### Working Paper No. 1, 2018

# How Social Inequalities Affect Sustainable Development

Five Causal Mechanisms Underlying the Nexus

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### **Working Paper Series**



#### trAndeS Working Paper Series

Published by:

Lateinamerika-Institut (LAI), Freie Universität Berlin, Boltzmannstr. 1, 14195 Berlin, Germany.

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Schorr, Bettina 2018: "How Social Inequalities Affect Sustainable Development. Five Causal Mechanisms Underlying the Nexus", *trAndeS Working Paper Series* 1, Berlin: Lateinamerika-Institut, Freie Universität Berlin.

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### **How Social Inequalities Affect Sustainable Development**

Five Causal Mechanisms Underlying the Nexus

Bettina Schorr

#### **Abstract**

Since the publication of the Brundtland Report in 1987, social inequality has been a topic of concern for the international development community. In the last decade, given the rise of global inequality the subject gained even more prominence as several international organizations (UNDP, World Bank, OECD) began emphasizing the negative impact of social inequality on human well-being. The Agenda 2030, the current development strategy adopted by the United Nations in 2015, elevated "reducing inequality" to one of the 17 Sustainable Development Goals (Goal No. 10). This paper connects with this growing concern over the impact of social inequalities on the opportunities for sustainable development. It proposes a research agenda for the social sciences to contribute to the debate by identifying the causal mechanisms that constitute the nexus between social inequalities and sustainable development. The focus on these intermediary steps is important in order to understand in more detail the barriers that social inequalities pose for more sustainable social, economic and ecological arrangements. This is especially necessary when it comes to designing or implementing strategies (political or technological) that aim to promote sustainable development, above all in highly unequal societies.

**Keywords:** social inequalities | sustainable development | global interdependent inequalities | Latin America | sustainable development goals | Andean Region

### **Biographical Notes**

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### 1. Introduction

Since the publication of the Brundtland Report in 1987, social inequality has been a topic of concern for the international development community. In the last decade, given the rise of global inequality the subject gained even more prominence as several international organizations began stressing the negative impact of social inequality on human well-being. The UN responded to this concern by introducing in its 2010 Human Development Report an inequality-adjusted version of its Human Development Index (HDI) that shows for several countries significant differences compared to the unadjusted version of the HDI (UNDP 2010). Recently, the concern for social inequality and its consequences also found its way into the Agenda 2030, the current development strategy adopted by the United Nations in 2015. Reducing inequality constitutes one of the 17 Sustainable Development Goals (Goal No. 10). This represents a major departure from the previous UN development strategy, the Millennium Goals (2000-2015) that did not contain any explicit mention of inequality (Fukuda-Parr 2016; Freistein and Mahlert 2016; Melamed 2012).<sup>2</sup>

This paper³ proposes a research agenda for social sciences to contribute to the alleviation of social inequality and the promotion of sustainable development by identifying the causal mechanisms that constitute the nexus between both phenomena. Based on a broad literature review, it asks why and how manifestations of social inequality act upon the opportunities for sustainable development. The focus on these intermediary steps is important in order to understand in more detail the barriers social inequalities are mounting to more sustainable social, economic and ecological arrangements. It is especially necessary when it comes to designing or implementing strategies (political or technological) that aim to promote sustainable development, above all in highly unequal societies.

A first systematic attempt to grasp, understand and predict the relationship between social inequality and environmental sustainability was the so-called "Environmental Kuznets Curve" (EKC) promoted by the World Bank in the early 1990s.<sup>4</sup> The EKC constitutes a variation of the original Kuznets Curve argument elaborated in the mid-

<sup>1</sup> Besides the UNDP (Human Development Report 2011 and 2016), see for example the concepts and indicators developed by the World Bank (2006; 2017) and the OECD (2015, 2011).

<sup>2</sup> See http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-10-reduced-inequalities/targets/

<sup>3</sup> For their generous comments on previous versions of this paper, the author would like to thank her colleagues at FU Berlin and trAndeS, the participants of the trAndeS workshop on Social Inequalities and Sustainable Development at FU Berlin in May 2017, and the participants of the panel of trAndeS researchers at the conference of the Asociación Latinoamericana de Ciencia Política (ALACIP) in Montevideo, Uruguay in July 2017. In particular, she appreciates the support and valuable comments from Jorge Atria, Marianne Braig, Julián Cárdenas, Gerardo Damonte, Philipp Lepenies, Hans-Jürgen Puhle and Paul Talcott.

<sup>4</sup> The World Bank popularized the concept in its 1992 World Development Report (World Bank 1992). It has been frequently characterized colloquially as implying a strategy of "first grow, clean up later".

1950s by the economist Simon Kuznets.<sup>5</sup> It establishes that in the early stages of economic growth, environmental degradation and pollution increase, but this trend reverses past some level of income per capita, so that further economic growth leads instead to environmental improvement (Stern 2004). Changing consumption patterns, technological innovation, a more diverse and greener economy as well as investment in the environment were hold to appear automatically in a country's transition towards higher development. As a hypothesis, the EKC has received at best mixed empirical support.<sup>6</sup> Subsequent studies showed that economic growth may or may not benefit the environment depending upon many other factors, in particular on adequate public regulation.<sup>7</sup>

What the EKC misses is a clear understanding of the mechanisms that sustain the harmful relationship between social inequality on the one hand and sustainability or sustainable development on the other. Also in the international development community in general, these causal mechanisms have so far not been at the center of the debates. Rather the two areas often remain unconnected - notwithstanding the general consensus that social inequalities are somehow bad for development and independently of the fact that they share several overlaps.8 A multidimensional notion of social inequalities that includes power inequalities is fairly absent in international debates addressing shortcomings in sustainable development (Telleria 2016). It is seldom mentioned that the lack of human development of some (of many indeed) is the result of the ability of more powerful actors to enforce their interests at the cost of others by hoarding opportunities or restricting access to resources. For example, the Human Development approach developed by Amartya Sen (1999), which serves as the theoretical and conceptual foundation of the UN development sector, does not pay any attention to power relations or political and social context in which development is supposed to take place (O'Hearn 2009; see also Navarro 2000, Hill 2003, Hahnel 2002). In the same manner but more specifically, much of the research on environmental sustainability has been criticized for focusing on technical solutions without considering the impact of context, particularly power relations, on their proper implementation or opportunities for success (see Allouche, Middleton and Gyawali 2015).

<sup>5</sup> Kuznets (1955) hypothesized that in industrializing countries income inequality first rises and then falls as economic development proceeds. While this is generally accepted, Kuznets argument was more sophisticated. He also stressed the importance of welfare state institutions to provide for the effects of economic growth to reach people with lower incomes.

<sup>6</sup> Further investigations revealed a more complex relationship for different pollutants and even rejected the conjecture altogether (Magnani 2000, Boyce and Torras 1998, Dasgupta et al. 2002, Perman and Stern 2004, Cole 2003, 2004, 2007).

In addition, the EKC faces a strong methodological problem: The vast majority of the worlds' poor countries are below the threshold level it defines, so there is simple no empirical data available to test the hypotheses seriously for these countries. This means also that economic growth without any further qualification will be very unpleasant for many years to come for current "underdeveloped" low-income nations (Cole 2005).

<sup>8</sup> For example, certain central foci of inequality research, such as income, education or health, are at the same time classic development goals (Freistein and Mahlert 2016).

Moreover, when social inequality is mentioned explicitly as an obstacle, there is a strong tendency to conceive of it as an isolated factor that can be treated as disconnected from the other dimensions that shape the possibilities for (sustainable) development. This is most clear in the case of the SDGs where, as stated before, the reduction of inequality has its own goal. Yet, inequality is far more than one goal among others. It is a transversal force which influences almost all other goals in the set. For example, poverty (SDG 1) and hunger (SDG 2), the lack of access to quality education (SDG 4) and health care (SDG 3) or clean water and sanitation (SDG 6) may not result from resource scarcity. More often than not, it is the unequal distribution of resources and the fact that powerful individuals monopolize their access that causes shortcomings in poorer groups or individuals. Furthermore, gender equality as a goal (SDG 5) is per se an expression of social inequality hindering the opportunities for sustainable development by excluding and discriminating women. In sum, reducing social inequalities is crucial not only for achieving SDG 10 but also for many other of the Sustainable Development Goals.

Understanding in more detail the link between social inequalities and sustainable development is particularly important for Latin America and within it, the Andean region. Although income inequality has fallen in recent years, Latin America remains the most unequal region on earth (rivaled only by sub-Saharan Africa). According to a recent study by Oxfam, in 2014 the richest 10% controlled 71% of the region's wealth (Oxfam 2014). As in the rest of the world, this number is rising. Within Latin America and notwithstanding some of the most visible changes in the last decade, particularly the Andean region (for example in Bolivia, Ecuador and Peru) continues to suffer from a rampant income inequality. 10 This high concentration of wealth translates into the concentration of political power in the hands of a few (often white) elites and exists alongside persisting or protracted ethnic (indigenous), race-based (Afro-Americans) and gender inequalities that further complicate the picture. Many of these inequalities have their roots in specific global configurations that link more powerful, relatively wealthy nations (often in the global North) with less powerful, relatively poorer nations (often in the global South). This global interdependent character also adds to their complex and persisting nature. On the other hand, the development challenges the region is facing are enormous: Poverty is still widespread and social conflicts, criminal activities and violence occur frequently. Furthermore, increased consumption rates and the dominant pattern of production (extractivism) have an immense ecological

<sup>9</sup> Also, the Human Development Report 2016 which compared to other development reports contains a quite sophisticated discussion on the impact of inequality on the possibilities for sustainable development, and treats inequality as one of several barriers to universalism. These barriers are grouped into four categories: "Intolerance and exclusion", "weak bargaining power", "elite capture of institutions" and "narrow self-identities" (UNDP 2016). Inequality appears in the "weak bargaining power" section but is certainly also an important driver for the other four categories.

<sup>10</sup> According to the World Bank, the Gini index (2014) is still 48.4 in Bolivia, 44.14 in Peru, and 45.38 in Ecuador. It is even as high as 50 in Chile and 53.5 in Colombia.

impact and are in bitter need of attendance to prevent non-reversible damage. Lastly, the region is particularly hit by global climate change that causes resource scarcity and reduces biodiversity in one of the most sensible biodiversity hotspots on the earth (Myers, Mittermeier, Mittermeier, da Fonseca and Kent 2000).

The paper proceeds as follows. The following chapter defines and discusses the central concepts that form the basis of the subsequent analysis: "multidimensional interdependent inequalities" (which includes "global interdependent inequalities") and "sustainable development". The paper then turns to the nexus between the two and its underlying mechanisms. It presents five causal paths by which social inequalities affect the opportunities for sustainable development: by granting excessive power to the wealthy, by weakening democratic institutions, by restricting access of the poor and marginalized to valuable collective goods, by hindering social cooperation and by reducing subnational state capacity. The fourth section explains the development challenges posed by global interdependent inequalities to less powerful and poorer countries by drawing on three empirical examples: global climate change, global production chains comprising extractive industries and international institutions and politics. In the last chapter, the central findings concerning the causal mechanisms linking social inequalities and sustainable development are summed up. It furthermore formulates several policy implications and finishes with some venues for further research.

### 2. Social Inequalities and Sustainable Development

### 2.1 Multidimensional Interdependent Inequalities

Since the mid-twentieth century, inequality has been of growing concern to the social sciences. The earliest work on this topic was limited to studies conducted mostly by economists and focused on individual income inequalities, their emergence and their relation to economic growth (see for example Atkinson 1980, 1983; Kuznets 1955). In recent years, scholars have gradually shifted to a richer notion of social inequalities which takes their multidimensional nature into account (for an overview Costa, Jelin and Motta 2017, Bashi-Treidler and Boatcă 2016, Guidetti and Rehbein 2014). This approach recognizes that social inequalities are not only rooted in individual income but also in a differential access to power resources: People may be unequal with respect to their possibilities to influence the environment in which they live (see also Kreckel 2004). Certainly, income and power inequalities tend to reinforce each other: less income and wealth often correlates with political inequalities, and less political power may also account for less income and wealth (Therborn 2006, 2013; Boyce 2007).

Second, social class is not the only trigger of social inequalities. They may also result

from social categorizations or status such as gender, ethnicity, *race* or age. In other words, people are not only unequal because they have less money or because they possess less but also because they are women or older people or because they self-identify with or are identified with a specific *race* or ethnicity. The literature refers to this group-based discrimination as horizontal inequality (as opposed to vertical inequalities based in individual income, see Stewart 2008). Often, such categorizations intersect and reinforce each other (Krizsán 2012).

Third, income and wealth are in most cases certainly socially desired goods, but they are not the only ones. People also value other collective goods such as security (physical), participation and autonomy, education and knowledge as well as health and a "functioning" or "healthy" environment but may differ significantly in their possibilities to access them (Góngora-Mera 2015). Again, the various aspects of social inequalities are interdependent: People lacking access to income and/or power resources are very likely also restricted in their access to other socially valuable goods.

Given this multidimensional and interdependent character, Costa et al. propose the following definition of social inequalities. They define them as the "distance between positions which individuals or groups of individuals assume in the context of a hierarchically organized access to relevant social goods (income, wealth, etc.) and power resources (rights, political participation and positions)" (Costa et al. 2017: 6). These "distances" may be divided into three basic categories of social inequalities (see Therborn 2013): "vital inequalities" referring to "socially constructed unequal life chances of human organisms"; "existential inequalities" which refers to the capabilities or allocated degrees of freedom of persons; And third, "resource inequalities" which reflect the unequal provision of resources for human action.

Recent research has also stressed the spatial character of social inequalities as well as their global interdependencies. As to the first, inequalities do not only matter on an individual or group basis, they may also be rooted in the particular space or territory where people live and where they were born into. Usually these inequalities stem from specific distributional schemes within nation states (regarding infrastructure, public services or monetary assignments). As a result, territories with a strong capacity to provide a certain level of human development exist alongside territories unable to provide the most basic services to their citizens (Rodrigues-Silveira 2013). The most visible expression of this phenomenon is the sometimes striking difference in terms of well-being between a relatively wealthy metropolis or capital and poorer hinterlands, or more generally between urban and rural areas in one and the same polity. Rooted in various factors (such as endowment with natural resources or elite pacts), huge differences may also exist among subnational units in one country (for Latin America, see Mondrego and Berdergué 2015).

Regarding the second aspect, several researchers have unearthed 'global entanglements' that underlie current social inequalities (Korzeniewicz and Moran 2009; Pieterse 2002; Boatcă 2015; Burawoy 2000). In this perspective, social inequalities are the result of processes that connect asymmetrically endowed actors and spaces all over the globe. Costa et al. (2017) refer to these as "global interdependent inequalities". As Kreckel (2004) points out, this specific configuration of inequalities is not rare: The vast part of social inequalities affecting individuals or groups today are actually rooted in such global entanglements. Moreover, current social inequalities are based to a great extent in unequal relationships that have evolved some time ago (Acemoglu and Robinson 2012, Bashi-Treidler and Boatcă 2016).11 They reflect the ability of certain social groups to dominate and exclude others from power and wealth through different exclusionary mechanisms, such as 'opportunity-hoarding' and 'exploitation' (Tilly 1998).<sup>12</sup> Other authors, following the work by Pierre Bourdieu (1984) stress the important role of education and (social) training (habitus) to explain the emergence and persistence of social inequalities (see Blossfeld et al. 2005). Once social inequalities are fixed in social norms or political institutions (laws, discriminating public policies etc.) they become protracted and will persist in time producing "durable inequalities" as the sociological literature calls them (Tilly 1998, see also Therborn 2013) or "inequality traps" as the international development community labels them (Rao 2006).

### 2.2 Sustainable Development

The term 'sustainable development' was popularized by the World Commission on Environment and Development (WCED), which became internationally known as the "Brundtland Commission" after its leader Gro Harlem Brundtland, the former Prime Minister of Norway. In 1987, the Commission published a report entitled "Our Common Future" (WCED 1987) which listed the most serious threats confronting humanity; the persisting poverty and the looming environmental crisis were the overarching concerns. For the Brundtland Commission the solution to these threats was "sustainable development" which it famously defined as "a development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987).

Sustainable development is sometimes used synonymously with "sustainability". Yet, they are not the same. The concept of sustainability was coined in the 18<sup>th</sup> century

<sup>11</sup> For example, in the case of Latin America social inequities are rooted in the institutional structure and the power relations installed by the Spanish Colonialists as well as in the redistributive struggles of the early republics.

<sup>12</sup> Tilly identified two basic mechanisms that sustain unequal social relations: "opportunity-hoarding" refers to the control of resources, defined in any number of ways, that allow certain groups to exclude others from access to said resources or benefits accruing to them. "Exploitation" operates when powerful, connected people command resources from which they draw significantly increased returns by coordinating the efforts of outsiders whom they exclude from the full value added by that effort

<sup>13</sup> The term was sporadically in use since the early 1980s (see Du Pisani 2006).

kingdom of Saxony by Hanns Carl von Carlowitz (1645 - 1714) (Grober 2007). Alarmed by the rapidly vanishing timber resources needed to keep the ore mines of the kingdom functioning, he called to arrange for their "sustainable" use. 14 They should be conserved and replanted steadily so "daß es eine continuirliche beständige und *nachhaltende* Nutzung gebe" (that there would be a continuous, steady and *sustained* use). In a general perspective, the term sustainability introduced "time" into human (economic) activities related to the use of natural resources (Harris 2002). This includes the ability to reproduce, cope and recover from stress and shocks and to provide opportunities for the next generation (Chambers and Conay 1992). 15

The concept of sustainable development, by contrast, is much broader. It was launched by the Commission as a global political objective to guide policies orientated to balance economic and social systems and ecological conditions (Boyer et al. 2016). <sup>16</sup> Generally, it is thought of as being composed of three pillars of sustainability: the environment, the economy and society. <sup>17</sup> These pillars are conceived of as interdependent, so that a sustainable development in one area must consider trade-offs with the others to mitigate any harmful effects produced in the other dimensions. <sup>18</sup>

The literature has not treated these dimensions equally. In particular, there has been a bias towards the environmental pillar in terms of research on conservation and resource protection (Boström 2012). The economic and even more so the social dimension of sustainable development have so far enjoyed far less attention. As a result, it is much clearer what environmental sustainability means than what social sustainability is actually referring to, with economic sustainability being located somewhere in between.

Environmental sustainability concerns the natural environment – the integrity of ecosystems and the diversity of species - and how it endures and remains diverse

<sup>14</sup> At that moment, Saxony was one of the oldest, most prosperous and technically advanced mining areas of Europe and the loss of timber would have put the kingdom on the verge of economic breakdown (Grober 2007).

<sup>15</sup> In 1972, the international think tank "Club of Rome" published its famous report 'Limits to Growth' that introduced the term 'sustainable' into political language. For the Club of Rome, a sustainable world meant a world free of the risk of "a sudden and uncontrolled collapse" (Meadows et al. 1972).

<sup>16</sup> Following the publication of *Our Common Future* the United Nations started to build up its system of promoting sustainable development. In 1992, the UN held the "Earth Summit" in Rio de Janeiro, which initiated a series of follow-up conferences each ten years (World Summit on Sustainable Development in Johannesburg in 2002; United Nations Conference on Sustainable Development, Rio+20 in 2012). These events published different declarations which set various kinds of goals (Rio Declaration, Agenda 21 and Millennium Development Goals, SDGs) and led to the creation of new specialized bodies such as in 1992 the Commission on Sustainable Development.

<sup>17</sup> The three-sphere framework was initially proposed by the economist René Passet in 1979.

<sup>18</sup> Of course, what these pillars imply in practice is a highly contested question (see Connelly 2007).

and productive (Harris 2002).<sup>19</sup> Ecological integrity is important not only for human productive activities but also for social well-being in terms of health and social peace. Moreover, the global ecosystem must be maintained in order to guarantee the reproductive capacity of the earth (via the absorption of CO<sub>2</sub>, or by creating resistance to stress via maintaining biodiversity) and hence, to assure the future existence of mankind.

Economic sustainability refers to the improvement of economic conditions (income and wealth, material well-being) of people to a preferred standard of living level (which of course is subject of contestation). However, in its interdependent relationship with the other dimensions, economic sustainability cannot mean simple (sustained) growth. It must encompass specific types of economic activities (those that do not harm the other dimensions) that can guarantee stable and dignified local livelihoods but do not harm the environment. On the other hand, the economic dimension has an important role for achieving environmental and social sustainability by providing the necessary material resources needed amongst others to relieve poverty and maintain social peace or to redress environmental degradation.

The social dimension of sustainable development is the least clear dimension of the triple bottom-line and "has earned a reputation for elusiveness and even chaos" (Boyer et al. 2016). For some authors it is "the missing pillar" (Boström 2012) that has been "marginalized by a sustainability agenda that is historically rooted in specific forms of environmentalism [...]". Indeed, research concerned with sustainability only seldom focusses on questions of social justice and peace, although they are equally important when it comes to assuring ecological integrity. Therefore, other authors perceive the social dimension as the most important pillar, because they assume that it mediates the other two. Economic well-being and ecological integrity can only be achieved by social action that derives into the formulation and implementation of adequate and binding rules (Boyer et al. 2016).<sup>20</sup>

While the bias in the literature towards questions of conservation accounts for one part of the absence, the lack of conceptual clarity provides for the other. Despite a shared interest, academics, professionals and policymakers often hold very different views on

<sup>19</sup> Since the 1970s the term is differentiated into weak and strong sustainability. Weak sustainability means that natural capital can be substituted by human capital. Consequently, humans may deplete resources as long as they can compensate for their loss by other means (mainly technological innovations or investments and savings). Proponents of strong sustainability assume that "human capital" and "natural capital" are complementary, but not interchangeable. They argue that certain forms of natural capital (the global climate, biodiversity, etc.) are critical and that their depletion cannot be compensated for (Neumayer 2011).

<sup>20</sup> Recently, also the UN has called for more attention to the social side of sustainability: "As the Secretary-General noted recently, sustainable development, enabled by the integration of economic growth, social justice and environmental stewardship, must become the international community's guiding principle and the operational standard of a new post-2015 agenda. Such an integrated approach will help to ensure that the three pillars of sustainable development are treated more equally than has been the case to date. Indeed, the interpretation of sustainable development has tended to focus on environmental sustainability while neglecting the social dimension" (see UN ECOSOC 2014).

what social sustainability actually means, and how it can be achieved. One definition sufficiently broad to encompass this ample character of the social sustainability pillar is provided by Grießler and Littig (2005). They define social sustainability as a "quality of societies. It signifies the nature-society relationships, mediated by work, as well as relationships within the society" (Grießler and Littig 2005: 72). It is given when people can arrange for their livelihoods and fulfil their human needs in terms of social justice, human dignity and participation. This definition is also consistent with the operationalization of social development applied for the UN Human Development Index. It measures social sustainability in terms of "knowledge and education", "health", "human security and rights", "gender equality" and "participation in political and community life". 21 Regarding the latter, the ability to deliberate, participate in public debates and be agents in shaping their own lives and environments is to many people an end in itself (UNDP 2016). On the other hand, it has an instrumental value in the sense that by participating, people can contribute to make appropriate decisions over their well-being. Political participation guarantees place-based strategies needed to really adapt to people needs, worldviews and cultures (Escobar 2008).

This last point brings another important dimension of sustainable development to the forefront: the political one. Indeed, some authors include "good governance" as a fourth pillar into the sustainable development scheme (WSSD 2002). While governance refers to the process of decision-making and the process by which decisions are implemented, the question of when such governance is good is certainly contested. There is a consensus in the literature that the rule of law, accountability and transparency as well as respect for human rights are among the main characteristics of good governance. Conceived of in this way, good governance is both a condition and a result of sustainable development: It is necessary to achieve the mix of ecological, economic and social sustainability and balance possible trade-offs. At the same time, strategies aiming at sustainable development must always consider the improvement in terms of transparency and accountability of the political institutions in charge (whether they are formal state institutions or others) in order to deliver truly sustainable results.

### 3. Exploring the Nexus: Five Causal Mechanisms

The previous sections introduced a multidimensional notion of social inequalities that includes material and power inequalities and applies to different socially valuable goods. It also stressed the importance of place or level (local-national-global) in order to detect the causes of social inequalities. The concept of sustainable development is thereby operationalized as environmentally friendly, conducive to a desired living standard that does not harm the environment and providing a good quality of society in terms of "knowledge and education", "health", "participation in political and community

<sup>21</sup> See http://hdr.undp.org/sites/default/files/hd\_diagram\_0.png for the operationalization.

life", "human security and rights" and "gender equality". The following part presents five causal mechanisms that link the multiple forms of social inequalities with the different dimensions that together form sustainable development thereby preventing more sustainable economic, social, political and ecological arrangements. Understanding these links helps explain both the persistence of social inequalities as well as the lack of sustainable development. Hence, the insights thereby generated form the basis for the important task of finding ways to move forward towards a less unequal world as a precondition for a true sustainable development.

# 3.1 Social Inequality, Concentration of Wealth and Power and Sustainable Development

Unequal societies are by definition characterized by the existence of a small group of individuals that control a disproportionate amount of wealth. This concentration of wealth in the hands of a few also leads to political "elite power" since it equips the rich with the material means to impose their will upon others. It has several harmful effects on the opportunities for sustainable development.

Elite power may express itself in terms of a privileged access to decision makers or public functionaries and is often employed to maintain or enlarge privileges and wealth. In fact, a vast amount of empirical studies demonstrates that business elites exert a disproportionate influence over public decisions or institutions (Boyce, 2002, see also Gilens 2012, Bogliaccini and Luna 2016, Crabtree and Durand 2017, Bull 2014, Dál Bo 2006, Thorpe and Mader 2017). Moreover, unequal societies have been shown to be particularly vulnerable to elite capture or political capture (Fuentes-Nieva and Galasso 2014).<sup>22</sup>

Wealthy individuals can achieve influence over public decisions by various means: They may use their wealth to corrupt policy-makers or functionaries directly and reach the formulation and implementation of certain policies that benefit their businesses (by favoring specific corporations, imposing sectorial de-regulation or hampering redistributive measures). They may also employ corruption to obtain preferential access to scarce resources made available exclusively through government permits or concessions (such as huge public infrastructural contracts) or to assure access to public resources such as subsidies.

Moreover, wealthy individuals may reach policy impact by other more indirect measures such as the funding of electoral campaigns. They may also go through "revolving doors" and move between political institutions and their businesses in order to assure beneficial regulation or legislation (Young and Desmarais 2015). Lastly, the rich also

<sup>22</sup> The term political capture refers to a process whereby public resources that should benefit the larger population are usurped by a few individuals or a privileged group (see Crabtree and Durand 2017, Carpenter and Moss 2013).

have more money to hire good lawyers in order to make use of even relatively clean judicial systems to achieve their ends. By means of their wealth, elites also employ other forms of power which may serve to maintain or enlarge their privileges: For instance, "agenda power", i.e. their ability to influence what is being decided on in the public sphere, "value power" which refers to their ability to influence what other people want, and "event power" which mean that they are able to determine the circumstances in which people make decisions (Boyce 2007, see also Bull 2014). Many of these other dimensions of power result from the control of mass media such as television, newspapers or journals.

The shaping of public decisions by particular interests has numerous negative effects on the opportunities for sustainable development. For instance, public resources that could be destined to people in need (social programs, re-distributional measures, tax policy etc.) are "captured" or "appropriated" by business sectors. Particularly, tax avoidance by the rich or resistance to tax reforms that would impose higher taxes on the wealthy (and create more equal systems) leaves states without resources to promote human development (Fairfield 2015, see also Atria 2014, Bogliaccini and Luna 2016, Berens and von Schiller 2017). As a consequence, many poor countries have regressive tax systems that strain poor and middle income households more than wealthy ones. In the same way, the use of "tax havens" or "fiscal paradises" by rich people in order to avoid tax payments in their countries of residence, deprives governments of resources to provide public goods or assist people in need (Zucman 2015; for Latin America see Gómez Sabaini and Morán 2017).

The concentration of wealth and power may also lead to the reproduction of dynasties characterized by the transmission of resources across generations (see Khan 2011). This undermines the putative meritocratic principle of modern industrialized democracies and severely restrains opportunities for social upward mobility that are especially important for the poor (see 3.4).

In addition, wealth combined with political power enables individuals to operate outside the rule of law without having to fear sanctions. This may apply for polluting activities that harm people and the environment. It may also derive in what some authors call "cheap appropriation" (Radhuber 2016) meaning that in the absence of state protection, local natural resources may be depleted by the use of crude power (for instance by land-grabbing) against the local inhabitants willing to resist. In this sense, being an environmental activist has become a dangerous activity in the last years, particularly in Latin America. Following the Global Witness Report 2015 on lethal attacks against environmental activists, in Latin America, Brazil is the most lethal place with 50 activists

murdered per year, followed by Colombia (ranked third) and Peru (ranked fourth). 23

On the other hand, in countries assigned to the "developing world", a series of other negative incentives exists that induce elites to unsustainable behavior: In such settings, the rich tend to control the polluting industries which may require large investments but also yield disproportionate benefits such as oil extraction, mining or industrial production (Boyce 2007). Consequently, they often have no interest in environmental or pollution control policies which would affect their businesses and will therefore try to shape policies in that particular way (Bull and Aguilar-Støen 2015). Along these lines, Magnani (2000) has found in her study that this holds true even for OECD countries in which inequality negatively affects research & development expenditures for environmental protection.

The lack of interest in more sustainable ecological and social arrangements may also result from another aspect of elite power: elites can ignore environmental degradation by various means at their disposal and may therefore not perceive the necessity to act or change in a way that would provide for greater environmental protection. Wealthy individuals can substitute private environmental amenities for public ones or can spatially distance themselves from pollution hotspots by buying residential property in unaffected areas (Neumayer 2011). Moreover, they tend to live far away from the pollution caused by their economic activities, which leaves them without a direct incentive to change (Baland et al. 2007: 27). Owners of mines, for instance do not suffer from the harmful consequences their business provokes, contrary to the people living near the pits.

Given the combination of wealth, power and the lack of incentives that could induce change, benefits from environmental pollution in terms of economic profit tend to be concentrated toward the upper end of the social ladder. The costs will tend towards the lower end of the income distribution, as poor people often do not have the resources to shield themselves against environmental pollution. This unequal distribution of environmental costs and benefits, in turn, negatively affects other dimensions of sustainable development such as health, food security or access to clean water resources with severe restrictions to the life chances of underprivileged people.

### 3.2 Social Inequalities, Institutional Weakness and Sustainable Development

Social inequalities affect democratic institutions including political participation and thereby harm democracy as a whole (see Piketty 2014, Stiglitz 2012, Boix 2003, Gilens 2012, Solt 2008, Acemoglu and Robinson 2006). This argument is closely related to the previous point since it also departs from the fact that social inequalities favor an environment that enable wealthy people to influence political decisions to

<sup>23</sup> The report can be accessed here: https://www.globalwitness.org/en/campaigns/environmental-activists/dangerous-ground/

their own benefits. The consequence is that institutions and holders of public offices do not respond to the needs of all members of a society equally nor do they focus on those most in need. However, research has shown that even without the intervention of vested interests, decision makers do not target the poor and excluded as preferential recipients of their policies. They tend to focus instead on more powerful middle and upper-classes. <sup>24</sup> For instance, various studies have found legislative bodies to be more responsive to affluent constituents than to poor ones (Bartels 2008, Gilens 2012, Volscho and Kelly 2012), a trend the literature refers to as the "Directors law" (Stigler 1970).

On the other hand, the dominance of wealthy interests within political institutions may close them off for less privileged groups or individuals. These do not have the same opportunities to access them and influence public decisions. The result is that democratic institutions do not function as they normatively should which reduces democratic quality as a whole. In addition, exclusionary political settlements are associated with high levels of violence and instability which for their part harm all three dimensions of sustainable development (DFID 2011; see also 3.4).

Beyond that, the continuing lack of participation and representation generated by social inequality can have further long-term negative consequences for the functioning of democratic institutions, public debate and system legitimacy. Persistent inequality may turn weak or unconsolidated institutions into defect institutions (Bull 2014). Dysfunctional or passive institutions, in turn, influence the way in which citizens view the legitimacy of the overall democratic system. In other words, it may cause system alienation. Inequality may also depress political interest, the frequency of political debate as well as the participation in elections among all but the most affluent citizens (Dahl 2006, Uslaner and Brown 2005). The results may be political apathy or support for non-democratic, authoritarian or populist politicians that concentrate power, openly restrain political participation and tend to short-sighted unsustainable economic or social policies. Moreover, institutional weakness raises incentives for broader support for organized anti-system violent movements with various political orientations depending on the party in power (as for instance in Nicaragua, Colombia, Peru, and Mexico).

The literature concludes that specific features of democratic regimes are conducive to sustainable development, particularly transparency in the management of resources, the protection of human rights and the encouragement of social participation (Manslow and Ekanga 1995). However, it is certainly true that democracies are not necessarily more (re-)distributive in the sense that they automatically reduce income inequality (Scheve and Stasavage 2016, Acemoglu et al. 2013, Profeta et al. 2013). Authoritarian

<sup>24</sup> Regarding this bias in nominally pluralistic societies, Schattschneider (1960: 35) once famously stated: "The flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent."

states can also (and often do) redistribute wealth (if not power) (Albertus and Menaldo 2016). The re-distributional capacity of democracies depends inter alia upon the extent elites are able to shape its institutions (Ibid; Acemoglu and Robinson 2006, Acemoglu et al. 2013). In consequence, it seems that institutional strength in general rather than the nature of the political system leads to sustainable development. However, while there is no direct relationship between democracy and income equality, there is a direct relationship between democracy and the reduction of power inequalities. Democracies clearly provide more space for participation and perform much better in guaranteeing civil liberties and human rights. Moreover, it has been shown that democracies outperform autocracies in terms of environmental commitment since representatives and politicians depend on the votes of the people potentially affected by environmental problems (Neumayer 2011). Furthermore, Acemoglu et al. (2013) demonstrate that democracies also perform better when it comes to secondary schooling (education), the capture of tax revenues as well as the provision and extend of public goods and services (García and von Haldenwang 2016).

# 3.3 Social Inequalities, Reduced Subnational State Capacity and Sustainable Development

Subnational political agency is important for sustainable development because it allows for the formulation and implementation of local development plans and is more suitable to draft strategies and tactics that reflect the aspirations of local communities (i.e. it allows for place-based development) (Tendler 1997). It also raises the possibility of local actions to reduce inequality because they are beyond the control of national elites. The political science literature on the conditions that foster effective subnational governance (i.a. Chandler 2010, Chattopadhyay 2013, Faguet 2011, Asfar et al. 2000, O'Donnell 1998) finds that subnational governments must fulfill three conditions in order to be effective and deliver "good governance": First, they must have the rights granted by the national level that enable them to decide on their own fate. Second, subnational governments must control the resources needed in order to be able to implement their decisions; and third, subnational governments must be capable of drafting and implementing their decisions. Inequality affects the capacity of subnational governments to promote sustainable development in several ways:

At the heart of this problem lies often the huge power imbalance (i.e. inequality) between local governments on the one hand and the much stronger central state on the other. This national – subnational power asymmetry can express itself in several spheres: In the first place central states can refuse to decentralize power or to transfer power and rights to subnational units including the right to raise their own revenues (for an overview on Latin American cases see Brosio and Jiménez 2012). This can prevent local actors from providing public services. Central governments can also

reduce existing levels of decentralization to the detriment of subnational governments depriving them of instruments useful for local sustainable development. This point is particularly important for Latin America where many decentralization reforms have stagnated in the last years, in some cases even a slight re-centralization can be stated (Rosales 2011, Bossuyt 2013).

Second, central states have the power to decide over the distributive schemes in place to channel resources to subnational units. They may fail to assign sufficient financial resources to subnational governments and not endow their subnational units with sufficient resources so they can provide development to their people (Brosio and Jiménez 2012). On the other hand, by creating distributional regimes that favor some regions over others (for example those endowed with important natural resources) they can generate significant subnational inequalities which may not only lead to very different levels of human development in different subnational units, but may also cause conflicts between and among regions (for Peru see Arellano-Yanguas 2011). Moreover, central states are more likely to respond to their wealthier regions because of their greater bargaining power (for the case of Brazil, see Schneider 2018).

In addition, it is still the norm rather than the exception that central governments given their greater power simply ignore local needs for instance by implementing measures that clash with local aspirations and visions for sustainable development. Huge infrastructure projects (such as dams or also mining projects) that affect the environment or reduce the access to natural resources are one example for this.

Lastly, elite capture and clientelism grounded in local power inequalities as well as deficiencies in knowledge and education, which are particularly strong in rural settings, also pose serious threats to sustainable development (i.a. Gervasoni 2010, Tulia 2010, Bardhan and Mookerjee 2000). They hamper the capacities of local institutions to create public goods and deliver public services (Eaton 2017). Additionally, unequal relations on the local level complicate the formation of stable political alliances and hence cooperation needed to implement policies conducive to sustainable development (DFID 2011, for the negative impact of social inequality on cooperation see also 3.5).

While it is certainly not the only factor, the impact of inequality on subnational state capacity and with it, in a more general sense, the possibilities of local actors to act upon their own fate, is enormous. Municipalities without autonomy are unable to improve the material well-being, health or education to their people. As a result, such places tend to be caught in traps: people living there tend to be poor and unequal even in a vital sense and face strong barriers for social upward mobility (see next point).

### 3.4 Social Inequalities, Disadvantaged Groups and Sustainable Development

Inequality and poverty are certainly not the same: while a society can be very unequal, it must not be necessarily be poor and vice versa. However, in many countries current levels of poverty are maintained and uphold by social inequalities which exclude certain groups defined by class or by status (ethnic, *race*, age, gender, etc.) from human development. In fact, discrimination by status and poverty often come combined and reinforce each other: For instance, indigenous groups all over the globe tend to be poorer than non-indigenous ones, while indigenous women tend to be more vulnerable than indigenous men (Hall and Patrinos 2012).<sup>25</sup>

In addition, members of such disadvantaged groups have less access to education and health and are prevented to fully participate in aspects concerning their life. Particularly the exclusion from education has pronounced long-lasting effects on opportunities for development in later life (UNDP 2016): Young people without decent schooling may not be able to enter higher education and ultimately find a good and well-paid job. Nor will they be able to creatively innovate or invest, in an economic sense (World Bank 2006). As a result, they will remain at the lower end of the social ladder and pass this disadvantageous situation on to their offspring. In general, it has been shown that the opportunities for social upward mobility decrease the higher inequalities are (Brunori, Ferreira and Peragine 2013). In this sense, social inequality also hinders macroeconomic growth (Stiglitz 2012). Moreover, the lack of knowledge and education or also deficient access to appropriate information makes people vulnerable to manipulation and weakens their bargaining positions when dealing with external, more powerful actors (for instance the government, NGOs, aid workers, unions, the church, companies).

A lack of health for its part also poses serious challenges for sustainable development. Unhealthy people may not invest and be neither economically active nor creative. Furthermore, unhealthy people may not be able to learn. Finally, it may cause general health crises such as endemic diseases and even epidemics which impose high costs on all members of a society (or whole regions or the world), but particularly on the poor ones (Neumayer 2012).

In addition, as widely discussed in the literature, poverty including a lack of education has a direct effect on individual decision-making over natural resources and therefore on ecological sustainability (Baland et al. 2007). Poor people may have no alternatives than to deplete natural resources in their surroundings, for example, by slash-and-

<sup>25</sup> Some selected data: The access of (particularly rural) indigenous households in Bolivia, Ecuador and Peru to electricity, piped water or also secondary education is significantly lower than that of non-indigenous households. Moreover, the probability of being poor when belonging to an indigenous household is considerably higher (around 25% when considering 2.50 US Dollar per diem as the threshold in Bolivia and Peru) as when belonging to a non-indigenous household (data from World Bank 2015).

burn agriculture, by hunting, overgrazing or firewood collection (Escobar, Reardon and Swinton 2003). Moreover, environmental sustainability does not only depend on a certain level of national income but also on citizens able to acquire and understand information about the quality of their environment (Barrett and Graddy 2000, see also Neumayer 2012). In this sense, a study by Holland et al. (2009) found a strong correlation between income inequality and biodiversity loss. The effects of environmental degradation are even more harmful when considering future prospects of sustainable development: In the mid- to long term, it will further worsen material poverty and intensify health problems with the consequences outlined above.

On the other hand, an ample body of research has shown that poor and discriminated groups are more exposed to pollution and more affected by environmental degradation and associated (health) risks than others. This observation is at the heart of the so called "environmental justice debate" that originated in the US in the 1980s (Bullard 1990; Schnaiberg and Gould 1994; Bryant and Mohai 1992; Pellow 1997; Taylor 2014). Power inequalities are central here. For instance, in the US "demographics reflecting political weakness" were found to be the most reliable predictors of where toxic waste will be sited (Boyce 2007: 329). Everywhere, indigenous people face some of the most egregious environmental (and social) inequities in the region (for Latin America see Carruthers 2008). Poverty may also function as a driver for people to live in unhealthy environments since polluted places tend to be cheap places, which the poor can afford (Auyero and Swistún 2009).

The impact of discrimination and exclusion on the possibilities for sustainable development is particularly strong in the case of women (UNDP 2016). The facts are striking: In the whole world, women are on average consistently "less developed" (income, education and health) than men according to the Human Development Index (HDI). The tendency is moving upward. In Latin America for instance, in 2012 there were 117 women in poor households for every 100 men, an 8 percent increase since 1997 (IBID). Furthermore, women are often prohibited to fully participate in economic activities and are excluded from politics leaving them without a say in issues regarding their lives. Moreover, women are much more vulnerable to insecurity and violence. Following a 2013 report by the World Health Organization, between 30 and 50 per cent of women suffered domestic violence in Bolivia, Ecuador, Perú and Paraguay (WHO 2013). Lastly, there is also evidence that women as heads of households suffer more from resource scarcity induced by climate change or by conservation policies (Agarwal 1998).

<sup>26</sup> The early debate in the US centered on the fact that social minorities such as black or Hispanic communities tend to bear a disproportionate environmental burden because of institutional and locational factors.

### 3.5 Social Inequalities, Deficient Cooperation and Sustainable Development

Sustainable development is also a challenge due to the effects of social inequality on the potential for common action to address problems in the status quo. By the creation of us/ them mentalities, social inequality erodes social trust and social cohesion (Pickett and Wilkinson 2009). As a consequence, social cooperation is severely hindered (Bardhan and Dayton 2007, see also Uslaner and Brown 2005).<sup>27</sup> The lack of cooperation, in turn, prevents the formation of stable political alliances needed to implement policies conducive to sustainable development (DFID 2011). Moreover, it can have particularly damaging consequences for the sustainable management of natural resources needed for economic well-being and social peace.

The specific effects social inequality exerts on cooperation are various (Baland et al. 2007): First, income inequality generates different consumption patterns on part of the rich and the poor. As a result, both groups at the opposing ends of the income ladder have different interests, which will at least complicate any attempt to cooperation. For instance, a person controlling a huge amount of local resources (such as timber or water resources) is likely to resist distribution through collective regulation which would allow for a more sustainable use of the natural resources in question (see also 3.1). For instance, it has been shown that inequality of land tenure has a significant negative effect on cooperation in water allocation (Baland et al. 2007).

Second, as the social-psychological literature shows, inequality among individuals renders agreements difficult because in situations of negotiations it focuses attention on the fairness of the process rather than on the outcome (Tavoni et al. 2011). In this sense, numerous studies have found that conservation rules are often broken because they are perceived as being imposed by elites in an unfair way. In contrast, fairer (more equal) environments lead to more efficient outcomes and enhance the probability of mutual agreements (Bardhan and Dayton 2007: 125) needed to avoid the "tragedy of the commons" (Hardin 1968) as well as sustainable local policies in general.

Lastly, gender and ethnic discrimination excludes certain groups from cooperation efforts what leaves them at least incomplete and fragile (Bardhan and Dayton 2007).

Distrust rooted in social inequality not only complicates cooperation. It may also end up in open social conflict or stimulate (violent) crime (Neumayer 2012, see also Pickett and Wilkinson 2009). When resources are unequally distributed, those at the top and

<sup>27</sup> The literature discusses a quite different perspective known as the "Olson effect" named after Mancur Olson who coined the concept. Olson stipulated that strong inequalities may lead to more ecological sustainability when leaders with a strong interest in environmental preservation enforce cooperation or provide public goods (Olson 1969). There are indeed such cases, think for example of Doug Tompkins, founder of The North Face, the US American company for outdoor clothing and equipment, who together with Kris McDivitt Tompkins of the outdoor clothing and equipment company Patagonia bought vast parts of Patagonia to conserve and protect it and create national parks on the model of the US system. As explained in the first section, this is rather an exception and is certainly not free of social tensions. Tompkins for example was accused of expulsing local populations.

the bottom might not see themselves as sharing the same fate, which can lead to situations of social confrontation. Social conflict in turn tends to harm all dimensions of sustainable development: It hampers effective resource management (Baland et al. 2007) and severely limits the availability of other dimensions of human development such as health care and education. Moreover, conflict and violent crime reduce the opportunities for economic activities and seriously prevent any form of social sustainability (they are the opposite).<sup>28</sup> As a result, people are more likely to fall into material poverty during conflicts.

# 4. Global Interdependent Inequalities and Sustainable Development

Having explored the five causal paths primarily within a single country, it is worth reiterating here that there is an international or global dimension of difficulty layered over all of them. Social inequalities do not only emerge and operate within specific national boundaries. They may be caused in one place while their consequences rage in others (see 2.1). Because of the underlying spatial split, such globally interdependent inequalities constitute a special challenge for development strategies. It makes it difficult to fight their causes: most national governments have very few ways to address the problems directly through legislation or exerting executive power. On the other hand, addressing their causes requires a significant amount of coordination with other governments that may pursue very different interests. Consequently, they may resist proposals to redress causes of social inequalities that exist far away because they may lack electoral incentives to do so or just ignore the specific relationship underlying the harmful phenomenon.

In addition to the high transaction costs that such coordination would involve, they are also marked by huge inequalities: governments all over the globe (particularly those in the North and those in the South) are asymmetrically endowed with material and power resources that allow them to impose their interests internationally (Freistein and Mahlert 2016).

One example of such a global interdependency marked by unequal relationships that harm sustainable development is global climate change. Climate change is caused mainly by the industrialized, "developed" nations in the global North. According to the Human Development Report 2011 (UNDP 2011), the average person in a rich country accounts for more than four times the carbon dioxide emissions (one of the drivers of climate change and global warming) of a person in a poor country — and about 30 times the carbon dioxide emissions of a person in a very poor country (see also Chancel and Piketty 2015). However, while less wealthy nations and within them the poor have

<sup>28</sup> Neumayer argues that the link between social inequality and social conflict is dubious and not clearly sustained by empirical findings (Neumayer 2005). For him, there is a clearer nexus between social inequality and criminal violence.

contributed the least to global climate change, they are bearing a disproportionate share of its costs (in terms of environmental degradation): These countries experience the greatest loss in rainfall and the greatest increase in its variability with implications for agricultural production and livelihoods more general. In the Andes for example (as in other mountainous areas) global warming has been found to cause the glaciers to melt which leads to water shortages. Rising temperature also reduces biodiversity destabilizing ecosystems with consequences ranging from soil degradation to plagues.

Furthermore, extreme weather events hit the poor countries (closer to the equator) more frequently and harder (Stern 2007). As a consequence, less-well off countries may get even worse. However, even if the impacts of climate change were the same in all countries, the poorer countries have a lower capacity to deal with them (Neumayer 2012): They lack the means and resources (technologies) to confront or adapt to it. Globally, wealthier nations are better placed financially and technologically to cope with the effects of climatic change (UNDP 2011).

Global production networks or value chains are another example for a global configuration characterized by unequal relations with a detrimental effect on sustainable development (Plank and Staritz 2009, Kaplinsky 2005). For example, the extractive sector (mining, hydrocarbons, agroindustry) is shaped by a globally unequal division of labor: the poor countries extract and export primary resources and the rich countries process, sell and consume goods. The result is an unequal distribution of benefits and costs: The actors at the upper end of the production process (in the rich countries) gain the lion share of the profits, while the lower end that provides the primary resources earns much less (Bridge 2008). Even more pressing are the environmental consequences of resource-extraction and these are borne by the localities where extraction takes place. The consequences are not only environmental degradation, but also increasing social conflict mainly in the localities where resources are being extracted (see i.a. Bebbington and Bury 2013, Dietz and Engels 2016). Furthermore, the insertion into the global market as a supplier of primary goods causes unsustainability in the economic and social dimensions. Extractive economies depend on global market prices that are highly volatile. As a consequence, income and rents generated by the sector do never persist in time, which means they are unsustainable by definition (for Latin America see Gómez Sabaini, Jiménez and Morán 2017). Additionally, economies based on the extraction of primary resources tend to suffer 'resource curses' and produce 'rentier states' with respective financial, economic and political distortions – all of them damaging to sustainable development (Auty 1993, Ross 2008).

A third example for global interdependent inequalities are international institutions. Due to huge power differences, poor countries find it hard to influence decision-making in international organizations (Freistein and Mahlert 2016, Neumayer 2011).

As a result, international decisions may not reflect their interests or even openly restrain their possibilities for sustainable development. For instance, free trade treaties among developed and less developed countries can have several detrimental effects on sustainable development: They tend to harm the poorest sectors of the societies by flooding national markets with cheap exports and imposing strong pressures on the livelihoods of local farmers and manufacturers; they can restrict the access to affordable medicines by imposing restrictive property rights or by constraining the kinds of policies developing country governments should enact to protect their own citizens or fight poverty (Oxfam 2014). Protectionist policies or subsidy policies in wealthy countries may also reduce the opportunities for sustainable development in poorer nations (Kaplinsky 2005).

These are but three examples out of many. For instance, global financial asymmetries (Fritz et al. 2017) and food systems (Galt 2014) also constitute examples in which global interdependent inequalities constrain the possibilities for sustainable development in many of the worlds' poorer countries.

### 5. Conclusion: Policy Implications and Further Research

Inequality is on the rise globally. The top 1 percent of the global wealth distribution holds 46 percent of the world's wealth, while around a third of the world population struggles with hunger, poverty, illiteracy and malnutrition, among other deprivations (according to data provided by the UNDP 2016, see also Oxfam 2017). Contrary to the increasing concentration of global wealth as well as of wealth within specific nations, the number of the poor has been notably stable (Milanovic 2005). It is widely acknowledged that the resulting social inequalities matter for sustainable development. The objective of this paper is to go beyond this general statement by specifying how exactly social inequalities harm sustainable development in its three dimensions. Their influence is vast and multifaceted, as the five causal mechanisms presented in the previous parts reveal: social inequalities enable powerful groups and individuals to impose their interests upon others and to behave in unsustainable ways. Social inequalities weaken public institutions, damage democracy and reduce subnational state capacity. Social inequalities exclude the poor and discriminated groups from human development including the political process and induce unsustainable behavior on part of resource weak groups; Ultimately, they prevent social cooperation and promote conflict, street crime and violence. In addition, global interdependent inequalities pose particular challenges to sustainable development since redressing them requires a significant political coordination among different actors on different levels with sometimes opposing interests and certainly varying degrees of power.

Identifying and deciphering these mechanisms is important in order to understand how social inequalities work, what exactly they affect and how they are interrelated. This

last point is quite important: Although presented in a static way, the five mechanisms through which social inequality reduces the opportunities for sustainable development are not compact, independent factors. Rather, they intersect and mutually reinforce each other. For example, while elites can influence public policies in ways that benefit them to the detriment of others or of nature, this behavior also weakens democratic institutions. It reduces the prospects for democratic participation and, in the long-run, challenges the legitimacy of the political system. At the same time, it excludes the poor from political and administrative processes affecting their lives, induces them to unsustainable behavior regarding natural resources and subjects them to unmediated and crude (sometimes violent) power. Vested interests and institutional weakness may also be at the bottom of subnational inequalities or a weak state capacity in general that for their part harm certain peoples' live chances. On the other hand, institutional weakness allows particular interests to impose themselves upon public interests while also depriving vulnerable groups of instruments to combat poverty, discrimination or corruption. Moreover, a lack of education and information may prevent not only social mobility but also a society's capacity to demand and mobilize for social change. It may also hamper ecological sustainability. It also affects subnational state capacity to promote sustainable development. Lastly, institutional weakness causes distrust due to disorder and crime which in turn reduces the willingness of wealthy people to pay taxes that could be used to provide public goods (Berens and von Schiller 2017). Given these mutually reinforcing interdependencies, social inequalities display a strong tendency to form "traps" defined as situations "where the entire distribution is stable because the various dimensions of inequality (in wealth, power and social status) interact to protect the rich from downward mobility, and to prevent the poor from being upwardly mobile "(Rao 2006: 11). Or, expressed more simply, as situations where "the poor will stay poor because the rich are rich" (ibid.). Empirical research has also convincingly demonstrated that inequality provokes further inequality (Brunori, Ferreira and Peragine 2013).

Although such traps are difficult to undo, knowing their constituent parts and relationships is urgently needed to conceptualize strategies and tactics aiming at reducing the barriers they impose onto more sustainable social, economic and ecological arrangements. In this sense, the mechanisms identified in this paper have several policy implications. First and foremost, they reveal that to achieve sustainable development a systemic perspective is mandatory that does not only target the poor and vulnerable, but society as a whole (Therborn 2006). Concentrating only on the poor or relying on pure technical solutions without taking the impact of power relations into account, will not manage to significantly change the direction of policy towards sustainable development in general or promote the realization of the 17 Sustainable Development Goals in particular. Public institutions and the incentives they have are of key importance here. In particular, it

means that governments and public institutions as well as external agents must work to restrict the extraordinary privileges and the power of influence of the rich by fostering democratic institutions, promoting institutional transparency and sanctioning rigorously all kinds of corruption as well as discrimination. Moreover, fiscal systems must be installed that tax wealthy individuals which not only will provide governments with the resources necessary to promote education, health and public infrastructure. It may also foster social cohesion by providing incentives to the rich to contribute to collective interests (not only particular ones). Furthermore, subnational governments must be strengthened so they can dispose of sufficient resources in order to deliver public services to their people while also strengthening their autonomy vis-à-vis the central state. Lastly, governments should especially target longstanding "poverty traps" which can operate in certain groups but also in certain places with particular programs that must be based in universal social rights.<sup>29</sup>

The five causal mechanisms proposed in this paper are intended to focus further research on the relationship between social inequality and sustainable development. In particular, we need to know more on how elites influence public decisions, which institutional arrangements cement their privileges and, most importantly, which instruments in which settings may reduce their power and privileges or under which circumstances they may support stronger re-distribution.<sup>30</sup> We also need to know more about the ways formal and informal institutions create discrimination and hinder sustainable development and what can be done to mitigate such effects. These questions are an indication of the richness of the research agenda that scholars are pursuing in order to contribute to truly innovative strategies for a sustainable development particularly for highly unequal societies.

<sup>29</sup> See Martínez Franzoni and Sánchez-Ancochea (2016) for the potential of universalism to reduce social inequalities.

<sup>30</sup> See for example the study by Berens and von Schiller (2017) on high-income earners' consent for progressive tax reforms in Latin America.

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trAndeS - Postgraduate Program for Research on Sustainable Development and Social Inequalities in the Andean Region is a joint initiative by the Freie Universität Berlin and the Pontificia Universidad Católica del Perú. It is supported by the DAAD (Deutscher Akademischer Austauschdienst/German Academic Exchange Service) with funds from the Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ).

trAndeS seeks to create and promote knowledge that can contribute to the realization of the United Nations' Sustainable Development Goals in the Andean Region. It focuses its efforts linking two dimensions: sustainable development as addressed by the 17 Sustainable Development Goals (SDG) that the United Nations established for the year 2030, and the serious socioeconomic, sociopolitical and socioecological inequalities that persist in the Andean region. Our goal is to identify how these inequalities present challenges to achieving the SDGs and how progress toward the SDGs can contribute to reduction of these inequalities.

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With the financial support of

