

Micro-, Small, and Medium- sized Enterprises (MSMEs) and their role in achieving the Sustainable Development Goals



DESA

Department of
Economic and
Social Affairs

Micro-, Small and Medium-sized Enterprises (MSMEs) and their role in achieving the Sustainable Development Goals

This paper was prepared under the project supported by the 2030 Agenda for Sustainable Development Sub-Fund of the UN Peace and Development Fund (UNPDF), of which the People's Republic of China is a major contributor.

This report was prepared by Ms. Raniya Sobir, consultant, for the United Nations Department of Economic and Social Affairs Division for Sustainable Development Goals. The views expressed in this report are those of the author and do not necessarily reflect those of the United Nations.

Table of Contents

I. Introduction	4
II. Analysis - Role of MSMEs in fulfilling the SDGs	5
Goal 1. End poverty in all its forms everywhere.....	5
Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture	7
Goal 3. Ensure healthy lives and promote well-being for all at all ages.....	9
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.....	11
Goal 5. Achieve gender equality and empower all women and girls	13
Goal 6. Ensure availability and sustainable management of water and sanitation for all	15
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	17
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	19
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.....	21
Goal 10. Reduce inequality within and among countries.....	23
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	25
Goal 12. Ensure sustainable consumption and production patterns	27
Goal 13. Take urgent action to combat climate change and its impacts	29
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.....	31
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.....	33
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.....	35
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	37
Bibliography.....	39

I. Introduction

This report aims to demonstrate the relevance, role and contributions of Micro-, Small- and Medium- Enterprises (MSMEs) to the seventeen Sustainable Development Goals (SDGs). The report examines the role of MSMEs to each of the SDGs. The report unpacks the role of MSMEs in economic activity, in creating employment and incomes, particularly for the poor and marginalized groups, as service providers (for example in education, health, water and sanitation) and as energy users/polluters with environmental footprints. Through these lenses, it is possible to establish direct and indirect linkages between MSMEs and the seventeen goals.

The SDG targets are ambitious and require transformation of public and private activities. This transformation is associated with adapting new business models, bringing in new innovation/technology and doing business differently – more sustainably and more ethically. This process opens up new business opportunities for the private sector in general and particularly for MSMEs. According to the Business and Sustainable Development Commission, sustainable business models could open economic opportunities worth \$12 trillion and create 380 million jobs by 2030, with more than 50 per cent¹ being located in developing countries. Such opportunities for MSMEs have been identified under each goal. The discussion also focuses on selected business examples and good practice initiatives that support MSMEs and in turn contribute to the achievement of SDGs.

Background on MSMEs

According to the World Bank, Micro, Small and Medium Enterprises (MSMEs) are defined as follows – micro enterprises: 1–9 employees; small: 10–49 employees; and medium: 50–249 employees.² However, the local definition of MSMEs vary from country to country, and is based not only on number of employees, but also by inclusion of other variables such as turnover and assets.

MSMEs play an important role in the wider eco-system of firms. Start-ups and young firms, which are generally small or micro firms, are the primary source of net job creation in many countries and are the driving force of innovation and sustainability in the private sector.

There are about 365-445 million MSMEs in emerging markets: 25-30 million are formal SMEs, 55-70 million are formal micro, and 285-345 million are informal enterprises.³

II. Analysis - Role of MSMEs in fulfilling the SDGs

Goal 1. End poverty in all its forms everywhere



The main focus of the goal is to eradicate and reduce poverty based on national definitions. Goal 1 has seven targets, including ensuring access to social protection, access to economic resources/assets, improving climate and disaster resilience of the poor, mobilising resources and strengthening national and international policies to address poverty.

Can MSMEs help achieve Goal 1?

MSMEs create employment that lift people out of poverty. The latest global estimate suggests that 11 percent of the world's population, or 783 million people, lived below the extreme poverty threshold in 2013.⁴ Most of the poor in developing countries are not employed or do not earn enough to lift themselves out of poverty. Job creation in the private sector has proven to be a main driver in the fight against poverty. Over the past 30 years, the private sector has contributed to a sharp decline in the share of the population in the developing world living below the poverty line from 52 percent to 22 percent.⁵ MSMEs contribute significantly to the employment creation process of the private sector. In emerging markets, 4 out of 5 new positions in the formal sector were created by MSMEs, which is about 90 percent of total employment.⁶



Informal enterprises engage poor and marginalized populations. In lower income economies, a large share of MSMEs are informal enterprises and serve as a source of livelihood for the base of the pyramid population, consisting of 4 billion people that earn less than US \$3000 a year.⁷ It is estimated that more than 70 percent of the workforce in developing countries operates in the informal economy either through self-employment or from work in enterprises that are not legally registered businesses.⁸ Given the flexibility of the informal economy, it provides opportunities for the poor, including women and youth, to earn money. According to the International Labour Organization (ILO), the majority of those employed in the informal economy lack social protection, rights at work and decent working conditions.⁹ Informal enterprises offer an avenue for interventions to formalize MSMEs and to provide access to social protection for those that they employ. Given the scale of informal employment, particularly in developing economies, support in formalizing MSMEs would be a step to achieving Goal 1.

Individual MSMEs have the potential to adopt actions in their business practices to contribute to the goal. They can set and enforce strict policies and practices that do not discriminate against the poor.¹⁰ MSMEs can also recruit, train, and employ local community members, including those living in poverty, and integrate them into the MSME value chain.¹¹

New business models/solutions of MSMEs that will help achieve the SDGs. The ambitious push for eliminating poverty through the SDGs offers a new range of business models and opportunities that are being tapped by the private sector, including MSMEs. Although the purchasing power of the poor is limited, the cumulative effect is large. According to a report by the World Resources Institute (WRI), the base of the pyramid has substantial

purchasing power, constituting a \$5 trillion global consumer market.¹² They offer a market that is increasingly being connected by mobile phones. The scale of the market and mobile phone penetration provides opportunities for market-based solutions in delivering services that will lift people out of poverty. There are encouraging entrepreneurial ventures, for example, providing affordable water filters or home treatment systems so that households can purify water for themselves, offering low-cost solar-powered lighting systems that can provide a few hours of light in the evening, or introducing efficient, multi-fuel cook stoves. Many of these initiatives apply micro-franchising.

Small businesses help alleviate poverty through micro-franchising

Micro-franchising uses elements of traditional franchising and targets small businesses. It is broadly defined as small businesses that can easily be replicated by following proven marketing and operational concepts. The study 'Poverty Alleviation as a Business' documented micro-franchising examples where profitable supply chains have been created through small businesses delivering useful products or services that are directly alleviating poverty. Some of these examples are:¹³

Village Farm and Forestry programme. A female entrepreneur in Bangladesh runs a village farm and forestry programme as a social insurance scheme. She runs one of the 2500 private nurseries that deliver almost 100 million tree saplings every year. Trees have become a profitable crop for 650,000 families; they serve as an asset as they can be sold at any point. The tree can be chopped in case of an emergency (e.g. a child's sickness).

The treadle pump. Over 1 million pumps have been sold to small and marginal farmers. On half an acre, they can grow more vegetables or other crops and make an average additional income of \$ 100 per year. Around 10,000 micro-enterprises supply, sell and install the pumps in Bangladesh, India and Nepal.

Micro-concrete roofing tiles. Over 2,000 workshops operate in more than 35 countries; they produce 150,000 roofs per year. The technology is supported by an international network. The cost-effective building materials can have a big scope for small enterprises and contribute to closing the housing gap.

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture



This goal has seven targets. The goal focuses on ending hunger, eliminating all forms of malnutrition, increasing productivity of farmers, particularly that of small-scale producers and sustainability in food production/agriculture sector. Other targets focus on international cooperation to promote research, to address global trade of agricultural goods and food prices that threaten food security.

Can MSMEs help achieve Goal 2?

Smallholder farmers and agricultural-focused MSMEs directly contribute to the goal.

MSMEs directly link to SDG Target 2.3 and promote interventions to develop capacity of small-scale farmers and agriculture-focused MSMEs.¹⁴ A large share of farmers in the developing world are small-scale producers. The percentage of small-scale food producers for countries with available data in Africa, Asia and Latin America ranges from about 40 to about 85 percent. In Nepal, the proportion of small-scale food producers is 43 percent, whereas in Armenia and Nicaragua it is about 85 percent.¹⁵ In most other countries, the proportion of small-scale food producers is between 50 to 70 percent.¹⁶ The capacity of small-scale producers needs strengthening because their incomes and productivity are systematically lower than those of large food producers. Incomes of small-scale producers range from a few hundred US dollars per year in countries such as Kenya, Tanzania, Uganda and Ethiopia, to over US \$3,000 per year in countries such as Vietnam, Iraq and Mongolia.¹⁷



MSMEs have the potential to adopt actions in their business practices to contribute to the goal. MSMEs can support and encourage small-scale farming, ensure sourcing from local entities and small-scale producers for office purposes as much as possible and demonstrate transparency in the agricultural supply chain particularly when sourcing.¹⁸ Malnutrition costs the global economy as much as five percent of global GDP in loss of productivity and direct healthcare spending.¹⁹ Given that MSMEs tend to be labour-intensive, improved nutrition status can help produce a healthy workforce and contribute to the improved productivity of MSMEs. MSMEs can therefore be incentivised to conduct nutrition education and awareness programmes to improve household dietary habits. These initiatives can promote consumption of food from small-scale producers at the same time.

New business models/solutions of MSMEs that will help achieve the SDGs. Climate-smart agricultural approaches can help to achieve several aspects of the goal, including the sustainability of the agricultural value chain, and at the same time increasing productivity of farmers. In India and Rwanda, food waste reducing technologies minimise post-harvest losses and have resulted in reduced losses by over 60 percent – and increased smallholder farmers' incomes by more than 30 percent.²⁰ The report of the Business & Sustainable Development Commission estimates that addressing challenges in the food and agriculture sector in line with the SDGs have a potential value in 2030 of US \$1.8 trillion in current prices.²¹ This includes a range of areas such as reducing food waste, digital services for the agriculture sector, farming technology, micro-irrigation, forest ecosystems and restoring degraded land. Areas for innovation and new business solutions identified by the Agri-Food Chain Coalition of Europe include new plant breeding methods and products, animal diets and specialty feed ingredients, which can help reduce the environmental footprint of animal farming, agricultural technologies, including genetically-modified organisms that help develop new seeds, manufacturing of agricultural machinery that reduces carbon emissions, and handling plants and fertilizers through safety standards management of agricultural waste and tools to improve fertilizer use.²² While MSMEs are already

active in these new areas, support to MSME capacity-building and access to technology for small and medium agriculture-based enterprises can contribute significantly to the achievement of Goal 2.

Business examples supporting MSMEs

The Okata Farm and Food Processing. Founded by a women entrepreneur, Okata Farm and Food Processing is a small enterprise in Ghana with 32 employees. The enterprise worked with over 3200 farmers producing organic crops including maize, rice and soy. 80% of the farmers who Okata works with are women. Focusing not only on business profits, Okata has won national and international awards recognizing its socially and ecologically-responsible business models. The company helps women farmers gain access to financial resources and provide trainings for them on organic farming and food fortification. Contributions of the company has helped women and youth in communities earn more income, in addition to planting organic crops with higher nutrition and market values. In December 2017, Okata Farm and Food Processing was selected as the second-best farm of Ghana with the recognition of their contributions to improving food and nutrition security among low income population group among communities they work with.

Goal 3. Ensure healthy lives and promote well-being for all at all ages



This goal has 13 targets. The targets cover a range of areas from reducing maternal, neonatal and infant mortality, eliminating epidemics, reducing non-communicable diseases, addressing substance abuse, tobacco control, reducing deaths from road accidents and injuries, and from exposure to pollution and achieving Universal Health Coverage (UHC). The targets also focus on promoting global cooperation on research for vaccines and medicines, health financing and addressing global and national health risks.

Can MSMEs help achieve Goal 3?

MSMEs are healthcare providers. The healthcare sector involves a range of business areas for private sector participation from health services to retail to life sciences and medical education. In a survey conducted by the AXA Group and the United Nations Environment Programme (UNEP) Finance Initiative's Principles for Sustainable Insurance on the impacts of climate change on MSMEs, 9 percent of the 1,104 MSMEs surveyed were involved in the healthcare sector, showing a relatively high number in this area.²³ Most healthcare companies in Africa are owner-managed and small (typically less than US \$0.5 million in profits).²⁴



MSMEs are bridging the healthcare gap through better-quality healthcare services and the provision of a wider range of basic laboratory and imaging services.²⁵ Further, MSMEs are progressively taking the leading role as innovators of low-cost, high-volume delivery models, driven by increased competition for the same customer base. However, MSMEs are facing several challenges, such as the lack of strict regulatory standards and the lack of resources to hire professionals with skills to manage the operational inefficiencies.²⁶ Supporting small and medium healthcare enterprises to overcome these challenges can contribute to improving healthcare provision and progress towards this goal.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal. They may make investments in health a priority in business preparations. They should also offer employee health benefits,²⁷ and encourage staff to explore ideas they have for activities that offer them a break and re-energize them at work.²⁸

New business models/solutions of MSMEs that will help achieve the SDGs. The health sector faces a range of challenges from ineffectiveness of drugs to communicable diseases, increasing non-communicable diseases, and growing elderly population and needs, skills and supply gaps in developing countries. To achieve the goal, these challenges need to be addressed. The report of the Business & Sustainable Development Commission estimates that these challenges have a potential value of US \$1.8 trillion in 2030 in current prices.²⁹ Some of these new areas that are critical to delivering the goal include risk pooling, activity services, low-cost surgery, better disease management, telehealth, remote patient monitoring, detection of counterfeit drugs, electronic medical records, advanced genomics, weight management programmes and healthcare training. MSMEs already play a key role in these areas. Existing MSMEs and start-ups can be further supported to capitalize on these business opportunities to achieve the goal. Increased healthcare spending can boost business opportunities and service areas for MSMEs. The World Health Organization (WHO) estimates that achieving the SDG health targets would require new investments increasing over time from an initial US \$134 billion annually to \$371 billion, or \$58 per person, by 2030 under the 'ambitious scenario' and new investments increasing from an initial US \$104 billion a year to \$274 billion, or \$41 per person, by 2030 under the 'progress scenario'.³⁰

e-Health MSMEs in Africa

E-health includes a range of products and services that integrate technology to deliver healthcare and are lucrative for MSMEs. Emerging technology products include wearable patches that can diagnose heart conditions, sensors that monitor asthma medication intake and detect poor air quality, and glucose monitors that send diabetics' data straight to smartphones. In 2017, e-health represented one third of African start-ups.³¹ Select e-health MSME examples are:

Helium Health³² is a small company that originated from Nigeria, which has developed a software system for health records and hospital management. It supports hospitals and clinics in Africa, the Middle East and Asia, with a user-friendly electronic health record and hospital management system that helps client hospitals to streamline their practices, reduce waste and increase their standards of care.

Peek Vision³³ is a Kenyan company that saw a market opportunity in the bulky, fragile and expensive equipment used for eye examinations. The firm's mobile application and US \$5 clip allows anyone with a smartphone to turn their handset into a diagnostic tool with the ophthalmological accuracy of a US \$25,000 camera, able to spot conditions from cataracts to glaucoma.

Kasha is an online store that provides healthcare products to women in Africa. They include hard-to-get products, such as emergency contraceptives and condoms with a guaranteed traceability.³⁴

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



The goal has 10 targets, which focus on provision of universal and equitable primary and secondary education, increasing access to early childhood education (ECE) and vocational and tertiary education, and achieving literacy and numeracy. The targets emphasize sustainable education and upgrading education facilities with gender-sensitive and disability-friendly features. Other targets include increasing global cooperation to improve learning environments, scholarships, training opportunities and skill development of educators.

Can MSMEs help achieve Goal 4?

MSMEs as providers of technical and vocational education. MSMEs, through work-based learning programmes (e.g. apprenticeship, career education and internship), could become informal educational service providers, and share technical and competency skills required by employers. Contributions of MSMEs to Technical and Vocational Education and Training (TVET) programmes have been noted in different countries in addressing the skill gaps and promoting lifelong learning. More efforts would still be needed to collect evidence on contributions of MSMEs to expanding access to formal and informal education services.



MSMEs as complementary formal education providers. In many developing countries, public schools alone are insufficient to ensure the inclusiveness of education services needed to reach the targets included in SDG 4. In many countries, MSMEs conducting business in the education sector could provide complementary education services, expanding the access to educational services to the general public.³⁵ For example, in a recent study conducted by the Center for Education Innovations tracks, the growth of low-cost private schools had more than doubled in India since 1993, while in Kenya, low cost private school enrolment has tripled since 1997, which has contributed to expanding access to educational services. MSMEs could contribute to achieving SDG 4 by expanding inclusive access to education services and improving skills of youth and women for obtaining decent jobs.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal.

They can:

- Create programmes (e.g., apprentice, career education, internships, work-based learning programmes, etc.) that give students earlier access to the corporate environment.³⁶
- Provide employees with continuous learning opportunities to improve their skills for their current and future employment.³⁷
- Improve awareness of employees on the importance of ECE, support access of employees to quality childcare, mental stimulation and learning through play.³⁸

- Use their voice in addition to investment in education programming. MSMEs can increase their engagement at high-level policy discussions by lobbying for increased public funding and prioritization on education related issues such as girls' education.³⁹

New business models/solutions of MSMEs that will help achieve the SDGs. The SDG agenda provides an ambitious framework to address education sector challenges. Innovation can help bring about the transformation needed to meet this ambitious agenda, and MSMEs could contribute to the creation and innovation for expanding the scope of inclusive education. This includes online/remote learning and educational opportunities, and digital education for development of skills of education professionals. The global market for educational products and services is growing rapidly (by nearly 50 percent from 2012 to 2017), primarily driven by an expanding middle class in emerging economies.⁴⁰ This trend indicates greater opportunities for business. Existing education-based enterprises and start-ups need to be supported through expanded access to finance and innovations to fully tap these opportunities and help achieve this goal.

Innovative MSMEs providing education

Kidogo.⁴¹ While 90 percent of brain development takes place between ages 0 to 5, 150 million children across the globe do not have access to ECE. The SDGs reassert the importance of ECE, as well as the potential of ECEs for social enterprises. One successful example is Kidogo, which is a social enterprise that provides high-quality, affordable early childhood care and education for families living in Africa's urban slums. They build early childhood development "hubs" that provide affordable, high-quality childcare and pre-school services using certified early childhood development teachers and a customized curriculum. These hubs serve as best practice early childhood development models and offer quality care, including nutritious meals and health monitoring. Kidogo micro-franchises their model by providing training, support, and resources to assist local women to open high-quality and affordable home-run care centers. These women receive Kidogo's "business-in-a-box" kit, which includes curriculum materials, several weeks of intensive training, a franchising package with resources such as signage and uniforms, facility renovations, and training in the basics of small business management, including financial literacy and marketing.

Moringa School.⁴² A partnership between Moringa School, a Kenya-based coding school, and Hack Reactor, a coding trainer based in the U.S., identifies children with strong tech potential and gives them top-notch web development training, in the process creating a future talent pool for the scheme's partners, which include Safaricom and Barclays.

Goal 5. Achieve gender equality and empower all women and girls



This goal has nine targets. The targets push for ending discrimination based on gender, ending violence against women and harmful practices against women and girls, promoting participation of women in decision making, improving women's access to economic resources, technology and reproductive health services, and strengthening overall policies and laws to promote gender equality.

Can MSMEs help achieve Goal 5?

A significant proportion of MSMEs are women-owned/led. Based on the findings from the International Finance Corporation (IFC)'s Enterprise Finance Gap Assessment Database, it is estimated that globally there are roughly 9.34 million formal women-owned MSMEs in over 140 assessed countries, which is approximately one third of all formal MSMEs. The findings show that East Asia and the Pacific have the highest overall number, though when weighted by the number of women in the region, Europe and Central Asia have the most. Based on either measure, South Asia has the least.⁴³ Formal women-owned MSMEs are well engaged in all sectors. They are more likely to have a larger presence in the retail and wholesale, and healthcare, beauty, and cosmetics sectors. They have close to equal footing in the tourist, transport, hotels and restaurants, services, and trade sectors, and a slightly lower presence in the manufacturing, agriculture, and construction sectors.⁴⁴ However, women-owned and women-led enterprises face many challenges, most critical being limited access to finance. Other barriers include lack of business skills and access to networks. Strengthening capacity of women-owned/led MSMEs can be a source of economic empowerment for women.



MSMEs employ women. A study by IFC shows that women constitute a fifth of the total workforce in the MSME sector.⁴⁵ According to data available, the rate of women's employment in registered MSMEs is 20.45 percent and 13.02 percent in unregistered enterprises.⁴⁶ Disaggregated data across MSMEs shows that women's employment, like ownership, is the highest in the case of micro enterprises, followed by small and then medium enterprises.⁴⁷ However, women are employed mostly in low-skilled jobs and face low wages, inappropriate working conditions, and an absence of social security, maternity benefits or sexual harassment provisions. Improving employment conditions of MSMEs can help to achieve women's active economic participation to achieve the goal.

Inclusive finance can bridge the gender gap. Financial inclusion can be a particularly powerful driver of gender equality. Eighty percent of women-owned businesses with credit needs are either unserved or underserved, a US \$1.7 trillion financing gap.⁴⁸ Women entrepreneurs, particularly those from rural poor communities, are often disadvantaged in growing their businesses, lacking land deeds and/or collateral needed to access formal sources of credit. Evidence shows that women are stronger savers than men, more responsible borrowers and calculated risk-takers. According to the Bank of New York Mellon, increasing women's access to financial products and services could unlock \$330 billion in annual global revenue.⁴⁹ Financial institutions, therefore, need to be incentivized to cater to women entrepreneurs. A good example is Women's World Banking Capital Partners Fund, which is a private equity limited partnership that makes direct equity investments in women-focused financial institutions. Their investment strategy builds on the belief that investors can influence institutions to ensure that women clients are part of financial institutions' growth strategy. Similarly, Asia Impact Investment Fund, co-founded by Credit Suisse, deploys capital in businesses that empower women.⁵⁰

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal. Similar to large companies, MSMEs can be encouraged to adopt gender inclusive policies within their business practice and in their value chains. This includes ensuring equal pay and benefits for work of equal value, zero-tolerance towards all forms of violence at work, supporting women with flexible work arrangements, providing child and dependent care support, promoting women in management positions and increasing gender balance in the teams.⁵¹ This could be achieved by adopting the Women’s Empowerment Principles, which are being promoted by UN Women and UN Global Compact for firms of all sizes in all sectors.⁵² Many other tools exist that businesses, including MSMEs, can use to promote gender inclusivity in their value chains. MSME entrepreneurs need to be informed and trained on adopting these tools to change business practices.

Gender balance in business promotes sustainability

Women employees and women leaders in business prioritize sustainability. A study by Net Impact found that 60 percent of employed women said it was very important to work for a company that prioritises social and environmental responsibility, compared to 38 percent of men.⁵³ Evidence also shows that companies with more women on their boards are more likely to invest in renewable power generation, low-carbon products, and energy efficiency.⁵⁴

Women-owned enterprises and women leaders are core to changing business practice and culture towards sustainability. An example is **Green Strategy**.⁵⁵ Anna Brismar is the founder and owner of Green Strategy, a consultancy firm specialized in circularity and sustainability issues of the fashion, apparel and textile industries on a global scale. She is the owner and developer of the online platform Circularfashion.com, which is the world’s first platform dedicated exclusively to circularity issues in the fashion, apparel and textile industries. She is also the founder and head of the Circular Fashion Network, an international network of professionals working with circularity and sustainability issues in the fashion and textile industries.⁵⁶ Principles of design being promoted in the company include durability and longevity, use of nontoxic and biodegradable materials, and ethical attitudes towards society and environment. They are also promoting recycling through the development of effective and safe technologies.

Goal 6. Ensure availability and sustainable management of water and sanitation for all



This goal has eight targets. They focus on ensuring universal and equitable access to safe water and safe sanitation, improving water quality, achieving water efficiency in sectors, protecting water-based ecosystems, promoting integrated water resource management, and increasing international cooperation to transfer knowledge, capacity building and technology to address water and sanitation and to promote local level management of water and sanitation activities.

Can MSMEs help achieve Goal 6?

MSMEs deliver water and sanitation services. The World Bank estimates an annual need of \$114 billion between now and 2030, three times the current investment levels, if we are to achieve the targets related to water, sanitation and hygiene (WASH) of SDG 6.⁵⁷ MSMEs fill the gap in many developing countries where the public sector fails to reach communities, particularly low-income families. In Asia, Africa and Latin America, MSMEs, either through their own funds or loans and some equity, are delivering water and creating sanitation infrastructure in the rural-remote or dense-urban areas. These MSMEs provide, in various innovative ways, safe water in cans or affordable water filtration systems; similarly, they provide household latrines with onsite waste treatment or transportation and treatment/recycling of the waste. In Ghana, as in many other low- to middle-income countries, micro-enterprises are common in sanitation service delivery, which include the storage, collection and transport sections of the sanitation value chain.⁵⁸ MSMEs in the water and sanitation sector, however, face difficulties in viability due to limitations in demand, lack of business and technical skills, and financial challenges such as access to credit.⁵⁹ Capacity building of MSMEs in the sector can contribute to the goal.



Agricultural and food supply chain MSMEs can conserve water. The agriculture sector is by far the largest user of freshwater, accounting for nearly 70 percent of global water withdrawals.⁶⁰ Saving just a fraction of this would significantly alleviate water stress in other sectors, particularly in arid countries where agriculture can consume as much as 90 percent of available water resources.⁶¹ MSMEs active in the agricultural value chain can contribute to water savings by increasing productivity of food crops, improving water management practices and technologies, implementing sustainable agricultural practices, and growing fewer water-intensive crops. Capacity building and awareness-raising for agri-businesses and farmers is key to changing these practices.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal.

They can:

- Ensure that the workplace has appropriate WASH facilities and advocate for WASH amongst employees.
- Prioritize water efficiency by installing best-practice technologies for water conservation.
- Educate employees about the importance of water efficiency.⁶²
- Prohibit the use of chemicals and materials that can be particularly detrimental to water quality if improperly disposed.⁶³

New business models/solutions and opportunities for MSMEs that will help achieve the SDGs. A report by the World Bank in 2014 identified a potential US \$1.2 trillion market for MSMEs in the developing world in the area of “clean technology” for the decade ending in 2023.⁶⁴ The greatest opportunities identified were in waste management, small hydro, water treatment and renewable energy. MSMEs are considered to be particularly well-placed to operate in this sector as they are already engaged in areas such as construction, installation, operations and maintenance and the connection that MSMEs have to local markets. The study reports that in the UK, up to 90 percent of clean technology businesses are MSMEs, and this could be replicated in the developing world. Safe disposal of waste is a huge challenge in many countries. The Bill & Melinda Gates Foundation has funded innovators of various new, low-cost sanitation technologies. MSMEs can contribute to the commercialization of such technology that is expected to have a global market valued at \$6 billion by 2030.⁶⁵ MSMEs and start-ups need to be supported with market-based and technology-based solutions through capacity building, access to finance and expertise which in turn will contribute to the progress of this goal.

Startups with water and sanitation solutions

cewas Start-Up Programme Switzerland was initiated in 2011 and targets young entrepreneurs.⁶⁶ The programme consists of sector-relevant lectures providing the knowledge that allows participants to develop an idea, create a strong business model, pitch the idea to the water sector at the International Water Week in Stockholm, develop the idea and manage the business model. Expert coaches provide one-on-one coaching such as technical or business advice, introduce the start-ups into their network and assist with funding options. The programme lasts for one year and as of 2018, 54 start-ups and MSMEs have participated. Participants include:

Eco Solutions Forge (ESF) was founded in 2014 as a result of participating in the cewas Start-Up Programme. ESF aims to change the current situation in the Ukrainian Carpathians with regards to wastewater treatment, and to offer sustainable sanitation solutions for the tourist industry in the region. Its main activities are consulting and teaching on water and sanitation issues, as well as designing and building wastewater treatment systems. Additional activities include designing and building public dry toilets and rainwater harvesting systems. Lately, the main focus has been on researching and building high-performance cold climate insulated vermifilters with biochar substrate.

SOIL is a non-profit research and development organization focusing on sustainable provision of household sanitation and ecological waste treatment in Haiti. For a small monthly fee, SOIL's social business, EkoLakay, provides over 1,000 households with container-based sanitation (CBS) toilets and safely transforms all collected waste into compost. The revenue from toilet user fees and compost sales support ongoing project costs. SOIL's model is one of just three household CBS services globally.

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all



This goal has five targets. They focus on ensuring energy access for all, promoting renewable energy, improving energy efficiency and strengthening international cooperation to promote clean energy research and technology and energy infrastructure.

Can MSMEs help achieve Goal 7?

MSMEs have the potential for becoming more energy efficient.

While individual small businesses have low environmental footprints, their combined impact can exceed that of large businesses. MSMEs may produce more pollution than big businesses because of their informal nature and the resulting lack of regulations and supervision.⁶⁷ Studies have estimated that these businesses can contribute up to 60-70 percent of pollution levels in developing economies.⁶⁸ Encouraging MSMEs to adopt green technology and other environmentally-friendly strategies are therefore essential to the progress on Goal 7. A study in India showed that an estimated 26 million MSME enterprises account for about 45 percent of India's industrial production and 40 percent of exports; out of 400 manufacturing clusters, nearly half comprise energy intensive sectors (metallurgy ceramics, glass, textiles, etc.).⁶⁹ According to the study, a majority of the MSME clusters use conventional and inefficient technologies. The total energy saving potential of MSMEs in 36 clusters was identified as about 16 percent of their total energy consumption. The study noted that although the importance of energy efficiency was recognized by most MSMEs, the uptake of energy efficient measures remains low and is attributable to non-availability of technologies, lack of local service providers, poor technical capacities of MSMEs, and limited access to credit.⁷⁰



MSMEs can be incentivized by larger enterprises to integrate sustainable practices in their operations.⁷¹

Multinational enterprises can lead by example through their market power in demonstrating the value of 'sustainability premium', i.e. higher price for a product produced in a sustainable manner. They can encourage smaller firms in their supply chains to focus on sustainability standards. They can further benefit from investing in MSMEs to get access to new markets. The French multinational energy company ENGIE, for example, has set up a corporate impact venture fund that invests in social enterprises that aim to provide sustainable energy access for vulnerable populations around the world.⁷² Through these investments, ENGIE offers financial resources to MSMEs in the energy sector. ENGIE also gains access to new business opportunities through investing in social enterprises.

MSME finance can contribute to Goal 7. A report by the Climate and Development Knowledge Network (CDKN) estimates that the credit gap for MSMEs providing climate technologies is approximately US \$4-5 billion across developing countries. It further explains that access to climate finance is a challenge for MSMEs because of a lack of awareness, lack of an enabling environment and the limited availability of financial products for greening activities and climate technology.⁷³ The Green Climate Fund (GCF) recognizes the importance of including MSMEs for climate action and dedicated an MSME programme for US \$200 million under the Private Sector Facility.⁷⁴ GCF is supporting MSME projects on energy efficient approaches. Other initiatives include the

Renewable Energy and Energy Efficiency Partnership (REEEP), an NGO that invests funds in MSMEs and ventures that have strong potential to generate clean energy market growth.⁷⁵ The ResponsAbility Energy Access Fund is a revolving fund that provides working capital loans and longer-term debt to MSMEs producing and distributing modern energy products.⁷⁶

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal.

They can:

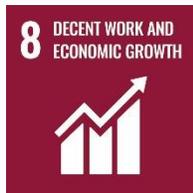
- Pursue energy efficient certifications.⁷⁷
- Prioritize energy efficiency across all operations, including preserving light, heating, cooling.⁷⁸
- Invest in skills development so that qualified personnel can enable clean technology adoption.

New business models/solutions of MSMEs that will help achieve the SDGs. Tackling energy demand and energy sources have a potential business value in 2030 of over US \$4.3 trillion in current prices.⁸⁰ There is a critical opportunity for renewable generators and equipment manufacturers. The International Renewable Energy Agency's (IRENA) forecasts that, including hydropower, renewables share of power generation worldwide could increase to 45 percent by 2030, from around 23 percent in 2014.⁸¹ Annual global investment in solar PV has already reached between US \$100 billion and US \$150 billion over the past five years. These trends present business opportunities for MSMEs.⁸² As highlighted earlier, MSMEs are considered to be well placed in the distribution, installation, operations and maintenance of technology applications. Existing MSMEs and start-ups need to be supported to tap these opportunities in renewable energy which in turn will help achieve the goal.

MSMEs deliver clean energy

Simpa Networks. Simpa Networks provides a basic, portable solar home system in an off-grid utilities model to base of the pyramid customers in India.⁷⁹ The system includes a low-cost meter connected to a cloud-based software that enables Simpa to track customer usage. Customers purchase the system with an initial down payment and then select how much energy credit to purchase. A portion of this payment covers the repayment cost of the system, while the rest goes to Simpa as profit and to cover operational costs. Once fully paid (typically within two to three years), the system unlocks permanently and continues to produce electricity for the customer for free. Simpa has installed over 15,000 solar home systems in India and is rapidly growing.

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

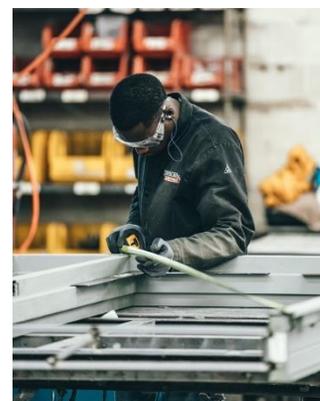


This goal has 12 targets. They cover a range of areas, including accelerating national economic growth, promotion of decent work, entrepreneurship, financial inclusion and global cooperation initiatives such as Aid for Trade, and a global strategy on youth employment.

Can MSMEs help achieve Goal 8?

MSMEs contribute to GDP and economic growth. Among Organisation for Economic Co-operation and Development (OECD) countries, MSMEs are the predominant form of enterprise and are major contributors to economic growth, generating between 50 percent and 60 percent of value added, on average.⁸³ In emerging economies, MSMEs contribute up to 33 percent of GDP. When taking the contribution of informal businesses into account, MSMEs contribute to more than half of GDP in most countries irrespective of income levels.⁸⁴

MSMEs create jobs and have the potential for promoting decent work and entrepreneurship. MSMEs directly relate to SDG Target 8.3.⁸⁵ As discussed under Goal 1, MSMEs contribute up to 45 percent of total employment in emerging market economies. In recent decades, employment generated by MSMEs has steadily increased at the global level. Over 2003-16, across 132 countries, the number of total full-time employees in MSMEs has nearly doubled, from 79 million to 156 million.⁸⁶ There is evidence to suggest that MSMEs contribute up to 90 percent of employment in thirteen Sub-Saharan African countries.⁸⁷ The presence of MSMEs is typically concentrated in low-skilled and labour-intensive sectors, such as light manufacturing and the service sector. Nonetheless, jobs provided by MSMEs may have lower salaries and may be more insecure than those of larger enterprises. Because of informality, it is also difficult to ensure jobs provided by informal MSMEs are fully covered by a social protection network. Therefore, MSMEs, while having a large share of employment, may not offer decent work opportunities as per ILO standards. Nonetheless, when better supported, they have the potential to promote decent work standards and decent job opportunities. The formalization and development of entrepreneurship as envisaged in this goal will require tackling various challenges MSMEs face, including creating more enabling policy and regulatory frameworks, increasing access to finance and market information, capacity building of MSMEs and increasing access to good infrastructure required for MSME operations.⁸⁸



MSMEs finance is a target for Goal 8. Target 9.3 under Goal 9 identifies the importance of access to financial services.⁸⁹ This Target points to the importance of providing sufficient financial resources to MSMEs, but it also includes the idea of strengthening the ability of MSMEs to access markets and expand their businesses through value chains, thus going beyond the domain of pure credit. The current credit gap is estimated at US \$1.2 trillion for formal MSMEs, and US \$6 trillion for informal MSMEs around the world.⁹⁰ About 70 percent of MSMEs in emerging economies countries lack access to credit.⁹¹ With limited assets to use as collateral, formal and informal MSMEs are often perceived by commercial financing institutions as high-risk borrowers, which means higher costs in terms of fees and interest rates incurred. In recent years, many national governments and international organizations have tried to promote grant facilities, preferential rates and loan guarantee programmes to bridge the gap. Well-managed schemes need to provide support and capacity building to ensure small business owners only take onboard acceptable amounts of risk and avoid bad debts. There continues to

be great interest and new developments in venture capital, and other innovative and alternative financing for MSMEs.⁹²

Individual MSMEs have the potential to adopt actions in their business practices to contribute to the goal. They can offer apprenticeship opportunities⁹³ and foster an entrepreneurial culture and invest in/mentor young entrepreneurs. MSMEs could also instil a firm policy against unfair hiring and promote decent work standards.

Diversifying MSME lending modalities and financial products

Idepro⁹⁴ in Bolivia is a cooperative that has a specific “Procadenas” lending product aimed at providing financing across the value chain of specific sectors and connecting various businesses along this chain with one another. Starting in various agro-forestry products, such as quinoa, grapes, castañas and forestry products, Idepro has now also expanded its value chain financing to textiles, transport and construction.

The Regional MSME Investment Fund for Sub-Saharan Africa⁹⁵ is a debt fund with a focus on financing microfinance institutions, local commercial banks and other financial institutions that serve MSMEs. The fund has disbursed US \$150 million to 42 lending institutions and to over 195,000 micro clients in 17 countries.

The ICICI Bank MSME programme in India⁹⁶ provides non-traditional financial services to MSMEs. To evaluate credit risk, the programme uses market segmentation and a “360 degree” approach. Credit scorecards (based on industries, linkages or market segments), MSME value analyses, relationship manager site visits and personal references are used to evaluate the credit worthiness of each MSME. ICICI has an MSME client base of almost 1 million enterprises.

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



This goal has 9 targets, which primarily cover three areas, including provision of resilient infrastructure, industrialisation including development of small-scale industrial enterprises, and promotion of research and innovation.

Can MSMEs help achieve Goal 9?

Small-scale industrial enterprises are directly relevant to the goal. SDG Target 9.3 focuses on increasing the role and capacity of small-scale industrial enterprises.⁹⁷ UNIDO reports that data on this target is limited from countries. Available data shows that the manufacturing value added of small-scale enterprises reveals high variability across developing countries. While Albania reported that 21 percent of manufacturing was produced



by small-scale industries, the share was negligible in Ecuador at 0.4 percent.⁹⁸ However the report notes that despite the small contribution to total industrial output, the role of small-scale enterprises in job creation, especially in developing countries, is significant in terms of their high absorption of labour from traditional sectors, such as agriculture or fishery. In OECD countries, MSMEs account for about 60 percent of jobs in the manufacturing sector and 75 percent in services, generating between 50 percent and 60 percent of value added, on average.⁹⁹

MSME finance for small scale industrial enterprises will contribute to the goal. Although small-scale enterprises have a key role in industrial development in developing countries, one of the biggest challenges they

face is access to financial services. Financial access is crucial for small-scale industries to grow as it allows entrepreneurs to innovate, improve efficiency, expand to new markets and create new job opportunities. The World Bank Enterprise Surveys for the period 2015 to 2017 reported that the highest shares of small-scale industries with a loan or line of credit in manufacturing are found in the Solomon Islands (64 percent), Nicaragua (59 percent) and Benin (52 percent).¹⁰⁰ By contrast, some countries such as Laos (6.7 percent), Zimbabwe (5.7 percent) and Egypt (4.3 percent) had very low shares.¹⁰¹

MSMEs promote innovation. While not all MSMEs are innovative, new and small firms are often the driving force behind the innovations that are important for economic growth, since they can work outside of dominant paradigms, exploit technological or commercial opportunities that have been neglected by more established companies or enable the commercialisation of knowledge that would otherwise remain uncommercialised.¹⁰² For instance, MSMEs account for about 20 percent of patents, which is one measure of innovation, in biotechnology-related fields in Europe.¹⁰³ MSMEs also contribute to value creation by adopting innovation generated elsewhere, and adapting it to different contexts through incremental changes, and by distributing new or niche products. However, a key challenge for many MSMEs is to identify and connect to appropriate knowledge partners and networks at the local, national and global levels, and develop appropriate skills and management

practices for integrating knowledge created by external partners with in-house practices and innovation processes.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal. They can establish standards and promote regulations that ensure projects and initiatives are sustainably managed.¹⁰⁴ They could also promote innovation by giving all stakeholders the opportunity to offer creative solutions to sustainability challenges.¹⁰⁵

New business models/solutions of MSMEs that will help achieve the SDGs. The SDGs promote resource-use efficiency and greater adoption of environment-friendly industrial processes. This transition of businesses and the economy will open up business opportunities; MSMEs are well-suited to replicate and commercialise technology and add value in a range of areas, such as software, nanotechnology, biotechnology and clean technologies.¹⁰⁶ Supporting MSMEs in the uptake of these new technologies and business fields will require capacity building, knowledge and technology transfer, financial resources and an enabling policy framework conducive for promoting the ease of doing business.

MSMEs driving innovation, business examples from the UNDP SDG Accelerator Programme for MSMEs

The following highlights some of the innovative SDG solutions developed with support of the UNDP programme, SDG Accelerator for MSMEs.¹⁰⁷

Palsgaard has developed a durable anti-fog coating for industrial food packaging, which keeps food fresh for a longer time, thus helping to reduce food waste. Through its global presence, Palsgaard will market the product worldwide with a particular focus on the major packaging manufacturers in Asia and the United States.

RGS Nordic is developing a digital platform that enables carriers to optimise the use of the many trucks visiting the company's more than 35 receiving and handling facilities in Scandinavia every day. The solution will significantly reduce the number of empty trucks and, consequently, CO₂ and particle emissions. In the long term, the solution will be a best practice example of how sharing of transport data and cooperation between different industry actors can significantly reduce freight on European roads for the good of businesses, the environment and for people.

E.ON is developing a model for replacing fossil fuels in local heat production with eco-friendly and cheaper heat pumps in housing blocks, townhouses and schools. Heat production in many Danish housing associations is still based on fossil fuels like oil and gas. Moreover, a large number of the plants are outdated and not maintained after many years of wear. This results in high energy losses and unnecessary operating costs.

Goal 10. Reduce inequality within and among countries



This goal has 10 targets, which primarily focus on increasing incomes for low income earning groups, ending discrimination, promoting social, economic and political inclusion, promoting better wage and social protection policies, facilitating safe migration and reducing remittance fees, monitoring regulation of global financial markets, and increasing the voice of and assistance to least developed countries (LDCs).

Can MSMEs help achieve Goal 10?

MSMEs promote economic inclusion and have the potential to regenerate under-served geographic areas. Small businesses serve geographic locations, populations and markets that do not have enough scale to attract larger firms. Research has shown that smaller businesses tend to spend more of the money they make from a local



area within that area, demonstrating their potential to regenerate economically disadvantaged localities. A research found that in the UK, for every £1 a local authority spent with an MSME, 63p was re-spent in the local area compared to 40p for every £1 spent with a large business.¹⁰⁸

MSMEs provide incomes to low income and marginalized groups. MSMEs tend to be labour-intensive; they employ many segments of the population, including low-skilled and less-educated people, as well as rural and urban poor (see Goal 1). MSMEs also offer employment and entrepreneurship opportunities for young people, women and other disadvantaged

groups, including migrants, ethnic minorities and the disabled. MSMEs are therefore crucial in increasing incomes for the bottom 40 percent of the world's population.

Increasing productivity of MSMEs can help bridge wage inequality. OECD work on productivity shows that, in some countries, the gap in productivity between MSMEs and large firms increased in the aftermath of the 2007-08 global crisis.¹⁰⁹ While for small and medium-sized enterprises there has been a reversal in this trend during the recovery, the larger gap has become persistent for micro-firms. This gap is also an important driver of the observed rise in inequality, including wage inequality, in many countries.¹¹⁰ In many emerging and developing economies, the productivity gap between bigger firms and MSMEs and the resulting income gaps are especially large, due in particular to a disproportionate concentration of employment in micro and small firms, often informal ones. Investing in MSME development and increasing their competitiveness and productivity is key to reducing wage inequalities.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal:

They can:

- Adopt equal remuneration policies for men and women employees of the same competency. Ensure compliance with the minimum wage policies and exclude preferences based on gender, race, religion and other discriminatory grounds.

- Provide social protection mechanisms to employees, including the payment for life, accident and unemployment insurance, contributing to social security of employees and ensuring paid leave in accordance with legal requirements.
- Organize skills training and career coaching opportunities for employees from marginalized and vulnerable population groups.

New business models/solutions and opportunities for MSMEs that will help achieve the SDGs. Small businesses can represent an effective tool to address societal needs through the market. Social enterprises bring innovative solutions to the problems of poverty and fill gaps in service delivery. In many countries, social enterprises are an increasing phenomenon, particularly in the aftermath of the global financial crisis. For instance, in France, in 2014, social enterprises contributed to 10 percent of the GDP.¹¹¹ In Belgium, over 2008-14, employment in social enterprises increased by 12 percent and accounted, in 2015, for 17 percent of total private employment.¹¹² In the UK, in 2015, 41 percent of social enterprises had created jobs compared to 22 percent of MSMEs.¹¹³ Companies pursuing social impact as a part of their core business strategies are seeing increased access to financing in a diversity of forms: philanthropic grants and impact investments, partial credit guarantees, and payment for performance. The socially-responsible investing industry exceeded US \$6 trillion in the United States alone in 2014 and stands at US \$21.4 trillion globally.¹¹⁴ MSMEs should be connected to these facilities to boost social enterprises and socially-responsible business operations.

MSMEs accelerating inclusivity

Dignity kitchen¹¹⁵ is a social enterprise that runs Singapore's first and only community food court. It is operated by people with disabilities and the socially disadvantaged. The business provides educational and employment opportunities in the food services industry to vulnerable people of all walks of life, including those with physical, intellectual and mental disabilities, ex-offenders, at-risk youth, victims of domestic violence, cancer and stroke survivors. Dignity Kitchen offers bespoke cashier training to the hearing- and visually-impaired – the cashier machines have Braille markings and stickers attached to them and provides height-adjustable countertops to create a more enabling work environment for wheelchair-bound 'hawkerpreneurs'.

MicroEnsure¹¹⁶ offers affordable insurance to previously unreachable groups via a model inspired by the popular computer game Angry Birds. The company saw an opportunity in providing health, life and disability insurance cover for low-income groups in Asia and Africa. These groups represent a US \$40 billion market opportunity for insurance companies. But as they face extensive risks and can only afford tiny premiums, they tend to get overlooked. For instance, in Africa, less than three percent of the population has health insurance. Working with local telecoms companies and big insurance providers, MicroEnsure created an Angry Birds model: free, but with paid-for add-ons. It provides free basic insurance in exchange for improved consumer loyalty to local telecoms companies, with the option for consumers to buy more extensive coverage once they understand the value of being insured. In effect, MicroEnsure extended its market by finding ways to bring affordable insurance to previously unreachable groups.

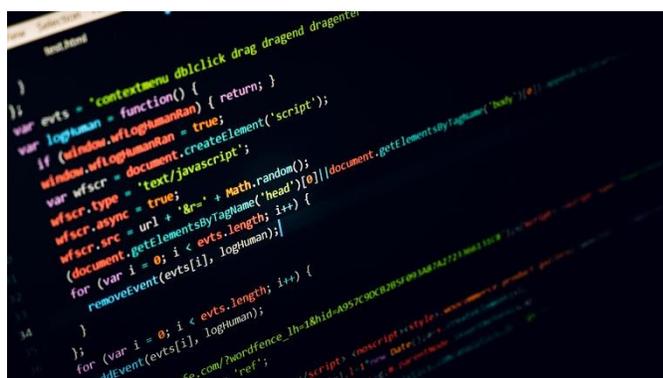
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable



This goal has 10 targets. They focus on providing adequate housing, transport facilities, waste management, urban settlement planning, and reducing losses from disasters in urban areas. The targets promote sustainable and resilient urban standards, policies and planning.

Can MSMEs help achieve Goal 11?

MSMEs provide employment and economic growth in cities. MSMEs in professional services, digital and the



creative industries (referred to as 'new work')¹¹⁷ are becoming increasingly important – both in terms of employment and in terms of output for cities. Employment in the UK in these 'new work' industries increased at over four times the average between 2009 and 2013.¹¹⁸ Output from the digital sector increased more than seven-fold between 1990 and 2013 and by 286 percent in the professional services and 196 percent in the creative sector.¹¹⁹ These firms are overwhelmingly city-based. Nearly 60 percent of these MSMEs are based in cities and on average in the UK, 40 percent of MSMEs in cities are 'new work' MSMEs,

compared to 34 percent in non-urban locations.¹²⁰ Fostering innovation and MSMEs is therefore key to the inclusive growth of cities and in creating employment for urban dwellers, including marginalized groups such as migrants from poor rural areas, young people and women.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal. They can jointly develop and/or participate in a sustainable community that brings together relevant stakeholders through a common and neutral platform to analyse, discuss, and act on urban functionality, resilience, and sustainable development;¹²¹ and support and utilize public transportation services.¹²²

New business models/solutions of MSMEs that will help achieve the SDGs. The report of the Business & Sustainable Development Commission estimates that addressing challenges in cities in line with the SDGs have a potential value in 2030 of US \$3.7 trillion in current prices.¹²³ They include business opportunities in a range of areas such as affordable housing, road safety equipment, office sharing, municipal water leakage, public transport in urban areas, electric and hybrid vehicles, vehicle fuel efficiency, durable and modular buildings, smart metering, energy efficiency in buildings, autonomous vehicles, timber buildings, cultural tourism and car sharing. The housing sector in cities alone is valued at US \$650-1,080 billion, while energy-efficient buildings are valued at US \$555-770 billion, which includes retrofitting existing buildings with more efficient heating and cooling technology and switching to efficient lighting and other electrical appliances.¹²⁴ Electric and hybrid vehicles are valued at US \$310-320 billion.¹²⁵ Assuming an average life of 15 years, the total global passenger vehicle fleet will turn over completely by 2030, presenting an opportunity for a huge increase in sales of electric vehicles and plug-in hybrid electric vehicles. MSMEs can help deliver many of these new products and services. Fostering start-ups and existing MSMEs to take up these opportunities is key to the implementation of the goal.

MSMEs solving urban challenges

Mobility. Bla Bla Car is a company which has scaled ride sharing between cities across Europe, allowing 1 million tons of CO₂ emissions to be avoided in just two years.¹²⁶ Its website and mobile app connect drivers and passengers willing to travel together between cities and share the cost of the journey. The platform has 70 million users in 2019 and is available in 22 countries. Other similar start-ups are: Bynd, which offers commuting car sharing in traffic-bound Sao Paolo, and Flattire, a bike-fixing platform from bike-friendly Amsterdam.¹²⁷

Housing. ¡Échale! a tu Casa is a social enterprise based in Mexico that co-designs homes with low income families and sets up housing committees.¹²⁸ It sees building communities as a part of the housing solution. It also buys over 60 percent of building materials locally and provides employment to local construction workers. Under ¡Échale!'s assisted self-building programme, participants receive the materials and technical training necessary to build a small house in a month, with supervision from a certified architect. The resulting homes, made from ¡Échale!'s patented compressed earth blocks, are designed for minimal energy and water use, making them eco-friendly as well as cheap to run. Green features include solar water heaters, wood saving stoves and systems to harvest rainwater. ¡Échale! is exporting its technology to Belize, Egypt, Haiti, Nicaragua and the UAE, and is developing a social franchise model to allow others to replicate its success. Already, 30,000 houses have been built and over 150,000 homes improved in Mexico alone using its model. PopUp Immo is a start up in Hong Kong that offers a marketplace dedicated to short-term commercial real estate rental.¹²⁹ The company aims at making rentals of short-term commercial spaces as easy as making bookings on Airbnb. The platform provides a flexible and global platform for brands looking for spaces to renew their customers' experiences. Property owners reduce their vacancy rates and increase their rental yields.

Waste management. Daily Dump is dedicated to empowering households, individuals and urban communities across India to convert their organic waste to high quality compost.¹³⁰ Indian cities generate 120,000 tonnes of waste a day and over 50 percent is wet/organic waste. Municipalities face huge challenges in handling this waste. Daily Dump started in 2006 with a core team of 3 members and 2 support members and potters who made prototypes. They designed a range of composting solutions, which are operated conveniently and hygienically at household level and are increasingly being used by offices. It has prevented 4400 kg of waste from reaching land dumps. Once the organic waste production reaches a certain volume, they are transported to villages to support organic farming.

Goal 12. Ensure sustainable consumption and production patterns



This goal has 11 targets. It includes targets to substantially reduce waste generation through prevention, reduction and recycling by 2030, promotes sustainable management of natural resources, sustainable lifestyles and consumption behaviours, sustainable business practices and sustainability reporting for businesses. The goal calls for integrating sustainability to public procurement and promotes international cooperation on research and development that facilitate sustainable consumption and production.

Can MSMEs help achieve Goal 12?

MSMEs as a group have significant cumulative social and environmental impacts. MSMEs form the backbone of national economies and the global supply chains of large companies. Individually, MSMEs have relatively small environmental and social impacts, but as a group, the impacts are much larger. MSMEs comprise a major share



of total private sector entities in both developed and developing countries; in developing countries such as Peru, 98 percent of private enterprises are MSMEs.¹³¹ Reducing the environmental impact of MSMEs is core to the successful performance of this goal. This is particularly urgent for MSMEs in the manufacturing sector, which accounts for a large part of the world's consumption of resources, air and water pollution and generation of waste.¹³² In India, there is a significant number of MSMEs that belong to categories recognized as highly polluting industries: chemical and allied industries, leather industries, textile processing, drugs and pharmaceuticals, agro-chemicals and food

processing industries.¹³³ MSMEs are unable to comply with environmental standards due to factors such as lack of information, lack of access to capital, lack of adaptation of environmental regulations to the social, economic and technical reality of local businesses and effective possibilities of control bodies, difficulty in recruiting qualified personnel, less awareness about environmental issues, and less environmental pressures from stakeholders.¹³⁴ Building capacity of MSMEs in these areas is therefore key to the achievement of the goal.

SDG Target 12.7 under this goal promotes public procurement practices that are sustainable. MSMEs are a major player in public procurement in many countries - 57 percent of the suppliers to public procurement in Brazil are MSMEs, up to 98 percent in Ecuador, and in China up to 76.2 percent of the government procurement contracts is granted to MSMEs.¹³⁵ Greening public procurement can pose challenges for MSME participation in public procurement. Strengthening policies and capacity-building support for MSMEs can help address the challenges MSMEs face to integrate in green public procurement.

MSMEs have the potential to adopt sustainable business practices. In general, MSMEs are more flexible than large companies, making them more likely to adopt sustainable business practices. MSMEs have to be incentivized to adopt sustainable business practices and to report which can be beneficial for them. MSMEs need to be informed that the transition can help businesses to become more competitive, cut costs and optimize operations. A 2014 McKinsey study found that 44 percent of sustainable business leaders cite growth and new business opportunities as reasons for tackling sustainability challenges.¹³⁶ In a review of 200 studies on sustainability and corporate performance, Oxford University and Arabesque Partners concluded that 90 percent of studies in this area found that high environmental, social and governance (ESG) standards reduced companies' cost of capital, and that 80 percent show a positive correlation between stock price performance

and good sustainability practices.¹³⁷ Business development support programmes provided by government departments and international organizations need to share additional good practices with MSME entrepreneurs on demonstrating sustainability as promising business solutions conducive for enhancing efficiency, innovation and positive recognition among stakeholders.

MSMEs can contribute to sustainability reporting. Currently, a small percentage of MSMEs carry out sustainability reporting. In 2015, MSMEs accounted for just 10 percent of the total number of sustainability reports captured in the Global Reporting Initiative (GRI) Sustainability Disclosure Database, with 90 percent coming from large and multinational organizations.¹³⁸ Yet, sustainability reporting is vital for micro, small, medium and large enterprises alike.¹³⁹ MSMEs need to be motivated to start reporting and need to be made aware of the benefits of reporting. According to Stichting GRI, benefits include increased transparency to stakeholders and better risk management, while driving business development and the optimization of business processes.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal.

They can:

- Reduce manufacturing impacts by substituting raw materials in products with post-consumer materials through recycling and upcycling.¹⁴⁰
- Significantly reduce waste and ensure that any unavoidable waste is utilized to the fullest degree (e.g. organic waste as fuel or fertilizer).¹⁴¹
- Conduct a simple audit to see where money is being spent, what waste it relates to and what MSME entrepreneurs could do to prevent negative environmental impacts as the first step to develop an impact reduction plan.¹⁴²

New business models/solutions of MSMEs that will help achieve the SDGs. Promotion of sustainable practice will offer new or competitive business opportunities for MSMEs in a range of areas: public procurement, consumer information (such as eco-labelling, certification), sustainable tourism, lifestyle education, retrofitting buildings and construction, and food systems. A potential area is the circular model and approaches to design, manufacturing and reuse which keep resources in play for as long as possible and recover and reuse spent materials and products. The report of the Business & Sustainable Development Commission estimates that circular models in the automotive industry have a potential value in 2030 of US \$475-810 billion in current prices and circular models of appliances and machinery have a potential value in 2030 of US \$305-525 billion.¹⁴³ MSMEs can play a critical role in the logistics of circular businesses and recycling processes. Start-ups and existing MSMEs need to be equipped with skills, matched with investors and markets to exploit these opportunities, which in turn will contribute to the progress of this goal.

MSMEs and green public procurement

One of the challenges for MSMEs to participate in green public procurement is the need for use of ecolabels and certifications, which incurs costs, resources and expertise that MSMEs are not able to cover. The Brazilian Development Bank (BNDES) offers a credit card to MSMEs (through several commercial banks), with up to 48 months to pay and preferential interest rates, which can be used to pay for raw materials and other goods, as well as for services, such as metrology, standardization and conformity assessment services (calibration, laboratory tests, certifications), such as ISO certification provided by entities accredited by the national accreditation body. This is complemented by SEBRAE, a Brazilian Micro and Small Business Support Service. This organization has implemented several programmes to foster entrepreneurship. SEBRAE subsidizes 50 percent of the value of the service approved for the MSMEs (which is responsible to pay the rest), or 60 percent in the case of Individual Micro-entrepreneurs or Rural Producers. The MSME's counterpart can be paid using the BNDES card described before. The services that can be accessed through SEBRAE's Sebraetec include product design, ISO certification, OHSAs certifications, and certification of organic products, among other services. Although the direct impact of this initiative is unknown, evidence shows that MSMEs have sustainable business practices in Brazil. In 2014, MSMEs accounted for 66.8 percent of the reported sustainable purchases in Brazil and out of 3,563 suppliers that were registered for sustainable purchases, 89 percent were MSMEs.

Goal 13. Take urgent action to combat climate change and its impacts



This goal has five targets. They promote adaptation against impacts of climate change, strengthening planning to integrate climate risks at various levels, increasing awareness of stakeholders on climate risks and impacts, and building global cooperation to support climate action and build capacity of countries to address climate issues.

Can MSMEs help achieve Goal 13?

MSMEs have the potential to make vulnerable populations and households climate resilient. Given that MSMEs create employment and entrepreneurship for a large proportion of the population in developing countries, MSMEs can enhance capacities of households through stable and diversified incomes to help withstand impacts of climate-induced shocks and stressors.

MSMEs are heavy energy users and have the potential to contribute to mitigation.

As highlighted under Goal 7, many MSMEs operate in energy-intensive sectors and have the potential to contribute to mitigation. An estimate of climate impact of MSMEs shows that the sectors with the largest volumes of greenhouse gas (GHG) emissions were found in three sectors for which data were available - agriculture, hunting, forestry and fishing; manufacturing and electricity; gas and water supply.¹⁴⁴ The number of MSMEs active in these sectors were 88 million, 49 million and 1 million, respectively. If informal enterprises were added, the numbers were even higher.¹⁴⁵ This demonstrates the scale of MSMEs and the role MSMEs can play in GHG mitigation. Mitigation activities of MSMEs include reducing energy use by supporting a switch to energy efficient approaches for lighting, buildings, and refrigeration; reducing emissions by supporting a switch to renewable energy sources; or improving water conservation by supporting behavioural change towards pollution and water use.¹⁴⁶



MSMEs can contribute to adaptation of economic activities/sectors. MSME-dominant sectors such as agriculture, manufacturing and services are vulnerable to climate-induced events such as floods, droughts, and sea level rise. A discussion paper on metalworking enterprises in India shows direct impacts on their buildings, manufacturing processes and infrastructure from higher frequency of hot days or heavy rainfall and indirect impacts on their supply chains and markets, including rising energy and material prices or change of demand in response to climate change effects.¹⁴⁷ Based on a climate change sensitivity assessment, an analysis shows that climate change plays a catalytic role speeding up and intensifying already existing challenges for MSMEs in India, including resource strain and infrastructural problems. MSMEs' vulnerability to climate change is compounded by the fact that many operate outside the formal sector. These businesses will have limited access to public social safety nets, formal finance channels, and post-disaster insurance, making it difficult for them to recover from the impact of extreme weather events. Addressing capacities of MSMEs is key to strengthening adaptive capacity of key economic sectors such as agriculture, manufacturing, food processing, tourism, etc.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal:

They can:

- Conduct a simple energy audit and make changes like adoption to energy-efficient LED lighting.¹⁴⁸
- Understand climate risk and build resilience into the company's assets and supply chain.¹⁴⁹
- Expand sustainable forest management through responsible sourcing practices.¹⁵⁰

- Create a Green Travel Policy to encourage staff to use more sustainable forms of travel and improve low-carbon lorry fleet planning along their supply chains.¹⁵¹
- Directly engage with community members to promote adaptive practices.¹⁵²

MSMEs respond to emerging climate risks and climate-induced events

MSMEs can contribute to climate change adaptation by providing climate-resilient products and services for vulnerable communities. One example documented by WRI¹⁵³ and others is:

Ignitia.¹⁵⁴ The yields of small-scale farmers in sub-Saharan Africa are the lowest in the world, contributing to the challenge of food insecurity. It is estimated that between 20 percent and 80 percent of annual yields are lost due to climate uncertainties. Ignitia, a high-tech social enterprise, has joined the Business Call to Action (BCtA)¹⁵⁵ with a commitment to deliver reliable, targeted, low-cost tropical weather forecasts via text messages to 1.2 million small-scale farmers in West Africa by the end of 2017. Small-scale farmers in the tropics have limited access to reliable weather forecasts, which seriously constrains their ability to plan farming activities. To fill this gap, Ignitia created a forecasting model that creates reliable, GPS-specific weather forecasts. Launched in Ghana in 2014, iska™ has proven to be 84 percent accurate compared with global forecasts, such as those found on the BBC or CNN, which only achieve 39 percent accuracy in West Africa. With iska™, smallholder farmers receive the vital information they need to mitigate risk and create resilience. The farmers are charged the equivalent of US \$0.04 per day for the service; they can pay in micro-instalments from pre-paid mobile credit. Over the entire season, this typically adds up to less than 2 percent of a farmer's total expenditure on inputs.

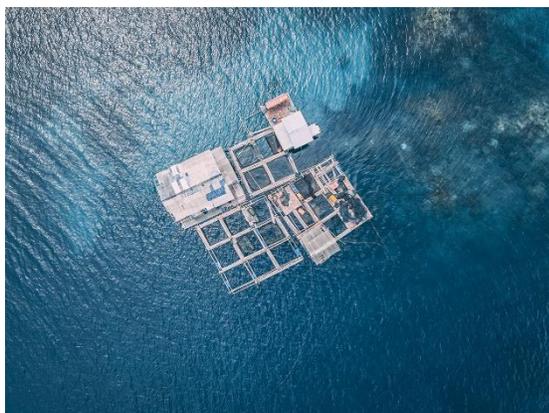
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development



This goal has ten targets. They encourage reduction in marine pollution, sustainable management of marine and coastal ecosystems, regulation of overfishing, protection of marine ecosystems and oceans, promotion of research to address ocean acidification, promotion of benefits of marine resources to small island developing states, promotion of international cooperation, research and capacity building on marine technology, and in promotion of conservation.

Can MSMEs help achieve Goal 14?

Small-scale fishery and marine-based enterprises are directly relevant to the goal. Target 14.b “provide access



for small-scale artisanal fishers to marine resources and markets”. The small-scale, artisanal fishery sector encompasses pre-harvest, harvest and post-harvest, and employs both men and women in almost equal measures, with a high female participation in fish processing and small-scale fish trading operations.¹⁵⁶ Some 90 to 95 percent of the catch produced by small-scale landings is used for the consumption of local communities and in some developing countries, including small island developing states (SIDS), small-scale fisheries provide more than 60 percent of protein intake.¹⁵⁷ If small-scale actors are capacitated with monitoring of fishery management systems and marine resource governance, it could help to relieve environmental pressures stemming from overfishing.¹⁵⁸

Building MSME capabilities to promote sustainability of value chains. Sustainable practices, such as eco-labelling, and traceability systems for wild catch will help MSMEs become more competitive, considering the increased demands of consumers for fair trade, organic and BioTrade products.¹⁵⁹ There has already been evidence showing seafood production certified under global sustainability initiatives grew 40-fold from 2003 to 2015 and now represents more than 14 percent of global production.¹⁶⁰ As indicated under Goal 12, MSMEs face challenges in adopting certifications and eco-labelling due to the resources and costs involved. Technical assistance and financing to cover costs of certification can help small-scale marine-based enterprises to become more competitive for their business operations, contributing to the progress of this goal.

Individual MSMEs have the potential to adopt actions in their business practices to contribute to the goal.

They can:

- Track the product life cycle to understand how they are disposed, and which products could likely find their way into marine environments.¹⁶¹
- Record and disclose information on the chemical makeup and material usage of products, packaging, and processing systems to facilitate closing the loop.
- Prevent waste mismanagement or littering that could pollute the marine environment.
- Understand climate risk and build resilience into the company’s assets and supply chain.¹⁶²

New business models/solutions and opportunities for MSMEs that will help achieve the SDGs. The OECD projects a marked acceleration in economic activity in the ocean by 2030, based on the rapidly expanding ocean industries combined with expectations of moderate growth in already large industries like maritime and coastal tourism, offshore oil and gas, shipbuilding and maritime equipment.¹⁶³ Conservatively, ocean-based industries’

gross value added could double in size by 2030, reaching around US \$3 trillion. Some ocean industries' value added is set to grow even faster than the world economy.¹⁶⁴ These include marine aquaculture, capture fisheries, fish processing, offshore wind, and port activities. Emerging trends include use of marine living resources such as algae for pharmaceuticals and chemicals, trade of non-edible seafood products for use in cosmetics, and marine renewable energy sources—including wave and tidal and ocean thermal energy conversion, deep sea exploration for minerals and resources, marine biotechnology. It is important to identify the value of MSMEs in these emerging industries and to build the capacity of existing small entrepreneurs and foster start-ups to maximize the role of small-scale businesses in the marine sector.

A small firm develops technology for reducing marine pollution

EONcrete®¹⁶⁵ is a young science-based company that provides bio-enhancing concrete solutions that enhance marine life and help reduce the ecological footprint of coastal and marine development projects, protecting and rejuvenating coastlines, while sustaining and enhancing marine biodiversity. The bio-enhanced concrete has a unique combination of innovative admix, rough surface textures, and 3D designs that encourage and support colonization of rich and diverse marine plants and animals, enhancing biodiversity rather than reducing it. Not only is bio-enhanced concrete strong enough to withstand harsh marine environments, the enhanced marine growth on EONcrete® actually increases the strength and durability of the structure in a cost-effective, low-carbon solution, reducing the carbon footprint of ports, marinas and other coastal development projects, while making them more resilient and adaptive to climate change.

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



This goal has 12 targets. They focus on sustainable management of inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, address deforestation, combat desertification, restore degraded land and soil, ensure conservation of mountain ecosystems including their biodiversity, and promote equitable sharing of the benefits arising from the utilization of genetic resources. The targets call for an end to poaching and trafficking of protected species, promote protection against invasive species, promote ecosystem-based planning and global cooperation on conservation, and promote land-based ecosystems.

Can MSMEs help achieve Goal 15?

Agribusinesses and smallholder farmers have a critical role to play in conserving land-based ecosystems. Today's dominant industrial food system is rapidly depleting and degrading the world's soil, water and biodiversity. Environmental damages caused by industrial and agriculture activities cost the world US \$3 trillion each year, according to the United Nations. Small-scale food producers make up 90 percent of farmers worldwide.¹⁶⁶ Adoption of agro-ecological methods through capacity building of small-scale producers can foster biodiversity, natural soil fertility, water conservation and biological control of insects and shift food production to a sustainable path.¹⁶⁷

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal.

They can:

- Measure, manage, and mitigate impacts on ecosystems and natural resources.¹⁶⁸
- Scale up best practices for land-use planning and management.¹⁶⁹
- Commit to and implement responsible sourcing practices beyond compliance, applying environmental and social safeguards for all raw materials and commodities.

New business solutions and opportunities for MSMEs. The Business & Sustainable Development Commission estimates forest ecosystem services have a potential value of US \$140-365 billion a year by 2030. Deforestation and forest degradation account for 17 percent of global emissions -more than transport.¹⁷⁰ Just four commodities, beef, soy, palm oil and paper/pulp, are responsible for driving half of all deforestation.¹⁷¹ It is expected that a carbon price of US \$50 per tonne by 2030 will open up major new opportunities in sustainable forest services, such as climate change mitigation, watershed services and biodiversity conservation, if mechanisms to pay for them develop too. One hundred and fourteen governments have made commitments to ecological restoration as part of their overall plans to tackle a changing climate, pledging to restore 162 million hectares of land.¹⁷² More and more enterprises are seeing the commercial potential in sectors related to ecological restoration, including those whose main value proposition is linked to forest and landscape restoration. This may be a direct link, enterprises that plant trees, for example, or an indirect one, such as companies that offer technology or consulting services for restoration. A restoration enterprise can also include companies whose revenues are not directly linked to restoration, but whose customers are drawn to them because they channel their profits toward restoration. Existing MSMEs and start-



ups need to be supported with capacity building to tap the new business opportunities stemming from contributing to the SDGs.

Small businesses as restoration enterprises

Better Globe Forestry¹⁷³ is a Kenyan company that works with smallholder farmers to plant *Melia volkensii* trees, a native species known for its resilience to drought. Providing farmers with a range of resources to plant the trees on their lands, from seedlings and water supplies to training and microfinance, Better Globe intends to purchase the trees from farmers once they are mature, harvesting them and exporting them as high-quality timber. By establishing the trees on semi-arid lands with more than a million planted to date, the company helps retain water and improve soil quality, transforming dusty farmlands into oases of grass and vegetation.

Greenprint Partners,¹⁷⁴ (formerly known as Fresh Coast Capital), exemplifies the potential of restoration companies to deliver financial, environmental and social returns. As a project developer, Greenprint partners with cities throughout the U.S. Midwest to restore and revitalize underserved urban communities through the transformative power of nature. By paying Greenprint to install large-scale green infrastructure such as native plants and trees, cities can naturally manage stormwater runoff while improving soil and air quality. These projects can save cities millions in infrastructure costs while creating restoration jobs and improving property values, delivering triple-win scenarios for the company, the city and the environment.

Ecosia¹⁷⁵ is an online search engine that displays ads next to its search results. Ecosia earns revenue every time a user clicks on one of the ads. At least 80 percent of its profits are invested into tree-planting programmes in Burkina Faso, Madagascar, Peru, Indonesia and Tanzania. While Ecosia's business model does not directly benefit from trees, its customer value proposition is intimately linked to restoring degraded land. Its platform enables users to see how many trees have been planted based on individual online activity. With 9 million trees planted to date, Ecosia proves that business models that indirectly promote restoration can be effective at creating large-scale impact.

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



This goal has 12 targets. The goal focuses on reducing all forms of violence, ending exploitation, trafficking and violence against and torture of children. The targets promote rule of law, calls for reducing illicit financial and arms flows, reducing corruption, promoting transparency of institutions, promoting participatory decision making and access to information, ensuring legal identity through birth registration, promoting international cooperation, and non-discriminatory laws and policies.

Can MSMEs help to achieve Goal 16?

MSMEs have the potential for promoting good governance principles. Adopting ethical business practices and standards and promoting integration of these standards within value chains of MSMEs can be beneficial for their growth and profitability. For example, clean business without having to make illegal payments can lower the cost of production or operation. Maintaining strong business ethics and integrity can help strengthen customer relationships, improve reputation and win more business. Businesses no longer view adoption of good governance standards as compliance but also internalize these approaches as part of business risk management strategies.¹⁷⁶ MSMEs which often take up a large share of the business community have the potential for adopting governance principles if they are provided with the necessary support and resources. Support should also extend to informal enterprises to become formalized.

MSMEs have a role in conflict/violence prevention. MSMEs provide incomes to poor families, women and youth through employment and entrepreneurship opportunities. Supporting women and youth-led enterprises is therefore considered an effective strategy for violence prevention as incomes from entrepreneurship can motivate young people not to take up arms or to participate in crime. Supporting youth and women-led businesses, particularly those who are marginalized, can contribute to a more inclusive society which in turn promotes peace. The SDG Fund demonstrates several such initiatives that support farmer's groups in Colombia following the long-term conflict, support women's cooperatives in the Occupied Territory of Palestine and target unemployed ex-combatants with youth entrepreneurship development in Sierra Leone.¹⁷⁷ These MSME promotion strategies were mainly targeted to prevent violence and promote peace as part of post-conflict recovery.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal.

They can:

- Comply with laws and seek to meet international standards; requiring and supporting business partners to do the same.¹⁷⁸
- Conduct risks assessment to examine and monitor external patterns that could affect business operations.
- Support organization or participation of employees to training programmes on prevention of violence; incorporate violence prevention measures in enterprise management regulations.

New business models/solutions and opportunities for MSMEs resulting from the 2030 Agenda and SDGs. Supply chain policies and programmes offer key opportunities for companies to scale up their sustainability practices, thus contributing to the advancement of the SDGs.¹⁷⁹ Traceability is the ability to identify and trace the history, distribution, location and application of products, parts and materials, to ensure the reliability of sustainability claims, in the areas of human rights, labour (including health and safety), the environment and anti-corruption.¹⁸⁰ Adopting traceability schemes and initiatives can lead to an increase in market base and appeal, in many cases allowing MSMEs to offset costs involved in adopting these schemes by charging premium prices for their products and services of higher quality.



Business examples and initiatives that promote MSME governance

Dipantara and the traceability scheme¹⁸¹ Global traceability organizations, such as the Forest Stewardship Council (FSC), the Marine Stewardship Council (MSC) and UTZ Certified, engage with stakeholders along the entire value chain. This allows for the development of a credible and robust chain of custody standards and certification for products from the raw material to the final use phase. Dipantara, a small community wood trading initiative in the province of Java, Indonesia, has developed a group business model aimed at helping smallholder farmers and farmers' groups in the region sell their wood to the international market. Maisons du Monde, a UN Global Compact participant signatory, and The Forest Trust (TFT) homeware retail member has supported the Dipantara farmers' initiative by placing orders for its stores. Dipantara, as a non-profit business entity, partners with 96 farmers' groups across 22 villages totaling 7,966 farmers that have registered with the business. By 2012, it had helped 20 of these farmer groups achieve Forest Stewardship Council (FSC) certification. The initiative's efforts help buyers identify the source of wood and trace it back to the tree stump, while at the same time increasing revenues for farmers with smallholdings.

Initiatives promoting MSME governance

The Basel Institute¹⁸² provides anti-corruption collective action, compliance and bribery prevention guidance services to MSMEs through the new Business Integrity Consultancy Service, part of the UK government's Business Integrity Initiative. MSMEs that meet the eligibility criteria can submit an application to receive subsidized anti-corruption guidance services in three areas – (i) anti-corruption compliance, (ii) corruption and bribery prevention and (iii) anti-corruption Collective Action. Depending on their size, companies that receive services will be asked to pay only 20 or 40 percent of the total cost of the service.

The Integrity App¹⁸³ is an innovative tool to support MSMEs in sustainability compliance. It was launched by the Alliance for Integrity at the beginning of 2017 and provides a one-stop-shop online platform where companies can track their levels of compliance based on a questionnaire developed in line with international standards and receive an immediate status report and recommendations on how to improve. Further, the platform is a reliable source of information, provides tools, workshops, and webinars and even offers consultations and implementation support.

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development



This goal has 19 targets. It promotes financing of development through domestic resource mobilisation, overseas development assistance (ODA), trade and investment promotion and calls for addressing debt sustainability, etc. The goal promotes international cooperation on access to science, technology and innovation, capacity building, improving policy and institutional coherence, data and monitoring of SDGs and encourages multi-sector partnerships.

Can MSMEs help achieve Goal 17?

MSMEs account for a large share of added value in international trade when indirect linkages are taken into account. Overall, MSMEs tend to be under-represented in international trade. Across OECD and non-OECD Members, few MSMEs export directly and for those that do, exports typically represent a lower share of trade turnover (relative to larger firms).¹⁸⁴ However, when considering MSMEs' indirect contribution to exports, as suppliers to larger domestic firms or multinational companies that export, MSMEs in OECD countries can represent more than half of total exports in value added terms.¹⁸⁵ The quality and responsiveness of MSMEs that supply goods and services to multinational companies that export play a key role in the competitiveness of entire supply chains, at both local and global levels. Harnessing this interdependency between MSMEs and larger businesses and coordination between the entities can therefore contribute to promotion of trade and competitive supply chains.

MSMEs are a source of partnership to implement SDGs. Small businesses address societal needs through market solutions as demonstrated by social enterprises (see Goal 10). MSMEs also play a role in public-private partnerships (PPP) to provide services to address various developmental challenges. They can participate in dialogues with governments and communities to find solutions to development problems as they work closely with communities. They can contribute to society through Corporate Social Responsibility (CSR) practices.

MSMEs are a source of data for SDG monitoring and reporting. The former Secretary-General of the United Nations Ban Ki-moon called for a 'data revolution' for the SDGs. This refers to the "integration of new data with traditional data to produce high-quality information that is more detailed, timely and relevant for many purposes and users, especially to foster and monitor sustainable development", which encourages governments to engage with private-sector actors who generate large amounts of data through their work.¹⁸⁶ MSMEs which are present in a range of value chains and employ a large share of the population have potentials for generating data that can assist in monitoring the SDGs.

Individual MSMEs have the potential to adopt actions in their business practice to contribute to the goal. They can take a collaborative initiative and seek a local charity that the organisation is close to and have a conversation on how the business can support their work.¹⁸⁷ They could also partake in SDG-related partnerships like the UN's Make the Global Goals Local campaign, the SDG reporting initiative and locally-based sustainability initiatives.¹⁸⁸

New business models/solutions and opportunities for MSMEs that will help achieve the SDGs. An integrated

global economy as envisaged in this goal is associated with the rise of global value chains (GVCs). GVCs and the digital transformation offer new opportunities for MSMEs to integrate into the global economy. Greater flexibility and the capacity to customize and differentiate products can give MSMEs a competitive advantage in global markets, as they are able to respond rapidly to changing market conditions and to test with shorter product life cycles. Some niche international markets are dominated by MSMEs, and innovative small enterprises are often key partners of larger multinationals in developing new products or serving new markets. For example, in Germany, small- and mid-size companies hold between 70 percent and 90 percent of global market share in some



specialized manufacturing segments and account for the bulk of the German international trade surplus.¹⁸⁹ However, MSME constraints in internationalising include access to information, skills, technology, finance, trade facilitation, and connectivity. Evidence shows that MSMEs are lagging behind in adopting digital technologies.¹⁹⁰ While in most countries, the divide is narrow for simple connectivity and web presence, the gap broadens when considering participation in e-commerce and, especially, more sophisticated applications. In many countries, a large adoption gap is also observed for cloud computing, for instance the renting of computer power from an external provider, which can allow smaller firms to use big data, while overcoming some of the barriers associated with the high fixed costs of ICT investment.¹⁹¹ MSMEs are also disproportionately affected by trade facilitation/administrative costs, business taxes and compliance in export destinations compared to larger firms. Limited access to credit faced by MSMEs and start-ups further exacerbate the disadvantages of MSMEs to integrate in GVCs.¹⁹² Responding to these challenges, MSMEs will help achieve the broader vision envisaged in international cooperation on trade and investment under this goal.

Business examples supporting the delivery of SDG 17

Bluetown.¹⁹³ This Danish company founded in 2012 with 60 employees has developed a wi-fi solution that runs entirely on solar energy. In addition to internet access, wi-fi hotspots allow access to a local cloud so local authorities, private companies, and NGOs can post free learning material to the communities. The provision of internet promotes e-health, e-commerce and e-learning in regions where Bluetown has projects. Bluetown was a participant of the UNDP SDG Accelerator programme and was the joint winner of the USAID WomenConnect Challenge, which provides finance for projects that break down the digital gender divide.

Ushahidi.¹⁹⁴ The 'data revolution' required for SDGs opens opportunities for MSMEs in data analytics. One such example is the social enterprise Ushahidi which applies data collection as part of its business model. Ushahidi develops and supports information technology tools that promote transparency and accountability, employing data pulled from user-submitted reports. It was originally established as a Kenya-based website that tracked information about the scope and locations of post-election violence in 2007 and 2008. Since then, it has developed a technical platform for collating and mapping many types of information submitted by the public. This tool has been used to coordinate information-sharing for disaster response and crisis management in Haiti and Sao Paulo, among other locations. The UN's Office for the Coordination of Humanitarian Affairs has worked with Ushahidi to support crisis mapping in conflict, including during the 2011 Libyan crisis.

Bibliography

- ¹ Business & Sustainable Development Commission (2017) *Better Business Better World: The Report of the Business & Sustainable Development Commission*.
- ² Khrystyna Kushnir, Melina Laura Mirmulstein, and Rita Ramalho (2010) *Micro, Small, and Medium Enterprises around the World: How Many Are There, and What Affects the Count?* IFC, the World Bank Group.
- ³ <https://www.worldbank.org/en/topic/smefinance>
- ⁴ United Nations *The Sustainable Development Goals Report 2018*. United Nations. New York.
- ⁵ Kok, J et. al. (2013) *Is Small Still Beautiful? Literature Review of Recent Empirical Evidence on the Contribution of SMEs to Employment Creation* International Labour Organisation (ILO) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- ⁶ Lessidrenska, T (2019) *SMEs and SDGs: challenges and opportunities* OECD Development Matters Blog.
- ⁷ Hammond, A et. al. (2007) *The Next 4 Billion Market Size and Business Strategy at the Base of the Pyramid*. World Resources Institute (WRI) and the International Finance Corporation, World Bank Group.
- ⁸ Ibid.
- ⁹ International Labour Organization (2018) *Women and Men in the Informal Economy: A statistical Picture* Third edition ILO.
- ¹⁰ Edwards, C (2018) *UN's Sustainable Development Goals for Small Businesses*.
- ¹¹ Ibid.
- ¹² Hammond, A. et. al. (2007) *The Next 4 Billion Market Size and Business Strategy at the Base of the Pyramid*. World Resources Institute (WRI) and the International Finance Corporation, World Bank Group.
- ¹³ Urs Heierli and SDC, Swiss Agency for Development and Cooperation (2019) *Poverty Alleviation as a Business: The Art of What Works*, Berne.
- ¹⁴ Target 2.3 - "By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment."
- ¹⁵ Food and Agricultural Organization. Performance tracking of SDG 2.
- ¹⁶ Ibid.
- ¹⁷ Ibid.
- ¹⁸ Edwards, C (2018) *UN's Sustainable Development Goals for Small Businesses*.
- ¹⁹ Food and Agricultural Organization (FAO) 2018. *Transforming Food and Agriculture to Achieve the SDGs – 20 Interconnected Actions to Guide Decision-Makers*. Food and Agriculture Organization of the United Nations, Rome.
- ²⁰ Business & Sustainable Development Commission (2017) *Better Business Better World*.
- ²¹ Ibid.
- ²² Agri-Food Chain Coalition (2018) *How Innovation Contributes to the Sustainable Development Goals*.
- ²³ Blue Orchard Academy (2017) *SMEs and SDGs: Supporting Small and Medium Enterprises to Achieve the Sustainable Development Goals – Insights from a Blue Orchard Survey*.
- ²⁴ Private Sector & Development (PS&D) (2018). *Does the Private Sector Help Improve Healthcare Systems in Developing Countries?* *Private Sector & Development (PS&D) Magazine*. Agence Française de Développement.
- ²⁵ Ibid.
- ²⁶ Ibid.
- ²⁷ Edwards, C (2018) *UN's Sustainable Development Goals for Small Businesses*.
- ²⁸ Karlstrom, C (2018). *What Impact can SMEs Have on the Sustainable Development Goals?* Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA).
- ²⁹ Business & Sustainable Development Commission (2017). *Better Business Better World*.
- ³⁰ World Health Organization (2017). *Online Q&A: Sustainable Development Goals Health Price Tag*.
- ³¹ Leopoldie, M. (2017). *12 African Startups Among the Best in Emerging and Developing Countries*.

-
- 32 <https://heliumhealth.com/about.html>
- 33 Business & Sustainable Development Commission (2017). *Better Business Better World*.
- 34 <https://kasha.rw/about-us>
- 36 Blue Orchard Academy (2017). *SMEs and SDGs: Supporting Small and Medium Enterprises to Achieve the Sustainable Development Goals – Insights from a Blue Orchard Survey*.
- 37 Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- 37 Ibid.
- 38 Global Business Coalition for Education (undated) *Opportunities for Impact: The Business Case for Early Childhood Development*.
- 39 Miranda, A. (2015). *The Journey of a Girl: Opportunities for Business Investment in Girls' Education - A Working Paper*, Global Business Coalition for Education.
- 40 United Nations Development Programme and Deloitte (2016). *Uncharted Waters: Blending Value and Values for Social Impact through the SDGs*.
- 41 Global Business Coalition for Education (undated). *Opportunities for Impact: The Business Case for Early Childhood Development*.
- 42 Business & Sustainable Development Commission (2017). *Better Business Better World*.
- 43 International Finance Corporation (2014). *Women Owned SMEs: A Business Opportunity for Financial Institutions. A Market and Credit Gap Assessment and IFC's Portfolio Gender Baseline*. International Finance Corporation, the World Bank Group.
- 44 Ibid.
- 45 International Center for Research on Women (ICRW) (2014). *Gender Issues in the Micro, Small and Medium Enterprises (MSME) Sector in India*. The World Bank.
- 46 Ibid.
- 47 Ibid.
- 48 Care International, UK. (2019) *Giving Women Better Access to Finance Could Unlock \$330 Billion in Annual Global Revenue*. Business Fights Poverty.
- 49 Care International, UK. (2019). *Giving Women Better Access to Finance Could Unlock \$330 Billion in Annual Global Revenue*. Business Fights Poverty.
- 50 Women Rising 2030 (2018). *Better Leadership, Better World: Women Leading for the Global Goals Business and Sustainable Development Commission*. London
- 51 Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- 52 <https://www.empowerwomen.org/en/weps/about>
- 53 Women Rising 2030 (2018). *Better Leadership, Better World: Women Leading for the Global Goals Business and Sustainable Development Commission*. London.
- 54 Ibid.
- 55 APEC Small and Medium Enterprises Working Group September (2018) *Enhancing the Competitiveness of Women-led MSMEs in the Garments and Textile Sector through Innovation and Entrepreneurship* Makati City, Philippines.
- 56 <http://www.greenstrategy.se/about-us/anna-brismar/>
- 57 Interview with Sanjay Banka, Managing Director at Banka Biolo and private sector representative on SWA's Steering Committee (2019). Partner Perspectives – High Level Meeting Series. Sanitation and Water for All.
- 58 i-San Associates (2017). *Barriers and Opportunities for Sanitation SMEs: A study of the wider market system in Ghana*. USAID Sanitation Service Delivery (SSD) Program
- 59 Sustainable Sanitation Practice (2019). *CEWAS Success Stories – Issue 27 EcoSan Club Austria, Vienna*.
- 60 UN-Water. 2018. *Sustainable Development Goal 6 - Synthesis Report on Water and Sanitation*.
- 61 Ibid.
- 62 Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- 63 Ibid.
- 64 World Bank (2014). *Building Competitive Green Industries: The Climate and Clean Technology Opportunity for Developing Countries*.
- 65 Young, D. and Woods, W. (2019). *Innovation Is the Only Way to Win the SDG Race* Boston Consulting Group.
- 66 Sustainable Sanitation Practice (2019). *CEWAS Success Stories – Issue 27 EcoSan Club Austria, Vienna*.

-
- ⁶⁷ Asia Pacific Economic Cooperation (APEC) Policy Support Unit (2018). *Identifying Green, Sustainable and Innovative MSMEs in APEC*. Policy Brief No.19.
- ⁶⁸ Ibid.
- ⁶⁹ Agence Française de Développement (AFD), Bureau of Energy Efficiency (BEE) French Environment & Energy Management Agency (ADEME) and The Energy and Resources Institute (TERI) (undated). *Benchmarking and Mapping Indian MSMEs Energy Consumption*.
- ⁷⁰ Ibid.
- ⁷¹ Organisation for Economic Co-operation and Development (OECD) Development Centre and Emerging Markets Network (EMnet) (2018). *Policy Note on Sustainability Better Business For 2030: Putting the SDGs at the Core*. OECD.
- ⁷² Ibid.
- ⁷³ The Climate and Development Knowledge Network (CDKN) (2015). *Increasing MSME Access to Climate Finance*.
- ⁷⁴ The Climate and Development Knowledge Network (CDKN) (2015). *Increasing MSME Access to Climate Finance*.
- ⁷⁵ Ibid.
- ⁷⁶ Ibid.
- ⁷⁷ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- ⁷⁸ Ibid.
- ⁷⁹ United Nations Development Programme (UNDP) and Deloitte (2016). *Uncharted Values Blending Value and Values for Social Impact through SDGs*.
- ⁸⁰ Business & Sustainable Development Commission (2017). *Better Business Better World*.
- ⁸¹ Ibid.
- ⁸² Ibid.
- ⁸³ OECD (2017). *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*.
- ⁸⁴ Ibid.
- ⁸⁵ SDG Target 8.3 - "Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services."
- ⁸⁶ Organisation for Economic Co-operation and Development (OECD) (2018). *Strengthening SMEs and entrepreneurship for productivity and inclusive growth – Issue Paper*. SME Ministerial Conference.
- ⁸⁷ Liu, C.K. (undated). *Policy Brief: The Role of Micro-Small and Medium Enterprises in Achieving SDGs*. United Nations.
- ⁸⁸ Ibid.
- ⁸⁹ Target 9.3 - "Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets."
- ⁹⁰ Liu, C.K. (undated). *Policy Brief: The Role of Micro-Small and Medium Enterprises in Achieving SDGs*. United Nations
- ⁹¹ Ibid.
- ⁹² Ibid.
- ⁹³ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- ⁹⁴ Blue Orchard Academy (2017) *SMEs and SDGs: Supporting Small and Medium Enterprises to Achieve the Sustainable Development Goals – Insights from a Blue Orchard Survey*.
- ⁹⁵ The Climate and Development Knowledge Network (CDKN) (2015). *Increasing MSME Access to Climate Finance*.
- ⁹⁶ Ibid.
- ⁹⁷ Target 9.3 - "Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets".
- ⁹⁸ United Nations Industrial Development Organization (UNIDO) (2019). *Statistical Indicators of Inclusive and Sustainable Industrialization - Biennial Progress Report*.

-
- ⁹⁹ Gurria, A. (2018). *SMEs are Key for more Inclusive Growth* OECD Observer.
- ¹⁰⁰ United Nations Industrial Development Organization (UNIDO) (2019). *Statistical Indicators of Inclusive and Sustainable Industrialization - Biennial Progress Report 2019*.
- ¹⁰¹ Ibid.
- ¹⁰² Organisation for Economic Co-operation and Development. OECD (2017). *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*.
- ¹⁰³ Ibid.
- ¹⁰⁴ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- ¹⁰⁵ Ibid.
- ¹⁰⁶ Business & Sustainable Development Commission. (2017). *Better Business Better World*.
- ¹⁰⁷ United Nations Development Programme (UNDP) (2019). *The SDGs as a Lever for Business Innovation – Celebration of the 13 Participating Companies in SDG Accelerator for SMEs*.
- ¹⁰⁸ Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) (2013). *How Small and Micro Businesses Could Reduce Inequality*.
- ¹⁰⁹ Organisation for Economic Co-operation and Development (OECD) (2018). *Strengthening SMEs and Entrepreneurship for Productivity and Inclusive Growth – Issue Paper*. SME Ministerial Conference.
- ¹¹⁰ Ibid.
- ¹¹¹ Organisation for Economic Co-operation and Development (OECD) (2017). *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*.
- ¹¹² Ibid.
- ¹¹³ Ibid.
- ¹¹⁴ United Nations Development Programme and Deloitte (2016). *Uncharted Waters Blending Value and Values for Social Impact through the SDGs*.
- ¹¹⁵ <https://projectdignity.sg/>
- ¹¹⁶ Business & Sustainable Development Commission (2017). *Better Business Better World*.
- ¹¹⁷ Creative industries include the publishing, production and broadcasting of literature and media services, such as design, PR and advertising agencies, library and museum activities, artistic education and creation. Digital includes software and computer consultancy, programming and the reproduction of sound, video and information technology media. Certain news media activities and the manufacturing and wholesale of computer related equipment. Professional services include legal, accounting, administrative and management consultancy work, as well as scientific research and development and other professional activities.
- ¹¹⁸ Business Advice (2016). Innovative “new work” small businesses are fuelling growth, but only in certain cities.
- ¹¹⁹ Ibid.
- ¹²⁰ Ibid.
- ¹²¹ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- ¹²² Ibid.
- ¹²³ Business & Sustainable Development Commission (2017) *Better Business Better World*.
- ¹²⁴ Ibid.
- ¹²⁵ Ibid.
- ¹²⁶ Business & Sustainable Development Commission (2017). *Better Business Better World*.
- ¹²⁷ Ibid.
- ¹²⁸ Ibid.
- ¹²⁹ Ibid.
- ¹³⁰ www.dailydump.org
- ¹³¹ Liu, C.K. (undated) *Policy Brief: The Role of Micro-Small and Medium Enterprises in Achieving SDGs*. United Nations.
- ¹³² Organisation for Economic Co-operation and Development (OECD). (2017). *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*.
- ¹³³ Aguilar, S. (2016). *Promoting the Participation of Small and Medium Size Enterprises (SMEs) in Green Public Procurement*. The Sustainable Public Procurement (SPP) Programme of The 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP). CEGESTI.

-
- 134 Ibid.
- 135 Ibid.
- 136 Business & Sustainable Development Commission (2017). *Better Business Better World*.
- 137 Ibid.
- 138 Stichting Global Reporting Initiative (GRI) and the International Organization of Employers (IOE) (2016). *Small Business Big Impact SME Sustainability Reporting - From Vision to Action*.
- 139 Ibid.
- 140 Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- 141 Ibid.
- 142 Karlstrom, C. (2018). *What impact can SMEs have on the Sustainable Development Goals?* Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA).
- 143 Business & Sustainable Development Commission (2017). *Better Business Better World*.
- 144 The Climate and Development Knowledge Network (CDKN) (2015). *Increasing MSME Access to Climate Finance*.
- 145 Ibid.
- 146 Ibid.
- 147 Deutsche Gesellschaft für Internationale (GIZ) and Small Industries Development Bank of India (SIDBI). (undated) *Facing the Impacts of Climate Change: Indian MSMEs and Adaptation* GIZ India..
- 148 Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- 149 Ibid.
- 150 Ibid.
- 151 Karlstrom, C. 2018. *What impact can SMEs have on the Sustainable Development Goals?* Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA).
- 152 Terpstra, P and Ofstedahl, A. 2013. *Micro, Small, and Medium Enterprises: Key Players in Climate Adaptation* World Resources Institute (WRI).
- 153 Ibid.
- 154 United Nations Development Programme (UNDP) 2015. *Using SMS Texts to Provide Weather Forecasts for Small Farmers in West Africa*. Relief Web.
- 155 BCtA is a global initiative that encourages companies to fight poverty through inclusive business models. It is supported by the United Nations Development Programme (UNDP) and other international organizations.
- 156 United Nations (2017). *Oceans Conference Concept Paper Partnership dialogue 5: Increasing Economic Benefits to Small Islands Developing States and Least Developed Countries and Providing Access for Small-Scale Artisanal Fishers to Marine Resources and Markets*.
- 157 Ibid.
- 158 Ibid.
- 159 BioTrade is a programme of UNCTAD and refers to the collection, production, transformation and commercialization of goods and services derived from native biodiversity in environmentally, socially and economically sustainable ways. The sustainability of BioTrade is guaranteed by adherence to principles and the working approach focusing on three areas: value chain, ecosystem and adaptive management. (https://unctad.org/en/PublicationsLibrary/UNCTAD_DITC_TED_2012_6.pdf).
- 160 Ibid.
- 161 Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.
- 162 Ibid.
- 163 Organisation for Economic Co-operation and Development (OECD).2019. *Rethinking Innovation for a Sustainable Ocean Economy*.
- 164 Ibid.
- 165 Michalt. (2019). *Small businesses with a BIG vision Turn UN Sustainable Development Goals into Concrete Actions*. EConcrete.
- 166 Cook, C.D. (undated). *Farming for the Future: Agro-ecological Solutions to Feed the World*. Friends of the Earth.
- 167 Agro-ecological methods include farming methods include intercropping, cover cropping, crop rotation, conservation tillage, composting, managed livestock grazing and combined animal and plant production. These

methods foster biodiversity, natural soil fertility, water conservation and biological control of insects

¹⁶⁸ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.

¹⁶⁹ Ibid.

¹⁷⁰ Business & Sustainable Development Commission (2017). *Better Business Better World*.

¹⁷¹ Ibid.

¹⁷² Wu, A. et. al. (2017). *Growing Trees and Growing Profit: Is Your Business a "Restoration Enterprise?"* World Resources Institute (WRI).

¹⁷³ Ibid.

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

¹⁷⁶ The Sustainable Development Goals Fund (SDG Fund), University of Pennsylvania Law School and McDermott Will & Emery LLP. (2017). *Business and SDG 16, Contributing to Peaceful, Just and Inclusive Societies*.

¹⁷⁷ Ibid.

¹⁷⁸ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.

¹⁷⁹ The United Nations Global Compact defines "supply chain sustainability" as the management of environmental, social and economic impacts, and the encouragement of good governance practices throughout the lifecycles of goods and services

¹⁸⁰ United Nations Global Compact. (2016). *A Guide to Traceability for SMEs The Drivers, Opportunities, Challenges and Implementation Steps for Small and Medium-Sized Enterprises (SMEs) Looking to Adopt Traceability in their Supply Chains*.

¹⁸¹ Ibid.

¹⁸² <https://www.baselgovernance.org/>

¹⁸³ Wannewetsch, S. (2018). *The Integrity App: an Innovative Tool to Support SMEs in Sustainable Compliance*. Basel Institute on Governance.

¹⁸⁴ Organisation for Economic Co-operation and Development (OECD) (2017). *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*.

¹⁸⁵ Ibid.

¹⁸⁶ United Nations Independent Expert Advisory Group (IEAG) on the Data Revolution for Sustainable Development (2014). *A World that Counts: Mobilising the Data Revolution for Sustainable Development*.

¹⁸⁷ Karlstrom, C. (2018). *What impact can SMEs have on the Sustainable Development Goals?* Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA).

¹⁸⁸ Edwards, C. (2018). *UN's Sustainable Development Goals for Small Businesses*.

¹⁸⁹ Koreen, M. and Cusmano, L. (2019). *Fostering Greater SME Participation in a Globally Integrated Economy. SME Policy Faced With Development of Financial Technology*.

¹⁹⁰ Organisation for Economic Co-operation and Development (OECD) (2017). *Enhancing the Contributions of SMEs in a Global and Digitalised Economy*.

¹⁹¹ Ibid.

¹⁹² Ibid.

¹⁹³ United Nations Development Programme (UNDP) (2019). *Danish BLUETOWN has Developed a Wi-Fi Solution that Runs Entirely on Solar Energy*. SDG Accelerator for SMEs.

¹⁹⁴ <https://www.usahidi.com/>