11 SUSTAINABLE CITIES AND COMMUNITIES

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

This goal is all about managing urban development. Cities are on the rise, and well-managed cities can be hubs of innovation and prosperity. Their management is a big cornerstone in sustainable development. As more people migrate to cities in search of better opportunities, access to affordable, safe and sustainable housing becomes a priority. Managing slums, urban sprawl, waste management and air pollution are essential to ensuring the well-being, health and prosperity of our population and our environment.

TARGETS

- Ensure everyone has access to quality, safe housing and basic services.

- Provide safe, organized transportation that is not harmful to the environment and serves vulnerable populations, including women and children.

- Engage communities in discussions and planning for improvement of their cities.

- Strengthen efforts to protect our cultural and natural heritage.

- Strengthen our resilience to disasters.

- Ensure waste management and air quality is monitored.

- Prepare communities to properly manage their resources and tackle climate change.

> " Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody. "

Jane Jacobs
American-Canadian author and urban activist

LEARNING OBJECTIVES

1 Learners will understand how to identify and address their basic physical, social and psychological human needs in relation to their urban, semi-urban or rural settlement.

2 Learners will understand the basic principles of sustainable planning and building, and identify opportunities to make their own area more sustainable and inclusive.

3 Learners will understand the role of local decision-makers and participatory governance and the importance of representing a sustainable voice in planning and policy for their community.

4 Learners will be able to use their voice to identify and advocate for a sustainable future vision for their community through community groups, local planning systems and themselves.

5 Learners will understand the value of planning, implementing and evaluating inclusive community-based sustainable projects.

CURRICULUM CONNECTIONS

Media
What are the different perspectives needed to understand urban issues in the media?

Environment
What are some steps to make urban development more sustainable?

Poverty, wealth and power
How does the poverty cycle differ between rural and urban areas?

Indigenous Peoples
How are Indigenous communities impacted by urban settlement?

Oppression and genocide
What are the impacts of oppression and segregation on urban development?

Health and biotechnology
What are the health issues caused by urban expansion?

Gender politics
How does urbanization impact women uniquely?

Social justice and human rights
How can we strengthen our social support for the vulnerable?

Peace and conflict
How can urban participation and inclusion promote peace?

THE BIG QUESTIONS

1 Where did it begin?

- From the beginning of civilization, humans have sought opportunities in larger communities. Today, half of humanity (or 3.5 billion people) live in cities, and it's only going up from here.[1] Better job opportunities, strong communities, healthcare, education and access to social services are just some of the reasons why people are moving to cities in droves. With more people comes a need for more infrastructure, services, transportation and waste management.

- Addressing inequalities is a big concern for urban centres. Governments and **non-governmental organizations (NGOs)** have difficulty providing sufficient housing, services, security and jobs for new urban citizens. Cities, particularly growing developments on coastal areas, are more vulnerable to **climate change** and natural disasters due to their density and location.

- Today, 828 million people live in **slums**.[2] These communities are often densely populated and informal, with sub-standard or non-existent **sanitation** services, electricity, security and other basic services.[3] Rapid **urbanization** throughout history, coupled with a combination of poor urban planning, **segregation**, **poverty**, natural disasters, social conflicts and poor infrastructure, have led to the expansion of slums around the world.

- Designing **sustainable cities** means putting environmental impact at the forefront. Sustainable planning considers how urban development can minimize inputs like energy, water and food, while reducing waste outputs of heat, air pollution and **water pollution**.

- **Inclusive city** planning seeks to improve opportunities and living conditions for all through spatial, social and economic inclusion. Inclusive programs can be used to address issues of sanitation, **poverty reduction** and job opportunities to name a few.

2 Why does this issue matter?

- **We need quality, safe housing and basic services**

  In 2014, 30 per cent of the urban population lived in slum-like conditions.[4] In sub-Saharan Africa, this proportion was at 55 per cent—the highest of any region.[5] Basic needs like housing, health services, education, **food security**, transportation and **decent work** (particularly for people living in slums) make up the foundation for sustainable, healthy urban centres.

- **We need to better manage our transportation, waste and air quality**

  Managing solid waste can be problematic in densely populated areas. In fact, in many developing regions, less than half of solid waste is disposed safely.[6] As per capita waste generation continues to rise, the collection and safe disposal of solid waste will continue to require serious attention.

  Urban air pollution is a challenge for cities around the world. An impact of human activity, poor air quality causes illness and millions of premature deaths annually. In 2014, around half the global urban population was exposed to air pollution levels at least 2.5 times higher than the maximum standards set by the World Health Organization.[7] In order to manage pollution levels, sustainable and renewable-energy transportation needs to be a high priority for expanding urban centres. Doing so will promote more inclusive economic development and manage environmental impact.

- **We must engage government and civil society to improve our cities and ensure inclusivity**

  Unplanned urban sprawl undermines the foundation of **sustainable development** for everyone. For example, for every 10 per cent increase in sprawl, there is a 5.7 per cent increase in per capita carbon dioxide emissions and a 9.6 per cent increase in per capita hazardous pollution.[8] Governments need to help citizens manage their own well-being, as well as the well-being of our environment and infrastructure.

- **We need to make our cities resilient to disaster and adaptable to climate change**

  Impacts of climate change, including extreme weather, flooding, hotter temperatures and health concerns, should be a priority for future planning and management of our urban centres. Low-elevation coastal areas face considerable threat from sea-level rise and storm surges. Adapting our cities is an ongoing cycle of preparation, response and revision developed over time. Integrating adaptation into existing planning processes and goals will help cities thrive in a time of climate change.

3 Who and what are affected?

- **Urban poor**

  People caught in the **poverty cycle** often face compounding challenges of unstable housing, lower income and poor health. Food security is hard to obtain in densely populated areas with poor distribution systems. Slums are often the only solution for families seeking shelter amidst pressing socio-economic conditions. Making development and urban planning inclusive of vulnerable populations, such as the urban poor, will make our cities more supportive spaces for everyone

- **Women**

  Gender inequalities are substantial barriers to the support and empowerment of women in urban areas. Women-headed households suffer **disproportionately** from inadequate housing, poor access to clean water and inadequate sanitation in poor urban neighbourhoods.[9] In order to improve sustainability in cities, urban policy makers and governments need to understand how gender impacts rural-urban migration, slum growth and urbanism.

- **The Environment**

  Cities leave large ecological footprints that reach far beyond their urban boundaries to surrounding ecosystems. Managing **greenhouse gas** and waste pollution are top priorities for large urban areas. These issues require a two-prong approach to clean up our mess and reduce our impact in the future. In the developing world, where population growth is outpacing the ability to provide necessary infrastructure and services, health issues and **environmental degradation** intersect with high density and increased reliance on motor traffic.

> " In the planning and designing of new communities, housing projects and urban renewal, the planners both private and public, need to give explicit consideration to the kind of world that is being created for the children who will be growing up in these settings. "

Urie Bronfenbrenner
Russian-American psychologist

4 What needs to be done?

- Urban development costs money, however, this cost is minimal compared to the benefits. For example, a lot of people might see the creation of a new transit line as problematic because of the cost to develop and build it. At the same time, better transport can have spillover benefits that increase economic activity, quality of life, environmental sustainability and the success of a networked city. What we invest, we can get in return.

- When decision-makers initiate plans and activities without listening to community concerns and aspirations, troubled times lie ahead. Urban development should empower and involve residents to invest in their community. Good communication, planning, action and reflection through necessary social, political and economic channels will help support this development.

- Standards, set through policy and public activism, are important to indicate progress toward achieving our necessary goals. Incentives, such as tax breaks, grants or loans, are great ways to help individuals, communities and businesses to make the switch towards sustainable choices.

- Community activism and engagement through volunteering, protest, lobbying and mobilization are helping spread the message that the world wants sustainable, inclusive and resilient urban environments.

> "A protected bicycle lane in a city in a developing country is a powerful symbol, showing that a citizen on a $30 bicycle is as important as one in a $30,000 car."
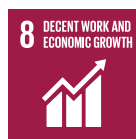
Enrique Peñalosa
Mayor of Bogotá

CONNECTION TO THE OTHER GOALS

Sustainable cities and communities require us to plan and implement programs that reduce inequalities while offering opportunities for improved infrastructure and innovation. Strengthening the resilience and development of our urban space in all these spheres takes strong governance, inclusive policies and an investment in vulnerable populations.

Poverty cycles are unique in urban and rural areas. To end poverty, we need to understand how it is perpetuated in our cities and how populations are uniquely affected. How can specific services support the increasing amount of migrants and settlers moving to a city for a better life?

Sustainable cities require sustainable services. Adequate sanitation, clean air, green spaces, affordable energy, quality education, healthcare and decent work all need to be provided in order to support a city's inhabitants.

Consequences of inaction

- The impact of poorly planned urbanization can be seen in the growing reality of huge slums, tangled traffic, greenhouse gas emissions and sprawling suburbs all over the world. Slums are a burden on **GDP**, and lower life expectancy. Proper planning and governance can help reduce these detrimental effects.

- If we don't choose to act sustainably, we miss the opportunity to build cities where all citizens live a decent quality of life, creating shared prosperity and social stability without harming the environment.

REFLECTION AND ACTION QUESTIONS

1 How do you feel about the issue now that you know more about it?

2 How might this issue have been prevented? What could have been done differently?

3 How has this problem changed over time? Where do you see it going in the future?

4 What questions do you still have?

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has."

Margaret Mead,
American cultural anthropologist

RESOURCES

How to take action

- **Learn about the issues.** No matter how big or small your city, there are certainly issues and inequalities related to sustainability that need attention. Put on your investigator hat and start asking questions about how people meet their basic needs and access essential services. Identify what the issues are and how they need to be addressed. See what other cities and citizens are doing to resolve these issues and get inspired.

- **Use your voice.** Once you have identified the issues you want to see resolved for you and your community, identify who the key **stakeholders** are who can make a difference and advocate for you. If homelessness or housing availability are key issues for your city, make sure your government knows about it. Call in, show up, and speak out—using your voice as a citizen helps reinforce that sustainability and empowerment are a priority for governments and decision-makers in your city. Every voice counts.

- **Get involved**. Make a difference with sustainable activities on a local scale. Join a community garden, learn about the history of citizen activism, support a food bank and learn about the stories of vulnerable populations in your city. Getting involved will help give you a better understanding of the issues facing you and your neighbours.

- **Support a cause.** Beyond government policy, citizen groups, NGOs and local charities are highly involved in supporting the needs of marginalized groups in urban centres. Lend your time, talent and treasure to a cause you feel drawn to and help make a difference in your community.

- **Participate in a community garden.** Start a small plot in your neighbourhood or community and grow your own food, learning what it takes to put food on the table while simultaneously reducing emissions related to transportation.

- **Learn and invest in vertical farming**. This agricultural practice uses a system of vertically stacked layers while growing produce to save space and control environmental factors that tend to use less energy. Vertical farming not only requires less land and helps protect the environment's diversity, but also cuts down on transportation and production emissions as vertical farms can be closer to its consumers, while maximizing the food production of a small area.

- **Create or get involved in a commuter challenge.** Challenge yourself, your class and your community to cut down on their transportation emissions. Walk, bike or share a ride.

- **Propose a bike exchange system in your community.** Set up a system from which people can borrow bikes to get from point A to point B. These initiatives help reduce emissions and make this form of transportation more accessible community-wide.

- **Encourage positive spaces in your community**. Protect green spaces by having clean-up days, hold art contests with the help of your local government to showcase your community's culture and heritage, or help plan and promote sustainable development projects in your community.

Educational resources

- The World's Largest Lesson page for Goal 11 has downloadable comics, posters and lesson plans here. Understanding Community Violence (ages 11-14, 60 minutes) focuses on the different forms of violence that can be present in a community and how it can be prevented, ensuring a safe and inclusive community for everyone.

- Our vibrant cities need vibrant citizens. The Ontario Institute for Studies in Education has collected a variety of resources and readings about supporting student social justice education. Use these resources in your classroom and have students brainstorm on what change might look like.

- Nature Works Everywhere has compiled a number of lessons on sustainable cities for Science and Biology classes. Students learn, explore, analyze and map out their own ideas of sustainable community planning.

- TED Studies have collected a number of videos and lectures about "ecofying" our cities to help expand student understanding of sustainable cities. Engage with the material and see how your students take the ideas to heart.

- Search over 100 online games and simulations at Games 4 Sustainability. Options include board games, card games, and mobile or online games for students.

- Visit Hydro Quebec for a variety of online and interactive games that focus on energy efficiency, sustainable development and practices, and the impacts of human interaction. Games are available for students of all ages and are focused around both group work and self-guided learning.

- Learn more about the urban poor from this video by Overseas Development Institute. Talk with your students about how different social, economic and political issues might be addressed through different approaches in urban development.

CASE STUDIES

1 HOPE International Development Agency

HOPE International Development Agency is working to improve the sustainability of seasonal migrant communities in Cambodia. This project is helping reduce the need for rural farming families to migrate by improving local agricultural livelihoods. Families now have viable year-round farming, increased food production and income. Communities are more self-sufficient, reducing the widespread need to migrate for seasonal work. The project established and trained two village agricultural committees, provided training, seeds and tools for dry season rice production, and small rice-processing mills in each community.

2 Kamikatsu, Japan

To reduce their impact on the environment, residents of the town of Kamikatsu, Japan sort their waste into 34 different categories. Each of these categories helps improve the town's ability to effectively recycle and achieve their goal of being a zero-waste city. Currently, 80 per cent of their trash is recycled, with only 20 per cent going to landfills. Residents are responsible for washing, sorting and collecting their trash, with opportunities to repurpose old clothing, toys and accessories in local shops.

3 USAID: CityLinks

USAID has developed a program called CityLinks, which enables officials in developing countries to collaborate on sustainable solutions with leaders in the US. Municipal leaders in La Cieba, Honduras and Somerville, Massachusetts were partnered to share practices on adapting to climate change. Both cities are adapting to increases in rainfall which are overwhelming sewer systems. Both identified that investments in underground tanks would serve as a solution to reducing flooding from increased runoff. Partnerships like these are important because they encourage **solidarity**, communication and collaborative solutions to problems caused by climate change.

4 World Vision Canada

World Vision Canada is working in Ghana, Mali, Senegal and Sierra Leone to improve and sustain food security. Using a **systems approach**, this project is designed in response to chronic food insecurity in West Africa. It improves food security for people living in poor, rural communities by tackling crop and livestock productivity challenges, environmental degradation, poor incomes and limited institutional support for farm families. The project supports the procurement of inputs and supplies needed to increase agricultural production and income generation for beneficiaries. It also provides gender-sensitive training on improved, sustainable crop and livestock production, and trains animal health workers in disease prevention and control.

5 EMAS Canada

EMAS Canada is working in Haiti to improve community sustainability through the development of sustainable construction development in areas vulnerable to hurricanes and earthquakes. Developed out of the El Shaddai Community Center, this is a post-earthquake construction project where Haitians are learning to "Build Better than Before". The project provides employment and economic stimulus to the neighborhood and teaches workers hurricane and earthquake resistant construction.

6 Presbyterian World Service and Development Agency

The Presbyterian World Service and Development Agency is working in Malawi to raise the economic potential of people living in poverty using self-help groups to promote vocational skills, education and financial management in sustainable ventures. Productivity is bolstered through volunteer care groups to improve health, hygiene and nutrition, while bringing awareness to maternal and child health services.

End notes

[1] https://sustainabledevelopment.un.org/sdg11

[2] https://www.un.org/press/en/2010/gaef3294.doc.html

[3] https://sustainabledevelopment.un.org/sdg11

[4] https://sustainabledevelopment.un.org/sdg11

[5] https://sustainabledevelopment.un.org/sdg11

[6] https://sustainabledevelopment.un.org/sdg11

[7] https://sustainabledevelopment.un.org/sdg11

[8] https://sustainabledevelopment.un.org/sdg11

[9] https://sustainabledevelopment.un.org/sdg11