

Sustainability Leadership as a Requisite Skill for Waste Management in the South African Post Office: A Case of the North Region

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Abstract: This paper argues that accountable waste management practice is increasingly becoming a challenge to many utility organisations. As a case in point, the South African Post Office (SAPO) by the very nature of its business requires effective strategies which will improve environmental sustainability; and such strategies should be integrated into operations as part of its comprehensive waste management intervention plan. Accountable waste management practice requires significant sustainability leadership capacity. To enhance operational strategies against waste management, the SAPO had developed waste management policies which should be operationalised to mitigate possible negative environmental impact(s) associated with postal services. The paper is based on a study that was conducted in the SAPO (North Region). The study sought to investigate if the SAPO's waste management policies are executed by sufficiently capable sustainability leadership. The study comprises secondary research, most of which comprise documents obtained from the particular entity's North Region headquarters in Limpopo, South Africa. Much of the research was conducted *ad locum domicilii*. The primary objective of this study was to establish which strategies are effective in this (remote) area and to recommend sustainability leadership acumen that may be employed/developed to ameliorate the impact of waste in the postal sector in similar settings. In the paper it is recommended that the SAPO should improve particular sustainability leadership proficiency to implement effective waste management strategies, which should be effected comprehensively at the postal outlets. The paper concludes by providing specific suggestions to make the SAPO an environmentally accountable institution contributing to South Africa's green energy plans, pursuant towards achieving the United Nations sustainable development goals.

Keywords: Sustainable development, Environmental sustainability, Sustainability leadership, waste management

1. Introduction

One of the most important environmental issues that face South Africa today is proper implementation of waste management mechanisms. Many notable authors such as Dilley, Earle, Keats, Ravenscroft & Nxele (2012), Ramonyai & Ngwakwe (2017), Vitor (2017) and Waite (1995) have extensively written about this in general. However, waste management practice particular to public utilities such as the South African Post Office (SAPO) isn't well-described. Entities such as the SAPO, by the very nature of their business tend to generate much waste which needs to be managed in an environmentally accountable manner. Various legislative stipulations govern waste management and seek to ensure sustainability and accountability which aligns with international standards.

It could be imagined that the waste generated by the SAPO may, if not well-disposed of or adequately processed, have adverse effects on the environment in the form of for instance water pollution, soil pollution and air pollution. The impact of such pollution on the economy may be incalculable. Equally, it may have an adverse impact on human health, animal health and the environment – the economic, social and environmental impacts, as described in Elkington's theory and model of sustainability.

The SAPO is an actor and stakeholder in the country's economy and carries a responsibility to ensure adherence to waste management regulatory framework. In terms of the SAPO Waste Management Procedure (2018:8), the responsibility to manage waste lies with all employees of the SAPO Group;

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the Sustainability Division of the SAPO is the custodian and moderator of the waste disposal strategy of the Group and therefore responsible for the implementation of waste management practice. The paper introduces the SAPO case against the backdrop of Elkington's theory by discussing waste management in the SAPO and the requisite sustainability leadership required to effectively mitigate waste management challenges in the organisation. It concludes by providing recommendations for effective SAPO waste management strategies.

2. The Concept Sustainability Leadership

For the purposes of clarification, the concept sustainability leadership is defined as follows: "Mindful actions and behaviors embracing a global world-view to recognize the connection between the planet and humanity; thereby, through personal and organisational choices, effects positive environmental and social change." (Way, 2012). However, to comprehend this concept, sustainable development should be read to imply: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (thwink.org, [Sa]). Therefore, sustainable development should be viewed as the context in which sustainability leaders function. Consequently, Elkington's model of the three pillars of sustainability apply: "The three pillars of sustainability are a powerful tool for defining the *complete* sustainability problem. This consists of at least the economic, social, and environmental pillars. If any one pillar is weak, the system as a whole is unsustainable" (thwink.org, [Sa]). Therefore, economic, social and environmental sustainability feature as mainstay conditions in this regard. Additional discussion on the aforementioned follows *infra*.

3. Research Modalities

The aim and objectives of the study were to investigate aspects relating to implementation of waste management in the SAPO, in the North Region. The case of the North Region is cited since it is the geographical proximity in which the researchers function. In addition, it is postulated that a remote SAPO location (such as the North Region) possibly with restricted capacity (as opposed to some other SAPO localities or even Head Office), may provide an invaluable arena for the study. Particular emphasis is placed on reflecting upon, and establishing

sustainability leadership protocols that may promote effective waste management in the SAPO. The study was undertaken by engaging secondary research, policy documents and the relevant regulatory framework, most of which comprise documents obtained from the particular entity's North Region headquarters in Limpopo, South Africa. This research does not extend from any previously published research conducted by either of the researchers. It should be noted that one of the researchers is employed as a manager in SAPO in the North Region and thus holds *participatory observer researcher* status in the context of the research project.

4. Statutory Framework

The principal South African statutory framework documents that may bear relevance to this research include the following:

4.1 The Constitution of the Republic of South Africa, 1996

The Constitution of the Republic of South Africa, 1996 is the supreme law in South Africa. Section 24 (b) of the Constitution prescribes that everyone has the right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

- Prevent pollution and ecological degradation;
- Promote conservation; and
- Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

In view of the above, the citizens of South Africa have the right to, and should also take responsibility to create an environment that is not harmful or detrimental to their wellbeing. Taking responsibility to ensure that the environment is not harmful and detrimental to human livelihood means that citizens should protect the environment and make it sustainable for future generations. The SAPO should comply with the prescripts of this act and has consequently created policies that encourage sustainability and waste management. In terms of SAPO waste management procedure (2018:8), the responsibility to manage waste lies with all employees of the SAPO Group (WSP SAPO, 2018:8).

This procedure is consistent with the Kyoto Protocol (1998:9) which commits countries to develop programmes that mitigate climate change and *inter alia* such programmes include waste management.

4.2 National Environmental Management Act (NEMA): Air Quality (Act 39 of 2004)

According to section 2(a) of the object of National Environmental Act: Air Quality, 2004 (Act 39 of 2004) is to:

- a. "Protect the environment by providing reasonable measures for the protection and enhancement of the quality of air in the Republic; the prevention of air pollution and ecological degradation; and securing ecologically sustainable development while promoting justifiable economic and social development."

Furthermore, section 51(1a) of the same Act prescribes that a person convicted of an offence in terms of NEM Act 39 of 2004 is liable to a fine, or imprisonment for a period not exceeding ten years or both a fine and such imprisonment. Applied to the postal context, this provision makes it clear that any employee of the SAPO who is responsible for waste management control, to exercise his/her functions in a manner that is consistent with waste management policies and procedures of the institution whilst failure to do so, consequence management will invoke.

4.3 Waste Management Act (Act 59 of 2008)

Section 26 (1a) of the Waste Management Act, 2008 (59 of 2008) prescribes that no person may dispose waste, or knowingly or negligently cause or permit waste to be disposed of, in or any land, waterbody or any facility unless the disposal of that waste is authorized by law. By implication, the Waste Management Act, 2008 (Act 59 of 2008) attempts to reduce the risks associated with improper waste disposal which might become a hazard to human life. In view of the above, employees of the SAPO should follow due processes of waste management to improve physical and emotional safety and avoid organizational injuries. Park (2001:21) argues that environmental hazards are the result of natural environment processes at work. This constitutes a two-way relationship between people and environment (see also Waite, 2009:135).

5. Kyoto Protocol: United Nations Convention on Climate Change

The ideals of environmental sustainability in South Africa have found expression in international bodies. One of the most notable agreements under the United Nations is the Kyoto Protocol. Under the terms of such agreements, the quest for environmental sustainability has prompted international companies including SAPO to develop waste management policies in order to address issues of sustainability. The SAPO Corporate Strategic Plan (2019:2) outlines SAPO's vision as to be recognized among the leading organisations and in particular the leading State Owned Enterprise in sustainable development in tackling challenges faced by the natural environment. Similarly, the SAPO Environmental Policy and Action Plan (2008:3) emphasises that SAPO should be recognized among the top leading postal operators as a leader in environmental management. By implication, it means that the SAPO should seek to enforce its policies through the strategic imperatives to advance sustainable development within the entity. The Kyoto Convention, to which South Africa is a signatory and member state, provides guidelines to all its member states on how to deal with issues of waste management and global environmental challenges. It also commits member states to provide quantified statistics regarding limitations, reduction and management of waste.

In particular, Article 2 of the Kyoto Protocol (1998:2) states that "to achieve quantified emission limitation and reduction in order to promote sustainable development, member states shall implement policies and measures in accordance with its national circumstances, such as:

- Enhancement of energy efficiency in relevant sectors of the national economy;
- Promotion of sustainable forest management practices, afforestation and reforestation;
- Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the convention.
- Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases; and

- Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport a distribution of energy.

6. Why Develop an Environmental Policy and Plan?

Policy making is a process that involves a number of related decisions originating from different institutions and actors ranging from across the whole domain of government and private institutions (Rosenbaum, 2014:37). To develop a policy, a series of decisions needs to be made, to execute that policy a further series of decisions needs to be taken, and to analyse that policy, yet a further series of decisions needs to be taken (Fox, Bayat & Ferreira, 2006:2). What government is doing about environmental problems relates primarily to how the programs have been implemented (Rosenbaum, 2014:39). It is in this context that a policy is an important document which guides the organisation on how to attain a particular objective, and for this article, waste management in particular. The SAPO also developed an environment policy with the purpose of improving the environmental performance of the organisation and avoiding potential organizational diseases and injuries. Minnaar (2009:37) correctly argues that a policy should contain the philosophy of the organisation and that the management of an organisation has legal responsibility to act within the law. Fox *et al.* (2006:108) emphasise that policy is a desired course of action that is aimed at the realization of public goals and objectives, and which is made public by means of legislation. It is against this background that Chandrappa & Diganta (2012:32) argue that Waste Management requires interrelated elements such as policy, law and planning (see also Rana, 2006; Rosenbaum, 2014:361). An environmental policy should therefore allow involvement of all stakeholders to participate in policy making. It could be argued that interest groups and other international bodies such as Universal Postal Union can have an influence on policy making process and South African postal administration should align themselves with environmental policies of such international bodies. Cloete (in Fox, Bayat & Ferreira, 2006:45) affirms that the American Universal Postal Union (UPU) can prescribe standards which must be respected by all Postal administrators. It is in this context that waste management policies should be adopted by postal administrators because it informs the employees about the desires of the organisation

and prescribe to employees on how to respond to such desires.

7. South African Post Office Corporate Strategic Plan 2019/2020

Business activities of the SAPO include acceptance and transportation of letters; acceptance and transportation of parcels and etc., all this operation directly connect to the generation of waste in a form of carbon combustion and paper. To deal with the issues of waste, corporate vision and mission should have aligned with the concept of sustainability. It is in this context that the SAPO Sustainable Development Vision is to be recognized among the leading companies, in particular the leading state owned enterprise in sustainable development in tackling challenges faced by the planet and mankind by fostering the shared value proposition (SAPO, 2019:2). According to SAPO (2019:2), environmental strategy is based on six strategic pillars which are:

- Protect the environment;
- Minimise impact on the environment;
- Utilising non-renewable resources in a sustainable way;
- Pursue sustainable management practices;
- Partake in the national debate surrounding sustainable development; and
- Environmental sustainability performance continuous improvement.

It can be argued that, once a product becomes redundant and is reduced to waste, it can gain a function in another activity and becomes a new product (recycling). By implications it means that enterprises can re-utilise materials which are of no use and give them a new life. By so doing, enterprises will be saving on resources and depletion of resources will be halted. From the preceding strategic pillars, it can be argued State Owned Enterprises (for example the SAPO) should respond to the risks associated climate change and one method to respond to such risk is proper implementation of waste management. It is therefore the responsibility of the SAPO to ensure that waste is properly managed so as to contribute ensuring environmental health.

8. Waste Recycling for Head Office: Standard Operating Procedure – South African Post Office (2018)

One of the methods involved in waste management practice is waste recycling. Waste recycling reduces the amount of waste that we produce by minimizing the quantities of natural resources that we convert into products and discard (Chandrappa & Diganta, 2012: 81). From the SAPO perspective, managers should adopt policies which are in line with waste recycling programmes for the sole purpose of sustainability. Once managers have set up a clear Standard Operating Procedure (SOP), it sets a tone to all employees on how to deal with certain aspects. A disciplinary code was developed which provides guidelines to follow in dealing with issues of non-compliance to the procedure. The procedure notifies employees that specific behaviour will not be tolerated and non-compliance will invite consequence management (SAPO Disciplinary Code, 2019). At SAPO it is incumbent upon management together with the Sustainability Division to ensure that the organisation's employees are conversant with the prescribed environmental policies.

In this regard, policy awareness is critical for business operations to run fluidly (Rosenbaum, 2014:81; Park, 2001:53). This undertaking will assist in minimizing a number of offences perpetuated by employees in relation to sustainability. Management should commit resources which are technical and also manpower to deal with issues of sustainability and waste management in the workplace. Waste recycling in the SAPO is one aspect that management is prioritising and to an extent that a waste recycling procedure was developed. The purpose of the waste recycling programs is to reduce impact which the organization has in the environment and contributes to sustainable development by reducing, re-using and recycling resources (SAPO WSP, 2018:2).

SAPO WSP (2018: 2-6) has identified the following materials to be recycled:

- **Office waste paper and cardboards** – Only waste paper shall be thrown into their relevant enviroboxes clearly labelled paper. Business Units champions must transfer the contents of enviroboxes into envirobags and forward to a dedicated "holding" area and pick up arranged. The procedure emphasise that paper recycling bags must not be used for mail transportation

or any other purpose except for waste paper purpose. It is important to note that no paper must be burned (Waite, 1995:98; Rana, 2006:81).

- **Lighting bulbs** – To replace a bulb, a job incident card is completed and a bulb is replaced. The used lights shall be stored in the appropriate box/bin and be kept in the holding area. The used light bulbs shall be collected and transported from the collection points to the disposal site (see also Waite, 1995:44).
- **Cartridges** – Only used cartridges shall be thrown into their relevant enviroboxes clearly labelled and sustainability division is informed once the enviroboxes are full. Arrangement with service provider for pick up is made and proof of collection must be left by the service provider.
- **Plastic, cans and glass** – Only plastic, glass and cans shall be thrown into their relevant bins clearly labelled. Cleaning staff must replace the bins of recyclables once they are full with an empty bin and forward to the dedicated holding area. Service provider is notified and pick up is arranged (see also Waite, 1995:95; Waite, 2009:82). Kumar (2017:9) correctly argues that careless disposal of plastic bags chokes drains, blocks the porosity of the soil and causes problems for groundwater recharge, and it also contaminate foodstuffs due to leaching of toxic dyes and transfer of pathogens.

It is against the above background that the SAPO should ensure that waste is re-used and recycled to minimize additional extraction of resources from the ground unnecessarily, to minimize the impact of ozone depletion and ensuring that employees have a safe work environment as a result of the removal of waste which could cause a safety hazard (Park, 2001:247).

9. Research Gap

It could be argued that the SAPO Standard Operating Procedure (2018) focuses primarily on the Head Office, with regard to the implementation of waste management practices and limited waste management effort is invested in promoting such in the postal outlets. Ramonyai & Ngwakwe (2017:38) confirm that managing waste at all levels of supply chain is proven to be one of the requirements to improving profitability. It is therefore important not to be

selective when implementing waste management activities and that implementation to be applied across the board. It is therefore in this regard that a scrutiny of the North Region of SAPO be had.

10. Impact of Waste Management

The following annotations may be of importance relating to the impact of waste management protocols on SAPO.

10.1 Safe Working Environment

The object of the Health and Safety Act, 1993 (Act 85 of 1993) is to provide for the health and safety of persons at work. Section 8(1) prescribes that "every employer shall provide and maintain, as far as it is reasonably practical, a working environment that is safe and without risk to the health of his employees". This Act obliges the SAPO to put the safety of its employees on top of its priority list. If waste in the work place is not properly managed and controlled, a safety hazard (see Chandrappa & Diganta, 2012:275) may occur. Kumar (2017:12) emphasizes that employers and employees should be encouraged to reduce workplace hazards, implement safety programmes, improve existing safety programmes and encourage research to innovate ways of dealing with workplace safety troubles. This opinion is similarly supported by Davis & Masten (2004:536) by opining that proper awareness and guidance in this regard should be maintained throughout the workplace. By implication it means that all employees should continuously monitor and record all safety hazards that might cause injuries and report such hazards to the relevant authorities in the workplace to attend to them.

10.2 Corporate Turnover

Waste management and corporate turnover potentially shares a mutually beneficial relationship. Collection of waste from corporates and institutions by service providers is part of income to such corporations. Ramonyai & Ngwakwe (2017:38) argue that managing waste at all levels of supply chain is proven to be one of the requirements to improving profitability. Similarly, Ramonyai & Ngwakwe (2017:38) maintain that managing waste may contribute to increasing profit; environmental cost can be offset by generating revenue through the sale of waste (Onwubiko, 2017:71). Chandrappa & Diganta (2012:36) assert that waste management

may have many benefits including increased profit, reduced energy costs, reduced raw material costs and increased productivity. It is against this background that the SAPO should look at waste as a product with revenue generating potential.

10.3 Health Related Problems

The nexus between waste management and clean working environment cannot be over-emphasized. If waste management as an activity is not properly implemented, health related problems become imminent in the workplace. From an ecological viewpoint, occupational health represents a dynamic equilibrium or adjustment between industrial workers and their work environment (Rana, 2006:134). Chandrappa & Diganta (2012:36) correctly argue that sound waste management reduces the risk of commutable diseases and millions are already facing diseases (Dzvimbo, Monga & Mashiza, 2017:60). It can be deduced that uncontrolled waste in the workplace can cause accidents, injuries and even death and it is therefore the responsibility of all SAPO employees to ensure that the environment they are working in, is free from diseases and has no potential to cause injuries or accidents. Kumar (2017:5) claims that uncollected waste increases the risk of injury and infection (see also Wilson, 2000:243). Injuries as a result of uncontrolled sharp objects should be avoided at all costs. Sharp objects should be placed in separate bins and be carefully disposed of. Wilson (2000:286) asserts that sharp objects should be discarded immediately after use into an appropriate container, and should have a closer device that does not open when carried or dropped (Shah, 2000:147; Kumar, 2017:11). Safe disposal is necessary to protect the health of the individual, family, and the community, and also to prevent the occurrence of certain nuisance (Davis & Masten, 2004:9).

11. Sustainability Leadership as a Requirement for Implementation and Goals Strategic Achievement

As much as literature on sustainable leadership abounds, the notion and concept remains limited in depth and scope because of limited case research on empiric level. It may be postulated that only once heurism in the *sustainability leadership* environment increases and experiences are recorded and theories further develop, this field may grow exponentially. Yet, as an elementary point of departure, sustainability leadership should be

viewed as to encompass 3 interconnecting aspects, being the environmental, a social dimension and an economic dimension. This strongly reverberates with Elkington's People, Planet and Profits (triple bottom line theory and model) interactive dependency approach; "society depends on the economy and the economy depends on the global ecosystem, whose health represents the ultimate bottom line" (Way, 2012). The novelty of sustainable leadership as a paradigm doesn't detract from the importance of achieving sustainability and progressiveness in organisations on the environmentally accountable practice front (Lambert, 2011).

Organisations should adopt and imbed a range of management practices – borne from in purposefully designed strategies – in order to generate equity between economic, social, and ecological objectives while attaining required levels of performance, high-level resilience and sustainability. It appears as if a holistic approach to leading an organisation with the aims of balancing the 3 P's –Triple Bottom-line (people, profits, and the planet), and Twenty-three sustainability practices (Avery & Bergsteiner, 2011:2) are imperative focus points for leaders in organisations. Seen against the preceding description of the SAPO as an organisation, the illustrated sustainability practices may provide direction with regards to

Figure 1: 3PS – Triple Bottom-Line

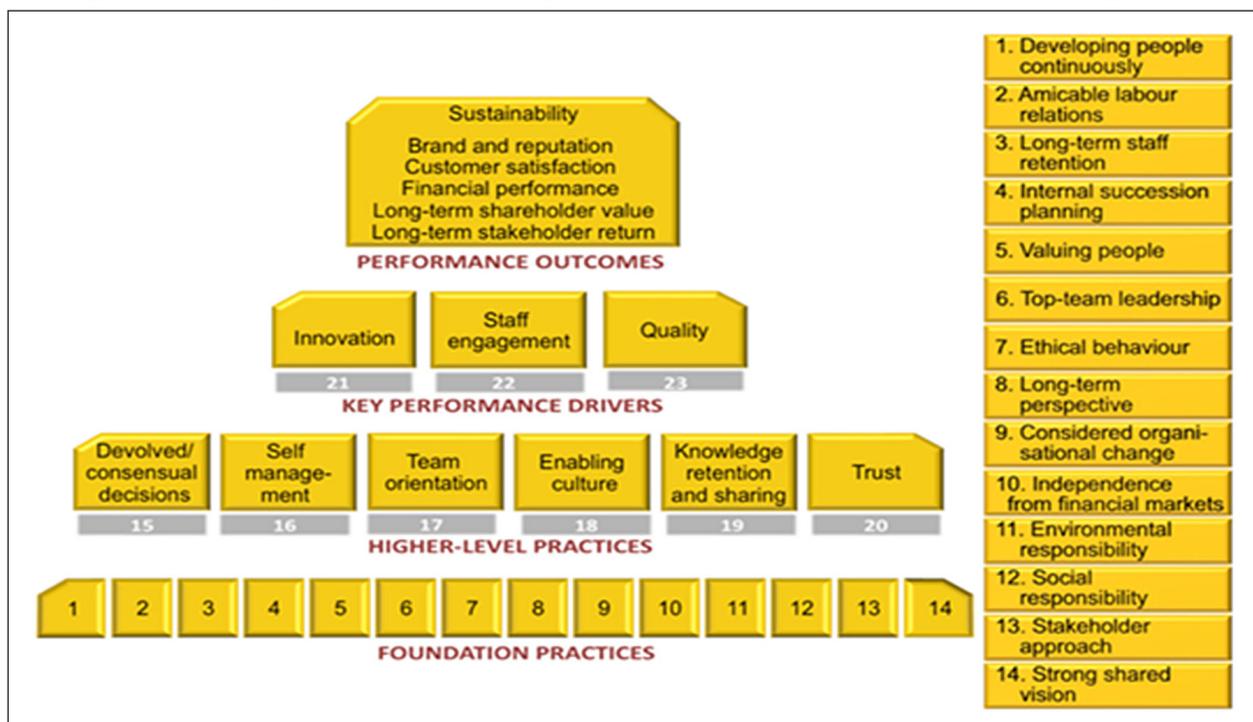


Source: Authors

how an organisation (and in particular the SAPO), may elect to institutionalise or strengthen sustainability in their operations.

Notable, are the 14 foundation practices, which are supported by six higher level practices. The thrust that may be said to deliver impetus to the said practices are innovation, staff engagement and quality.

Figure 2: Twenty-Three Sustainability Practices – The Sustainable Leadership Pyramid



Source: Avery & Bergsteiner (2011)

It is also notable that in essence, the performance outcomes envisaged in this model point towards strong corporate governance and social responsibility which tends to feature as a trait in organisations where sustainability leadership is prevalent. In support of the above, the researchers Hargreaves and Fink (2004) consider a number of principles (general truisms – albeit within an educational-organisational context) that define this type of leadership:

- Sustainability leadership matters – it makes a difference. The organisation functions to a lesser performance in the absence thereof;
- Sustainability leaders should plan for leadership succession – achieve this goal by grooming successors to continue important reforms;
- Sustainability leadership infuses throughout the organisation – it permeates to all sections and levels;
- Sustainability leadership benefits everyone in the organisation – socially equitable – not just a few at the expense of the rest;
- Sustainability leadership is resourceful. The system should provide reward and provide incentives that attract and retain the best talent among the available leadership pool;
- Sustainability leadership promotes diversity – it recognises and cultivates many kinds of excellence in learning, teaching, and leading, and it provides the networks for sharing these different kinds of excellence in cross-fertilizing processes of improvement;
- Sustainability leadership promotes activism – it engages assertively with its environment in a pattern of mutual influence to promote change and cement accountable practices; and
- Systems should be supportive of sustainable leadership efforts – such leaders develop sustainability by committing to improvements and by engaging actively with their environments and they seek to accomplish goals that matter, they inspire others to join them in working toward those goals, and leave a legacy.

Once the aforementioned discussion points serve as directive towards improving sustainability

leadership practice in SAPO, environmental sustainability through thoughtful waste management may be enhanced significantly.

12. Conclusion and Recommendations

This paper proposes that some evidence exists that that proper waste management practice, if implemented properly by organisations, may potentially reduce a possible adverse health impact on humans, animals and the environment. The discussion in the article argued that the SAPO should similarly continue to minimise, reduce and mitigate its environmental impact by continuously (re)designing its operations to remain environmentally accountable. To achieve these goals, sustainability leadership should be transuded throughout the organisation; The SAPO management and employees should be made aware of the consequences of improper execution of environmental strategies. Management should ensure that capacity is built to assist employees to deal with waste management practices to its fullest extent. These recommendations may also be valuable when postal outlets are designed in the SAPO. All employees should ultimately accept accountability on this front. It is hoped that this research may stimulate debate on this issue and it is anticipated that other state owned entities may benefit therefrom as well.

In the North Region of SAPO, it may be argued that limited emphasis is given to the essentials of sustainability leadership development and practice. It is against the background of the preceding discussion, that the following recommendations are made for the organisation:

12.1 Employee Awareness on Waste Management and Environmental Issues

The SAPO, with particular reference to the Sustainability Division, conduct an education campaign informing the employees of the impact of waste management so as to be able to respond proactively to environmental issues. Creating awareness can be made in a number of ways including roadshows, internal newsletters, leaflets and newspaper articles. Obiamaka *et al.* (2017:77) argue that environmental awareness is one of the ways in which firms demonstrate ethical behaviour. The Post Office is currently using online communication to convey information to employees. This means of communication can aggressively convey information to the majority of employees and with the speed that it is required.

12.2 General Sustainability Leadership Development

Organisational performance is part-measured by the level to which it remains accountable towards its environment in the broadest sense. Sustainability is ultimately a leadership issue. It is therefore important that the SAPO ensures that sustainability leadership is present at all strata of the organisation and that initiatives and advancement on this front is pursued continuously. This pursuit may be best achieved if sustainability leadership is embedded into all leadership development programmes.

12.3 Merit Awards

SAPO Management should consider giving merit awards to postal outlets which comply with environmental laws. These awards may motivate employees at a lower level and enhance their environmental performance which will increase sustainability to the institution. Rewarding environmental performance should create a general awareness of waste management as an imperative and instil a positive culture thereto.

12.4 Building Capacity at Branch Level

Waste management is an international requirement in relation to environmental accountability and the SAPO must align itself to the global requirements. To implement waste management effectively, the SAPO should have designated officials who will be responsible for all waste management activities at every postal outlet. Such task can be given to a trained senior employee, possibly as an additional responsibility over and above the normal job functions. One important job aspect of such a designated official should be to gather statistics to provide pertinent information to senior management to be promote informed decisions on waste management issues.

12.5 Allocation of Waste Dumping Space at a Branch Level

SAPO infrastructure department should ensure that designated areas for waste and other recyclable materials are allocated a space when an office is designed. If no such facilities are available, employees will dump waste anywhere in the workplace and this action will have a detrimental safety and health effect on them and to their fellow co-workers.

References

- Avery, G.C. & Bergsteiner, H. 2011. Sustainable leadership practices for enhancing business resilience and performance. *Strategy & Leadership*, 39(3):5-15.
- Chandrappa, R. & Diganta, B. 2012. *Solid Waste Management: Principles and Practice*. 1st edition. Bangalore: Springer.
- Davis, M.L. & Masten, S.J. 2004. *Principles of Environmental Engineering and Science*. 1st ed. New York: McGrawHill.
- Dilley, L., Earle, J., Keats, G., Ravenscroft, G. & Nxele, A. 2012. *Focus Geography*. 1st ed. Cape Town: Maskew Miller Longman.
- Dzimbo, M.A., Monga, M., Lee & Mashiza, T.M. 2017. Perpetual "Outcasts": The Impact of Climate Change on Rural Children in Zimbabwe. *Journal of Public Administration and Development Alternatives*, 2(2):60-73.
- Fox, W., Bayat, S. & Ferreira, N. 2006. *A Guide to Managing Public Policy*. Cape Town: Juta & Company.
- Haergreaves, A. & Fink, D. 2004. The Seven Principles of Sustainable Leadership. Educational Leadership. *Leading in Tough Times*, 61(7): 8-13. Available at: <http://www.ascd.org/publications/educational-leadership/>. Accessed 15 March 2020.
- Kumar, U. 2017. *Public Health Engineering*: New Delhi: Random Publications
- Kumar, U. 2017. *Solid Waste Engineering*: New Delhi: Random Publications.
- Obiamaka, N., Akintola, O., Francis, I. & Matthias, N. 2017. The Relationship Between Firm Size, Financial Performance and Climate disclosures in Nigeria: A Study of Industrial Goods Companies. *Journal of Global Business and Technology*, 13(2):75-81.
- Onwubiko, C.O. 2017. Impact of Environmental and Social Costs on the Performance of Quoted Manufacturing Companies in Nigeria. *Journal of Global Business and Technology*, 13(2):68-74.
- Park, C. 2001. *The Environment*. 2nd ed. London: Routledge.
- Rana, S.V. 2006. *Environmental Pollution: Health and Toxicology*. 1st ed. Oxford: Alpha Science International Ltd.
- Rosenbaum, W.A. 2014. *Environmental Politics and Policy*. 6th ed. London: SAGE.
- SASOL. 2019. *Notice of Annual Meeting*. Gauteng: SASOL.
- Shah, R. 2014. *Basic Civil and Environmental Engineering*. New Delhi: Random Publications.
- South Africa, Republic. 1996. *The Constitution of the Republic of South Africa, 1996*. Pretoria: Government Printer.
- South Africa, Republic. 2004. *National Environment Management Act, 2004* (No 39 of 2004). Pretoria: Government Printer.
- South Africa, Republic. 2008. *Waste Management Act, 2008* (no 59 of 2008). Pretoria: Government Printer.
- South African Post Office Limited. 2008. *SA Post Office: Environmental Policy and Action Plan*, Pretoria.
- South African Post Office Limited. 2018. *Waste Recycling Procedure for Head Office: NPC*. Pretoria.
- South African Post Office Limited. 2019. *Disciplinary Code of the South African Post Office*. Pretoria.
- Sustainability. [Sa]. Available at: <https://www.thwink.org/sustainability/glossary/Sustainability.htm>. Accessed 15 March 2020.

- Sustainable Leadership Pyramid. [Sa]. Available at: www.bing.com/images/search?q=avery+and+bergsteiner+sustainability+practices&FORM=HDRSC2. Accessed 15 March 2020.
- Tustin, D.H. Ligthelm, A. Martins, J.H. & de J van Wyk, H. 2005. *Marketing Research in Practice*. 1st ed. Pretoria: Unisa Press.
- United Nations. Kyoto Protocol to the United Nations, 1998. *Framework Convention on Climate Change*.
- Vitor, D.A. 2017. Factors Influencing Choice of Climate Change Adaptation Strategies by Maize Farmers in Upper East Region of Ghana. *Journal of Global Business and Technology*, 13(2): 10-23.
- Way, C. 2012. *What is Sustainability Leadership?* Available at: <https://www.td.org/insights/what-is-sustainability-leadership>. Accessed 15 March 2020.
- Waite, R. 1995. *Household Waste Recycling*. 1st ed. London: Earthscan.
- Waite, R. 2009. *Environmental Management: Household Waste Recycling*. London: Earthscan.
- Wilson, J. 2000. *Clinical Microbiology: An Introduction for Health Care Professionals*. 8th ed. London: Bailliere Tindall.