The need for a fair and sustainable development paradigm in an urban world.


‘Sometimes it takes a city to lead a nation’

(Mayor of Auckland, quoted at Rio+20).

A planet of cities

The 21st Century is a time of both transition and transformation for humanity and our greatest creation: the city. The transition is happening at a global scale as the production and consumption patterns of the world’s cities impact on and begin to drive planetary processes. The transformation on the other hand is occurring amongst ourselves – as we change from being a predominantly rural species to an unashamedly urban one. This process of global urbanisation will continue over the next several decades with the majority of future global population growth projected to occur in the urban areas of the global south (e.g. Asia and Africa). Global rural populations are also expected to begin declining by about 2020, making this truly the ‘century of the city’.

As our societies, cultures, economies and environments continue to urbanise, so our worldviews and global policies follow. The specific focus on cities and urban settlements in the outcome document of Rio+20: “The future we want”, is an acknowledgement that cities have a significant and important role to play in the quest for global sustainability. The Convention on Biodiversity also acknowledges the importance of sub-national governments, cities and other local authorities in protecting and managing the world’s biodiversity - the foundation for all human and economic development.

This ongoing urbanisation of the global sustainability agenda is a recognition of the fact that cities are increasingly significant drivers of global environmental change. They are the location of the majority of the world’s assets, infrastructure and economic activities and are the key drivers of global consumption and production. As such, the ecological footprints of cities affect the whole planet, despite the fact that they occupy only a small percentage of the global land surface area.

Cities, can, however, also be incredibly dynamic forces for a positive change. The emergence of the ‘sanitary city’ over the last two centuries, has had a positive impact on the health and welfare of millions of people around the world. The move to the productive, inclusive and sustainable city will be equally significant — but new visions and strategies will be required to catalyse this change.

Local governments have a unique role to play in this urban transition, by helping to ensure that the transformation of our species is just, equitable and sustainable and that it occurs within planetary boundaries. This will require that local governments start to go beyond providing better public transport systems, developing integrated spatial plans or ensuring that waste is disposed of in a safe and responsible manner, to a deeper questioning of the existing theories and paradigms of the current dysfunctional and unsustainable global development model. In other words, if urban sustainability is to be transformational, it needs...
to look beyond pipes and powerlines, and must engage with the way we look at ourselves and the world we live in, encouraging progressive values and institutions that promote social cohesion and environmental integrity.

The search for a new way

The questioning of the existing order and the search for a new development model is not unique to cities or local governments. There are individuals, communities and societies around the world who have already begun exploring different ways of looking at the world. Responses range from the work of individuals such as Rachel Carson’s work on the toxic legacy of the twentieth century to global initiatives such the Brundtland Report and the subsequent United Nations Millennium Declaration and Millennium Development Goals (Figure 1) – which are in their turn evolving into a still-to-be-determined set of Sustainable Development Goals. While ambitious goals, targets and indicators have been agreed to in order to address issues of income and nutrition, health, schooling, gender parity, and environmental sustainability, action to achieve these goals has been undertaken in isolation, leading to a fragmentation of values and interests, of authority and responsibility, and of information and paradigms. Frequently under the current systems, short-term interests overshadow long-term visions and competition replaces co-operation. The net result has been a series of inadequate solutions and more often than not, the creation of additional problems.

The inadequacy of existing responses has resulted in the emergence of alternative proposals for a global economy based on a more thorough understanding of how natural resources underpin development and the creation of material wealth. Others still, have sought to describe a new society in which happiness is the primary goal. All of these alternative approaches have the common goal of lifting society to a new level of sustainable well-being. Amongst these has emerged a new alliance for sustainability and prosperity (ASAP) focused on transforming the world economy and human society into something that equitably and justly serves the needs of people, while working within planetary boundaries that define the safe operating space for our species - thereby hopefully altering humanity’s future on this planet.

How does a fair and sustainable development paradigm work?

The economists of the world claim that by increasing growth in Gross Domestic Product (GDP) they can deliver increased human well-being. In the past this seemed to be true, but times have changed. The recent financial collapse, soaring global unemployment, loss of biodiversity and ecological integrity all testify to the failure of the current system to continue to deliver on its promises. Going beyond GDP has now become a survival imperative. Transforming the economies of the world is both as simple as refocusing our attention on the ultimate purpose of economic life, and as difficult as systematically transforming “business as usual” to put people and the ability of natural systems to sustain them first. In essence we have to begin to decouple traditional growth from economic prosperity and start to create high-value jobs while lowering the throughput of natural resources in the economy.

Figure 1: The 8 Millennium Development Goals
So what might a development paradigm that seeks sustainability and stresses qualitative improvement, rather than simply a bigger economy, look like? The general framework and how the pieces interact with each other are shown in Figure 2 above. Note first that the entire framework lies within a box signifying the planetary boundaries of the global ecosystem. This reflects the obvious point, that to be sustainable over the long term, the paradigm must operate in ways that do not exceed the Earth’s capacity to supply resources and absorb wastes.

Within the planetary boundaries, the first key element is the box at the far left, which represents the nine needs that are central to happiness and wellbeing:

- decent living standards
- a healthy and diverse environment that promotes wellbeing for both people and non-human life
- good personal health
- knowledge and understanding
- a sense of belonging to a vital community
- a vibrant culture
- a good balance among paid work, community work, and leisure and creative time
- meaningful participation in decision-making
- psychological wellbeing (contentment, joy, benefiting from the exchange of care and affection with others).

In order to satisfy any and or all of these needs, we will need to build or modify institutional structures, government policies, regulatory mechanisms, and accounting and measurement systems. These elements fall into four categories:

**Sustainable and equitable development.**

Development that degrades or depletes nature’s resources and extinguishes other species—i.e., that breaches the planetary boundaries—is unsustainable, threatens life on Earth, and comes at the expense of future generations. Inequitable socio-economic development that benefits a few over the many cannot bring happiness to the vast majority, and in fact breeds resentment, frustration, anger, and alienation that undermine societal wellbeing.

Development must, therefore, be fully aligned with nature, deeply rooted in the equitable use of natural resources, which are the common property of all beings, and the fair distribution of the products of human labour based on equity among groups, genders, and generations and in the distribution of power. The new development paradigm recognizes that the wellbeing of each individual depends upon the wellbeing of all.

Greater equity can be promoted through systems such as cooperative ownership, social safety nets, poverty alleviation, fair trade rules, technology transfer, full employment policies, work sharing, and mechanisms to limit excess consumption, unearned income, and private capture of the common wealth. The new development approach also recognizes that agriculture and its products are the very basis of survival and health. Sustain-

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*The government of Bhutan pioneered the concept of Gross National Happiness (GNH) and within that framework has identified and committed to a systematic measurement of each of these nine need areas. Any local government could do the same.*
able, equitable, affordable, and healthy food production, distribution, and consumption, which include changing certain food habits, are essential to preserve the planet’s food supply.

Environmental conservation.
A healthy environment is essential not only for humanity’s survival but for physical, mental, and cultural health, and for the wellbeing of the rest of nature. Structures, mechanisms, principles, and policies required to conserve ecosystems and their services include, but are not limited to:
- application of the precautionary principle (informed prudence, or caution exercised in conditions of uncertainty)
- investment mechanisms to repair past damage and to support indigenous ecosystems, appropriate technologies, renewable energy development, and sustainable infrastructure, agriculture, and business practices
- establishment of governance mechanisms for the global commons, including but not limited to the atmosphere and oceans, to take immediate and effective action to reverse climate change and other threats
- incentives and penalties to reduce carbon and non-renewable resource use, to ensure renewables are harvested and consumed so they are not degraded or depleted, to reduce pollution and waste, and to reward ecosystem service protection and sustainable farming practices.

Promotion of culture and values.
Cultures, languages, and indigenous knowledge systems are disappearing worldwide even more rapidly than species. These are serious losses to humanity and the principle of sustainability should therefore apply to cultures as well as to ecosystem services and economic development. The new development paradigm asserts the right of both cultures and all life forms to survive and thrive. Ways of ensuring these goals include incorporation of indigenous knowledge and local languages into educational curricula; strengthening local economies, community networks, social supports, and extended family ties; supporting the arts and creative commons; using new technologies to promote cultural industries; and nurturing the values, wisdom, and practice of our spiritual traditions, as well as harmony between them.

Good governance.
The new development approach recognizes that responsible, transparent, and accountable government in the public interest as well as active, informed citizen participation are essential to achieve the needs and policy directions outlined above. Good governance is based on the twin principles of justice and equity among different societal groups, in the distribution of life’s necessities and satisfaction of human needs, and in decision-making processes. In this regard, local government is especially important given that it is the sphere of government closest to the people. Since human beings manage relations with nature and make decisions that affect future generations and disadvantaged and vulnerable groups, the principles of justice and equity also apply to other life forms and to inclusion of youth and minorities in deliberative processes.

This brings us to the forms of capital we use in the creation and operation of our institutions, economies and societies in general. There are five kinds:
- **Built (produced) capital** includes economic assets such as buildings, machinery, roads, tools, and so on. It is made entirely from natural capital and involves converting natural resources to other forms and uses. Built capital is the only form for which investment and depreciation (loss of value with age and use) are tracked and assessed in conventional accounting systems.
- **Natural capital** is whatever the natural environment supplies and humans can value or make use of, including minerals, other species, and lands, but also—because natural capital exists in complex systems—climate regulation, habitat for other species, pollination, water cycle regulation, and so on.
- **Human capital** is, of course, people and their best attributes: health, strength, courage, knowledge, experience, wisdom, skills—any capacities that enable them to be productive members of society and to live fulfilling lives.
- **Social and cultural capital** consists of the interpersonal connections, social networks, cultural heritages, traditional knowledge, and trust, as well as the institutional arrangements, rules, norms, and values that facilitate human interactions and cooperation among people. These contribute to social cohesion, vibrant and secure communities, and good governance, and help fulfill basic human needs such as participation, affection, and a sense of belonging.
- **Financial capital** is the money or equity used by entrepreneurs and businesses to keep track of the assets (human, social, natural and built) needed to make their products or to provide their services, and fund their operations. Financial capital is not “real” capital in that it...
is a human creation that is used to track what is happening in the real world. For example, financial crises and bubbles can occur if the financial markers become unsynchronized with the real capital they are supposed to be tracking. Financial capital should be regarded not as a substitute for the other four capitals, but as a critical marker and subset of social capital.

Although, as noted, standard accounting systems only track financial and built capital, all forms of capital are subject to investment and depreciation. Natural capital, for instance, can be built up when a forest is allowed to grow and evolve undisturbed by clear-cutting; conversely, the same forest can depreciate through over Logging—just as air can be polluted, soil and water resources degraded, the atmosphere’s capacity to absorb wastes strained, and other natural resources depleted or over-harvested. Likewise, social capital depreciates when social inequality, poverty, alienation, isolation, and crime increase, and when social networks disintegrate. Human capital declines when investment (such as in good education) lags, when rates of physical and mental ailments are allowed to rise, when skill and knowledge levels are neglected, or when a healthy balance among work, leisure, civic involvement, and community service is destroyed.

The intended outcome of all these elements and processes is equitable and sustainable societal wellbeing, the bottom right box. The broad outcome is captured and measured in terms of the nine needs described earlier. For each of them, there will generally be multiple measures. Physical and mental health, for instance, can be captured by data on life expectancy, infant mortality, incidence of so-called life-style diseases, suicide rates, rates of psychiatric drug prescription, and so on. A healthy environment would be reflected in, for example, large areas of undisturbed habitat, the existence of critical wildlife corridors, low rates of water and air pollution, and the use of farming practices that conserve and build up agricultural lands.

But even if strongly optimal conditions are achieved in all nine areas, does this guarantee societal well-being? It is possible to enjoy every luxury and amenity human culture can offer and still be miserable. There is therefore one more link to be examined: what we call “happiness skills.” The attitudes and behaviors that constitute “happiness skills” include such things as gratitude, altruism, kindness, sociability, delayed-gratification, empathy, compassion, cooperation, and many other virtues. No doubt genes play a role in shaping each person’s temperament, but there is also no doubt that certain inter- and intra-personal skills, self-awareness, self-discipline and mastery, the ability to truly listen to another’s words, and empathy, for instance can be taught and practiced, beginning as children, and that these will go a long way toward facilitating both individual and societal happiness. The development paradigm itself needs to incorporate efforts to invest in this sort of human capital.

Finally, to close the circle, the state of societal happiness acts as feedback on both the human needs, and on the paradigm machinery that seeks to address them. This process is certain to be ongoing; there will be no definitive moment when the goal is achieved once and for all. The beauty of this model is that it does not ignore either the importance of policy or of personal behaviors in achieving good lives for all. It is also not a call for sacrifice; indeed, the research informing the model implies that that we can have a better life with less consumption in wealthy countries, while allowing economic growth where it in reduces poverty and improves well-being and at the same time, protecting our planet.

**Conclusion**

Tackling the challenge of implementing a fairer and more sustainable development paradigm at a global level will require the full engagement of the world’s cities and the mobilization of farsighted local governments. A fairer and more sustainable development paradigm requires a new urban development paradigm and will require that local governments, in their day-to-day business, acknowledge the reality of a finite planet and develop appropriate strategies to achieve the maximum feasible sustainable well-being for humans and the rest of nature. This challenge is both a practical and moral necessity for cities and their citizens worldwide, and should be acknowledged and championed in the first instance through the development of a Sustainable Development Goal (SDG)\(^1\) for cities, as recently recommended\(^2\) by the Sustainable Development Solutions Network Thematic Group on Sustainable Cities in their report to the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, and similarly called for by ICLEI-Local Governments for Sustainability.

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1. The development of SDGs was called for at the Rio+20 Conference and is intended to provide the backbone of the post-2015 Development Agenda.