Article

A Sustainable Community Development Framework for Environmental Citizenship Empowerment

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Abstract

A plethora of evidence indicates rapid industrialisation and urbanisation contributed significantly to the estranged relationship between humanity and nature. The environmentally pro-active mandate is clear. Ecological social work and environmental citizenship have become as popular catchphrases as their originator, sustainable development, in contemporary discourse. Yet, despite their growing popularity, conceptual and operational clarity for achieving sustainable community development through environmental citizenship empowerment remains a challenge. The global development agenda, reflected in the Sustainable Development Goals, is grounded in a holistic view of sustainability interdependent with well-being dimensions (health, income, education, housing, energy, sanitation, environment, transport, security, food, recreation and communication). The leading theory for community development——socio-ecological systems theory——is linked to different forms of community capital (ecological, physical, economic, human, social and cultural), which are collectively required for sustainable community development. Each is seen as a sub-system of the larger 'community' system interconnected with the status of the well-being dimensions and influenced by policies and legislation that unfold at micro to macro levels. Challenges to sustainable community development, and their solutions, are presented across these well-being dimensions, development levels and legislative policies which influence development initiatives. This paper discusses concepts of sustainable community development, environmental citizenship and the importance and relevance of socio-ecological systems theory in sustainable community development practice.

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It proposes a Sustainable Community Development Framework for environmental citizenship empowerment informed by the Triple Bottom Line pillars within the context of socio-ecological systems theory. It concludes with suggestions and recommendations to social service professionals for sustainable community development.

Keywords: environmental citizenship; community development; sustainable community development; sustainable community development framework; socio-ecological systems theory

Introduction

The 1992 UN Conference on Environment and Development (Rio Earth Summit) highlighted the importance of sustainable development, formalised in the Rio Declaration signed by 175 countries. Thirty-one years later, the United Nations Sustainable Development Goal 11 (UN SDG 11) discussions focus on making cities more inclusive, safe, resilient, and sustainable (UN 2015), reinforcing the relevance of sustainable community development (SCD) and environmental citizenship (EC). Emerging in the 1970s and 1980s, sustainable development (SD) envisions socio-economic progress balanced with ecological limits. However, achieving full sustainability remains challenging due to rapid urbanisation, industrialisation and economic prioritisation over environmental and social needs, especially in capitalist systems.

To address these challenges, this paper advocates an approach that integrates socio-ecological systems theory (SEST), SD principles and EC empowerment. SEST provides a framework for understanding human development within the ecological context, emphasising the interconnectedness of human systems and the environment. Similarly, EC is a catalyst for sustainable change, promoting pro-environmental behaviour, civic participation and policy co-creation.

This paper introduces a Sustainable Community Development Framework (SCDF) as a guide for planning, monitoring and evaluating SCD initiatives. The SCDF integrates sustainability pillars and community capitals, offering a structured approach to address the interplay between environmental, social and economic factors. It also facilitates stakeholder engagement by identifying key dimensions, indicators and impacts of SCD interventions. By considering all relevant factors and stakeholders, the SCDF aims to enhance the effectiveness and sustainability of community development interventions.

Sustainable Community Development

Sustainable development is complex due to its interdisciplinary nature (Jabareen 2008; Ruggerio 2021). Dobson (1996) identified over 300 definitions of SD. Current definitions emphasise the balanced interaction of society, economy and environment for SCD (Vare and Scott 2007; Sterling 2010; Marin et al. 2012; Mensah 2019; Shi, Han,

Yang et al. 2019). A sustainable environment is essential to achieving SD (Duran et al. 2015). The concept of a 'sustainable community' is difficult to define. It is a community that meets the needs of current and future residents while respecting the environment and quality of life (QoL) (Dale and Newman 2006; Mensah 2019). Thus, SCD incorporates both meanings namely: maintaining development at a certain rate or level and ensuring development that is ecologically sustainable.

Tomislav (2018, 70) indicates that the concept of SD that evolved in the 1970s and 1980s, encompasses three key ideas: development that balances socio-economic progress with ecological constraints, the redistribution of resources to ensure QoL for all, and the sustainable use and sourcing of resources to ensure long-term access to QoL for future generations.

Jabareen (2008) views the concept of SD as an 'ethical paradox', because sustainability is seen as a characteristic of a process or state that can be maintained indefinitely while development is environmental modification, which requires deep intervention in nature and exhausts natural resources. Thus, one can safely state that both urbanisation and industrialisation are needed for SD, but they are also the key detriments to creating SCD.

Over the years, society has witnessed rapid industrialisation and urbanisation, which has contributed significantly to an estranged relationship between humanity and nature. Urbanisation, defined as the increase in human populations in cities and towns (Sishuto 2015), brings both benefits and challenges. While it improves healthcare, education and employment, it also risks environmental degradation through population expansion, water quality issues, pollution and waste management challenges (Sultana 2020).

Human settlements play a crucial role in addressing global challenges amid the exponential growth of urban populations (Roseland and Spiliotopoulou 2017). Urban populations grew from 30 per cent in 1950 to 54 per cent in 2014, with projections rising to 66 per cent by 2050. Urban areas, though covering only 3 per cent to 4 per cent of land, consume 80 per cent of resources and generate most of the world's waste. These regions are increasingly vulnerable to climate change leading to health challenges. These health challenges, in turn, give rise to extended healthcare needs, infrastructure demands and other costs that impose a weighty burden on both the economy and environment.

Industrialisation and urbanisation uphold capitalism, which now exploits both workers and nature for profit (Watson 2017; Guerrero 2018). SCD under capitalism has arguably failed to improve living standards for most people, with poverty and inequality rising, especially in developing countries. Moreover, SCD risks nature for short-term gains. Jabareen (2008) argues that a truly sustainable community integrates social needs, equity, welfare and economic opportunity with the environmental limits of supporting ecosystems. Despite efforts to prioritise equality, dignity and environmental respect in

development (UNDP 2015), Earth's natural environment has often been misused as if it were an inexhaustible resource (Sishuto 2015).

Sustainable development changes communities in ways that sustain our existence on the planet. It requires economic and social changes to improve well-being while protecting the natural environment. Sustainable community development adapts to meet the needs of its members while preserving the environment. It involves activities in which a community engages to meet its needs, sustain the environment and simultaneously empower its members.

Furthermore, the understanding of SCD is intricately linked with the principles of SEST, which provide a framework for comprehending the complex interactions between human development and the broader ecological system in which communities exist.

Socio-Ecological Systems Theory

SEST, developed by Bronfenbrenner in the 1980s (Friedman and Allen 2011) applies socio-ecological models to human development and the ecological systems in which growth occurs. SEST emphasises that human development cannot occur in isolation from the environment (Friedman and Allen 2011; Walker, Holling, Carpenter and Kinzig 2004; Stanger 2011, 169). Human development occurs across five system levels: micro, meso, exo, macro and chrono. These levels contribute to the contextual conceptualisation of human development, ranging from the innermost to the outermost levels (Neal and Neal 2013; Stanger 2011; Bronfenbrenner 1994). This comprehensive range of levels is especially valuable when assessing community well-being, as it could indicate the factors contributing towards the current well-being status of a community, as well as predict the extent to which well-being improvement is achievable (Hart 2018; Stimson, Marans and Webster 2024). This SEST well-being assessment provides insight into the 'push and pull' factors that affect community development.

The five ecosystems range from relationships within immediate natural surroundings to social capital bridges, linkages between two or more settings, overarching patterns characteristic of a given culture and the overall level of consistency or change over time.

Micro Ecosystem

A micro ecosystem reflects a community's needs through interpersonal patterns of activities, social roles and relationships within its physical, social and symbolic features, such as family or friends. These patterns are influenced by factors like weather, local environments and food systems. Proximal processes sustain development based on the micro ecosystem's content and structure (Neal and Neal 2013, 724; Stanger 2011, 171; Bronfenbrenner 1994, 39).

Meso Ecosystem

A meso ecosystem represents the linkages and processes that occur between two or more settings, such as between home and workplace, forming bridges in social capital through interconnected micro ecosystems. In determining well-being in community development, it is crucial to understand both the access of community members to well-being aspects and how they interconnect. For example, access to food depends on money, which is tied to income, education and skills. Access to food can also rely on land, water and farming abilities. These aspects are shaped by 'structural' social capital, including established roles and networks linked to rules, procedures and precedents, which are in turn influenced by norms, values and attitudes (Hitt et al. 2002; Krishna and Uphoff 2002; Seferiadis et al. 2015; Lin and Chang 2023).

Exo Ecosystem

An exo ecosystem represents processes between settings outside the community's control, where community influences interact with government, economic, and religious systems (Neal and Neal 2013, 724; Stanger 2011, 171; Bronfenbrenner 1994, 40).

Macro Ecosystem

A macro ecosystem encompasses belief systems, knowledge, customs, hazards and life course options that shape the overarching patterns of the micro, meso and exo ecosystems that are characteristic of a community's culture. These ecosystems are directly linked to the structure and understanding of social capital and other community capitals. Identifying specific capital factors and their interrelationships deepens the understanding of the conditions and processes within the micro ecosystem (Neal and Neal 2013, 724; Bronfenbrenner 1994, 40).

Chrono Ecosystem

The chrono ecosystem tracks changes over time in the well-being of a community and its members, considering consistencies or shifts in their environment. This system relates to community life, including family, work and society and is crucial for comparing development between different societal groups, especially between the haves and have-nots. It also examines coping mechanisms and adjustments made across other ecosystem levels in response to these changes, whether or not they result from deliberate interventions (Neal and Neal 2013, 724; Stanger 2011, 171–172; Bronfenbrenner 1994, 40).

The Poverty Gap

Applying SEST to community development involves real-world examples, such as South Africa's stark contrast between wealth and poverty, which underscores the socio-ecological complexities of sustainability and social equity. SEST provides a framework for understanding human-environment interactions and guiding holistic community development approaches. By integrating insights from various system levels, SEST

enhances the understanding of well-being dynamics and empowers communities to drive sustainable change.

The aim of SEST in community development is to foster integrated social unity and well-being through collaboration across all levels. Socio-ecology advocates for an evolving process driven by community empowerment, not an abstract ideal society. True empowerment arises through decentralised, participatory and democratic forums where equity among all stakeholders, including community members, is central (Cook 1994; Clark and Bookchin 1990).

Well-being Dimensions

Developments in the 20th and 21st centuries show that community well-being creates strong communities and countries. "Community well-being depends on integrated, balanced functioning of its infrastructural, social, economic, political, and ecological elements," write Hart and De Beer (2022, 9211–9212). Hart (2018) proposes 12 micro-level well-being dimensions, based on the Organisation for Economic Co-operation and Development's (OECD) 11-dimensions macro framework (Boarini, Kolev and McGregor 2014).

Hart (2018) identifies 12 micro-level well-being dimensions based on the OECD framework. These include health, income, education, housing, energy, sanitation, environment, transport, security, food, recreation and communication, each assessed in relation to the others. Different indicators must be assessed within each dimension, (the SEST approach), to determine the well-being status of a community.

Health dimension indicators assess access to health care, some high-risk diseases linked to environmental health challenges and access to health facilities, staff and medication. Good health adds to both intellectual and economic growth because it enables people to participate fully in society (Hart and De Beer 2022).

Food: combined with water and oxygen, the human body daily needs calories and nutrients (protein, fats and carbohydrates) to grow, function and repair any damage. Data indicators must include the types of food resources and access to them (Hart and De Beer 2022).

Education: underpins development of the competencies, knowledge and skills of people, both for personal development and employability. Data indicators for education facilities are access to facilities and the quality of education (Hart and De Beer 2022).

Transport: needed for access to facilities and services to allow for food access, employment and social interaction. Data indicators are access to transport types and availability, quality and cost of transport (Hart and De Beer 2022).

Communication: the interface connecting people and ensuring the transfer of information between people about social gathering, job opportunities, development prospects, food costs and other well-being dimensions. Data indicators are access to and cost of communication types (verbal, written, electronic) and the frequency with which they are used (Hart and De Beer 2022).

Income: linked to education and employment is a means of preparing for earning activity in a job market which contributes the force needed for economic growth. Data indicators are employment status, employment opportunities, types, requirements and access to them by the community members (Hart and De Beer 2022).

Security: freedom from fear of threats against individuals, including various forms of personal vulnerability such as domestic violence, robbery, drug trade and common crime. This definition does not extend to human security in its broader context of basic needs. Data indicators include access to security services, types of crime and the sense of security from crime experienced by community members (Hart and De Beer 2022).

Recreation: along with leisure, recreation should impact positively on community QoL through events and activities that contribute towards social cohesion and inclusion. Data indicators should be on access to recreational facilities, types and frequency (Hart and De Beer 2022).

Housing: a basic need contributes to safety and security and provides shelter from environmental elements. Housing links strongly with physical and emotional security, and a sense of belonging. Data indicators are types of housing, quality and cost (Hart and De Beer 2022).

Energy: directly links with energy sources such as electricity, gas and forms of green energy (e.g. solar, wind and hydro) needed to sustain economic development, growth and more importantly sustainability. Management of energy resources, the available types and their costs are important factors influencing community development, especially in developing countries. Data indicators must include infrastructure types, quality, cost and access (Hart and De Beer 2022).

Water and sanitation: part of basic needs and services provided at local and national levels and directly related to health, economic and sustainable environmental development. Data indicators include types, access, cost and quality of water, its delivery, and the sanitation infrastructure access, type, cost and impact on the environment (Hart and De Beer 2022).

Environment: the key dimension for sustainability as it interlinks with protection of the natural environment and responsible use to ensure for a positive impact on local biodiversity and long-term health. Data indicators must show types of pollution threats

linked to related pests and diseases that require environmental protection to ensure sustainability (Hart and De Beer 2022).

Triple Bottom Line Pillars and Community Capitals

Sustainable development involves balancing three demands: ecological sustainability, social sustainability through democratic governance and economic sustainability to meet fundamental needs (Dale 2001; Robinson and Tinker 1997). These demands link to the triple bottom line (TBL) pillars first mentioned in the 1987 Brundtland Report.

The environmental sustainability pillar's focus is on maintaining the quality of the environment while conducting economic activities, but at the same time maintaining human QoL. This bottom-line pillar includes elements such as land, forests, natural resources, wildlife, oceans, fresh water and air. Social sustainability must ensure human rights and equality, preservation of cultural identity, respect for cultural diversity, race and religion within an environmentally sustainable context. This pillar links with QoL and includes elements such as human rights, equity, race, peace, culture and religion. Economic sustainability depends on and requires maintaining natural, social and human capital necessary for income and living standards. The economic pillar is dependent on the elements of both other pillars to ensure economic viability and poverty alleviation (Brundtland Report, 1987).

Achieving SD therefore requires that each pillar of sustainability must respect the interests of other pillars and not bring them into imbalance (Mensah 2019, 9 and 22).

Roseland and Spiliotopoulou (2017) present an SCDF of different forms of community capital that effect and affect decision-making during sustainable community planning and development. The framework consists of six capitals: natural: air, water, soil and energy resources; physical: housing infrastructure, land public facilities and transport; economic: products, services, employment, income and wealth; human: education, health, skills and knowledge; social: communication, interaction and networking; and cultural: heritage, values and traditions (Roseland and Spiliotopoulou 2017, 54).

The framework was designed with a systems-thinking perspective that regards each form of community capital as a subsystem of the larger whole community system. This framework thereby links well with the triple bottom pillars that affect each other and the 12 well-being dimensions and their respective indicators that must be improved to ensure sustainable community well-being. When communities take action to enhance their capitals and mobilise both citizens and governments to do so, they move closer to sustainability.

Environmental Citizenship

Changes in individual, institutional and organisational behaviour are crucial to sustainable development (Dobson 2008; Asilsoy and Oktay 2018). Environmental

citizenship offers hope for addressing environmental challenges (Hadjichambis and Reis 2020). Dobson (2010) defines EC as pro-environmental behaviour, driven by fairness in the distribution of environmental goods, participation and the co-creation of sustainability policies. Environmental citizenship is an important element in the transition to sustainability (Barry 2002; Bell 2005; Dobson 2007; Carter 2007; Amprazis and Papadopoulou 2022; D'Arco and Marino 2022). It is an umbrella term encompassing characteristics, such as skills, knowledge, attitudes, values and beliefs needed to address environmental problems (Takahashi, Tandoc, Duan and Van Witsen 2017).

Environmental citizenship plays an important role in achieving environmental justice, defined as "a rights-based approach and people-centred discourse focusing on the marginalised, voiceless, powerless, and sometimes disenfranchised communities according to their class, gender, race, ethnicity and geographical locations" (Sishutu 2015, 545) as the concepts of rights, justice, and values are key to EC (Dobson 2007). Miller, Hayward and Shaw (2012) note that environmental justice builds on rights-based concepts, emphasising fairness in human rights and needs. Unlike social justice, environmental justice focuses on societal inequities arising from environmental issues, targeting those disproportionately affected by pollution, deforestation and limited access to sustainable food sources. This framework highlights the uneven allocation of environmental impacts, with the most heavily affected often being economically disadvantaged and marginalised populations worldwide.

There is a clear link between EC and social work values, such as social justice, service, dignity, integrity (NASW 2021), alongside community development principles, including human orientation, participation, empowerment and sustainability (Swanepoel and De Beer 2016). Environmental citizenship requires collective citizen action toward sustainability and human dignity. See also Table 1.

Environmental citizenship has three key dimensions: political, economic and social, which align with the triple bottom line pillars. The 'political' dimension relates closely to 'environmental sustainability', as explained above. However, the political dimension emphasises the role that *citizenship* (people living sustainably) must commit to finding a balance between maintaining individual rights and a responsibility towards the common good; and the *role of the state* (operationalising) in a green political philosophy that entails some process of contractual obligations enabling the promotion of a sustainable society (Levinson et al. 2020). Regarding the economic dimension, Kaputa et al. (2020) highlight the importance of having a balance between economic activity and preserving nature which encourages the practice of a green economy. In the social dimension, Šulc et al. (2020) highlight the importance of urbanisation, cultural diversity and concerns resulting from transportation.

To achieve EC, community empowerment (CE) should focus on the aforementioned key dimensions to foster holistic awareness. CE through environmental education is

central to EC, as education is a fundamental tool for fostering behavioural change (Gunningham, Kagan and Thornton 2004; Ardoin, Bowers and Gaillard 2020). Environmental education aims to build an environmentally literate population equipped with the knowledge, attitudes and skills needed to address current and future problems (Tbilisi Declaration 1977). Through CE, communities serve as hubs for action, peer learning and knowledge sharing (Roseland and Spiliotopoulou 2017).

Table 1 outlines the relevant social work values and ethical principles of the community development profession that facilitate environmental change in the pursuit of SCD. Table 1 also includes the value categories and value types identified by Schwartz (1994), the types of knowledge needed (Frick, Keiser and Wilson 2004), and examples of intentional behavioural outcomes to achieve SCD (Asilsoy 2012; Asilsoy and Oktay 2016; Asilsoy and Oktay 2018).

Furthermore, environmental citizens who are environmentally literate, could take agency for the current situation resulting from the exploitation of nature and continue to empower others, thus enhancing social and cultural capital in communities to achieve SCD. The concepts of agency, social and cultural capital are positive EC attributes important to actualising SCD.

The social work and community development professions can play a vital role in advancing EC by developing and facilitating programmes that contribute to environmental policymaking; advocate for equitable resource access and support marginalised communities; and foster collaborative approaches through stakeholder initiatives that share resources, expertise and support for sustainable community development.

Environmentally literate citizens can take agency in addressing the exploitation of nature and empower others, thereby strengthening social and cultural capital in communities toward SCD. Agency, along with social and cultural capital, are key EC attributes for achieving SCD.

Table 1: Values, knowledge, intentional behavioural outcomes and EC goals

Social Work Values and Community Development Principles	Value Categories and 10 Value Types	Types of Knowledge	Intentional Behavioural Outcomes	Ultimate Goal
Social Work Values: Social justice, service, human dignity, integrity	**Self-Transcendence**: Universalism, benevolence	**System Knowledge**: Understanding ecosystems and their processes	**Energy Saving**: Using efficient bulbs, insulation, efficient appliances	**Sustainable Community Development**
Ethical Community Development Principles: Human orientation, participation, empowerment, ownership, sustainability, release	**Self-Enhancement**: Power, achievement	**Action-related Knowledge**: Knowing what can be done about environmental issues	**Water Conservation**: Reducing baths, turning off taps, using drought-resistant plants	

Social Work Values and Community Development Principles	Value Categories and 10 Value Types	Types of Knowledge	Intentional Behavioural Outcomes	Ultimate Goal
	Openness to Change: Self-direction, stimulation, hedonism	**Effectiveness Knowledge**: Understanding the benefits of responsible actions	**Waste Management**: Recycling, reducing paper use, reusing materials	
	Conformity and Tradition: Tradition, security		**Public Participation**: Engaging in environmental decision-making, activism **Sustainable Transportation**: Walking, biking, public transport, carpooling **Green Consumption**: Using own bags, buying local or organic, reducing packaging	

A Sustainable Community Development Framework for Citizen Empowerment

Herath and Rathnayake (2019) highlight the following drawbacks from the eight SCD models they reviewed which do not integrate the environment, social and economy dimensions, nor do they give equal attention to them, especially the environmental dimension; and incorporate a time dimension, resulting in the lack of monitoring the application of a model and, more importantly, the progress or transformation towards SD. These drawbacks were considered when we developed the SCDF for citizen empowerment, presented in Table 2.

The authors integrated the TBL pillars and the community capitals as follows: the environmental sustainability pillar with natural and social capital; the social sustainability pillar with human, social and cultural capital; and economic capital with the economic sustainability pillar. The SEST levels are presented in the middle section of Table 2 because they cut across all the well-being dimensions and their related indicator clusters for monitoring and evaluation. These are presented in the far left and right columns of Table 2 respectively.

The SCDF aim is two-fold. First, it consolidates key constructs discussed by scholars, incorporating the three TBL pillars, six forms of community capitals and 12 well-being dimensions. Second, it provides indicator clusters for planning, monitoring and evaluating SCD, as presented by Hart (2018) and Hart and De Beer (2022) and shows how these manifest across SEST levels.

Smart, measurable, attainable, relevant and timely (SMART) sub-indicators relevant to a development plan or intervention must be formulated with the community. These sub-indicators are project-specific and, therefore, not included in the SCDF in Table 2. The SMART sub-indicators should align with the SEST levels in the SCDF to clarify the influence of decision-making across levels. This alignment helps identify areas where community members are knowledgeable and where they need empowerment to participate, influence and control SCD decision-making and implementation effectively.

Table 3 presents a populated example for one of the well-being dimensions (i.e. housing) to provide guidance to the user regarding the 'what' and 'how' populating aspects to be considered for the SCDF when applied to community development project/intervention planning and implementation. It illustrates the TBL sustainable dimensions, community capitals and different SEST levels that must be considered for each well-being dimension when planning interventions/projects.

A populated SCDF should highlight primary well-being dimension indicator clusters at each SEST level relevant to the specific project/intervention. Put differently, each project must be grounded in baseline data on the community's well-being status. Some dimensions and their indicators may require more focus than others, while 'positive' baseline dimensions can often support areas with low or negative well-being indicators. This interconnectedness across well-being dimensions and SEST levels creates a push-pull relationship that impacts SCD.

SCD projects cannot always address every well-being dimensional indicator with equal priority. This framework guides project planners and stakeholders in focusing on each dimensional indicator, capital type and SEST level to support integrated, sustainable community development. The SCDF enables users to consider the push-pull effects of well-being dimensions, indicators and capital types across SEST levels during project planning. This approach also aids in developing sub-indicators with the community by anticipating project pros and cons.

Table 2: An SCDF for Citizen Empowerment

Well-being Dimensions	**Six Capitals for SCD**						**Main Indicator Clusters for SCD Planning, Monitoring and Evaluation**
	Natural Capital	**Physical Capital**	**Human Capital**	**Social Capital**	**Cultural Capital**	**Economic Capital**	
	TBL Pillars						
	Environmental Sustainability Pillar		**Social Sustainability Pillar**		**Economic Sustainability Pillar**		
SEST Levels	Micro Immediate surround-dings linked to needs i.e. activities and social role patterns	Meso Access to and control over links and pro-cesses between 2 or more settings and indica-tors	Exo No control links and pro-cesses e.g. govern-mental, political, eco-nomic and reli-gious systems	Macro Over-arching pattern of the micro, meso, and exo systems character-istics in different capitals	Chrono Consistency / change over time, assists with coping mechanisms and adjustments made about the changes		
Food							Types of food resources, access to food resource types
Water and Sanitation							Types of water resources, quality of water types, access to or delivery method, types and quality of available sanitation infrastructure
Energy							Types of energy sources, access to and cost of energy types, quality of available energy infrastructure
Environment							Treats: types of pollution-related, pest-related diseases

Health	Health facility types, access to facilities, access to staff, access to medication, cost of access to health care
Housing	Types of housing, cost, quality of available housing
Transport	Types transport, cost, quality and access
Education	Education facilities, Access, quality of education
Income	Types of income, employment status
Security	Types of crime, security services in the community, sense of security from crime experienced by community
Recreation	Types of socialisation, recreational facilities; frequency of and access to recreation and socialisation facilities and groups
Communication	Communi-cation types, Cost, frequency of use

Table 3: A populated SCDF example

Well-being Dimensions	**Six Capitals for SCD**						**Main Indicator Clusters for SCD Planning, Monitoring and Evaluation**
	Natural Capital	**Physical Capital**	**Human Capital**	**Social Capital**	**Cultural Capital**	**Economic Capital**	
	TBL Pillars						
	Environmental Sustainability Pillar		**Social Sustainability Pillar**		**Economic Sustainability Pillar**		
SEST Levels	Micro Immediate surround-dings linked to needs i.e. activities and social role patterns	Meso Access to and control over links and processes taking place between 2 or more settings and indicators	Exo No control linkages and processes e.g. govern-mental, political, economic and religious systems	Macro Overarching pattern of the micro, meso, and exo systems characteris-tics in different capitals	Chrono Consistency / change over time, assists with coping mechanisms and adjustments made about the changes		
Housing	Family size, poverty status, cultural beliefs (e.g. human rights and social justice), neighbour-hood commi-ttees, church and cultural asso-ciations	Local govern-ment policies, plans, frame-works and approa-ches, housing lobby groups	Provincial Department of Housing policies, plans, frame-works and approaches National Treasury Department of Labour	Department of Human Settlements policies, plans, frameworks and approaches	Vancouver Declaration on Human Settlements, Habitat-UN Human Settlements Programme SDG 11		Types of housing, cost of housing types, quality of available housing

Table 3 presents the housing well-being dimension (i.e. primary dimension) at the different SEST levels with the cluster indicators to consider when planning a housing intervention/project. In keeping with the earlier mentioned integration and the push-pull factors to be considered when planning SCD projects, it is important to identify the other (i.e. secondary) well-being dimensions that will be influenced and affected by the 'housing project'. These are, for example: water and sanitation, which in turn impacts on environmental resources such as land, water and waste: and energy (e.g. electricity), which impacts on the environment if not provided as green energy. Additionally,

owning or renting a house requires its upkeep, payment for services such as water, sanitation and energy (e.g. electricity), which, therefore, necessitates that the owner/housing beneficiary's income (type, access to and frequency) is determined and considered when planning a housing project.

Failing to consider secondary dimensions in housing projects can lead to issues with affordability, maintenance and environmental impacts, including water, land use and air pollution. All 12 dimensions are affected to some extent. Tributary dimensions, such as education (level and type) influencing income and factors like security and recreation, are also impacted by housing projects and should be considered in planning. By identifying relevant dimensions (e.g. for a housing project), the SCDF also helps identify stakeholders and role-players, supporting integrated and well-coordinated planning and implementation.

Conclusion

Exponential population growth, along with capitalist industrialisation and urbanisation, has strained the community development agenda, exploiting both workers and nature. As urbanisation rises, human settlements are a key response to basic community needs. We agree with Jabareen's (2008) concept of sustainable development as an ethical paradox and argue that EC is key in addressing SCD concerns.

This paper suggests that social service practitioners, particularly social workers and community development practitioners, should be value and principle-driven when empowering communities to become environmentally literate. These empowerment sessions should equip communities with the knowledge to change their attitudes and behaviour towards the environment with the goal of fostering SCD. Through education and collective action, communities can harness social capital and agency to address environmental threats. Both social capital and agency are essential in shaping environmental citizens.

We are further of the opinion that using the SCDF presented in Table 2 not only provides for better project conceptualisation, planning and foresight, but also for more inclusive and empowering participation between project planners, stakeholders and beneficiaries (community members). Additionally, the framework highlights the areas where capacity building and empowerment are required to plan for mitigating the negative impacts from the project as far as possible.

At the time of writing this article, the authors were using this SCDF as part of conceptualising a multi-stakeholder and multi-community research project on sustainable livelihoods. The monitoring and evaluation of this project will be conducted using the SCDF with the aim of presenting the research results when the first phase of the project is completed after 24 months.

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