Sustainable development: Local economic growth strategy post- Covid-19 in South Africa

Robert Walter Dumisani Zondo

Abstract—The local economic challenges facing South Africa, so far, have been addressed by the introduction of policies. Hence, there are major policy reforms that have taken place pre- Covid-19 era, including the protection of rural producers, consumers and the markets. However, the spread of COVID-19 novel coronavirus around in 2020 was fast and dramatic. With the death toll experienced by various countries around the world, the effect had tremendous impact on the general economy and local communities in rural areas (in specific). The economic effects were also exacerbated by emergency strategies (like lockdowns) by different countries around the world.

Nonetheless, it has been established that rural institutions are viewed as having a potential role in rural poverty alleviation and sustainable development. Hence, the enforcement of local institutions in rural areas and capacity building as fundamental elements of strategies for rural poverty alleviation are necessary. Local economic growth, as a poverty alleviation strategy, is a peoplecentred process and circumstance specific. Common parameters for such growth include improved health facilities, infrastructure services, sanitation facilities, and educational services. Other than the above parameters for local and sustainable development, local communities have vast indigenous knowledge that can be used to facilitate sustainable development. This knowledge is not fully utilised due to a lack of complementary institutions and facilities that enable people to improve productivity and sustainability. It is essential for development practitioners and policy makers to facilitate the dissemination of this local knowledge to enable sharing amongst community members, rather than spend scarce resources in bringing in more new knowledge and information that will not benefit the local community for sustainable development. This study assesses the influence of sustainable development on local economic growth in South Africa. It establishes the suitability of sustainable development as a strategy for local economic growth for South Africa

Keywords—Covid-19, environmental management, governance, local community, local economic development, South Africa, sustainable development

I. Introduction

Globally, sustainable development is a desirable yet debatable concept with attainable objectives (Subban, 2009). On a smaller scale, where it can be seen as synonymous with concepts such as urban autonomy, self-reliance or self-sufficiency, it is, however, less applicable (Brennan & Withgott, 2005). In the 1990s the slogan "Act Locally, Think Globally" occupied the global agenda regarding the environment, giving impetus to the implementation of sustainable development (Amba, 2010). In the Brundtland Report, the World Commission on Environment and

Development (1987), defined sustainable development as a condition that meets the needs of the present without compromising the ability of future generations to meet their own needs. Emerging international agendas around sustainability define it as a holistic approach aimed at the economic, social and biophysical environment rather than limited to a green agenda (Amba, 2010). Following on from the 2000 Millennium Summit of the United Nations, the millennium development goals were set up to focus on sustainable development through the eradication of poverty, with emphasis on the importance of halving the number of people who live on US\$1 a day or less (United Nations, 2004). The implementation of sustainable development requires a concerted effort at reducing poverty, as well as the finding of solutions for hunger, malnutrition and disease. The urgency and speed for change becomes critical during the post Covid-During the Covid-19 pandemic, South Africa experienced recession and was downgraded to junk status by the rating agencies (that is, Fitch and Moody) after revising the outlook on the country's investment-grade credit rating to negative due to the slowdown in economic growth and rising debt burden.

Sustainable development and sustainability have various interpretations that can move towards weak or strong outcomes (Amba, 2010). The terms sustainability and sustainable development will be used interchangeably in this paper. Choudhury and Harahap (2015) aver that sustainable development is accepted as a policy framework in planning and development, both internationally and locally. The term is defined as a process whereby environmental opportunities are maximised for current generations without compromising or limiting opportunities for future generations (Mishra, 2014). Historically, development and the conservation and management of natural resources were considered as mutually exclusive and conflicting needs within a society. The concept of sustainable development has reversed that trend by indicating that it is both possible and desirable to attain a balance where development and the management of natural resources coexist. Hence, this paper discusses the environmental management for ecological modernisation on one hand, as well as the governance for sustainable development, including local economic development, on the other. Over the last decade the term sustainable development has been used as a catch-all and fix-all concept with little real examination of whether it is a process or a state that is either real or achievable (Manley, 2007). Few people talk about environmental management or conservation without implying that the ultimate goal is sustainable development. Fadara



(2010) states that few have demonstrated the examples that real sustainable development exists and those that do are small representative projects within limited geographical areas. Part of the problem is that the term 'sustainable development' implies an end point or something that can be achieved (Subban, 2009). However, this end point as a 'package' does not exist. As a result, sustainable development can be defined as a normative concept and looks at how the world should be, not how the world is. Consequently, sustainability is a journey or pathway that needs to be taken so as to meet the goals and principles of sustainable development (Amba, 2010).

п. Problem Statement:

The lack of integrating sustainability in the Integrated Development Plans (IDPs) for local economic growth in South Africa

In South Africa, both at the national and provincial levels, strategic planning and strategic environmental management have been conducted as separate processes (Subban, 2009). This influences the level of compliance on sustainability in the Hence, the environmental reports assess sustainability at the national and provincial levels only. The main tools for planning at these levels are the National Spatial Development Perspective (NSDP), as well as the Growth and Development Strategy (GDS). These documents show the need for sustainability mainly in terms of pro- socioeconomic, infrastructure and governance developmental issues (Blowers, 2012). Within the South African context, the Integrated Development Plans (IDPs) provide an opportunity for the integration of sustainability into this strategic document and is mandatory in many municipalities. Coetzee (2013) states that the IDPs provide an avenue for strong sustainability to emerge. Despite this, Donk, Swilling, Pieterse and Parnell (2009) argue that the integration of sustainability into IDPs is lacking. The problem lies in the focus on the process issues of the IDPs rather than the content. The IDP content is dominated by social and economic concerns (Subban, 2009). It is anticipated that the problem, if not resolved, will exacerbated post Covid-19 if not prioritised. During the Covid-19 pandemic period (particularly in 2020), there was sharp decline in oil prices which depressed nominal energy consumption, the majority of which was for motor vehicle fuels (Potter, 2020). With millions of South Africans staying at home, these expenditures decline sharply in real terms. On top of sharp pullbacks in purchases of nonessentials (such as clothing and footwear, durable goods such as cars, furniture, and recreational goods) and many services, the South Africa experienced acute declines in the consumption data (Potter, 2020). Amongst others, this setback was heavily felt by individuals residing in local-based economies.

Hence, this paper assesses the appropriateness of sustainable development as a discourse for local-based economic growth in South Africa. It elaborates on environmental management as a method of achieving sustainable development, the institutional systems, as well as governance for sustainable development. Local economic development as a determinant for strong sustainability, the discussion, as well as conclusions and recommendations conclude this paper.

III. Environmental Management for Sustainable Development

This section discusses the importance of maintaining the ecological system in which sustainable development attempts to achieve a balance where development and the management of natural resources coexist (Mishra, 2014). It addresses social justice and the decision-making that involves people. The mechanisms for environmental management to achieve sustainable goals and ecological modernisation conclude the section.

It has been established that in order to implement a sustainability agenda, the importance of maintaining ecological systems (while developing and enhancing social capital, involving people in decision-making and addressing issues of social justice) needs to be recognised, as does ensuring that decisions taken are both economically viable and sustainable (Choudhury & Harahap, 2015). implementation of the principles of sustainability via a wide range of mechanisms has, however, proved difficult to attain. Although mechanisms for environmental management have been developed to meet the goals of the sustainability agenda, the success of these mechanisms has thus far proved to be limited. Whilst many initiatives, worldwide, have made attempts to reduce environmental degradation, the beginning of this century still reflects serious environmental degradation, increased poverty levels, a widening gap between the rich and the poor, as well as a fight to restore the earth's ecological balance. This shows that the 'war' is being lost (Staley, 2006). Perhaps part of the problem lies in the manner in which environmental problems have been socially constructed. Within the techno-centric approach to environmental management, environmental issues are defined as problems of inefficiency, marginalising the importance of social issues and the broader social, economic and political context of these problems. The use of technical solutions to deal with complex problems that defy rational and objective approaches have thus been implemented. Within the South African context, it is evident that although mainstream environmental management approaches still dominate environmental policy, there is a move towards alternate approaches that challenge the dominant technical and scientific discourse of ecological modernisation (Amba, 2010). Hence, sustainability is a pathway that needs to be embarked upon in order to fulfil the goals, objectives and principles of sustainable development (Choudhury & Harahap, 2015). It is a process of assisting in the integration of the ecological, social and economic realms.



Manley (2007) states that it can also be seen as a scientific principle, as well as a political goal, a social practice and a moral guideline. National governments around the world have institutionalised discussion of mainstream environmental management through state policy and legislation that seek to manage the impacts brought about by development. Subban (2009) explains that environmental conditions in South Africa relate to three key dimensions of poverty. These include:

- Livelihoods: Poor people tend to be most directly dependent on natural resources, and are therefore the first to suffer when these resources are degraded
- Health: Poor people suffer most when water and air are polluted because pollution sources are often placed in or near poor communities
- Vulnerability: Poor people are most often exposed to environmental hazards and environment-related conflict, and are least capable of coping when they occur.

Wealthier people are able to afford medical care for pollutionrelated sicknesses, like asthma, and are able to move out of congested and polluted areas, whereas poorer people cannot do so. Hence, the next section discusses institutional choices for communities to achieve sustainable outcomes. It elaborates on government actions for social welfare, as well as the nature of decision-making in local communities in South Africa.

Institutional Systems for Sustainable Development

Selecting the correct institutional mechanism for making collective choices regarding the relationship between politics, the environment and the economy is still being developed, despite the fact that sustainability has been around since the 1970s (Mishra, 2014). Tietenberg, (2005) confirms that while sustainable development has adopted more specific definitions in recent years, economists have been concerned about sustainable economic growth in an environmental context for decades. The United Nations (2001) advanced an important step in this discussion when it formulated a widely cited definition of sustainable development as that of meeting the needs of the present without compromising the ability of future generations in meeting their own needs. Many analysts believe that sustainable development emerged as a core organising principle of urban planning on a global scale (Amba, 2010; Fadara, 2010; Katsamunska, 2016). institutional choice, however, has important implications for understanding the likelihood of communities achieving sustainable outcomes (Staley, 2006). Webster and Lai (2012), for example, have emphasised that collective decision-making through actions of government can enhance social welfare as long as it also reduces the transaction costs associated with investment and urban redevelopment, whereas Choudhury and Harahap (2009) hold that to a large degree it is competitive advantage that determines what products and services are provided by the private or public sectors. Webster and Lai (2012) hypothesise that the mix of private and public decision-making tends to evolve together as communities experiment and priorities change. Owing to the evolutionary nature of decision-making, opportunities for public intervention using a variety of institutional mechanisms from top-down, centrally-directed planning to more contractual and market-based transactions are provided (Webster & Lai, 2012; Yu, Shaw, Fu & Lai, 2014). However, these authors emphasise the possible inefficiency of these choices, that could result in lower social welfare should transaction costs increase unnecessarily.

Although sustainable development concepts appear to be negative, they do attempt to prevent the use of resources in ways that compromise the ability of future generations to use them (Yu *et al.*, 2014). Their application tends to be prescriptive by mandating the adoption of specific technologies in order to achieve specific environmental goals, although political choices on environmental policy tend to be specific and discreet rather than dynamic and open-ended.

v. Governance for Sustainable Development

This section elaborates on the delegation and devolution of power to local communities for sustainable development. According to Manley (2007), power relations within which governments and institutions operate cause them to undertake courses inconsistent with development (Manley, 2007). A decentralised governance structure tends to reduce the need for co-ordination, while a centralised structure transfers to lower levels of government those functions that it cannot manage effectively. Large, centralised and hierarchical organisations such as governments tend to simplify, centralise and standardise (Fadara, 2010), which are appropriate methods of organising some kinds of activities. According to Henfridsson and Bygstad (2013), decentralisation for sustainable development has three forms:

- Deconcentration: transferring resources and decision-making from headquarters to other branches of central government;
- **Devolution:** devolution of resources and power to autonomous units of government such as municipalities and local governments; and
- Delegation: delegation of resources and power to organisations outside the regular bureaucratic structures, such as public corporations, development agencies or NGOs.

Devolution and delegation, properly executed, can enhance the effectiveness of development programmes (Yu et al., 2014). In developing countries, however, decentralisation has mainly taken the form of deconcentration, as in India where one major act of devolution was the transfer of resources and power to village governments. This has not necessarily resulted in an improvement in the efficiency of the administration of rural



development (Subban, 2009). In fact, such decentralisation benefits have mainly been enjoyed by the dominant political party's dominant power groups. Local governments also suffer from a shortage of technical and administrative skills, and Subban (2009) states that a genuine decentralisation of resources and power cannot take place in India unless the entire structure of development planning is changed. In a decentralised power structure, plans are formulated by rural people at the grass-root level and not imposed from above.

The empowerment of people can be facilitated by the decentralisation of power. Hence, local communities should be empowered, an action likely to result in more sustainable development as local communities are said to be more knowledgeable about the results of local environmental changes (Henfridson & Bygstad, 2013). Features of normal bureaucracy, including centralisation of authority (especially financial control and standardisation of rules, recommendations and actions), may not facilitate the empowerment of people, resulting in the necessity of the participation of beneficiaries in the formulation, and maintenance implementation of improvement programmes. According to Bond (2012), the justification for the participation of the local community is based on the argument that local people organise optimally around the problems they consider to be most important. This includes assessing needs and finding appropriate solutions, making rational economic decisions in the context of their own environment, ensuring voluntary commitment of resources, as well as exercising local control over the quality and distribution of benefits. It must be noted that the centralisation of power has, in some cases, resulted in destruction of the environment and the loss of forests, as was reported for Nepal (Mishra, 2014). On the other hand, it is decentralisation that has hastened deforestation and biodiversity loss in Indian states like Mizoram (Amba, 2010). It would seem thus that there are advantages and disadvantages to both the centralised and decentralised governance structures for sustainability. Hence, this paper assesses the influence of sustainable development on local-based economic growth in South Africa.

Mishra (2014) points out that planners and local policymakers have a role to play in achieving sustainable development in cities and regions, although Donk et al. (2008) feel that their resources may be more effectively focused on enabling sustainable development practices to emerge spontaneously through market mechanism rather than by prescribing specific outcomes. In general, markets move more swiftly and dynamically in responding to changing consumer needs and preferences than do governments, while legislative processes are particularly unstable when they provide for significant citizen participation. Planning processes run the risk of adopting an incorrect technology and are subject to less economic accountability. Thus, Subban (2009) claims that local community leaders and policymakers who want to encourage sustainable development policies should consider the following strategies and approaches:

- focus on measuring sustainable development outcomes and making these measures transparent;
- hold local government sustainable development programmes to the same standards as those in the private sector;
- avoid mandating specific technologies or approaches in achieving environmental goals;
- benchmark progress based on peer communities and the region;
- incorporate consumer trends and preferences into sustainable development practices and strategies;
- focus on applying sustainable development principles to local government operations rather than imposing new technologies and costs on the private sector; and
- build sustainable development goals and objectives into competitive contracting programmes.

Having discussed governance for sustainable development, the next section elaborates on local economic development for strong sustainability. It reviews the South African national and provincial levels in sustainable development. This includes the tools used in the process and the assessments for sustainable development.

vi. Local Economic Development as a determinant for strong Sustainability

Whatever form of economic change is proposed, the importance of the local context is emphasised as being the key focus of efforts leading to stronger sustainability (Blowers, 2012). It has been noted that local problems are frequently caused by geographically distant consumers and producers (Blowers, 2012). To counteract the effects of globalisation and the international economy, a strong sustainability discourse argues for decentralisation and the reassertion of localism, to create a 'protective space' for local communities and regions (Choudhury & Harahap, 2009). Linked to this would be a decreasing dependency on external markets, thus increasing self-reliance, autonomy and self-determination. This involves a focus on meeting the basic needs through selfsufficiency (Choudhury & Harahap, 2009). Central to strong sustainability is the need to address issues of social inequality, which are intricately linked to issues of power, through environmental and social justice (Staley, 2006). The poor are the most vulnerable to environmental impacts and change. They are exposed to environmental hazards. According to Fadara (2010), the notion of strong sustainability is the need to promote the participation and empowerment of affected individuals in any development context. Strong sustainability argues for the redistribution of power, allowing for local communities to take control of, or at least contribute to, decision-making that affects their livelihoods and living environment. This requires a commitment to "a participatory framework of decision-making which provides people with effective power" (Blowers, 2012: 167). While participatory



democracy is not without difficulties, including lengthy and contradictory decision-making and participation fatigue, sustainable change requires that people are given greater freedom and responsibility in decision-making (Amba, 2010). Essential to participatory democracy is ensuring that the concerns of local communities are not excluded, by the expedient of using non-scientific or non-technical language in policymaking processes. Expert discourses have often been deployed by those in positions of political or economic power to attempt to diminish the importance of local viewpoints or concerns (Curtis, 2006). Scientific or other formal institutionalised arguments should be balanced by local discourses, arguments and traditional forms of knowledge. It must be noted that local communities have vast indigenous knowledge that can be used to facilitate sustainable development (Morolo, 2014). Unfortunately, this knowledge is not fully utilised due to lack of complementary institutions and facilities that enable people to utilise them for sustainable development.

vII. Discussions

This study assesses the suitability of sustainable development as a discourse for local economic development in South Africa. It has been indicated that a strong sustainability discourse gives voice to a range of concerns or issues most strongly expressed at a local level by (or for) those who have experienced the inequalities of the current development paradigm (Coetzee, 2013). It brings together a diverse interest groups from urban communities in dealing with environmental justice issues seeking alternative sustainable lifestyles, to rural communities who depends on natural resources for their livelihoods (Subban, 2009). How then can the strong sustainability discourse make an impact on the status quo in environmental politics? Will South Africa reverse loses they have experienced pre- and during Covid-19 period? During the Covid-19 period, the community had to stay at home and this strongly affected the local economy. The Covid-19 pandemic is likely to be a threat stressor, reinforcing existing as well as generating new forms of tension and conflicts in South Africa. As the African Centre for the Constructive Resolution of Disputes (ACCORD) (2020) indicates, the Covid-19 pandemic contributed to the additional stress to a pre-existing mix of economic, social and political tensions; which among a variety of other influences, are also aggravated by climate-related security and development risks.

Thus, South Africans require sustainable development in their local communities in order to realise local economic development. Fadara (2010) argues that, for meaningful change to happen, it requires transcending the diverse interests through the establishment of stronger alliances between communities, labour and environmental activists, both at a local and global level. The prominent aspect in driving such a discourse is self-reliance in local communities. It must be noted that self-reliance (or self-sufficiency) are part of sustainable development processes (Brennan & Withgott,

2005). While this study focuses on local economic growth, self-reliance is possible through the participatory approach of local communities. Appropriately facilitated in communities, this will sustain their development. Dawkins (2006) indicates that sustainability is represented by reproduction of resources in agricultural lands, given their due linkages with agro-based industries and service outlets. However, the entire process of local development is made possible through the use of indigenous knowledge in local communities. Hence, it is important to incorporate indigenous knowledge system during the process of development in local communities for sustainability.

viii. Conclusions and recommendations

Local communities are making efforts to implement sustainable development initiatives (Makura, 2013). However, there is lack of capacity, specific development strategies, expertise, infrastructure and finance. These deficiencies disadvantage self-reliant initiatives as the development interventions and investments are directed to better-off urban communities. It is pertinent for government and public funding development agencies in South Africa to pay special attention to local communities. For self-reliance to be realised, Fadara (2010) indicates that:

- there should be a continuous interaction with and amongst the local communities in order to develop appropriate responses to their livelihood strategies, needs and development challenges; and
- a Rural Support Fund must be established to support key needs such as the erection of earth dams, structures for community development and capacity building.

In addition, for sustainable development to be a success, the indigenous knowledge system in local communities must be recognised. Such knowledge can be viewed from cultural, social and economic perspectives (Morolo, 2014). This indigenous knowledge must be systematically managed when the achievements of sustainable development goals in local communities are expected.

It has also been realised that the municipal IDPs tend to overlook activities pertinent to accelerating rural development. Thus a special framework and processes are required to accommodate rural economic activities, as well as the rural institutions that support self-reliance. On issues relating to business activities in rural areas for sustainable development, there are impediments that block potential entrepreneurs from starting (Makura, 2013). These include the lack of land, water and mechanisation equipment, while other entrepreneurs cannot be fully operational due to lack of appropriate branding and marketing as well as poor infrastructure. For sustainable development to be realised, the economic empowerment programmes should be tailored for such rural entrepreneurs.



In addition, sustainable development in South Africa can also be improved by a strong relationship between local government and the players in the private sector. It should incorporate the revitalisation programmes in local villages. Local community growth in villages cannot be achieved through the efforts of local governments alone. Collaboration and cooperation among the various other players, including local shopping establishments, landowners and various private organisations involved in the village development, must be encouraged.

A. Author and Affiliation

Robert Walter Dumisani Zondo (Dr) Durban University of Technology (DUT) South Africa

References

- African Centre for the Constructive Resolution of Disputes (AACORD), 2020, Conflict and Resilience Monitor, https://www.accrd.org.za/conflict-resilience/13-may-2020/
- (2) Amba, K., 2010, 'The need for popular participation in Abuja: a Nigerian story of informal settlements', *Journal of Place Management and Development*, 3(2):149-159.
- (3) Bond, P., 2012, 'Unsustainable South Africa: Environment, Development and Social Protest', University of Natal Press, Scottsville.
- Blowers, A., 2012, 'Ecological and political modernisation: The challenge for planning', *Town Planning Review*, 71(4), 371-393.
- (5) Brennan, S. & Withgott, J., 2005, 'Environment: The Science behind the Stories', Pearson/Benjamin Cummings, New York, NY.
- (6) Choudhury, M.A. & Harahap, S.S., 2015, 'Complementing community, business and microenterprise by the Islamic epistemological methodology: A case study of Indonesia', International Journal of Islamic and Middle Eastern Finance and Management, 2(2):139-159.
- (7) Coetzee, M., 2013, 'Local Pathway to Sustainable Development in South Africa', Prepared for the World Summit IDP-LA21 Partnership DPLG, DEAT, SALGA, CSIR, GTZ, DBSA, UNDP. Pretoria: CSIR.
- (8) Curtis, D., 2006, 'Mind sets and methods: poverty strategies and the awkward potential of the enabling state,' *International Journal* of *Public Sector Management*, 19(2):150-164.
- Dawkins, R., 2006, 'The God Delusion', Transworld Publishers, London.
- (10) Donk, M., Swilling, M., Pieterse, E. & Parnell, S., 2008, 'Consolidating Developmental Local Government: Lessons from the South African Experience', UCT Press, Cape Town, South Africa.
- (11) Fadara, S.O., 2010, 'Recent Banking Sector Reforms and Economic Growth in Nigeria,' *Middle Eastern Finance and Economics*, 8(1):21-25.
- (12) Henfridsson, O. & Bygstad, B., 2013, 'The Generative Mechanisms of Digital Infrastructure Evolution', MIS Quarterly, 37(3), pp. 907–931. doi: 10.25300/MISQ/2013/37.3.11.

- (13) Katsamunska, P., 2016, 'The concept of governance and public governance theories', *Economic Altenatives*, 5 (2):133–141. Available at: https://www.unwe.bg/uploads/Alternatives/Polya_1_br2_2016_en. pdf (Accessed: 12 August 2018).
- (14) Manley, M., 2007, 'Do community-based approaches to natural resources management work?' Pacific Economic Bulletin, 22(3): 100-112.
- (15) Makura, M.N., 2013, 'Do Rural Institutions matter?' *South African Rural Development Quarterly (SARDQ)*, 2(4):16-19.
- (16) Mishra, H.R., 2014, 'Balancing human needs and conservation in Nepal's Royal Chitwan National Park', Ambio, 11(3): 246-251.
- (17) Morolo, T., 2014, 'Perspective to indigenous knowledge system', South African Rural Development Quarterly (SARDQ), 2(4):25-28.
- (18) Potter, S.B., 2020, Economic Impact of Covid-19. http://insight-factset.com.
- (19) Staley, S.R., 2006, 'Sustainable development in American planning: a critical appraisal', *Town Planning Review*, 77(1): 99-126.
- (20) Subban, T., 2009, 'Towards Integrating Sustainability in the eThekwini Municipality Integrated Development Planning Process' (Dissertation in partial fulfillment of a Master's Degree in Social Science (in UKZN).
- (21) Tietenberg, T., 2005, 'Enviornmental and Natural Resource Economics', 2nd ed., Scott Foresman, Boston, MA.
- (22) United Nations, 2004, 'Summary of: Global Plan to Achieve the MDGs', Report for discussion at the OECD-DAC High-Level Consultation on the UN Millennium Project.
- (23) United Nations, 2001, 'World Commission Environment and Development (The Brundlandt Commission)', United Nations, New York, NY.
- (24) Webster, C. and Lai, L.W.C., 2012, 'Property Rights, Planning and Markets: Managing Spontaneous Cities', Edward Elgar, Northampton, MA.
- (25) World Commission on Environment and Development (WCED), 1987, 'Our Common Future', Oxford: Oxford University Press.
- (26) Yu, B.T., Shaw, D., Fu, T. & Lai, L.W.C., 2014, 'Property rights and contractual approach to sustainable development', *Environmental Economics and Policy Studies*, 3(3): 291-309.

About the Author:

The significance of delegation and devolution of power to local communities for sustainable development thus creating opportunities from top-down, centrally-directed planning to more contractually and market-based transactions.

