**The UN Sustainable Development Goals: An Interdisciplinary Academic Introduction**

**Organized By:**

**Massive Open Online Course by KU (Katholieke Universiteit) Leuven**

Welcome to our course on the 17 UN Sustainable Development Goals.

I am Jan Wouters, Professor of International Law at KU Leuven. We are the oldest University in Belgium, and also the most innovative university in Europe, according to Reuters. I am also the director of the Leuven Center for Global Governance Studies, an interdisciplinary research center.

For our research at the University of Leuven and the Leuven Centre, sustainable development has become a real key focus. The 2030 Sustainable Development Agenda, adopted by the United Nations in 2015, has become ingrained in all areas of governance and policy making. It is this framework which promotes economic development and social progress, which occurs in an environmentally sustainable manner taking ecological boundaries into account. This is the founding principle of sustainable development.

The primary aim of this MOOC (Massive Open Online Courses) is to give an introduction into the UN's 17 sustainable development goals as part of the so-called 2030 agenda. Our six modules will cover the 17 sustainable development goals (the SDGs as we call them) and the 169 targets contained therein. These modules will cover all of the 17 SDGs which will be presented by academic experts from the University of Leven.

This MOOC offers an interdisciplinary perspective on the SDGs. They include perspectives from law, regulatory governance, political science, pedagogical sciences, health management, forestry management, economics, circular economy and architecture. These academic experts will first provide a general introduction to the different goals and they will then offer some critical reflections on the progress made so far. Moreover, how these SDGs function on the ground will be discussed through testimonials given by practitioners from civil society organizations, mostly in developing countries, but also from international organizations who are involved in the implementation of the SDGs.

I will now briefly introduce the structure of our MOOC.

First, there is module 1. That module will introduce the sustainable development goals. It will focus on the emergence of the SDGs and how they succeeded the Millennium Development Goals (the so-called MDGs). Module 1 will also introduce the concept of sustainable development and how this concept is translated into the SDGs. Finally, module 1 will concentrate on how the different SDGs are interrelated. We will also discuss how the SDGs take a perspective that embeds commitments to social progress into the 17 goals while also focusing on economic development. This is because economic development is a necessary condition to address social challenges. These social and economic SDGs in turn are embedded in the ecological system which determines the ecological boundaries in which social and economic progress should take place.

Therefore, modules 2 to 5 will introduce the 17 SDGs following this logic.

Modules 2 and 3 will cover SDGs related to social goals. There is module 2, which focuses on goals related to poverty, hunger, health, and education.

Module 3 introduces goals on gender equality, energy, sustainable cities and peace, justice and strong institutions.

Then, in relation to the economic goals, module 4 will cover First, decent work and economic growth. Second, it will cover innovation, industry, and infrastructure. Third, socio-economic inequalities and Fourth, sustainable production and consumption.

Module 5 will then explore the environmental SDGs by focusing on sustainable management of water and sanitation for all, climate change, life under water and, finally, life on land.

Module 6 will discuss SDG 17 which focuses on implementing the SDGs and introduces the approach of public-private partnerships to achieve the goals.

Now how will this MOOC be evaluated? For the evaluation, we will include short finger exercises at the end of every video to check that basic information has been acquired. Last but not least, there will be a final exam which will evaluate your understanding of all the SDGs and which will test your ability to critically reflect on the goals and on the overall SDG approach. We sincerely welcome you to our MOOC and we thank you for participating.

**Learning Objectives**

The learning goals of this MOOC are:

* Understand the emergence and development of the SDGs
* Understand how the different SDGs are interrelated
* Understand the structure of the SDGs in the United Nations context
* Acquire an understanding of how the SDGs relate to addressing global challenges such as inequality, climate change, poverty, unsustainable consumption and production, and peace and security
* Acquire scientifically informed and evidence-based information about the background and reality of each SDG
* Understand the complexities of the 169 individual targets that are part of the 17 SDGs
* Reflect on the challenges with which the SDGs are confronted
* Recognize the mutual interdependence between social, ecological and economic objectives of the SDG agenda
* Acquire an understanding of the institutional infrastructure in place that aims to realize SDG goals
* Understand how the SDGs are implemented
* Learn from practitioners what are the difficulties are in achieving the SDGs

Background Readings

The list below contains general resources to the Sustainable Development Goals. These readings are optional but you are encouraged to explore some of them to get an overview of the Sustainable Development Goals. You can click on the links to get access to the resources.

The original UN SDGs text where you can read the official 2030 Agenda for Sustainable Development. United Nations General Assembly. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. A/RES/70/1

(<https://courses.edx.org/assets/courseware/v1/4236d1aa3a99ec1fd32036195ef12e83/asset-v1:KULeuvenX+UNSDGx+1T2020+type@asset+block/Transforming_Our_World_-_The_2030_Agenda_for_Sustainable_Development.pdf> )

The UN SDGs Knowledge Platform where you can explore the SDGs and find out more about sustainable development in the UN framework. (<https://sustainabledevelopment.un.org/?menu=1300> )

The SDG Resource Centre where you can find academic articles and reports related to each SDG. (<https://sdgresources.relx.com/> )

The Sustainable Development Goals Report 2019 where you can explore the latest progress on the SDGs. (<https://courses.edx.org/assets/courseware/v1/c611d357358f60b83c6e9d6228f13e2f/asset-v1:KULeuvenX+UNSDGx+1T2020+type@asset+block/The_Sustainable_Development_Goals_Report_2019.pdf> )

**Module 1: The origin, development and idea of the SDGs**

Welcome to the first module of this MOOC on the UN Sustainable Development Goals!

The following video will provide you an overview of the module.

Four Interdisciplinary Insights videos will introduce you to the UN SDGs framework. For each of these videos, you will have to complete two short finger exercises that will test your understanding of the main messages.

Two Testimonials will then provide you with more practical information and experiences from experts working with the UN SDGs framework.

This module then contains a reflection question for which you will have to engage in a Discussion Assignment.

A Questions and feedback unit is present at the end of the module should you have any question, problem or comment. You can also post your thoughts and feedback on the module, which we would love to read!

We thank you for participating and hope you will enjoy this first module!

Welcome to this first module of our MOOC on the Sustainable Development Goals. In this module, we will delve into the history, foundations and reasons behind how the United Nations arrived at the Sustainable Development Goals back in 2015. We will also examine the history of the United Nations and how the organization gradually embraced the concept of sustainable development over a long period of time. We will look at various breakthroughs, reports and conferences which inspire the international action on global problems, such as poverty reduction and climate change. Next, we will introduce the idea of pursuing goals on global public policy issues. This begins with assessing the achievements of the Millennium Development Goals - the so called MDGs. The MDGs, set by the UN in the year 2000, were a first attempt to formulate global targets and they were the predecessors of the current SDGs. In this section, we will also look at how the MDGs in a way led to the SDGs, which helps us to understand the emergence and conceptualization of the Sustainable Development Goals. Next, we will discuss sustainable development as a concept. Here, we will look into the emergence of the concept itself and how it has developed over the years. We will also discuss how sustainable development has been transformed to encompass economic, social and environmental aspects of development. Moreover, in this module 1, we will look at the SDGs from a policy perspective, looking at their structure and what exactly this means for policy makers in theory and practice. Finally, we will hear from expert practitioners on how they assess the SDGs and the SDG framework, and they are critical because indeed in this way we can evaluate the nature as international targets of the SDGs and how effective these goals can be within their current framework. These critical perspectives will also shed light on the efficiency achievability and the measurability of these targets and their potential impacts on the great challenges of our current times.

**Learning Objectives for Module 1**

Upon completion of this module, you will have developed the following skills:

* Understanding the emergence of the SDGs and shift from the MDGs to the SDGs
* Understanding the evolution and definition of the concept of Sustainable Development
* Understanding the SDGs Framework from a Policy Perspective
* Understanding the involvement of the United Nations in Sustainable Development
* Ability to critically assess the interrelatedness of the SDGs
* Ability to distinguish between goals, targets and indicators

**Reading Materials for Module 1**

This list provides you with relevant readings related to the topics covered in Module 1. These readings are optional but you are encouraged to explore some of them to gain deeper insights of the topics. You can click on the links to get access to the resources.

**From MDGs to SDGs**

Battersby, J. (2017). MDGs to SDGs – new goals, same gaps: the continued absence of urban food security in the post-2015 global development agenda. African Geographical Review, 13(1), 115-129. <https://www.tandfonline.com/doi/full/10.1080/19376812.2016.1208769>

**Sustainable Development as a Concept**

The Brundtland Report:

World Commission on Environment and Development (WCED). (1987). Our common future. New York and Oxford: Oxford University Press. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

**The SDGs Framework from a Policy Perspective**

Pradhan, P., Costa, L., Rybski, D., Lucht, W. and Kropp, J. P. (2017). A Systematic Study of Sustainable Development Goal (SDG) Interactions. Earth's Future, 5, 1169-1179. doi:10.1002/2017EF000632. <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017EF000632>

**The UN and Sustainable Development**

The original UN SDGs text:

United Nations General Assembly. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. A/RES/70/1

<https://courses.edx.org/assets/courseware/v1/4236d1aa3a99ec1fd32036195ef12e83/asset-v1:KULeuvenX+UNSDGx+1T2020+type@asset+block/Transforming_Our_World_-_The_2030_Agenda_for_Sustainable_Development.pdf>

**Activity**

What is the first word that comes to mind when you think of “sustainable development”?

Ans: Sustainability



451 words submitted in total. Your words were: sustainability 1%

**From MDG’s to SDG’s**

In this video, we will consider how we arrived at the 2015 UN Sustainable Development Agenda, more specifically by looking into the historical context. Let's go back to the year 2000, the start of a new millennium, when 189 countries signed up the Millennium Development Goals following the Millennium Declaration. These goals were the first international attempt to set ambitious goals and targets on poverty to a goal-based system with a specific timeframe, from 2000 to 2015. Arguably, setting goals for development can help create pressure on different levels of government across the world, to achieve global targets. The MDGs comprised 8 goals and were primarily concerned with eradicating extreme poverty and introduced the first set of measurable global targets to do this. The other targets also included aspects of education, gender equality, infant mortality, maternal health, HIV/AIDS, the sustainability of the environment, and global partnerships for development. Essentially, these goals aimed at improving the quality of life for those of the poorest and least developed regions of the world. By the 2015 deadline for the 8 MDGs, a number of criticisms emerged, citing problems with the structure as "simple-minded" and a general lack of focus on strong objectives or indicators. The MDGs have also been accused of being not entirely specific on certain targets such as environmental protection. Moreover, it is clear that the MDGs put the emphasis for change in developing countries and not in developed countries. The SDGs in contrast make clear that achieving sustainable development is a goal for all countries in the world regardless of their level of development. Nonetheless, the MDGs had major successes according to some sources in halving the number of people in extreme poverty since 1990, more than halving infant mortality rate (under the age of 5) since 1990, and raising primary education enrollment to 91% in developing countries. It can also be claimed that the MDGs had successes in the areas of public health. According to the World Health Organization (WHO), child mortality rates were cut by 49% from 1990 to 2013, and maternal mortality rate by almost half. HIV/AIDS and malaria rates were also cut by 40% and 30% respectively. These successes were vital to the improvement of human quality of life especially in poor countries. So why were the 2030 Sustainable Development Goals necessary? While the MDGs tackled urgent human crises, it became clear, following the 2008 global financial crisis and the growing awareness of the effect of climate change, that global development goals could no longer be limited to poverty-related issues. In order to tackle the increasing challenges of climate change, poverty and rising inequalities among others, a more globally comprehensive approach to sustainable development was needed to deal with these issues. To do this, 17 individual sustainable development goals were designed, including 169 targets, ranging from eradicating poverty to affordable and clean energy, from decent work and economic growth to reducing inequalities. This ambitious and widespread agenda was designed to tackle these goals through three main pillars of sustainable development: social progress, economic growth, and environmental protection. This pillar-approach has been labelled a triple-bottom-line approach to sustainable development and aims to tackle more specific issues in the broader context of establishing a wide consensus for sustainability. This approach is far more integrated than the MDGS, and there are many issues which need to be implemented more horizontally across the different goals such as gender equality, which is important to both education and economic growth. In this sense, the SDGs are much better connected to each other than the MDGs were, and arguably, this has facilitated more policy integration across sectors. The SDGs are designed to be more measurable, and therefore countries could be held more accountable to their successes or shortcomings. Many of the 169 targets contain measurable deliverables with more relevant and specific indicators to ensure that monitoring is possible. Also, the SDGs place a much greater emphasis on environmental issues such as SDG 15 which focuses on deforestation, biodiversity and desertification. The signing of the Paris Agreement in 2015 was in many ways a result of the SDGs' ambitions to deal with climate change and environmental protection and foresees the implementation of many of the sub-goals of the SDGs. With this comprehensive approach, another key priority of the SDGs is to be more focused on successive targets which can be implemented by a diversity of public and private actors, with UN agencies to help monitor implementation on the ground. This has been called a localized approach and is intended to give effect to the targets of the SDGs in developing regions and to give locals a sense of ownership over the SDGs. SDG 17 also expands the idea of partnerships for implementation and foresees large-scale cooperation between public and private actors to achieve these ambitious goals. The real challenge with the SDGs compared to the MDGs is that they will require much more systemic and fundamental change. Many global systems are based on sustainable principles and practices in economic, social and environmental terms. These goals should be understood as interconnected and interdependent, as fulfilling one objective in one area can contribute to the achievement of another objective in another area.

**Sustainable Development as a Concept**

In this video, we will explore the notion of sustainable development as a concept and how this developed over time. The notion of sustainable development has emerged over many decades and international conferences. The first explicit common reference to sustainable development was in the 1987 Brundtland Report of the United Nations Commission on Environment and Development. In this report, sustainable development was defined as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987). It is clear that this conception of sustainable development is an intergenerational one. This means that we must accept the reality of the finite natural resources of our planet, and that these must be used and transformed in a way in which they are not depleted or unusable for future generations. This remained the dominant version of sustainable development for a long time. Yet, after the announcement of the Millennium Development Goals, it was clear that a new approach also including intragenerational equity concerns could be more far-reaching and effective at different spatial scales, from the global to the local. This new direction was necessary to expand the notion of sustainable development to make more explicit the interrelationship between social, economic, environmental and political factors. This renewed definition is crucial to the idea of sustainable development, as it no longer only focused on resources and intergenerational responsibility, but also on core socio-political concerns, including issues of needs, development, democracy, participation, justice, and equity across and within different generations. Together with the negotiation of environmental limits, inequality also prevailed as a crucial issue in this period, after international conferences such as the Rio+20 Summit highlighted how inequality was a worldwide issue. These catalysts shaped the transition of sustainable development thinking towards bridging social sustainability, economic viability and ecological sustainability through governance. A frequent idea defended by scholars addressing governance is the recognition that contemporary societies are governed by a plurality of interdependent actors and socio-institutional arrangements. This means that not only formal agencies influence decision-making over sustainable development but also a range of political actors from outside the formal political arena. This includes civil society groups, actors of the private sector, academia, NGOs, among many others. From the global to the local level, institutions and actors involved in sustainable development are numerous and diverse. Furthermore, scientific advancements in reporting on biodiversity and other ecological areas contributed to the environmental pillar of this renewed concept of sustainable development. The various sustainability dimensions, comprising social inclusion, economy, environment and governance, became the foundations for the 2015 SDGs. With complex interlinkages between these dimensions or pillars, it is clear that some policies which would only benefit one pillar would inevitably in some manner have a negative impact on another. However, the opposite is also true. Most of the SDGs actually have positive interactions with other SDGs, meaning that goals contributing to social sustainability can often have a positive impact on reaching other socio-economic or environmental goals. However, the achievement of one goal can also negatively affect another goal. One of the great challenges of the next development agenda will be to determine how we stimulate improved synergies between goals, and how we can achieve genuine sustainable development in every policy domain in a maximally complementary way. This means that different policy measures or development alternatives cannot be analyzed or implemented from a single point of view. The actual impact of policies on different social-ecological systems, such as forests, cities, coastal areas, food webs or protected areas for biodiversity conservation, should be addressed simultaneously. Therefore, the reasoning behind the holistic and dynamic view of sustainable development, considering both human and non-human systems, is that policies must somehow take all of these multifaceted impacts into their planning and development processes. There is no single way forward in pursuit of sustainable development but rather a limitless governance potential to collectively decide on, produce and encourage societal arrangements and agreements on agendas, actions, projects and policies of which society can take advantage in order to trace more sustainable paths of development. This is where governance emerges as the key implementing force for sustainable development. From this perspective, governance is not an addendum or fourth sustainability pillar but the fundamental engine of the sustainability system. In other words, governance in and for sustainable development represents the all-embracing social thread that connects society and the natural environment, on the one hand, and opens the question about the custodians in charge of steering the sustainable societal dynamics, on the other. Without strong global commitments and structural transformations to combat contemporary socio-ecological threats, uncertainties and persistent inequalities, there is little prospect of the original ambition of sustainable development, inter and intra-generational justice, to be met. However, as we have seen, as the concept of sustainable development has transformed over the decades, governments, international organizations, private actors and all of society, will have to do far more than simply conserve natural resources for the next generation. Truly implementing this holistic sustainability approach will require huge efforts. A focus on governance recalls that sustainable development, including the implementation of the SDGs, is a society project and not a unique successful model that will be invariable along time and suitable for all countries and territories. Sustainable development is a context-dependent concept grounded in the socio-material circumstances of people and places. According to this, governance, aligned with democracy and social participation, comes out as the socio-political process from which societies can learn how to deal with contemporary sustainability challenges and collectively create more sustainable paths of development.

**The SDGs Framework from a Policy Perspective**

In this video we will discuss the interlinkages between the 17 SDGs, and the implications of the SDG framework for policies at multiple scale levels from global to local. First, with this ambitious agenda for 2030 and a complex series of 17 interrelated goals, it is clear that many policy areas cannot simply remain the same for these goals to be achieved. However, there are different ideas about how our society and global economic system should be transformed. This video will explain some of the leading pathways of sustainability transition, most particularly the idea of the circular bio-economy. So, what is the circular bio-economy and how could it help to implement the UN sustainable development goals? According to the UN Conference on Trade and Development the circular economy can be defined as: “a market that gives incentives to reusing products, rather than scrapping them and then extracting new resources”. In addition, bio-economy has roots in biological production, which means that it is a decarbonized economy, not any longer relying on fossil energy sources, but on the renewable power of photosynthesis and other sun-based energy systems. Therefore, the circular bio-economy is a circular economy which integrates natural capital, including biodiversity and ecosystem services, biotechnology, renewables. One of the primary aims therefore would be to “decouple the economic growth from environmental degradation”. To show how economic, social and environmental aspects of sustainable development are linked we have constructed the following infographic. The infographic splits the UN SDGs into 3 areas: First, the Economy, covering the SDGs on decent work and economic growth, industry, innovation and infrastructure, inequality, and consumption and production. Second, the Society, covering SDGs related to poverty, hunger, health, education, gender equality, energy, sustainable cities, and peace, justice and institutions. And then third, the Biosphere, covering the SDGs addressing sanitation, climate change, life under water and life on land. After the insufficient results of the Rio conference of 1992, awareness has risen that the original model of sustainable development with equal pillars of economy, society and biosphere had evolved into a weak sustainability model, with the economy dominating the other two pillars. The SDGs are based on an attempt to bring in strong sustainability as a game changer. Strong sustainability is based on a nested model of sustainability, with economy at the service of society, and society within the boundaries defined by the planetary ecosystem. This conception is crucial and underpins the design of the circular bio-economy. So, what does this mean for policy as it stands at the moment? First, this will require a re-thinking of many policy areas to embed social and environmental objectives, always from the design stage, and not as an end-of-pipe solution after the damage is already made. Areas such as clothing production, housing, health care, food production and consumption and transportation will need to be adapted to be more sustainable in terms of their systems of consumption and production, recycling and reuse. This requires a comprehensive policy framework which provides alternatives to fossil-fuel sources of energy, non-renewable and non-biodegradable products. In effect, these bio-products would put more emphasis on “natural capital”, the idea that natural resources have inherent value as natural occurring assets which are used for human consumption. This conception is useful as it places emphasis on the economic nature of natural resources so that we don’t over-consume them. In this sense natural capital can inspire sustainable policies on every area from energy, to waste management, agriculture, chemicals, industry to forestry. These new conceptions create synergies between different areas of the economy, environment and society. The SDGs were also designed to create these synergies. An example of a synergy between two SDGs would be the contribution of SDG 7 on sustainable, clean energy for all, which could contribute to achieving poverty alleviation as targeted in SDG 1, by providing energy to poverty-stricken areas. In turn, the suitability of many lower income countries to host certain types of renewable energy, for example, solar power, would also contribute to the achievement of many targets in SDG 7, so there is a win-win in both directions. However, there are instances where some SDGs contain negative interactions with others, and are in fact antagonistic to the achievement of other goals. An example of such trade-offs would be the interaction between SDG 8 on decent work and economic growth and SDG 14 on life under water. This is due to the need for more sustainable fisheries, reduced pollution, management and conservation of marine biological resources. In areas such as coastal cities and small-island states which are heavily reliant on marine resources, large policy shifts in favor of achieving these targets could actually limit and even reduce economic growth in the short-term, which could also have negative repercussions for poverty-related targets. However, for large policy changes to occur, it is perhaps inevitable that there will be problems in this transition. For all 17 SDGs and the 169 targets contained within them, it would be impossible for all interactions between them to be positive. But there are still challenges which remain in how we think about sustainable development, particularly the role of the economy in contributing to environmental and social sustainability. For this, we cannot simply adopt the ‘business as usual approach’, as many believe that our current economic model must be transformed to decarbonize completely and rely solely on renewable resources. This means also that apart from rendering our resources renewable that we should try to an overall decreased resource use without losing comfort. This could be achieved by emphasizing more on services than on material products, to invest more in health and happiness than in mere prosperity, to narrow the gap between rich and poor, rather than increasing it, as this phenomenon is a very destabilizing factor in the road to a resilient society.

**The United Nations and Sustainable Development**

The United Nations has had a pioneering role in bringing its member states together throughout its history in order to cooperate to tackle global challenges from peace and security to human rights and development. The UN has taken several initiatives to address these challenges. This includes the Millennium Development Goals which are also mentioned in this MOOC and which are the predecessors of the SDGs. In this video, we will look at how the SDGs are constructed in terms of goals, targets and indicators and how they relate to the broader spectrum of existing international law. We start with the latter. Firstly, what is the status of the SDGs in the context of international law? The answer is rather tricky. Indeed, the SDGs are undoubtedly a non-binding framework which uses aspirational language to set its goals and specific targets. Encouraging such a broad and ambitious agenda would be virtually impossible to turn into legally-binding conventions or instruments. However, it is clear that the SDGs refer to several international agreements and conventions and, in this way, they try to further implement existing international law. For example, several ILO conventions, as laid out in the Decent Work Agenda by the International Labor Organization are included in the remit of SDG 8 on decent work and economic growth. These conventions include the prohibition of child labor and forced labor. Therefore, while the SDGs cannot be described as legally-binding or as legal tools, they do reinforce multilateral agreements. Moreover, sometimes the SDGs feed into new international agreements. For example, goal 13 on climate change, explicitly encourages to pledge to mobilize 100 Billion USD by 2020 for climate financing. This pledge was eventually enshrined in the Paris Agreement of December 2015. By emphasizing this crucial aspect of tackling climate change through financing, the SDGs make a vital link with both the spirit and the contents of this subsequent agreement. Next, we must look at the structure of the SDGs. In the first place, we have the seventeen goals themselves. Other videos will delve into the thematic areas of these goals, but the goals are indeed split up into economic, social and environmental areas. Each of these far-reaching goals are made up of individual targets, with some goals containing as few as three targets, and some containing over 15 targets. These targets hone in on specific problems, such as ocean acidification or primary school enrollment. This enables the SDGs to build up a comprehensive framework by having broad far-reaching goals, with specific targets to pin-point certain areas. Targets are then monitored by one or more indicators which act as proxies to measure the progress made on a certain target. An indicator is typically a measure of the state of a particular phenomenon. For example, the indicator for the target on reducing the maternal mortality rate is to bring it down to 70 per 100,000 live births. Overall, many of the individual goals and targets of the SDGs are not unique and many pertain to existing agreements established outside the framework of the SDGs. So, what is the added value of these goals and targets? Firstly, some goals and targets signify a shift in policy priority, with items which previously received less attention, such as climate change and inequality, being brought to the top of the international agenda. Secondly, they provide an impetus for change, through ongoing consultations and high-level political forums which pressure states through peer pressure to implement changes. Thirdly, the goals and targets provide a platform for knowledge and policy exchange about how to develop policies to reach them. Most importantly, the targets of the SDGs do not simply apply to governments by advocating for a top-down approach, they also encourage bottom-up action by private actors. That bottom-up approach is used occasionally to emphasize individual responsibility for example in SDG 12, which encourages companies to adopt sustainable consumption and production cycles. Moving on to the indicators in the SDGs. These indicators allow for monitoring progress towards achieving the goals. These monitoring systems act primarily as a feedback mechanism. They allow states to monitor and compare progress being made in a wide range of policy areas. Again, this pressure states to make progress. It is important to stress that the UN system is vital to this monitoring system. And therefore, to the implementation of the SDGs. Many bodies and specialized agencies of the UN family have a central role in monitoring. To provide some examples, the UN Development Programme will monitor certain indicators related to poverty in SDG 1. Indicators in SDG 8 on decent work and economic growth will be monitored by the International Labor Organization. Finally, indicators in SDG 3 on good health and wellbeing will be monitored by the World Health Organization. The consolidation and review of all the indicators is done by the Inter-Agency Expert Group on SDG Indicators (IAEG-SDGs) at the UN Statistical Commission. This review can then monitor progress of all countries on all goals and targets. Benchmarking countries on goals and targets again provide an incentive to perform better on the SDGs. Finally, the indicators in the SDG framework were designed to be ‘SMART’. This means Specific, Measurable, Achievable, Relevant and Time-bound. Obviously, not all indicators achieve this, but at least they aim to do so. Ultimately, the SDGs are meant to be taken as a whole. Their broad coverage is arguably their strength, but also possibly a weakness as some experts argue. These experts would argue that they just aim to achieve too much. However, one could also submit that these goals have a huge normative impact on the day to day running and planning of local, national and international authorities and businesses. They create, in other words, a global impetus and platform for ambitious reform.

**Activity**

The UN SDGs have not been developed out of the blue. They are the result of several decades of evolution in the conception of sustainable development and how it should be attained. Below are 6 milestones in the history of sustainable development that have been influential in progressing towards the making of the UN SDGs:

* Rio Summit
* Brundtland Report
* Club of Rome Report: "The Limits to Growth"
* Rio+20 Summit
* First picture of the Earth taken from the Moon
* Millennium Development Goals

For each milestone, make some research and find out when the milestone took place (date) and why it was important in the evolution of sustainable development.

**First picture of the Earth taken from the Moon – (1968)**

Although on August 23rd, 1966, the first picture of Earth was taken from the moon, by NASA's Lunar Orbiter I from a distance of about 236,000 miles (380,000 km), the photo wasn't revealed any details until November 13th, 2008. Earthrise, the first ever released colored photograph of Earth, was taken by astronaut William Anders on December 24, 1968 from lunar orbit, during the Apollo 8 mission. It was declared the "the most influential environmental photograph ever taken" by Galen Rowell. The photo influenced so many people including many scientists to understand that “the mighty earth has also a limit”.

**Club of Rome Report: "The Limits to Growth" – (1972)**

In the summer of 1970, an international team of researchers at the Massachusetts Institute of Technology began a study of the implications of continued worldwide growth. They examined the five basic factors that determine and, in their interactions, ultimately limit growth on this planet-population increase, agricultural production, nonrenewable resource depletion, industrial output, and pollution generation. The MIT team fed data on these five factors into a global computer model and then tested the behavior of the model under several sets of assumptions to determine alternative patterns for mankind’s future. The Limits to Growth is the nontechnical report of their findings which was published in 1972 and commissioned by the Club of Rome. The summary of the findings represents a message, still holds today: the global resources of earth probably cannot support present rates of economic and population growth much beyond the year 2100 even with advanced technology, if mankind fails to impose limits on production of material goods to achieve a state of global equilibrium.

**Brundtland Report – (1987)**

In 1987, the World Commission on Environment and Development (WCED), published a report entitled “Our common future” which came to be known as the Brundtland Report after the Commission's chairwoman, Gro Harlem Brundtland. It developed guiding principles for sustainable development as it is generally understood today. The Brundtland Report explored the causes of environmental degradation, attempted to understand the interconnections between social equity, economic growth, and environmental problems, and developed policy solutions that integrated all three areas. The Brundtland Report is most often cited for its definition of sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” It didn't cease by citing the definition only but also proposes long-term solutions for bringing about sustainable development and continuing it into the 21st century. Some other important topics that were included in the report are as follows: the role of the international economy, population and human resources, food security, social equity, species and ecosystems, energy, industry, and proposed legal principles for environmental protection. In 1989, the report was debated in the UN General Assembly, which decided to organize a UN Conference on Environment and Development.

**Rio Summit – (1992)**

The United Nations Conference on Environment and Development (UNCED), also known as the Rio de Janeiro Earth Summit, the Rio Summit, the Rio Conference, and the Earth Summit, was a major United Nations conference held at Rio de Janeiro, Brazil (June 3–14, 1992), to reconcile worldwide economic development with protection of the environment. The Earth Summit was the largest gathering of world leaders as of 1992, with 117 heads of state and representatives of 178 nations in all attending. By means of treaties and other documents signed at the conference, most of the world’s nations nominally committed themselves to the pursuit of economic development in ways that would protect the Earth’s environment and nonrenewable resources. It could be considered as the very first step towards the journey of achieving global environmental sustainability.

Some of the main documents agreed upon at the Earth Summit are as follows: Convention on Biological Diversity; The United Nations Framework Convention on Climate Change (UNFCCC) or Global Warming Convention; The Declaration on Environment and Development, or Rio Declaration; and Agenda 21.

**Millennium Development Goals – (2000)**

In September 2000, world leaders from all 191 UN member states, came together at the United Nations Headquarters in New York to adopt the United Nations Millennium Declaration committed to a new global partnership to combat poverty, hunger, disease, illiteracy, environmental degradation, discrimination against women, and set out a series of eight time-bound targets to achieve by the year of 2015 - that have become known as the Millennium Development Goals (MDGs). The MDGs are inter-dependent and later led to a new approach of sustainable development consists of 17 integrated and indivisible goals, which are much broader, deeper and far more ambitious in scope than MDGs.

**Rio+20 Summit – (2012)**

The United Nations Conference on Sustainable Development (UNCSD), also known as Rio 2012, Rio+20, or Earth Summit 2012, was a 20-year follow-up to the 1992 Earth Summit held in Rio de Janeiro. It was the third international conference on sustainable development aimed at reconciling the economic and environmental goals of the global community. It resulted in a focused political outcome document which contains clear and practical measures for implementing sustainable development. In additionally, it launched a process to develop a set of Sustainable Development Goals (SDGs), which were built upon the Millennium Development Goals, and adopted ground-breaking guidelines on green economy policies.

Module 2: SDGs and Society: Ensuring resilience and primary needs in society

Module 3: SDGs and Society: Strengthening Institutions for Sustainability

Module 4: SDGs and the Economy: Shaping a Sustainable Economy

Module 5: SDGs and the Biosphere: Development within Planetary Boundaries

Module 6: Realizing the SDGs: Implementation through Global Partnerships