

What is sustainability? *Our gift to future generations*

The Fresh Outlook Foundation is passionate about and committed to “sustainability,” but what is sustainability in the community context?

The concept of sustainability, or sustainable development, emerged in the 1980s when growing numbers of people recognized the need to balance social, cultural, and economic progress with environmental stewardship. The concept gained worldwide momentum in 1987, when the Brundtland Commission reported that “sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.”

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Brundtland Commission

Development is sustainable if “it improves the quality of life while living within the carrying capacity of living support systems.”

Caring for the Earth, 1991



The Earth Charter speaks of “a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace.”

Simon Fraser University’s Centre for Sustainable Community Development (CSCD) defines a sustainable community as one that “resembles a living system in which human, natural, and economic elements are inter-dependent and draw strength from one another.”

The Sustainable Urban Development Association warns that, “A community is unsustainable if it consumes resources faster than they can be renewed, produces more waste than natural systems can safely process, or relies on distant sources for its basic needs.”

University of British Columbia professor and internationally acclaimed speaker Dr. William Rees says: “A society is sustainable if it can continue to operate in its present configuration or maintain its present development trajectory indefinitely, without undermining either the biophysical or socio-economic basis of its own existence.” As he explains in his co-authored book *Our Ecological Footprint*, this is difficult because “people today often see themselves and the economy as separate from nature. We can therefore justify the destruction of ecosystems on grounds that our actions won’t seriously affect ourselves. But human enterprise cannot be separated from the natural world even in our minds because there is no such separation in nature. Therefore, sustainability requires that our emphasis shift from managing resources to managing ourselves.”



Sustainability Models

Communities everywhere are exploring sustainability or sustainable development as a way to balance and integrate socio-cultural, environmental, and economic objectives. The challenge is that sustainability is a difficult concept that means different things to different people at different times. As described by Simon Fraser University's CSCD: "Activities that the environment can sustain and that citizens want and can afford may be quite different from community to community. Rather than being a fixed thing, a sustainable community is continually adjusting to meet the social and economic needs of its residents while preserving the environment's ability to support it."

The popular sustainability models shown below, albeit outdated, reflect the CSCD's definition of a sustainable community as one that "resembles a living system in which human, natural, and economic elements are interdependent and draw strength from each other."

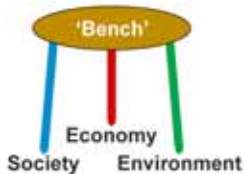
Concentric Circles (Nested Hierarchy)

Society and the economy it creates and maintains are both nested in the environment (ecosphere), and are therefore bound to its limits and capabilities.



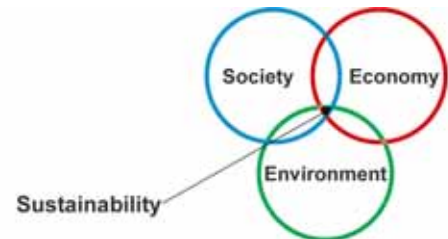
Three-Legged Stool

Society, economy, and environment are equally valued in this model, which demonstrates that if one leg is removed, or is not as strong as the others, the stool will collapse! Not many people consider the role of the 'bench' in this model. The bench (e.g. government, business, community, or other human organization that seeks to be sustainable) keeps all legs firmly attached. This model is criticized because society, environment, and economy are shown to be linked, but not interdependent.



Overlapping Circles

This model, the most commonly used of the three, also places equal value on society, economy, and environment. Theoretically, the overlap between circles indicates new opportunities, while the overlapping of all three in the centre indicates sustainability. However, where on earth does the economy exist outside of the ecological services provided by the planet's natural functioning systems?



Community Capital Model

While helpful in showing the overall concept of community sustainability, the abovementioned models do not illustrate the extent to which human factors impact community well-being. The more sophisticated Community Capital Model balances six forms of capital managed sustainably with community guidance to ensure long-term sustainable community development.

It's important to note that each community has a unique mix of natural, physical, human, social, cultural, and economic capital, and that each community is located somewhere on a community sustainability continuum ranging from not engaged to fully engaged with the changes that must occur to guarantee vibrant and resilient futures. For information about the similar Five Capitals model visit www.forumforthefuture.org.



Dr. Rees argues that a more accurate and, therefore, more meaningful and useful tool is one that combines the nested hierarchy and community capital models. “The community and all its different forms of capital assets constitute a fully-contained, totally dependent subsystem of the ecosphere.”

About the models, Rees says: “The main thing to keep in mind is that, at present, the world is operating under a neoliberal economic paradigm. This implies that the human enterprise is operating as if it were an open, growing system functioning more or less independently of nature. Natural resources are priced at zero (prices reflect only extraction and labour costs), and we assume that technology can substitute for any depleted resource or life-support function. Hence, resource shortages are a non-issue and there are no serious constraints on growth.



“By contrast, ecological economics sees the human enterprise as a growing, open, totally dependent subsystem of a materially closed, non-growing ecosphere (this is Herman Daly’s view). From this perspective, the current economy is consuming nature from within, and there are limits to substitution of natural capital by manufactured capital. Resource scarcity is inevitable as a consequence of growth and, therefore, there are real limits to growth. Ignoring what many of us see as biophysical reality will eventually lead to cultural collapse.”

In simplistic terms, our sustainability responses can be either weak or strong. ‘Weak sustainability’ implies that various forms of capital are substitutable and that all we need to do is to maintain the value of the aggregate stock of capital. ‘Strong sustainability,’ on the other hand, reflects the belief “that different forms of capital are complementary (not fully substitutable), and that we need adequate stocks of each in separate accounts, particularly adequate stocks of natural capital.”

Rees concludes by saying: “If one subscribes to ecological economics and strong sustainability, then it is clear that healthy human capital, cultural capital, manufactured capital, and financial capital, like natural capital, all depend utterly on a fully functional ecosphere. That is why I see the community capital model as existing within (as a sub-system of) the ecosystems that sustain it. On a global level, all forms of capital connected to humans exist within the mother of all natural capital, the ecosphere.”



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Dr. Bill Rees

NATURAL CAPITAL, as described by Dr. Mark Roseland in his book *Toward Sustainable Communities*, “refers to any stock of natural assets that yields a flow of valuable goods and services into the future. For example, a forest, a fish stock, or an aquifer can provide a harvest or flow that is potentially sustainable year after year. The forest or fish stock is natural capital and the sustainable harvest is natural income.” The premise inherent in this model is that **we must live on our natural income rather than deplete our natural capital.**

Natural capital encompasses biophysical resources, living systems, and life support services that can be inventoried into three categories: non-renewable resources such as fossil fuels and water, renewable resources such as food crops and trees, and the capacity of natural systems to provide environmental services such as air purification, waste assimilation, erosion and flood control, and protection from UV radiation.

To protect natural capital we must live within ecological limits, conserve natural resources, minimize pollution and waste, and preserve biodiversity.



PHYSICAL CAPITAL is the stock of manufactured resources and infrastructure used to produce a flow of future income (e.g., buildings, bridges, roads, equipment). Roseland says that, “Improving physical capital includes focusing on community assets such as public facilities (e.g., hospitals and schools); water and sanitation; efficient transportation; safe, quality housing; and adequate infrastructure and telecommunications.” The move toward greener infrastructure and demand management is helping to minimize the use of natural resources during construction, and reducing the generation of harmful environmental pollutants such as green house gasses.

HUMAN CAPITAL, as described by the Organization for Economic Cooperation and Development (OECD), “is the knowledge, skills, competencies and other attributes embodied in individuals that facilitates the creation of personal, social, and economic well-being. Human capital is formed consciously through training and education and unconsciously through experience.”

If we are to meet the challenges caused by climate change, population growth, and rampant consumerism, to name just a few, we must use our human capital wisely, expediently, and collaboratively in ways that meet short- and long-term goals. To increase the impact human capital has on our communities, we must specifically focus on health, education, nutrition, literacy, relationships, and community cohesion.





SOCIAL CAPITAL, as defined by the OECD, is “the relationships, networks and norms that facilitate collective action,” or the shared knowledge, understandings, and patterns of interactions that a group of people bring to any productive activity (Coleman, 1988, Putnam 1993). The “glue” that holds our communities together, social capital is reflected in socially acceptable behaviours such as politeness, tolerance, compassion, patience, forbearance, fellowship, and reciprocity; in commonly accepted standards of honesty, integrity, discipline, and ethics; and in commonly shared rules, laws, and information.

One component of social capital — community “civiness” — is key to helping communities achieve their sustainability goals. Roseland says: “Civiness in a community will lubricate social life, enhance productivity and facilitate action; in practice, it will then become a proxy for successful policy implementation (Putnam, 1993). It is also an important component of sense of place, which is critical for community sustainability.”

Interestingly, Roseland notes that social capital is different from other forms of community capital in that “it is not limited by material scarcity, meaning that its creative capacity is limited only by imagination. Consequently, it suggests a route toward sustainability by replacing the fundamentally illogical model of unlimited growth within a finite world with one of unlimited complexity, not bound by the availability of material resources.”

But social capital also has limitations that the other forms of capital don’t. Roseland explains that “it cannot be created instantly, and the very fact of trying to consciously create or direct it can create resistance.” He adds that “social capital is inherently non-transferable,” and that it is “fragile and subject to erosion not only by direct assault but more importantly, by neglect, if there are many or strong competitors for investment of emotional significance or time.”

Roseland goes on to explain that: “Multiplying and using social capital is not without its problems. By its very nature, social capital can tend to mirror existing power structures. Marginalized people are sometimes marginalized exactly because they are unable to access social capital, as is often the case with the mentally ill or other people with poor social skills.”

To build social capital, communities must enable and encourage community ‘civiness,’ participatory planning, strong local governance, a strong sense of community and place, collaboration and partnerships, and easy access to information.

“Social capital is not limited by material scarcity, meaning that its creative capacity is limited only by imagination.”

Mark Roseland
Toward Sustainable Communities



CULTURAL CAPITAL is the product of shared experience through traditions, customs, values, heritage, identity, and history. While cultural capital was initially overlooked as a key determinant of community well-being, it is increasingly being given its due. To enhance cultural capital, we must celebrate history, value traditions, preserve heritage, promote the arts, and encourage cultural diversity. As noted by Roseland in his book, “Cultural capital is particularly important in aboriginal communities and in other communities with a long history. Much like social capital, cultural capital is limited only by a lack of creativity.

ECONOMIC CAPITAL “refers to the ways we allocate resources and make decisions about our material lives,” says Roseland. “Economic capital should be maintained in order for people to live off the interest, or income.”

This requires communities to become self-reliant through collaborative action, capacity building, and control over business enterprises, capital, labour, and other resources. Businesses support this model by adapting their practices for the wise use of resources, and holding themselves accountable for the environmental and human rights impacts of their activities.

To build economic capital we must make more with less, maximize the use of existing resources (e.g., waste as a resource), buy local, trade fairly, and develop new community financial institutions and opportunities.



Sustainability Thinking

To achieve our goals for vibrant and resilient communities, we must look at and think about things differently.



FUTURES THINKING prompts us to consider people of all generations when making short- and long-term decisions about a community’s future. Whenever possible, people of all ages should be included in the development of processes, plans, policies, programs, and partnerships that affect the community’s natural, physical, human, social, cultural, and economic capital. The resulting strategies and tools will not only reflect the various perspectives identified via meaningful and productive dialogue, but they will also generate buy-in for necessary changes and set the stage for accountable decision making.



ECOSYSTEMS THINKING embraces the knowledge that we live in a closed system that provides unique and non-substitutable products and life-support services. It also considers that we live among myriad species, all of which rely on one another to survive and thrive. Ecological economists are busy evaluating the social, cultural, and environmental, and economic benefits and actual costs in dollars of services provided by various ecosystems.

INTEGRATED THINKING reflects that all people’s rights are protected in a just society, all people’s basic needs are met in a healthy society, and decisions are made only after social, cultural, environmental, and economic impacts have been considered fully. Integrated thinking prevents us from justifying the inequities of resource use and abuse around the globe, and prompts us to look at our individual and collective choices more critically.



INTERDISCIPLINARY THINKING leads to collaboration among the public, private, nonprofit, and academic sectors. Ideally, teams of experts from each sector, with input from the public, identify community needs, set priorities, and expediently undertake necessary actions. Partnerships optimize each sector's strengths while providing a forum for different perspectives and innovative, cooperative solutions. If they are well planned, implemented and documented, these collaborative exercises can provide valuable research and operational information for communities experiencing similar challenges.



INNOVATIVE THINKING requires that all sectors and related industries embrace new philosophies, scientific discoveries, planning and management strategies, technologies, and partnership opportunities. While many people believe advancing technologies will solve our environmental problems, the fact is that meaningful, lasting change will come only as we adopt alternatives to capitalism and the resulting use and abuse of natural resources. **The critical resource for strengthening community capital is not money...but**



imagination, trust, courage, commitment, and relationship between and among all sectors.

INDIVIDUALISTIC THINKING prompts people to protect and promote their communities' unique and special geographical, social, cultural, environmental, and economic attributes. Because no two communities are alike, no two sustainability processes, plans, programs, projects, or partnerships will be similar in all ways. Only through strategic and meaningful public engagement, will a community's true 'sense of place' become apparent. And only by responding appropriately and authentically to residents' input, will decision-makers facilitate the move toward more livable and enduring communities.



Sustainable Development



Strengthening these six forms of community capital is the foundation for sustainable development. Here's an example shared by Roseland in his book.

A transportation system oriented to walking, cycling, and public transportation contributes to **natural capital** by saving energy and reducing emissions. It contributes to **human capital** by reducing the number of accidents, reducing the health impacts of air pollution, and increasing the amount of exercise people get. It may contribute to **social capital** by increasing the social networking required by carpooling or public transit. And it contributes to **economic capital** by reducing congestion and the costs of transportation if people don't use their cars.

Learning the lingo...

But like other complex, political objectives of its kind, explains Roseland, we all agree with the ideal of sustainable development and disagree over what it means and what it entails.

“The term ‘sustainable development’ has been criticized as ambiguous and open to a wide range of interpretations, many of which are contradictory. Confusion has also resulted from using the terms sustainable development, “sustainable growth,” and “sustainable use” interchangeably, as if their meanings were the same. They are not. Sustainable growth is a contradiction in terms; nothing physical can grow indefinitely. Sustainable use is applicable only to renewable resources; it means using them at rates within their capacity for renewal (IUCN, 1991).

Many people use the term sustainable development to mean environmental protection. But as Roseland argues: “Environmental protection is like foam padding — it offers some protection from a fall. We congratulate ourselves as we double our spending to double the thickness of the foam, because we assume thicker foam means more protection. *However, we only get more protection if we fall the same distance.* Meanwhile, *unsustainable* development constantly increases the distance we are likely to fall. Sustainable development must, therefore, be more than merely “protecting” the environment; it requires economic and social change *to improve human well being while reducing the need for environmental protection.*”

Defining the goals...

Some people think sustainable development is a guiding principle, while others believe it’s a concrete goal that can be measured and evaluated. As defined by the OECD, sustainable development “is also a means of considering the relationships of things to each other in order to propose viable solutions. It is a way of forcing ourselves to look at factors we might rather ignore in favour of short-term benefits, as in the case of a polluting industry that worries primarily about this year’s profits, or a pension plan that doesn’t account for the increase in the number of retirees relative to the number of subscribers.”

The OECD encourages people and governments to change the way they “perceive their activities, their roles, and their responsibilities from a primary emphasis on increasing material wealth to a more complex interconnected model of the human development process. In that light, sustainable development could be considered:

- **a conceptual framework** that changes the predominant world view to one that is more holistic and balanced;
- **a process** that enables and encourages decisions that reflect integration across sectors, space, and time; and
- **an end goal** with strategies for addressing social, cultural, environmental, and economic challenges such as poverty, social exclusion, pollution, and unemployment.



“Sustainable development is a moral, ethical, and political ideal.”

Mark Roseland

“Nevertheless,” says Roseland, “sustainable development has a core meaning which remains, however it is interpreted. The three elements of sustainable development are (Jacobs, 1993):

- **Environmental considerations must be entrenched in economic policy-making.** Environmental and economic objectives must be placed within a common framework in which a variety of parallel objectives can be recognized.
- **Sustainable development incorporates an inescapable commitment to social equity.** This requires not simply the creation of wealth and the conservation of resources, but their fair distribution both

between and within countries, including at least some measure of redistribution between North and South. Sustainability also requires the fair distribution of environment benefits and costs between generations.

- **Development does not simply mean growth**, as represented by faulty measures of economic performance such as increases in the gross national product (GNP). Development implies qualitative improvement as well as quantitative improvement.

“In sum, sustainable development must be a different kind of development. It must be a proactive strategy to develop sustainability.”

Looking ahead...

As noted in *Sustainable Development*, created by the OECD, significant progress has been made in the last 20 years. “Most national governments have begun to incorporate sustainable development into their planning and policy. Proactive businesses across the globe have brought sustainability to their products and processes. Local initiatives have had success in informing citizens of the importance of participating in reducing waste, renewing urban spaces and other programs.

“In spite of these efforts, though, putting the principles of sustainable development into practice has proven to be anything but simple or straightforward. After all, both people and institutions have their habits, and changing them, even when the need is obvious, can be daunting. A key question remains whether we have made enough progress, or taken the warnings seriously enough to allow us to grasp and confront our biggest, most pressing problems.

“We have solid evidence of climate change, with projections pointing to an increase in extreme environmental events with potentially devastating consequences for the systems that support human life and society. About half the world still lives on less than \$2.50 a day, lacks access to clean water, sanitation, adequate health care and education — an unacceptably stark contrast to the much higher standards of living in developed countries. Some emerging economies, such as China and India, are undergoing rapid growth, resulting in more wealth, but also an increased demand for energy and greater pollution problems.”

The good news is that “we actually have the tools and information to plan our development sustainably,” but “implementing them will require personal and political will on a global scale.”

‘Foundational’ Values for Community Sustainability

The Fresh Outlook Foundation...

- ✓ Believes that community sustainability — a process during which a community protects, enhances, integrates, and balances its community capital — is the only way to ensure quality of life for current and future generations...
- ✓ Understands that community sustainability is a complex issue with myriad political, administrative, operational, and behavioral challenges, all of which are best addressed using proven and collaborative strategies for positive change...
- ✓ Recognizes that community sustainability is being pioneered by proactive individuals and communities everywhere using leading-edge planning models, proactive policies, best practices, and proven behavior-change technologies...
- ✓ Promises to connect these people and places so they can collaboratively expedite the move toward community sustainability.