

Linking LCA and SDG

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Goal 1 End poverty in all its forms everywhere



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1 Goal 1. End poverty in all its forms everywhere

1.1 Introduction

“Overcoming poverty is not a gesture of charity. It is an act of justice. It is the protection of a fundamental human right, the right to dignity and a decent life.” This quote by the late Nelson Mandela explains the importance of restoring dignity to millions of people around the world that are born into poverty-stricken circumstances.

The OECD (The Organisation for Economic Co-operation and Development) describes a multidimensional poverty index which measures a range of deprivation factors. These include health, education and living standards in its definition. The component indicators for these three dimensions are nutrition, child mortality, years of schooling, children enrolled, cooking fuel, toilets, water, electricity, floor and assets (Lingnau, no date).

The state of poverty is increasing because globalisation and the technology automation revolutions are destroying previous social safety nets which leave lower-income populations without jobs and income. Nevertheless, the technological revolution provides many opportunities and a platform of voice to people who previously had none. Accessibility and education are huge enablers of effective use of these tools (*The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet*, 2021).

In 2015, more than 700 million people, or 10 percent of the world’s population lived in extreme poverty. This is characterized by not fulfilling basic needs like healthcare, education, access to water and sanitation and many other necessities (*No Poverty: Why it Matters*, no date). Developing countries are forecasted to bear the brunt of poverty post-pandemic as tens of millions of people are pushed back into the extreme state of living under \$1.90/day. Eight out of ten ‘newly poor’ people are in middle-income countries and it is projected that around 600 million people will remain in extreme poverty by 2030 (Economic and Social Council, 2021).

The state of employment also does not correlate to decent living. About 7.1 percent of employed workers and their families world-wide lived-in extreme poverty in 2019 which is expected to rise post-pandemic. The pandemic severely impacted the informal economy where a vast majority of people living in poverty earn a living (Economic and Social Council, 2021).

There are many dimensions through which communities result in a poverty-stricken state. The most direct causes are from unemployment, social exclusions, and high vulnerability of certain populations to disasters, diseases and other phenomena which prevent productivity. The threat of poverty is compounded by climate change and conflict. And the downstream consequences in the form of malnourishment, disease, fatalities as well as an unskilled and unproductive workforce are dire for sustainable wellbeing (Tanumihardjo *et al.*, 2007).

By 2020, only 47% of the global population were effectively covered by at least one social protection cash benefit, which left 4 billion people unprotected. However, between 1 February and 31 December 2020, governments of 209 countries and territories announced more than 1,500 social protection measures (mostly short-term) in response to the COVID-19 crisis.

In 2019, 12,000 people were reported as disaster fatalities across 72 reporting countries and territories which is a significant reduction from 2018 (Economic and Social Council, 2021). The importance of framing policy for the misrepresented and consequently developing national social protection programs can ensure that vulnerable groups have a social safety net. This also ensures that government spending is focused on uplifting poorer populations.

The outlook for this goal is to focus policy on reforming financial systems and monetary authorities to reduce interest rates of bank loans and less barriers to entry to the market for poorer populations. This includes authorities developing policy to promote economic freedom and stimulate economic growth (Kaidi, Mensi and Ben Amor, 2019).

1.2 Targets and indicators of SDG 1

This goal has many facets that mostly depend on the national circumstance and political standpoints of countries regarding government spending on social and economic services and welfare. However, some topics have the potential to greatly progress the current situation within a company's field of influence.

The eradication of extreme forms of poverty and its general reduction is enabled via enhancing social topics for workers, local communities and small-scale entrepreneurs. The mechanism of employment and decent wages has the potential to lift people above national poverty lines. The availability and accessibility of economic resources is of prime importance as this is a foundational platform for increasing the quality of life of individuals. Therefore, the mobilization of these resources should be a focus for companies.

Lastly, building communities that can withstand shocks such as natural disasters, climate-related events and economic downfalls is pertinent for its longevity.

It is important to note that this goal refers to stakeholder groups that lie below their national poverty line. The goal refers to lifting people out of poverty through resources, opportunities and social benefits.

SDG 1 links closely with all the basic needs-related goals such as goal 2 - zero hunger, goal 3 - health and wellbeing, goal 4 - quality education goal 7 - clean and affordable energy, goal 8 - decent work and economic growth and goal 10 - reduced inequalities.

Table 1. The targets and indicators defined for SDG 1

Target	Indicator
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)
1.2 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	1.2.1 Proportion of population living below the national poverty line, by sex and age

	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable
1.4 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	1.4.1 Proportion of population living in households with access to basic services 1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure
1.5 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	1.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people 1.5.2 Direct disaster economic loss in relation to global gross domestic product (GDP) ^a 1.5.3 Number of countries with national and local disaster risk reduction strategies
1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions	1.a.1 Proportion of resources allocated by the government directly to poverty reduction programmes 1.a.2 Proportion of total government spending on essential services (education, health and social protection)
1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to	1.b.1 Proportion of government recurrent and capital spending to

support accelerated investment in poverty eradication actions

sectors that disproportionately benefit women, the poor and vulnerable groups

1.3 Classifying the links between SDG targets and LCA impact categories

Asterisk (*) represents a link that is established under specific condition outlined under the target.

Underlined topics represent those that are deemed critical by the SDG Assessment methodology.

1.3.1 Target 1.1 and 1.2: eradicating extreme poverty and reducing poverty for people of all ages in all dimensions

Target 1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

Target 1.2 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

Social LCA:

- **Worker's remuneration**: when a company contributes to this topic they are sufficiently compensating their workers above the National Poverty Line, above minimum wage and therefore give their employees a living wage. Non-compliance can lead to workers who are unable to financially support themselves and their dependents. This can lift the employee and their families out of poverty, linking to target 1.1 and 1.2.
- **Worker's forced labor**: when a company contributes to this topic, they are working towards eradicating forced labor and raising awareness of forced labor of all forms. People living below the poverty line are usually more vulnerable to forced labor, human trafficking syndicates and other illegal labor trades because of their desperate economic situations. Forced labor can also be related to withholding wages. This links to target 1.1 and 1.2.
- **Worker's freedom of association and collective bargaining**: when a company contributes to this topic are giving the right to their employees to establish and join organizations of their choice to pool their interests. Without this, employees can be exploited by means of a low salary and wage. This links to target 1.1 and 1.2.
- **Small-scale entrepreneurs' meeting basic needs**: when a company contributes to this topic, they are ensuring this group has purchasing power to support their dependents and to sustain the company while also meeting basic needs. Entrepreneurs should have enough income to purchase essential goods and services to support their family. Contributing negatively to this topic would include underpaying these stakeholders. This links to target 1.1 and 1.2.

1.3.2 Target 1.4 Equal rights to economic resources and mobilization of these resources

Target 1.4 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

Social LCA:

- **Worker's remuneration:** when a company contributes to this topic, they are sufficiently compensating workers which includes coverage of retirement, health insurance and disability thus enhancing their economic resource. This links to target 1.4. Underpaying worker's is exploitative leading to worker's being unable to support their basic needs.
- **Local community's access material and immaterial resources:** when a company contributes to this topic, they are either preventing and mitigating adverse effect on local communities or they are promoting restored access to resources. This can be in the form of land, water, clean soil, electricity, internet, mobile phones and various forms of cultural heritage. This links directly to target 1.4.
- **Small-scale entrepreneurs meeting basic needs:** when a company contribute to this topic, they are ensuring that entrepreneurs have purchasing power while allow ensuring that the basic needs of this group and their families are met by sufficient revenue. Entrepreneurs will then have access to purchase basic and essential goods and services. Should this group be unable to meet their basic needs and be unable to further develop their business, it would substantiate a negative contribution.
- **Small-scale entrepreneurs' access to services and inputs:** when a company contributes to this topic they are ensuring access to inputs such as credit, banking, secure methods of storing and saving money, ICT services, legal support and infrastructure enablers. This links directly to target 1.4
- **Small scale entrepreneurs land rights:** when a company contributes to this topic, they are ensuring that rights to the land and waterbodies are clearly defined, long term, enforceable, transferable and socially and legally legitimate i.e. land tenure rights. This links directly to target 1.4 through ownership and control of land and other property. Should a company be involved in land grabbing or be complicit in activities related to this, they are negatively contributing to this topic.

1.3.3 Target 1.5: building resilience of poor communities and their vulnerability to climate-related extreme events¹

Target 1.5 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

Social LCA:

- **Local community's health and safety***: when a company contributes to this topic, in a matter that is related to climate resilience, they are preventing and mitigating adverse impacts on the health and safety of the local community especially to vulnerable groups. This includes proactive hazard mitigation and risk assessment within the communities at risk of climate-related, economic, social and environmental shocks.

¹ Environmental impact categories are not linked to this target because global climate mitigation does not necessarily have a localized effect on a specific community. This target is largely associated with the social aspects of building resilient communities and reducing their vulnerability to climate-related extreme events.

1.3.4 Overview of links

In Figure 1 the overview of the links between LCA impact categories and SDG 1 is shown.

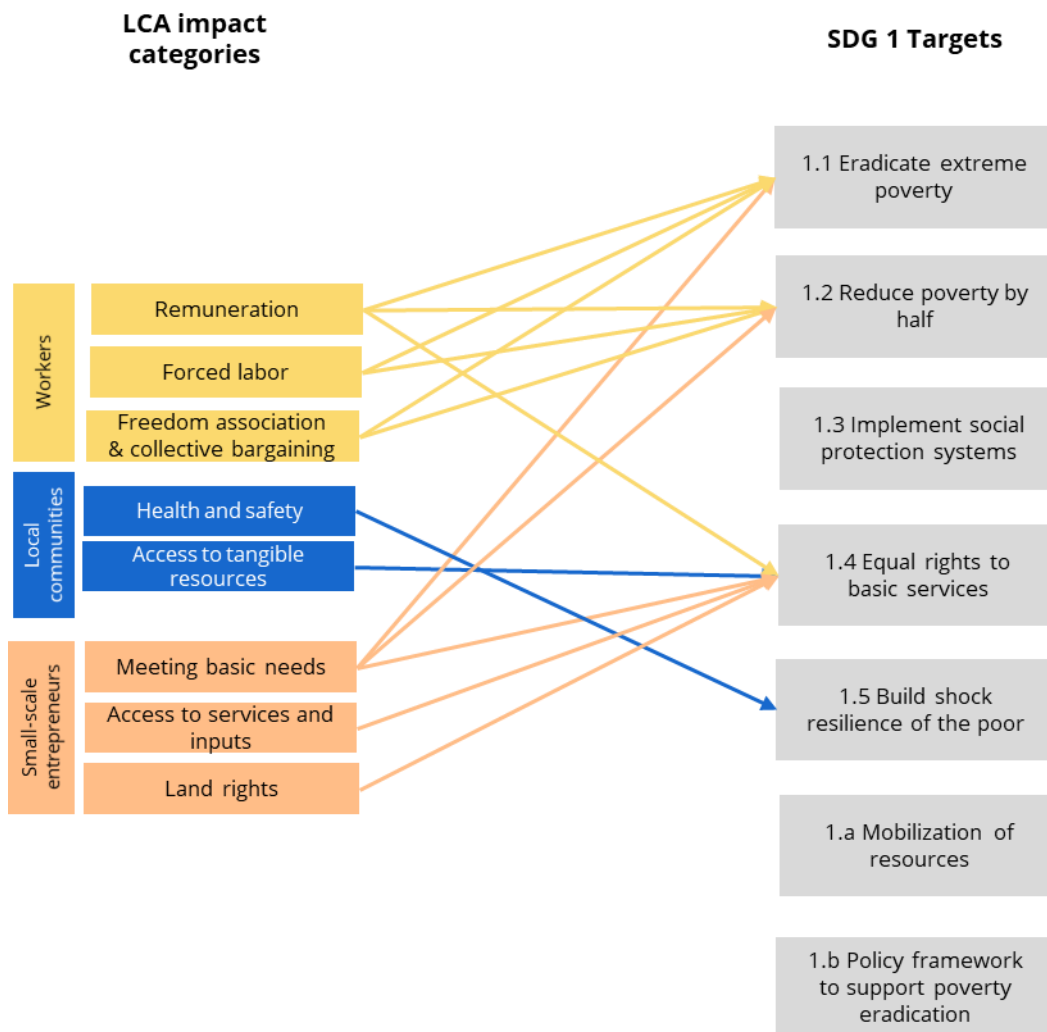


Figure 1 Overview of links between LCA impact categories and SDG targets for SDG 1

1.4 Characterizing the relation between LCA and SDG 1

In this paragraph, the nature of the relation between the impact categories and the targets of SDG 1 are defined. This step determines the score needed to qualify as a contribution to a target, per target and impact category. The first section describes how environmental impact category indicator results can be linked; the second section does the same for social metrics.

Asterisk (*) represents a link that is established under specific condition outlined under the target.

Underlined topics represent those that are deemed critical by the SDG Assessment methodology.

1.4.1 Social LCA

Table 1.3: Social topic linking to SDG 1

Stakeholder	Social topics	Rationale	Requirements to be counted as a contribution to SDG 1	
Workers	<u>Remuneration</u>	SDG target 1.1, 1.2 and 1.4 Sufficient compensation of workers can lift them and their dependents out of the cycle of poverty.	+2	Workers receive additional social benefits as defined for retirement, health, insurance, disability coverage etc. on top of the living wage levels for a standard family defined in the Wage-indicator project.
			+1	All workers are paid at least living wage for a standard family as defined by the methodology of the Wage Indicator
			-1	Not all workers are paid the living wage for a single household or are not paid the legal or industry minimum wage and/or social benefits are not according to applicable law. The company has committed to resolve this issues clearly.
			-2	Workers are paid below the poverty line in the country or region. This is according to legal or industry minimum wage and/or social benefits are not according to applicable law. There is no commitment to address this issues.
	<u>Freedom of association and collective bargaining</u>	SDG target 1.1 and 1.2 Employees that form part of a collective bargaining organisation or have the freedom to associate with a protective labour body, form part of a social protective system. This pools their interests and covers more threats to their job longevity.	+2	The company or facility engages in a dialogue with the collective representation of workers and incorporates their views into management decisions in a structured and well-defined manner

		+1	The company informs workers of the decisions that could affect their position, before they are taken and recognises and listens to the collective representation of organised workers in negotiations when they provide feedback.
		-2	Incidents have been discovered, that show that the company or facility prevents workers' rights to freedom of association and collective bargaining and a corrective action plan with a clear timeline for completion has not been developed.
	<u>Forced labour</u>	Target 1.1 and 1.2	
		The company is eradicating forced labour and consequently creating a better livelihood.	
		+2	The company has made eliminating the use of forced labour in its own organisation and its entire value chain, including its customers a top priority and can demonstrate the success of its approach.
		-2	Incidents of forced labour have been discovered within the company or facility, and a corrective action plan with a clear timeline for completion has not been developed.
Local communities	Access to material and immaterial resources	SDG target 1.4	
		The company is restoring and improving access to resources such as clean soil, electricity, internet, mobile phones and various forms of cultural heritage. This maintains equal rights to economic and natural resources.	
		+2	The company or facility has a PDCA programme in place to address the local community's access material and immaterial resources (beyond the requirements set in the local laws). Commitments, performance, improvements and effectiveness of programmes are disclosed publicly.
		-2	Incidents of actual damage, adverse impacts or risks to the community's access material and immaterial resources have been discovered, but a corrective action plan with a timeline for completion has not been developed.

Health and safety*	SDG target 1.5 The company is preventing and mitigating adverse health impacts with specific reference to climate-related disaster management affecting low income and vulnerable groups within the local community.	+2	The company or facility has publicly stated that health and safety for local communities is a high priority and publicly reports and discloses its commitments, performance, progress and effectiveness of the management system/initiatives/activities which confirm exceptional high performance on EHS.
		+1	The company has a management system in place to address the health and safety of local communities beyond the requirements set in local laws and this results in better than average performance in EHS.
		-2	Incidents of preventable significant damage, adverse impacts or risks to community health and safety have been discovered, and the company does not have the intention to address this.
Small-scale entrepreneurs	SDG target 1.1,1.2, 1.4 The company is ensuring that entrepreneurs within their supply chain have the required income to support their dependents as well as their own basic needs with regards to goods and services.	+2	The company that sources from this supplier community has a policy and activities to actively increase the productivity and quality of the products in a way that raises the income above the level of basic needs and supports the community with bridge loans during unforeseen circumstances. These results are community-recognised.
		+1	The company sourcing from this supplier community has a policy and activities to actively increase the revenue, productivity and quality of the products to create shared value.
		-1	The small-scale entrepreneur cannot meet basic needs and could not invest in their business further. The company is investing and engaging with this group to improve the situation with a plan and a clear and well-defined timeline.
<u>Meeting basic needs</u>			

		-2	The small-scale entrepreneur cannot meet basic needs at a minimum poverty level and could not invest in the further development of their business. No attempts have been made to improve this situation.
Access to services and inputs	SDG target 1.4 The company is ensuring access to financial services, ICT services and legal support thereby alleviating the state of poverty within this group and addressing their vulnerabilities and building resilience.	+2	The company that sources from this supplier's community has made stability and quality of the access to all four services and inputs a top priority.
		+1	Access to the four services and inputs is generally available and the company that sources from this supplier's community has provided stability and quality of the access to the scarcest services and inputs.
		-2	The small-scale entrepreneurs cannot meet basic needs at a minimum poverty level and could not invest in the further development of their farm and business in the most recent period, and no attempts are made by the company that sources from this community to improve this situation.
Land rights	SDG target 1.4 The company is ensuring that rights to the land and waterbodies are clearly defined, long term, enforceable, transferable and socially and legally legitimate i.e. land tenure rights	+2	Risk of land grabbing and tenure security in the entire region from which the company sources is actively monitored and the company actively fights land grabbing with legal procedures and by engaging in and investing in public-private partnerships.
		+1	Risk of land grabbing and tenure security in the community from which the company sources is low and actively monitored and people can get support, like legal advice and protection to fight such procedures.
		-1	Evidence indicates that there is a substantial risk of land grabbing, but the company sourcing from this community, is actively supporting the community to stop this practice.

-2	Evidence indicates that there is a substantial risk of land grabbing. The company sourcing from this area does not take action or is even complicit in this process.
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1.5 Scoring matrix for SDG 1

Based on the tables above, the following summary can be made as a checklist for determining if the LCA results can support a contribution to SDG 1.

Asterisk (*) represents a link that is established under specific condition outlined under the target.

Underlined topics represent those that are deemed critical by the SDG Assessment methodology.

Table 1: Scoring matrix for determining whether the LCA results can indeed support SDG 1

SDG 1	Red flag (-2, -1) or blocking (🚫)		Contributing		
Target 1.1					
<u>Remuneration</u>	🚫	-1		+1	+2
<u>Forced labour</u>	🚫				+2
<u>Freedom of association and collective bargaining</u>	🚫			+1	+2
<u>Meeting basic needs</u>	🚫	-1		+1	+2
Target 1.2					
<u>Remuneration</u>	🚫	-1		+1	+2
<u>Forced labour</u>	🚫				+2
<u>Freedom of association and collective bargaining</u>	🚫			+1	+2
<u>Meeting basic needs</u>	🚫	-1		+1	+2
Target 1.4					
<u>Remuneration</u>	🚫	-1		+1	+2
Access to material and immaterial resources	-2				+2

Meeting basic needs	⊘	-1		+1	+2
Access to services and inputs	-2			+1	+2
Land rights	-2	-1		+1	+2
Target 1.5					
Local community health and safety	-2			+1	+2

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