# Governance Practice Implementation on Education for Sustainable Development in Host Universities' Regional Centres of Expertise, Kenya

## Nancy Ng'ang'a[1*], Ruth Thinguri[1] and Ayub Macharia[2]

[1]School of Education, Mount Kenya University P. O. Box 342-01000, Thika, Kenya.
[2]Department of environmental education and awareness, Ministry of Environment and Forestry P.O Box 30126-00100, Nairobi, Kenya.

***Authors' contributions***

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

*Original Research Article*

## ABSTRACT

Institutional management refers to the effective running of different programmes and activities of an institution. This study sought to assess governance practice implementation on education for sustainable development (ESD) in host universities' Regional Centres of Expertise (RCE) in Kenya. The study employed mixed methodology and concurrent model of triangulation and descriptive survey research design to collect both qualitative and quantitative data. The target population was from 8 acknowledged RCEs in Kenya. This included 8 RCE coordinators, 270 lecturers conversant with ESD and 150 representatives of partner institutions making a total of 428 respondents. Purposive and simple random sampling was used to come up with the study sample of 93 respondents comprising of of 3 RCE coordinators, 60 lecturers, and 30 representatives of partner institutions. Research tools used were open and close-ended questionnaires, interview schedule and document analysis checklist. Quantitative data was analysed descriptively using SPSS version 23 and presented using tables, frequencies, percentages and Pearson's correlation coefficient. Qualitative data was thematically analysed and presented verbatim and as narratives using MS Word. Mixing and interpretation of data was then done. The study established that despite

_____

*Corresponding author: E-mail: nganganancy@yahoo.com; nancyngash@gmail.com*

numerous challenges, RCE host universities had implemented RCE governance practice on ESD through establishment of governance structures and appointment of coordinators. Financial and infrastructural resources were found to be a main challenge in implementation of governance practice on ESD. Anticipated beneficiaries of the study findings and conclusion include the management of RCE host universities, RCE coordinators, Ministry of education and County governments. The study recommended that host universities in Regional Centres of Expertise should initiate innovative methods of raising funds from both government and private sectors to establish a funding mechanism for ESD activities and programs in the RCEs. The appointment of RCE coordinators needs to be removed from the host university Vice Chancellors and a committee of partner representatives tasked with the appointment.

## 1. INTRODUCTION

Education for sustainable development (ESD) as a concept encourages people to acquire the knowledge, skills, values, behaviours and attitudes required to create a sustainable world, ensuring environmental protection and conservation, promotion of social equity and encouraging economic sustainability. Regional Centres of Expertise (RCE) in education for sustainable development are regional networks for the promotion of ESD proposed and acknowledged by the United Nations University as its contribution to the United Nations Decade for education for sustainable development (UNDESD, 2005-2014). According to [1] an RCE is not a regular centre but a linkage between current formal, non-formal and informal education organizations, mobilized to deliver education for sustainable development (ESD) to local and regional communities. RCEs are hosted worldwide by universities and other higher learning institutions.

Institutional management means management of different programmes and activities that tend to the realization of the prime goals of an educational institution. It is the process of putting things together in a harmonious manner and relationship for more effective fuctioning of an educational programme [2]. The host universities are expected to facilitate the RCE institutional management practices implementation on ESD in their campuses and region as a whole. One of these practices is RCE governance which entails having a defined structure of governance and management as well as provision of funds and infrastructure [3].

In the case of an RCE, the host university is one of the partners with the capacity to use its customary role of teaching, research and community outreach to guide the region to achieve sustainable development through ESD. As key partners and hosts of RCEs, the institutional management role helps to elevate the local and regional role of universities in delivering ESD outcomes [4]. Governance practice implementation on ESD in RCEs addresses matters of management and leadership and its effective implementation leads to the realisation of ESD in the university and region at large.

According to [5], though implementation of ESD is being severally undertaken in the nations of the world in formal instruction, there is a shortage of extensive empirical inquiry on its outcomes and efficacy in the literally world. Most are baseline studies largely done by UNESCO on the status of ESD in different countries [6]. According to [7], programs and research on ESD are well coordinated in universities in the Scandinavian countries. In his study [8] focused on the magnitude to which Costa Rican universities had incorporated ESD in their projects and curricular and other university practices. Results from the investigation demonstrated that Costa Rica's public approach on ESD, explicitly in universities, had been considerable in creation of an understanding of the significance of preserving nature for the SD of the nation.

A baseline study carried out by UNESCO on selected countries in Sub-Saharan African clearly indicated that universities in this region did not pay much attention to ESD when contrasted to their equivalents in USA, Asia and Europe [9]. The Kenya National Environmental Management Authority (NEMA) in partnership with the then Kenya Institute of Education (KIE) carried out a countrywide baseline ESD implementation survey in primary and secondary schools in Kenya. The study sought to give a feedback to the then Kenya Institute of Education (now

Kenya Institute of Curriculum Development, KICD) and the stakeholders on how the curriculum and supporting materials could be instrumental in promoting ESD activities and projects as emphasized in the country's Vision 2030 [10].

The Kenya Government has also published its end of decade report on status of ESD implementation [11]. The report notes that NEMA has led the formation of ten RCEs, eight of which have been registered with UNU. The report provides an analysis of selected RCEs focusing on the institutional management practices and its core functions. The RCEs in the report had undertaken to execute topical ESD concerns, which are applicable to their local societies as well as improving dialogue among partners. Though the Kenya Government has designed policies to include ESD at all education levels, and also facilitated formation of RCEs through NEMA, the researcher did not find any comprehensive study on the extent of implementation of RCE governance practice on ESD in host universities in the literature reviewed.

## 2. EXISTING LITERATURE

### 2.1 Regional Centres of Expertise Governance Practice

[12] describes governance as the procedure of decision making and the manner by which decisions are either executed or not. The author further analyses governance as a focus on both the formal and informal players who participate in making and implementing decisions. One of the features of an RCE is a definite system of governance and management. Being hosts, coordinators and key partners of RCEs, universities bear the responsibility for the establishment of the system. Governance addresses matters of management, leadership and resource mobilization for successful ESD activities and programs in an RCE.

Studies on specific RCE practices such as governance are rare as focus of many studies seems to be on the overall functions and activities of RCEs. However, a survey by [13] focused on RCE structure and governance to gather information on the various types of existing RCE governance and management models. The study did not focus on the extent of implementation of governance practice on ESD

activities and programs by host universities of the RCEs.

Although the organizational structure of each individual RCE is marked by the distinctive circumstances in the region, continuity and effectiveness of RCE's activities are to be created by considering several issues together. It is essential that various organizations/institutions that are part of the RCE be linked through official obligations. The pledges which may be in form of letters or official reports are to be properly documented and integrate the principles of ESD and the vision of the RCE. Also, management structures could be used to implement the vision and goals of RCE. It is important that the RCE establishes a mechanism for decision making and proper communication arrangement that is suitable for the region, involves relevant players and is appropriate for attaining specified goals of the RCE [14].

Studies that have been carried out on RCEs have revealed different models of governance structures that have led to successful ESD activities and programs. In their RCE governance structure survey, [13] among other findings that the majority of RCEs are funded and accommodated within a university and are coordinated by a steering committee. The study did not address the outcomes of host universities' implementation of governance practice on ESD activities and programs. Other studies and reports discussed below highlight the implementation of governance practice on ESD activities and programs in various RCEs.

### 2.2 RCE Governance Practice Implementation on ESD Models

Different host universities of RCEs have implemented different models of governance practice to steer the operations of individual RCEs. This section looks at some examples of governance practice implementation on ESD and the impact on the success of ESD activities and programs in the particular RCEs.

A study report of RCE Saskatchewan by [15] identifies a management and governance organization that utilizes both administrative and interactive elements. The RCE, from its launch, has utilized a lightweight structure of institutional administration using working groups with similar themes with a focus on volunteerism. They continue to observe that with a virtual home and model of governance, the unique structure

ensures effective implementation of ESD and long- term successful outcomes for RCE Saskatchewan through the management of the University of Regina which hosts the RCE. The success of the RCE Saskachewan's governance practice has led to different projects taking place all across the RCE that help to promote excellence in ESD [15].

The RCE Greater Western Sydney (RCE-GWS) in Australia is hosted by the Western Sydney University. The university has facilitated the formation of a number of smaller working groups to focus on and create projects around their regional sustainability challenges. The leaders of each working group constitute a Working Group Committee which comprises of the central leadership of the RCE network and epitomises the interests of the participating members. The steering committee meets a minimum of three times per year. Western Sydney University provides the administrative support for the RCE-Steering committee and to the coordinators of each of its action groups during its term [16].

The Steering Committee has a rotating framework wherein every one of the fundamental associates takes a two-year turn overseeing administration and managerial duties. Continuously quality tracking and documenting improvements in ESD is a crucial strategy for coordination in the RCE. This enables the partners to see how the RCE and the effect of its ESD work show up practically speaking. Additionally, it helps them understand their activities and to visualize the grander image of RCE functions and where their work fits in [5].

A study report on RCE Makana indicates that the Education Faculty of Rhodes University is host to the secretariat of the Makana and Rural Eastern Cape RCE. The RCE Makana is governed by a forum which is managed and guided by a representative steering committee.  Both the forum and the committee are led by the Environmental Education and Sustainability Unit of Rhodes University's Department of Education. Implementation of ESD projects and initiatives of the RCE are decided by the forum which meets quarterly. The RCE partners with several student organizations, youth/women groups, research organizations, schools, local authorities, community centres among many more in ESD activities [17].

# 3. RESEARCH OBJECTIVES

The overall objective of the study was to assess governance practice implementation on education for sustainable development in host universities Regional Centres of Expertise in Kenya. The specific objectives of this study were-

i.    To assess the extent of RCE management structures implementation on education for sustainable development in host universities in Kenya.
ii.   To assess the extent of infrastructural and financial resources implementation on education for sustainable development in host universities in Kenya.

# 4. METHODOLOGY

The researcher employed a mixed methodology approach, using of both qualitative and quantitative methods and the concurrent model of triangulation with descriptive survey design. The target population was 428 respondents derived from eight RCEs which had been registered by the UNU. This comprised of 8 RCE coordinators, 270 Lecturers from departments of the host university that facilitate RCEs and heads/representatives of 150 RCE collaborating institutions. These included formal and non-formal education institutions and organizations that are affiliated with ESD practices and sustainability.

A study sample of 93 respondents was derived from three purposively selected RCEs. These were RCE Greater Nairobi hosted at Kenyatta University, RCE Mau Complex hosted at Egerton University and RCE Central hosted at Kimathi University. The study sample was constituted 22% of the total population, comprising of all the three coordinators of the purposively sampled RCEs, a simple random sample of 10 partnering institutions from each of the RCE and a purposive sample of 20 lecturers from each university from departments that support RCEs. Purposive sampling was used to in order to get respondents who were conversant with RCEs and could provide credible information. The sample was deemed adequate in line with [18] who avers that a sample of at least 10% of a population is deemed adequate for descriptive studies.

Self-developed questionnaires were used to collect quantitative data from the lecturers and heads/representatives of partner institutions. The

data was derived from the Likert questions. Which required the respondents to indicate their level of agreement or disagreement with statements provided ranging from 5 for strongly agree to 1for strongly disagree. Qualitative data was obtained through document analysis checklist and semi-structured interviews with the RCE coordinatorsas well as open ended questions in the questionnaires. Quantitative data was analysed descriptively using SPSS (version 23) using frequencies and percentages. Qualitative data from the open-ended question, document analysis guide and interview schedule was analysed thematically and presented in narrative form.

## 5. RESULTS AND DISCUSSION

Governance practice implementation on education for sustainable development.

Descriptive analysis was carried out using frequencies and percentages arising from variables derived from a 5-point Likert questions that sought the views on various issues pertaining to implementation of RCE governance practice from the RCE coordinators/lecturers of host universities and from heads/representatives of partner institutions. The statistical analysis with reference to the variables is presented in Table 1.

From the table, the analysis established that the Universities had supported the establishment of the RCE governance structures with 51 (92.76%) respondents agreed with the statement. On whether the University had availed offices for the RCE, 42 (76.31%) of the respondents agreed while 9 (16.36%)

were in disagreement. The establishment of an RCE governance structure and provision of office space is an important factor in enhancing ESD outcomes in the RCE. This agrees with the office space study by [19] that office space is one of the critical factors in managing an organization.

On host university facilitation of planning meetings for RCE stakeholders, 52 (94.6%) of the respondents agreed with the statement while 3(5.4%) disagreed. Host Universities had contributed in-kind donations to the RCE such as time, office resources, meeting space among others where a majority of 50 (90.9%) respondents agreed with 5(9.1%) disagreeing. This agrees with a report [20] on RCE Greater

Eastern Uganda where they underscore the need for universities to dedicate leadership positions, offices and centres to coordinate and ensure a strong focus on the university community partnerships through RCE platform in order to effectively achieve ESD activities and programs.

Host universities' mobilisation of funds for RCE ESD activities was agreed upon by 33 (60%) of the respondents while 22(40%) disagreed. On whether the university received funding from the government for RCE activities, only 17 (30.9%) affirmed the statement while 38(69.1) disagreed. This indicates that financial support to the host universities for ESD activities and programs in the RCE was minimal. The findings are in agreement with a study by [21] where only 15% of the institutions that responded indicated receipt of general financial support for ESD activities and programs.

On private sector financial support for the RCE activities, only 19 (34.5%) of respondents were in agreement while 36(65.5%) disagreed. The implication of this there was no substantial funding for RCEs from the private sector to support ESD activities and programs. The findings are supported by a survey on RCE governance practice implementation carried out by [13] where all the RCEs indicated funding as one of their main challenges. This consequently poses a challenge in implementation of ESD activities and projects in the RCE host University and region at large.

In order to encourage commitment, the RCE host Universities may request signed membership declaration from the partner institution/organization. The majority of respondents totalling 18 (60%) disagreed that this was the case in the studied RCEs while only 12(40%) agreed with the statement. The respondents also indicated that the RCE governance structures in existence had not helped in the implementation of ESD activities and programs in their institutions/organizations, with 22 (73.3%) disagreeing and only 8(26.7%) in agreement with the statement given. This indicates that the governance structures that had been put in place by the host university had not been effective in up scaling ESD activities and programs in the collaborating institutions. This results contrast with a report by [22] on RCE Saskatchewan governance model which has enabled partnering organizations in the region

**Table 1. Responses of lecturers on governance practice implementation on ESD**

| Statements | | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| The University has effectively implemented the | F | 9 | 42 | 4 | 0 | 0 |
| establishment of the RCE governance structures | % | 16.4 | 76.4 | 7.27 | 0 | 0 |
| The University has availed offices for the RCE | F | 22 | 20 | 4 | 8 | 1 |
| | % | 40 | 36.4 | 7.3 | 14.5 | 1.8 |
| The University facilitates planning meetings for RCE | F | 8 | 44 | 2 | 1 | 0 |
| stakeholders | % | 14.6 | 80 | 3.6 | 1.8 | 0 |
| The University has contributed in-kind donations to the | F | 11 | 39 | 3 | 2 | 0 |
| RCE such time, office resources, meeting space among | % | 20 | 70.9 | 5.5 | 3.6 | 0 |
| others. | | | | | | |
| The University promotes mobilization of funds for | F | 2 | 31 | 10 | 11 | 1 |
| implementation of RCE ESD activities | % | 3.6 | 56.4 | 18.2 | 20 | 1.8 |
| The University receives some funding from the | F | 1 | 16 | 10 | 21 | 7 |
| government for the implementation of RCE ESD | % | 1.8 | 29.1 | 18.2 | 38.2 | 12.7 |
| activities | | | | | | |
| The University receives some funding from the private | F | 1 | 18 | 12 | 18 | 6 |
| sector for the implementation of RCE ESD activities | % | 1.8 | 32.7 | 21.8 | 32.7 | 10.9 |

**Table 2. RCE Partners' responses on RCE governance practice implementation on ESD**

| Statements | | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| The host University requests signed membership | F | 1 | 11 | 0 | 17 | 1 |
| declaration from the institution/organization | % | 3.3 | 36.7 | 0 | 56.7 | 3.3 |
| The existing RCE governance structures has helped in the | F | 0 | 5 | 3 | 21 | 1 |
| implementation of ESD in the institution/organization | % | 0 | 16.7 | 10 | 70 | 3.3 |
| The host University facilitates acquisition of funding for RCE | F | 2 | 6 | 3 | 13 | 6 |
| activities in the institution | % | 6.7 | 20.0 | 10 | 43.3 | 20 |
| The host University requests formal commitment of | F | 2 | 13 | 3 | 12 | 0 |
| resources and engagement from the institution/organization | % | 6.7 | 43.3 | 10 | 40.0 | 0 |
| The host university RCE governance structure allows for | F | 5 | 19 | 3 | 1 | 2 |
| collaborative governance involving partners in dialogue, | % | 16.7 | 63.3 | 10 | 3.3 | 6.7 |
| problem solving and planning. | | | | | | |

achieve success in reinforcing and legitimising efforts in sustainability and ESD by bringing people together in an adaptable and self-defined network to promote ESD programs and activities.

Host universities had not adequately facilitated acquisition of funding for RCE activities in the partner institutions as indicated by 19 (66.3%) of the respondents who disagreed and only 11(33.7%) agreeing. From the responses given on whether the host University requested formal commitment of resources and engagement from the institution/organization, it was established that 15 (50%) of the respondents were in agreement while an equal number disagreed. However, it is clear that the host universities' management and the RCE governance structure had supported collaborative governance where partners were involved in dialogue, problem solving and planning as supported by 24 (80%) respondents with only 6(20%) disagreeing. [22] describes a collaborative governance process as

involving face to face dialogue, social learning, commitment to the process and trust building. These aspects support democratic practices with favourable social and relational outcomes which are essential for enhanced ESD activities and programs in the RCEs.

**Thematic analysis on governance practice implementation on education for sustainable development:** The qualitative data analysed in this section was obtained from open-ended questions in the questionnaires, document analysis and interviews with RCE coordinators. The results adduced from the responses on the type of governance structure adopted by the different RCEs indicated that all the three host universities had implemented a governance structure consisting of a coordinating/steering committee headed by a coordinator that ran the affairs of the RCE. It also emerged that the members of the committee perform the RCE duties as part of regular duties at the host

university. Working groups that address emerging issues in the RCE were also cited as part of the management of the RCEs. The RCE Greater Nairobi also had an RCE office with a secretary and an administrator. Others had desk offices where RCE work was integrated in other regular duties. The findings are supported by those of a survey on RCE governance [13] which established that 75% of the RCEs studied had a management structure comprising of coordinating/steering committee. They also established that 45.85% performed the RCE duties as part of regular job duties at the host organization and 39.58% had Working groups.

The researcher also set out to establish the management challenges and opportunities the host universities were facing in managing the RCE governance practice. It was established that there were fewer successes and more challenges that have been encountered. On successes, it was established that in RCE Greater Nairobi, the university participates in governance and has offered office space for the RCE. It also offers space for meetings and conferences. The university management has also supported the setting up of a secretariat with a board and a coordinator. A budgetary vote for the secretariat has also been created by the Kenyatta University management and funds allocated. This had enhanced ESD activities and programs in the university and region as a whole.

In the case of RCE Mau Complex the researcher established that the host university had not provided a physical office provided for the RCE. The RCE Mau cited also included the fact that the RCE leadership is representative of all stakeholders and that they are able to hold regular meetings to resolve any issues arising from ESD activities and programs in place. The RCE Central Kenya also did not have a physical office in place. They had however successfully brought together ESD stakeholders and practitioners in the region through regular meetings to share experiences on best practices in ESD.

From the responses obtained, challenges that the host universities faced in implementing RCE governance practice seemed to cut across all the three RCEs. Inadequacy of funds to sustain the RCE offices' operations and limited fundraising opportunities seemed to be a common challenge in all the host universities. Some respondents cited the challenge of not having a clear RCE governance structure. Lack of understanding of

roles in ESD activities and programs coupled with the perception of inadequate benefits for the university from RCE activity involvement was also cited as a challenge to the smooth running of RCEs and ESD activities and programs. Another impediment that came up from the responses is that there was no clear membership register of ESD practitioners and no clear constitution governing RCEs. The general feeling across the board seemed to be a need for more funds to be channelled into the RCEs by the Universities and the relevant government ministries in order to scale up ESD activities and programs. These findings are in line with those of [10] who affirm that RCEs in Asia Pacific faced challenges of making the concept of ESD and RCE understood by a larger audience and lack of funding [10].

The researcher further sought the views of heads/representatives of partner institutions on the challenges and/or opportunities that existed in RCE governance practice. The challenges cited included lack of clear resource mobilization structure/framework that inhibited adequate fundraising to support ESD activities and projects. This was further echoed by respondents who affirmed that the greatest challenge facing many RCEs was the loose network in regards to RCE governance structure which limited commitment when it came to resource mobilization or undertaking certain ESD activities and programs.

It was the view of some of the respondents that the RCE should be somehow autonomous or independent from the host institution (university) to ensure the RCE coordinator is not appointed by the Vice Chancellor but is elected by RCE members. Further views put forward were that RCE governance must be focused on activating all the stakeholders to be active partners in development and implementation of ESD change projects. This view is also supported by [23] who report that collaboration among host universities, other higher education institutes and other stakeholders might create important synergy for ESD implementation strategies. This calls for work and strategic plan, which most RCEs are inherently lacking as reported by [13].

To further augment the results obtained from the questionnaires, the researcher embarked on document analysis of the RCE UNU application documents to establish the governance structure proposed vis a vis the current one. In all the three RCEs studied, it was established that the

governance structures in place were largely the same as indicated in the application documents. The current RCE management structure however was found to consist of a national board that was under review as at the time of the study.

Other documents analysed included minutes of meetings in order to establish how often the RCE management held meetings and whether the host universities assisted in facilitating the meetings. It was established that the university management supported RCE meetings by providing meeting space, office resources and refreshments for the participants. The researcher found no documents showing evidence of funding from the government or private sector for the RCE. This poses a challenge to the smooth implementation of ESD activities and projects as funds are requisite for activities that create ESD awareness among the stakeholders. This was supported by the findings by [13] who established that only 18.75% of RCEs studied received funding from government and private sector.

From the responses adduced from the interviews with the RCE coordinators it was evident that the host universities had facilitated creation of an RCE management and leadership structure in all the three RCEs studied. There was a general feeling that the host universities had limited opportunities for mobilisation of funds in the RCEs thereby impeding successful ESD activities and projects. On the question of infrastructure, the coordinators also raised the concern of RCE offices, equipment and personnel.

The coordinators cited a number of challenges facing the management of the RCE governance practice implementation. One of the coordinators, C1 responded: -

> *"Many of the stakeholders are yet to internalize the governance and organizational principles of the RCE. There is lack of elements of strategic leadership resulting in RCE aspirations being minimally realized.*

**The second coordinator, C2 responded: -**

> "*RCE faces financial constraints in that there is a limitation of funds for secretariat activities and meetings.* An *RCE office should be established with director and recognized RCE members Board for the smooth running of the RCE"*

**The third coordinator, C3 had this to say: -**

> "*We need more funds to be channelled into the RCEs by the Universities and the relevant government Ministries.* "*RCE structures must be well laid down with clear roles and that the RCE should be semi-autonomous with power to raise own funds."*

The sentiments forwarded pose a major challenge of RCEs lacking direction in bringing together all the stakeholders in the network to support ESD change projects as well as sourcing of funds for the same. As [23] report, the UNU deliberately highlighted the involvement of IHEs in RCE efforts as a key to ensuring the sustainability and quality of emerging RCEs, and at the same time, as a means to enhance the role of higher education institutes in contributing to sustainable development.

**Mixing and interpretation of data on governance practice implementation on education for sustainable development:** The researcher triangulated and interpreted the results from the descriptive and thematic analysis of data. Both levels of analysis indicated revealed that the RCE host universities had made efforts to establish some form of governance for the RCE as indicated by responses from the lecturers. However, responses obtained from heads/reps of collaborating institutions/organizations revealed a contrary opinion with regard to stipulated terms of engagement with the RCE host universities on membership and governance structures. There was concurrence from responses derived from the responses given by both lecturers and representatives of partner institutions on challenges in mobilisation of funds for RCE activities in ESD. Both descriptive and thematic analyses concurred on the involvement of stakeholders in collaborative governance through involvement in dialogue, planning and problem solving for ESD activities and programs.

Thematic analysis of responses also agreed with the descriptive analysis on the implementation of RCE governance practice through the establishment of some form RCE governance structure by host universities. Inadequacy of funds to implement ESD activities and projects also came up in the thematic analysis. The analysis also shows concurrence that implementation RCE governance practice on ESD requires establishment of a governance structure with the requisite personnel and

infrastructure. This will result to well-coordinated ESD activities and programs in the RCE. The challenge of availability of funds, which was an impediment to enhancement of ESD activities and projects was apparent in both the descriptive and thematic analysis.

## 6. CONCLUSION

This study set out to assess governance practice implementation on ESD in host universities of Regional Centres of Expertise in Kenya. The study focus was to assess the extent of RCE management structures implementation and also the extent of infrastructural and financial resources implementation on education for sustainable development in host universities in Kenya.

The findings of the study revealed that the host universities' management had on average managed well the operationalisation of governance practice in the RCEs studied as put forward by UNU-IAS [24]. In all the three RCEs assessed, there was a coordinator and secretariat in place to run the affairs of the RCE alongside their other university duties. The downside was that some of the RCE partner institutions/organizations had not been well sensitized on the governance model of th RCE. The need to explore new governance models was suggested as the current ones were deemed not to have been effective enough as they are overshadowed by host university procedures and bureaucracy [12].

Provision of infrastructural and financial support was found to be low as only one of the host universities had provided a physical office for the RCE while the other two had none. This was found to be an impediment to realization of ESD as the officers prioritized their university duties over the RCE activities. Mobilization of funds for RCE activities in ESD was a major challenge cited by all the RCEs studied. This posed a problem in the effective implementation of ESD activities and programs in the host universities and RCE at large.

## 7. RECOMMENDATIONS

From the findings of the study, the researcher came up with the following recommendations.

1. The host universities' management may consider putting in place policies to make RCE governance and operations independent from the university through provision of infrastructure and personnel specifically for the RCEs.
2. Host universities' management to come up with innovative methods of raising funds from both government and private sector. The host universities' management could also facilitate the development of a strategic plan for RCEs and bring the County governments on board.
3. There is need for the RCE secretariat to include representatives from partners in the network.
4. A membership register for ESD practitioners and a clear constitution governing the RCEs is necessary for the host University and RCE secretariat to offer proper institutional management of governance practice in Kenya.

## CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

## ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

## ACKNOWLEDGEMENT

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1.  Kurapka E, Vaitkus R. The Role of University in Orienting Society towards Sustainable Development. Mykolas Romeris University, Vilnius; 2006.
2.  Bliss H. Institutional Management. Wisegreek, Conjecture Cooperation; 2020.

3.  Ali S. The Role of Good Governance Practices in Enhancing Service Delivery in Public Institutions in Tanzania: The Case Study of the Tanzania Electric Supply Company Ltd. Semantic Scholar; 2017.

4.  Gay R. Educational Research: An Introduction (5th ed.). New Jersey: Prentice Hall, Inc; 1996.

5.  Fadeeva Z, Payyappallimana P, Tabucanon M, Chhokar K. (Building a Resilient Future through Multi-stakeholder Learning and Action: Ten Years of Regional Centres of Expertise on Education for Sustainable Development.UNU-IAS 5-53-70 Jingumae Shibuya-ku, Tokyo. 20014;150-8925 Japan.

6.  UNESCO United Nations Decade of Education for Sustainable Development, 30 March–2 April 2009. Bonn, UNESCO. Swansea, Whales; 2009.

7.  Mkawale S. Politics of Mau Forest return to haunt the nation; 2018.

    Retrieved:https://www.standardmedia.co.ke.

8.  Garcia J. Assessment of Education for Sustainable Development in Universities n Costa Rica: Implications for Latin America and the Caribbean. Pepperdine University; 2010.

9.  UNU. Regional Centers of Expertise in Education for Sustainable Development; 2002.

10. National Environment Management Authority. Education for Sustainable Development: Country Report. Nairobi, Kenya; 2012.

11. Mwaka M, Kafwa V, Musamas J, Wambu B. The National Goals of Education in Kenya: Interrogating the Achievement of National Unity. Journal of Education and Practice. 2013;(4): 149-156.

12. Coccia M. Bureaucratization in Public Research Institutions. Minerva. 2009; 47(1):31-50.

13. Filho W. Education for Sustainable Development in Higher Education: Reviewing Needs. HAW Hamburg, Hamburg, Germany; 2015.

14. Fadeeva Z. From centre of excellence to centre of expertise: regional centres of expertise on education for sustainable development", in Wals, A.E.J. (Ed.), Social Learning Towards a Sustainable World: Principles, Perspectives, and Praxis, Wageningen Academic Publishers, Wageningen; 2007.

15. Dahms T, Mcmartin D, Petry R. Saskatchewan's (Canada) regional centre of expertise on education for sustainable development. Journal of Education for Sustainable Development. 2010;4(1):51-59.

16. Ofei-Manu P, Shimano S. Capacity Building for Sustainable Living through ESD-Based Learning in a Regional Centre of Expertise (RCE); 2012.

17. Johnson, A. Higher education for sustainable development – Final report of International Action Research Project. Forum for the Future; 2007.

18. Sheng Y. What is Good Governance? United Nations Economic and Social Commission for Asia and the Pacific. Bangkok 10200, Thailand; 2015.

19. Mohammed M, Asmoni M. Office space study: A review from facilities management context. Journal of Technology. 2015;75 (10):85-96.

20. Andama E, Oyege I. Main Streaming Environment and Sustainable Development Issues in University Academic and Non-Academic Programs through RCEs: The Case of Greater Eastern Uganda-RCE; 2017.

    Retrieved from http://www.rcenetwork.org

21. Escrigas C, Polak E, Jegede O. The Promotion of Sustainable Development by Higher Education Institutions in Sub-Saharan Africa, Survey Report. Guni, IAU and AAU joint publication; 2011.

22. Kenya Institute of Education. Baseline Survey on the Awareness of Education for Sustainable Development in Learning Institutions in Kenya. Kenya Institute of Education, Nairobi; 2012.

23. Fadeeva Z, Mochizuk Y. Mobilising for Education for Sustainable Development: Towards a Global Learning Space based on Regional Centres of Expertise. Yokohama: UNU–IAS; 2005.

24. Smith K, Stamberger J, Shiota K. RCE Structure and Governance Survey: An Analysis of Results and Recommendations. RCE Greater Portland; 2016.

_____

---