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## Role of local government leaders on effective decision making at central district of Zanzibar

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### Abstract

The study focused on role of local government leaders on effective decision making at central district of Zanzibar. The specific objective was to determine the relationship of local government leaders' role of emotional Intelligence and effective decision making. Descriptive research design which involved quantitative approach was applied. The population was 10,725 while the sample consisted of 383. Purposive and random samplings were used in selecting the sample while questionnaires were used to collect data. Analysis of data was done by frequency distribution, percentages and correlation analysis. The findings showed that there was positive significant relationship between local government leaders' role of emotional Intelligence and effective decision making. The correlation coefficient was 0.740, which implied that, there is strong positive relationship between leader's role of emotional intelligence and effective decision making. The study recommended, government should increase workshops and seminars on emotional intelligence for local government leaders to enhance their capacity of making effective decisions.

**Keywords:** role of emotional intelligence, local government leaders, effective decision making

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### Introduction

The major role of local governments is mainly to enhance living standard of the population, and therefore, the local government leaders are mandated to make decisions on social, political and economic issues for the sake of the well-being of the community (Thapa, 2020) <sup>[25]</sup>. It is from this context, local government leaders are agents of decision making for the community. In respect of local government leaders being agents of decision making Kaufmann et al., (2014) <sup>[18]</sup> outlined one of the important aspects of leaders as role of emotional intelligence. According to Kamarudin et al., (2012) <sup>[16]</sup> the policy for involving local leaders in decision making is aimed at making sure that decision passed are effective and are in line with the objectives and needs of the society. In developed countries local government leaders make key decisions due to their level of devolution and advanced constitutions (Katarzyna and Beyer, 2021) <sup>[17]</sup>. Countries like Australia and China, the local government leaders make sure that decision made are appropriate and effective since the decisions affect public affairs in one way or another (Zhang and Kajikawa 2021) <sup>[27]</sup>. In this respect the leaders in developed countries are obliged to use emotional intelligence in order to come up with the best decisions possible. In fact in these countries such as china and Britain government leaders resign and sometimes taken to court because of a bad decision they undertook.

Most countries of Africa such Kenya, Tanzania, Uganda, Burundi Rwanda Ethiopia, South Africa etc has incorporated local government leaders in contributing and making decision affecting their areas (Babeiya, 2016) <sup>[6]</sup>. The United Republic of Tanzania decentralized its powers and responsibilities to the local authorities to ensure sustainable social and economic development, thus giving local government leaders in the local authorities mandate to make decisions affecting their areas (Mwaipopo and Mbuti, 2021). The local government leaders are seemed significant in decision making with a view to thrashing out particular problems and exploring possibilities of excellence in areas such as trade, industry, transport and communications, and health. Local leaders are therefore regarded as development engine of the local community (Marita and Mario, 2004). In Kenya for example according to Patrick and Willy (2017) explained the Members of County Assembly (councilors) in the year 2019 made a decision to close industries which were found to have remitted undervalued taxes. With that decision many major industries were closed. This later was found to have been a wrong decision by the councilors due to the two major consequences; first, once the industries were closed so many people were rendered jobless, second, the county government now lost the taxes including the undervalued tax from the industries. In the long run the counties could not sustain its activities due to lack of revenue. Thus, these made difficulty for the residents of the county to get services from the county local government. Later it was found that the correct decision would have been to negotiate on how the industries could slowly start paying their actual tax instead of closing them. This could have continued to make flow of revenues as the companies put efforts to pay their accrued taxes.

In the same vein in Uganda Luwero District Council which is a local government unit made decision to use three-year rolling plan, which are presented in form of work plans. This later was found that, it does not address the strategic long-term development interests of the district (Muyomba et al., 2018) <sup>[21]</sup>. This affected service delivery to the populace in Luwero district. This forced the District council to make another decision and adopt a strategic plan of seven years, this was credited by the people as it outlived the tenure of current occupants of the offices and that was able to be continued by the coming leaders after the five year mandate expires. The three year rolling plan was highly criticized as new leaders shifted their work on new plans instead of continuing with the started programmes since there was no binding long term strategic plan for the district causing so many programs to be left incomplete. Subsequently, in the year 2022 the Ubungo Municipal Council (UMC) issued a directive to all buses to drop and pick up passengers at the Magufuli Bus Terminal in Mbezi Louis, Dar es Salaam. This highly received criticism from commuters arguing the bust terminal was far from town where they get other vehicles to their home areas and that the government was losing nothing when bus owners opted to help commuter by dropping them in their private terminal stations in the city center. That decision caused a lot of suffering to commuters and was later rescinded (Daily News, Newspaper, 2022) <sup>[7]</sup>.

In Zanzibar, there have been some challenges with decisions made by local leaders such as Leaders from North Unguja which is in North 'A' District Council made decision to lease or sell land to investors inappropriately. This caused disputes between local community and the investors (*Tanzania Daily News*, 2017) <sup>[23]</sup>. Several initiatives to promote the profile of local governments decision making have been undertaken and in the process the Revolutionary Government of Zanzibar (RGOZ) decided to adopt the local government reforms as a strategy to strengthen the institutions and enhance the democratic process in planning for and monitoring local development (Shadrack, 2017) <sup>[23]</sup>. The local governments are managed through the Ministry of State (Presidents Office), Regional Administration, Local Government and Special Departments (MRALGSD). The Local Government system in Zanzibar is guided primarily by the Local Government Act (Act No.7, 2014). The implementation of decentralization in Zanzibar is focused on effective use of local government in the development process to deliver more efficiently public services, effective local development, and effective monitoring and supervision of local development plans, improved government accountability. However, there have been challenges in decision made to enhance development resulting to problems such as difficulties of balancing local budget realities, prioritizing issues, problems in social care, schools, housing, planning and waste collection Khamis, (2013) <sup>[19]</sup>. The local authorities function as per the law however depends on the decision undertaken by the local government leaders. Therefore, these discrepancies in service delivery by the local authorities demonstrate ineffective decisions undertaken by the local government leaders and thus put in question the local government leader's emotional intelligence during decision making. Therefore, this study is set to investigate the relationship between leader's role of emotional intelligence and effective decision making.

### 1. Statement of the Problem

Local government are said to be the nucleus of development practice everywhere in the world (Fasihi and Babune, 2021) <sup>[11]</sup>. Local authorities in Zanzibar are mandated to maintain law, order and good governance; promote the economic and social welfare of the people in their jurisdiction; and ensure effective and equitable delivery of quality services to the people. These functions cannot be performed efficiently without local government leader's effective decision making. According to Ahmed and Wang (2018) <sup>[2]</sup> there has been numerous challenges in decisions undertaken by local authority leaders leading to tribulations such as lack of priorities in budgeting, policy making discrepancies, wrong planning decisions, poor implementation local taxes collection, poor handling of social problems, poor waste management etc. This casts doubt on the contribution of role of emotional intelligence on local government leader's effective decision making. Therefore, this study assessed the relationship between leader's role of emotional intelligence and effective decision making in Central District of Zanzibar.

### 2. Specific Objectives

To determine the relationship between local government leaders' role of emotional Intelligence and effective decision making in Central District of Zanzibar

## Literature Review

### 1. Role of Emotional Intelligence and leadership

Fasihi and Babune (2021) <sup>[11]</sup> explained emotional intelligence as the ability of a leader to understand, use, and manage your own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict. Suraj and Takale (2019) <sup>[22]</sup> defined emotional intelligence as our capacity to be aware of, to control, and to express emotions. Ershadi & Eskandari, (2019) <sup>[9]</sup> argued that leaders should use emotional intelligent when making decisions because it helps reducing conflict from the followers of whose decision is made. Katarzyna and Beyer (2021) <sup>[17]</sup> argued that the ability to connect emotionally with people is to lead with emotional intelligence, as is essential in effective decision making. This is supported by Obi & Agwu, (2017) <sup>[10]</sup> by stating that the decisions are made by leaders make people feel can impact their engagement, as well as their productivity.

Hudson & Singh, (2017) <sup>[14]</sup> stated that emotions can weave through every work situation experience by people, including: Change and uncertainty, Interactions with colleagues, Conflict and relationships, Effort and burnout and Achievement and failure. A study by Joensuu and Niiranen (2019) <sup>[15]</sup> investigated if different interaction patterns of political leaders influence how they perceive their duties as political leaders. The study used survey method and data was collected by a questionnaire from political leaders in six local government organizations in Finland. The political leaders were then grouped into three using factor analysis and k-means clustering according to their interaction styles in their positions in the strategic level decision-making. The results suggest that the three groups among the political leaders think and act in different ways. The differences are not based on political opinions, but on attitudes towards the decision-making process and the political leaders' modus operandi of using emotional intelligent in their interactions.

## 2. Effective decision making

Decision making is the process of making choices by identifying a decision, gathering information, and assessing alternative resolutions. Using a step-by-step decision-making process can help you make more deliberate, thoughtful decisions by organizing relevant information and defining alternatives (Kaufmann et al., 2014) <sup>[18]</sup>. Massachusetts, (2021) opines effective decision making is the process through which alternatives are selected and then managed through implementation to achieve business objectives. Thus, effective decision is appropriate and clear values aligned objective and relevant.

Suraj & Takale (2019) <sup>[22]</sup> researched on the decision making process in an organization for effectiveness in India. The researcher embarked on six important steps useful for organization effectively making decision. Descriptive research design was used. A questionnaire was used to collect data. The study found that the six steps affected effectiveness of decision making. The steps were: Defining the problem (37%), Analyzing the problem (45%), Developing alternative solutions (30%), Deciding upon the solution (50%), Converting the decision into effective action (22%) and Evaluation (20). The mean ranges were between 3.52 and 4.4. These previous study was on effects of decision making steps on effectiveness of decision.

Katarzyna and Beyer (2021) <sup>[17]</sup> did a study on Determinants of the decision-making process in organizations Szczecin, western Poland. The authors conducted relevant literature review, inductive and deducting reasoning and 29 in-depth interviews (IDI). The research was carried out in 23 local organizations with managers of various levels. The in-depth interviews were structured and were conducted in the form of face-to-face personal conversations. The managers identified the resources held by the company, its business objective and the economic account as the most important economic factors influencing the decision-making process. Leadership style and organizational structure have the most influence over the efficiency of decision making.

Kamarudin et al., (2012) <sup>[16]</sup> conducted a study that proposed a Model in Fundamental of Decision Making Process at Local Government Level in Kuantan Municipality Council. The study was descriptive in nature and it indicates that most Councilors perceived the decision-making is a complex process, by referring to the second and third level of formal sequences of steps in the decision-making process. The study proposed a model of decision making-process for greater performance in decision making at the local government with thirteen factors. The study helped in getting a good strategy of decision making.

## Methodology

The study was conducted at Central District of Unguja Zanzibar. Specifically, the study was done in four shehas of the Central District which are shehas of Chakwa, Uroa, Marumbi and Pongwe Pwani. The reason for choosing Central District is due to that, there have been some questions by the residents over inconsistency decision on public issues by the local government officials especial of land, fishing, tourism, forest etc (District Commissioner Speech, 2022). The design used was descriptive research design as it gave description of the reality as it exists and also results in the formulation of important principles of knowledge and solutions to the problem investigated (Saunders et al., 2009). The design involved quantitative research approach in order to determine the relationship of leaders' role of emotional intelligence and effective decision making. The population comprised of the total number of people from four selected shehas of Chakwa, Uroa, Marumbi and Pongwe Pwani in Central District of Zanzibar which 10,716 (Census, 2022), Ward counselor 8, and one Mayor which totaled to 10,725 people. A sample size of 383 was used as calculated by Yamane (1967) formula (Kothari, (2004). Purposive sampling was used to select the mayor (1), all the ward Counselors (8), and Sheha heads (4) because they are the local government leaders in the Central District. Random sampling was used to select participants from the general public. This helped to give every member of general public a chance to participate in the study. A questionnaire was adopted to collect the information because of its low cost, and respondent have adequate time to well think out answers (Amin, 2005). The data was analyzed by use frequency distribution, percentages and correlation analysis.

## Findings

### 1. Response Rate

The researcher distributed the questionnaire and set dates to collect them. The Table 1 shows the response rate of the questionnaires.

**Table 1:** Response Rate

Gender	Questionnaire Distributed	Returned Questionnaire	Unreturned Questionnaire	Proportion of Un-returned: Distributed Questionnaire (Percent)	Response Rate (Percent)
Male	220	204	16	7.3	90.1
Female	163	141	22	13.5	100
Total	383	345	38		

Source: Researcher, (2022)

The study targeted 383 respondents from the total population 10,725 in the central district. However, when the questionnaires were distributed to the 383 respondents, 38 questionnaires were not returned as shown in Table 1. Mugenda and Mugenda (2003) observed that a response rate of more than 30% of the target sample representative. In this study 45 translated to 90.1% which surpasses the minimum set by Mugenda and Mugenda (2003). Thus the researcher observed that the response rate was representative.

## 2. Demographic characteristics of respondents

This subsection summarizes findings of characteristics of respondents. The demographic characteristics included gender, age, and level of education. Gender was focused in order to know the distribution males and females who participated carefully to avoid gender bias. The age was determined in order to check whether all ages participated in the study. The education level was considered in order to gauge how capable were the respondents in answering the questions in the questionnaire. The Table 2 shows the results.

**Table 2:** Demographic characteristics

Item	Frequency	Percentage (%)	Cumulative (%)
Gender			
Male	204	59.1	59.1
Female	141	40.9	100
Age			
18-19 years	30	8.7	8.7
20-30 years	80	23.2	31.9
31-40 years	100	29	60.9
41-50 years	117	33.9	94.8
51- 60 years	10	2.9	97.7
61 and above	8	2.3	100
Highest academic Qualification			
Below Secondary Education	0	0	0
Secondary Level	23	6.7	6.7
Diploma Level	170	49.3	56
University Degree	105	30.4	86.4
Post Graduate	47	13.6	100

Source: Researcher (2022)

### Gender

Table 2, above presents gender of the respondents in terms of the returned questionnaires, majority were males consist of 59.1% compared to a number of females who were 40.9%. This implies that more data was obtained from men compared to women.

### Age

Table 2 showed that 8.7 percent of the participants were aged 19-19 years, 23.2 were aged 20-30 years, 29 percent aged between 31-40 years, 33.9 percent aged between 41-50 years, 2.9 percent aged between 51- 60 years and 2.3 percent were aged 61 and above. The result shows that all ages participated in the study.

### Level of Education

Educational qualification was an important factor to be determined in the current study. The researcher examined the educational level of participants to seek their ability to think critically on various issues in decision making. Table 2 illustrates that 6.7 percent had a Secondary Level education, 49.3 percent possessed Diploma Level, and 30.4 percent had University Degree, while 13.6 percent had Post Graduate level of education. The data implied that majority of the participants had an education to understand the idea of making decisions.

## 3. Relationship between the leaders role of emotional Intelligence and effective decision making

The researcher gave the respondents statements depicting government leaders' role of emotional Intelligence on making effective decisions. They were advised to indicate how they agreed or disagreed with the statements. The response scale was: 1- Strongly Agree, 2- Agree, 3 Neutral 4- Disagree, 5- Strongly Disagree. The statements

were built on aspects of emotional intelligent which are: self-awareness, self-regulation, motivation and empathy (Ngussa & Gabriel (2017). According to Agebure (2017) <sup>[1]</sup> by Self-awareness is the ability to focus on oneself and how the personal actions, thoughts, or emotions do or don't align with your internal standards. The author stated that it is part of emotional intelligence. (Ngussa & Gabriel (2017) also wrote that self awareness is being able to focus on something positive when in a negative situation. Highly self-aware Individual, can objectively evaluate oneself, manage emotions, align behavior with values, and understand correctly how others perceive. Ngussa & Gabriel (2017) also listed self regulation and motivation on issues as part of aspects of emotional intelligence. The results are shown in Table 3 below.

**Table 3:** Response on aspects of role of emotional intelligence

Statement	S A		A		N		D		SD		Totals	
	F	%	F	%	F	%	F	%	F	%	F	%
Self-awareness leads effective decision making process.	180	52.2	40	11.6	40	11.6	50	14.5	35	10.1	345	100
Self-regulation leads effective decision making process	167	48.4	35	10.1	47	13.5	48	14	48	14	345	100
Leader's motivation leads effective decision making process.	184	53.3	50	14.5	53	15.4	32	9.3	26	7.5	345	100
Leader's empathy leads effective decision making process	177	51.3	70	20.3	27	7.8	42	12.2	29	8.4	345	100

Source: Field Data (2022)

The results in Table 3 show that on the statement that Self-awareness leads effective decision making process had 220 respondents equal to 63.8% who observed either strongly agreed or agreed. The Self-regulation leads effective decision making process had 202 respondents equal to 58.5% who observed either strongly agree or agreed The statement Leader's motivation leads effective decision making process had 234 respondents equal to 67.8% who either observed strong agreed or agreed and the statement Leader's empathy leads effective decision making process had 247 respondents equal to 71.6% who either observed strongly agreed or agreed. The results implied that the aspects role of emotional intelligence contributed to effective decision making. These results were similar the findings of Ugoani (2018) <sup>[26]</sup>.

The researcher also conducted correlation analysis to determine the relationship between the role of emotional intelligence and effective decision making. The results are shown on Table 4.

**Table 4:** Correlation between leaders role of emotional intelligence and effective decision making

		role of Leaders emotional intelligence	Effective decision making
Role of Leaders emotional intelligence	Pearson Correlation	1	.740**
	Sig. (2-tailed)		.000
	N	345	345
Effective decision making	Pearson Correlation	.740**	1
	Sig. (2-tailed)	.000	
	N	345	345

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher (2022)

Results in Table 4, shows the correlation coefficient was 0.740 which implies that there is relationship between leaders role of emotional intelligent and effective decision making. The relation is significant since the p-value is 0.01 less than 0.05. On the other hand the coefficient is positive indicating positive significance of the relationship. This implies that increase of leader's role of emotional intelligence in making decisions will increase effectiveness of the decision made. Also, any decrease in leader's role of emotional intelligence in making decision then the effectiveness of the decisions made will decrease as well. The results concurred with the results of Ajetunmobi et al., (2020) <sup>[3]</sup> and Ayeni (2018) <sup>[5]</sup>. Ayeni, (2018) <sup>[5]</sup> stated that in many countries many governments organize for the leaders short courses for emotional intelligence. This is aimed to boost their degree of making effective decisions during their work. This position was also observed by Dampson and Broni, (2018) <sup>[8]</sup> who observed any leader be it what level of leadership should be in a position to utilize emotional intelligent in order to make effective decisions. The results seemed to differ with the results of Hammad, (2017) <sup>[12]</sup> as the findings showed slightly lower relationship of coefficient of 6.4. However, this investigation was on teachers in secondary schools. The researcher of this current study explained this difference to the fact teachers in secondary school teachers deal with teenage students and due to their characteristic behavior at that age, teachers are likely not to be guided by their emotional intelligence during decision making rather are guided by rational decisions in order to contain the students.

### Conclusion

Based on the findings, the researcher concluded that there was a strong relationship between the local government leaders' role of emotional Intelligence and effective decision making. This was evidenced by the high correlation coefficient of 0.740. The relation is significant since the p-value is 0.01 less than 0.05. The conclusion concurred with (Hudson & Singh, (2017) <sup>[14]</sup>, Ershadi & Eskandari, (2019) <sup>[9]</sup> and Agebure, (2017) <sup>[1]</sup>.

### Recommendation

The study recommended that the government should increase workshops and seminars on emotional intelligence to be attended by the local government leaders. These would equip the leaders with current emotional intelligence knowledge to apply when making decisions and thus achieve effective decisions.

### References

1. Agebure AB. The state of teachers' participation in decision making in public senior secondary schools in the Bolgatanga municipality of Ghana. *Journal of Education and Practice*,2017:4(22):162-174. [www.iiste.org](http://www.iiste.org).
2. Ahmed SM, Wang B. Is Zanzibar Government Succeed in Achieving Good Governance Practices? *International Journal of Academic Multidisciplinary Research (IJAMR)* ISSN: 2000-006X,2018:2(12):36-46. <https://philarchive.org/archive/AHMIZG>
3. Ajetunmobi GF, Oladejo MA, Oladejo MA. Participatory management. Professional development and teachers job performance in public secondary schools in Ogun State, Nigeria. *Journal of Learning for Development*,2020:7(2):161-173.
4. Amin. Proposal & Thesis writing; An Introduction: Pauline Publication: Kampala Uganda, 2005.
5. Ayeni AJ. Principals decision making strategies and teachers productivity in secondary schools in Ondo central senatorial district of Ondo state, Nigeria. *Global Journal of Management and Business Research*,2018:18(10):19-30.
6. Babeiya E. Local Government in Tanzania and the Legacy. University of Dareslaam,2016:43(1). <https://journals.udsm.ac.tz/index.php/ar/article/view/127>
7. Daily News, Newspaper Magufuli Bus Terminal: RC clarifies boarding confusion. Tanzania Standard Newspaper Limited. Dar es salaam.<https://dailynews.co.tz/magufuli-bus-terminal-rc-clarifies-boarding-confusion>, 2022.
8. Dampson DG, Broni AA. Teacher participation in school decision making in Ghananian basic schools, looking back and moving forward, what stake holders' say. *Journal of Educational Studies*,2018:5(2):91-102.
9. Ershadi M, Eskandari D. Investigating the role of strategic thinking in establishing organizational excellence model: A moderating role of organizational forgetting. *The TQM Journal*,2019:31(4):620-640.
10. Obi JN, Agwu E. Effective decision-making and organizational goal achievement in a depressed economy. *International Journal of research and Development Studies*,2017:8(1):1-21.
11. Fasihi MS, Babune GS. Effectiveness of Local Government Political Leaders in Implementation of Their Roles in Zanzibar Tanzania. George Julius Babune's Lab, 2021. <https://www.researchgate.net/publication/354006134>
12. Hammad W. Decision domains and teacher participation. A qualitative investigation of decision making in Egyptian schools. The qualitative report. *International Journal of Modern Education Research*,2017:22(9):2478-2493.
13. Haradhan M. Two criteria for good measurements in research: Validity and reliability. *Journal of Munich Personal Repec Archive*, 2017.
14. Hudson D, Singh G. Expert medical decision-making: How the data-frame theory can explain physician sense-making. In *ITCH*, 2017,167-171.
15. Joensuu N, Niiranen V. Political Leaders' Experiences of Local Council, Board and Committee Work and Its Challenges in Finland *Administrative Sciences*,2019:9(4):77. DOI: 10.3390/admsci9040077
16. Kamarudin N, Zakaria Z, Hussin Z.. A Proposed Model in Fundamental of Decision Making Process at Local Government Level. *Asian Social Science Journal*, 2012. doi:10.5539/ass.v8n8p96. URL: <http://dx.doi.org/10.5539/ass.v8n8p96>
17. Katarzyna K, Beyer K. Determinants of the decision-making process in organizations. *Procedia Computer Science*,2021:192(6):2375-2384. DOI: 10.1016/j.procs.2021.09.006. <https://www.researchgate.net/publication/355023858>
18. Kaufmann L, Meschnig G, Reimann F. Rational and intuitive decision-making in sourcing teams: Effects on decision outcomes. In: *Journal of Purchasing and Supply Management*,2014:20(2):104-112.
19. Khamis HK. Performance and accountability of local government authorities: a case study of Urban/West region in Zanzibar. Dodoma: The University of Dodoma, 2013. <http://hdl.handle.net/20.500.12661/1494>
20. Kothari C. *Research Methodology*. (2<sup>nd</sup> ed.). New Age International Limited, New Delhi. India, 2006.
21. Muyomba LT, Eugene GS, David S, John S. Local Government Councils Performance and the Quality of Service Delivery in Uganda: Luwero District Council Score Card. *ACODE Policy Research Series*, No. 38. Kampala, 2018.

22. Suraj P, Takale VD. To Study the Decision Making Process in an Organization for its Effectiveness. The International Journal of Business Management and Technology, Volume 3 Issue 1 January - February 2019 ISSN: 2581-3889, 2019.
23. Shadrack J. Local Government Authorities in Tanzania. School of law UDSM, 2017.
24. Tanzania Daily News Leaders in Zanzibar Banned From Selling Land, *Dar es Salaam*, 2017. <https://allafrica.com/stories/201606150923.html>
25. Thapa I. Local Government: Concept, Roles and Importance for Contemporary Society. DOI: 10.13140/RG.2.2.23009.33123. Master in Public Administration (MPA) Public Administration Campus, Tribhuvan University, 2020. <https://www.researchgate.net/publication/342876251>.
26. Ugoani J. Effective management decision making and operational effectiveness in Nigeria. *Amity Business Journal*, 2018;7(2):1-8.
27. Zhang and Kajikawa Y. Editorial: Advanced Analytics and Decision Making for Research Policy and Strategic Management, 2021. Doi.org/10.3389/frma.2021.778622. <https://www.frontiersin.org/articles/10.3389/frma.2021.778622/full>