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# ***Public Sector Greenness and Cleanliness in Ethiopia: A Case Study of Government Organizations in Adama and Bahir Dar Cities, Ethiopia,*** Zerihun Doda<sup>1\*</sup> & Mulugeta Worku<sup>2</sup>

## **Abstract**

*Across the globe, calls for clean, green, and environmentally sustainable public sectors are growing louder, driven by the urgent need for a sustainable society, environment, and green development. These sectors act as crucial engines, both coordinating actions and promoting accountability across the private, government, and civil society spheres. However, in the Ethiopian context, information remains scarce on how employees and customers perceive the link between sustainability, clean and green environments within the public sector, and how these environments impact employee work motivation and productivity. This study dives deep into these questions, investigating the state of sustainability ethics and green/clean public sector maintenance in Ethiopia. It examines employee awareness, the challenges of building and running such workplaces, and ultimately, the perceived effects of clean and green working environments on the Ethiopian public sector. Employing a Concurrent Mixed Methods Design, the study utilizes both quantitative surveys with employees and customers and qualitative interviews with leadership positions. The findings reveal multifaceted impacts of green and clean public services, with the most resounding theme, supported by existing research, being the direct link between sustainable workplaces and higher productivity and success. These positive effects manifest in various ways, from increased employee and customer satisfaction, enhanced commitment and productivity, and the promotion of peace and stability, to laying the foundation for a healthy and productive society.*

Keywords: Green public sector, clean working environment, sustainability ethics, effects, employee productivity, Ethiopian public sector

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## **Background and Introduction**

Across the globe, a pressing need for sustainable societies, environments, and green development has emerged. Public sectors are key players in this movement, acting as engines of action and accountability across private, government, and civil society spheres (Department for Business, Energy & Industrial Strategy, 2017; The UN, 2011; World Bank Group, 2019). Anthropocentric environmental crises and societal changes brought on by changing environmental conditions present some of the greatest challenges we face (Catton Jr. & Dunlap, 1978; Lueck, 2007). Unsustainable development, environmental problems, and climate change, with their impacts on societal well-being and development, are high on the international agenda (Conway & Schipper, 2011; Dove, 2014). In response, environmentally sustainable living and working practices have become crucial components in the fight against climate change. Scores of the Sustainable Development Goals (SDGs) directly or indirectly call for changes towards greener, cleaner, and more sustainable living, highlighting the role of public sector organizations in driving this change through policy formulations, coordinating societal efforts, and implementing policies (Millennium Ecosystem Assessment, 2005; UN, 2015).

In recent years, various initiatives by UN agencies and countries have advocated for sustainable, greener, and cleaner practices in the public sector. This includes calls for designing the public sector to promote clean innovation, leading the way towards sustainable and climate-resilient practices, and fostering collaboration between public, private, and third sectors (Brendan Haley, 2016). The idea of green and clean economic development, with technological innovation at its core, has become paramount in current discourses (The UN, 2011). A multitude

of initiatives now support "green, clean, resilient" paths for developing countries as they pursue poverty reduction and development in a fragile environment (World Bank Group, 2019).

Public sectors are at the forefront of these endeavors. Emerging areas like green procurement, aimed at sustainable property purchasing and administration, are gaining traction (Oshani Perera, 2011; Testa et al., 2016). Green building development and project management are also actively discussed, particularly in the US where public sectors are encouraged to embrace green practices in their capital projects (Pearc & DuBose, n.d.). Additionally, initiatives for green investment and financing align public sectors with the SDGs.

Ethiopia, too, has embraced this shift. Relevant articles of the Constitution, Environmental Policy, and various proclamations set standards for environmental rights and responsibilities of citizens and the public sector (FDRE, 1995; FDRE EPA, 1997). However, these often remain principles rather than realities (Keeley & Scoones, 2000), sometimes imposed for securing grants (Ruffeis et al., 2012). Nevertheless, recent national development documents call for combating climate change and promoting sustainable practices. Regulations guide development projects towards environmentally friendly approaches, requiring them to incorporate these principles in their design and execution (DEVELOPMENT BANK OF ETHIOPIA, 2017; Ethiopian Investment Authority, 2018; Ministry of Environment, Forest and Climate Change, 2015).

Some countries, like Singapore, have implemented practical responses through Clean and Green Policy initiatives. These involve public education, spot checks, and competitions to motivate greener and cleaner public spaces (McDonald, 2018). Singapore's success serves as a model for other countries.

Similarly, Ethiopia has seen growing calls for greener and cleaner public spaces through nationally spotlighted activities. Tree-planting campaigns and monthly cleaning drives highlight a movement towards a more modern, cleaner, and greener public sector. This includes a focus on clean and green government buildings, office equipment, and facilities (FDRE Office of the Prime Minister, 2019). Despite these promising efforts, a key gap remains understanding employee and customer perceptions of the impact of these green and clean initiatives within the Ethiopian public sector. While studies on civil service ethics or service effectiveness exist, little attention is paid to this crucial aspect.

Therefore, further research is needed to investigate:

- How existing national policy instruments and frameworks promote environmentally sustainable public sector practices.
- How civil servants and customers perceive the green and clean ethos within the public sector.
- The challenges faced in implementing these green practices.
- The impact of green and clean working environments on employee and customer perceptions, including work motivation and productivity.

Addressing this gap can provide valuable insights into building a truly green and clean Ethiopian public sector, benefiting both employees and the nation.

## **Methodology**

### **Research Design**

The study adopts a mixed-methods approach, merging quantitative and qualitative data collection and analysis. It follows a Concurrent Equal Weight Mixed Model, meaning both

methods are employed simultaneously and with equal weight in terms of timing and analysis. This cross-sectional, descriptive strategy involves collecting data at a designated point in time across various demographic categories. The results are then presented and discussed in an integrated and complementary manner.

### Sampling and Sample Size

#### Quantitative Survey

A multi-stage sampling process was used to select both cities and public sector organizations within those cities. In stage 1, Adama City and Bahir Dar City were purposively chosen based on their relevance to the study. Next, stage 2 selected appropriate public sectors through purposive sampling, encompassing the Municipality, Water and Sewerage Service Office, Urban Agriculture, Environment & Education Departments, Health Department, and Urban Greenery & City Beautification Offices. Stage 3 then chose specific offices within these sectors, while stage 4 included all eligible employees and customers at those locations until the required sample size was reached.

The sample size for employees was determined using a 95% confidence interval and a 3% margin of error, accounting for a multi-stage sampling process. A similar calculation was used for customers, but with a 5% margin of error. This resulted in a planned sample size of 1067 employees and 384 customers across the six sectors in both cities.

#### Qualitative Data

Following the principle of data saturation, 32 key informants from each city were chosen for interviews. These informants hold leadership positions within the relevant sectors and were interviewed using a broadly open-ended checklist to generate data.

#### Instrumentation, Data Processing and Data Analysis

Quantitative data was collected using an MS Excel template and analyzed using SPSS 26 for basic statistical procedures. For descriptive analysis of 5-point Likert scale data, the study followed the recommendations of Chileshe and Kikwasi (2014, cited in Yalagama et al., 2016). These recommendations provided specific index ranges and interpretations for discussing the quantitative data.

#### Mean Value and Interpretation Used

Strongly disagree	Disagree	Moderately agree	Agree	Strongly agree
1.00 -1.8	>1.81 -2.60	>2.61 -3.40	>3.401- 4.20	>4.21 -5.00
20% - 36%	>36.1 %-52%	>52.1% -68%	>68.1% -84%	>84.1% - 100%

Qualitative data underwent a rigorous process of transcription, management, and analysis using MAXQDA 2020 software. Thematic analysis was employed to uncover overarching themes and patterns within the data. Initial coding was guided by established conceptual categories derived from relevant literature and theoretical frameworks. This ensured a structured approach to identifying key concepts aligned with existing knowledge. Further coding involved the identification of emerging concepts and themes directly from the data itself. This allowed for

new insights and patterns to surface, enriching the analysis and potentially challenging existing theoretical assumptions. Key Steps:

1. Transcription of qualitative data using MAXQDA 2020.
2. Deductive coding based on prior conceptual categories.
3. Inductive coding to derive new concepts from the data.
4. Exploration of coded data through querying.
5. Identification of frequent concepts and themes.
6. Analysis of relationships between codes and themes.

## Results

### Profile of Surveyed Sectors and Respondent Characteristics

#### Profiles of Surveyed Sectors

This study took place in two Ethiopian cities: Adama, a burgeoning industrial and conference-tourism hub in the Oromia region, situated roughly 100 km southeast of Addis Ababa; and Bahir Dar, the political and economic center of the Amhara region, around 578 km northwest of the capital.



Fig 1: Map of the Study Areas (Source <https://www.bestcitymaps.com/digital-maps/ethiopia-political-map/>)

To gather diverse perspectives on greening practices, the study focused on six key sectors in each city, chosen for their connection to the research theme. The Municipality, encompassing crucial units like urban land management and city beautification, topped the list at 21.9%. Other sectors like Education (19.4%), Health (18.7%), Water & Sewerage (18.5%), Agriculture

(11.5%), and Environment, Forestry & CC (10%) also provided valuable insights. Interestingly, the survey responses were split evenly between Adama City (50.4%) and Bahir Dar (49.6%), ensuring balanced representation across the two.

Table 1 Cross-tabulation of Surveyed Cities by Sectors, Employee Survey

City		Sector						Total
		Municipality	Health	Education	Water & Sewerage Service	Env't, Forestry & Climate Change	Agriculture	
Adama	Count	88	90	89	89	90	88	534
	% within City	16.5%	16.9%	16.7%	16.7%	16.9%	16.5%	100.0%
	% of Total	8.3%	8.5%	8.4%	8.4%	8.5%	8.3%	50.4%
Bahir Dar	Count	144	108	116	107	16	34	525
	% within City	27.4%	20.6%	22.1%	20.4%	3.0%	6.5%	100.0%
	% of Total	13.6%	10.2%	11.0%	10.1%	1.5%	3.2%	49.6%
Total	Count	232	198	205	196	106	122	1059
	% within City	21.9%	18.7%	19.4%	18.5%	10.0%	11.5%	100.0%
	% of Total	21.9%	18.7%	19.4%	18.5%	10.0%	11.5%	100.0%

Customer survey results mirrored the employee survey in some respects. Municipality again topped the list (24%), followed by Education (21.9%), Health (18.7%), and Water & Sewerage (17.2%). However, Environment, Forestry & Climate Change and Agriculture slipped further behind, accounting for just 9.8% and 8.4% of respondents, respectively. Notably, Bahir Dar saw no customer respondents from the agricultural sector, suggesting its relative infancy despite its thematic relevance.

Table 2 Cross-tabulation of Surveyed Cities by Sectors, Customer Survey

City		Sector						Total
		Municipality	Health	Education	Water and Sewerage Service	Env't, Forestry & Climate Change	Agriculture	
Adama	Count	32	32	32	31	32	32	191
	% within City	16.8%	16.8%	16.8%	16.2%	16.8%	16.8%	100.0%
	% of Total	8.4%	8.4%	8.4%	8.2%	8.4%	8.4%	50.4%
Bahir Dar	Count	59	39	51	34	5	0	188
	% within City	31.4%	20.7%	27.1%	18.1%	2.7%	0.0%	100.0%
	% of Total	15.6%	10.3%	13.5%	9.0%	1.3%	0.0%	49.6%
Total	Count	91	71	83	65	37	32	379
	% within City	24.0%	18.7%	21.9%	17.2%	9.8%	8.4%	100.0%
	% of Total	24.0%	18.7%	21.9%	17.2%	9.8%	8.4%	100.0%

For key informant interviews, health (23.1%), education (21.5%), and the Municipality (20%) emerged as the most represented sectors. While Adama City saw a relatively balanced distribution across sectors, Bahir Dar exhibited a noticeable bias. Notably, the Climate, Forestry, and Environment Agency was entirely absent, possibly due to non-response or like earlier observations, being a newly established structure in the city.

### Profile of Study Participants

The employee survey gathered responses from 1503 individuals: 65 leadership position holders, 1059 frontline staff, and 379 service users. (Table 3 details the respondent profile). Men comprised 55.5% of respondents, while women made up 44.5%. Notably, over 66% held a degree, suggesting an upward trend in civil servant education levels. However, only 5.2% had a master's degree, highlighting a need for further upgrades.

Table 3 Respondent Profile, Employee Survey

Characteristics of the respondents	Frequency	Percent	
Gender	Male	552	55.5
	Female	442	44.5
	Total	994	100.0
Age groups	21-30	372	37.2
	31-40	446	44.6
	41-50	158	15.8
	>50	25	2.5
	Total	1001	100.0
Education level	Certificate & below	53	5.2
	Diploma	102	10.1
	Degree	672	66.3
	Masters	184	5.2
	Others	2	10.1
	Total	1013	66.3
Job Position	Senior Professional	189	21.3
	Professional	308	34.7
	Junior Professional	167	18.8
	Beginner Professional	173	19.5
	Other	51	5.7
	Total	888	100.0
Service Year in the Public Sector	0-5	375	49.2
	6-10	213	28.0
	11-20	145	19.0
	21-30	25	3.3
	31-40	4	.5
	Total	762	100.0
	Service Year in the Current Organization	0-5	512
6-10		380	37.8
11-20		81	8.1
21-30		18	1.8
31-40		14	1.4
Total		1005	100.0

In contrast to the employee survey, where males were slightly more present (55.5% vs. 44.5%), the customer survey showed a near-balanced gender distribution (53.6% male, 46.4% female).

Both surveys indicated a similar trend towards younger demographics. While over 82% of employees were under 40, an even higher 86.1% of customers belonged to this age group.

Education levels, however, differed markedly. While 69.7% of customers held a diploma or lower, the employee survey revealed a larger share with degrees (66%). This suggests a potentially higher educational attainment among public sector employees compared to the general customer base.

Table 4 Respondent Profile, Customer Survey

Characteristics of the respondents		Frequency	Percent
Gender	Male	185	53.6
	Female	160	46.4
	Total	345	100.0
Age groups	18-30	149	43.2
	31-40	148	42.9
	41-50	41	11.9
	51-60	7	2.0
	Total	345	100.0
Education level	Certificate & below	135	40.2
	Diploma	99	29.5
	Degree	90	26.8
	Masters	12	3.6
	Total	336	100.0

The demographic profiles of respondents and key informants offer intriguing insights into their potential viewpoints on the study's critical themes. Notably, the male-dominated leadership landscape (75% male key informants) underscores the persistent gender gap in these positions. Similarly, the youthfulness of leadership (65% of informants aged 40 and below) raises questions about experience and perspective. Conversely, the high educational attainment (98% with degrees or above), with a significant proportion holding master's degrees (40%), suggests a potential alignment with knowledge-driven approaches. These preliminary observations require deeper exploration within the thematic results section to understand the multifaceted relationships between demographics and attitudes towards the study's key issues.

### Perceptions of the Effects of a Green and Clean Public Sector

This section explores how employees and customers perceive the impact of a green and clean public sector on employee productivity. We investigated this theme through both:

Survey instruments: Using Likert scales with 8 and 6 items for employees and customers, we assessed their opinions on several factors:

- The organization's green and clean practices.
- The organization's performance and its link to clean and green spaces.
- Whether a successful public sector organization necessarily has a green and clean environment.

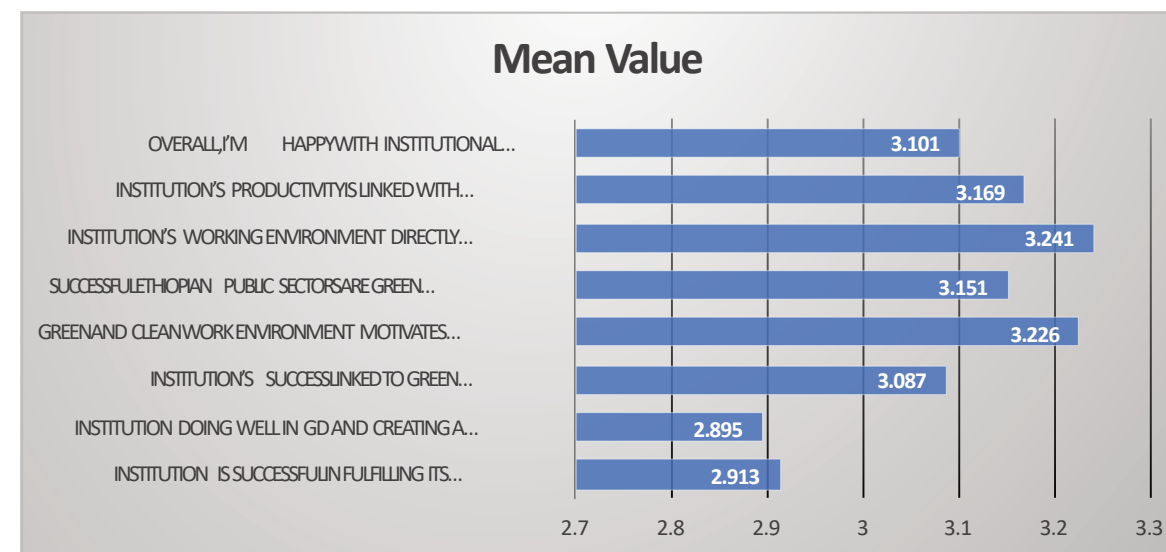
Open-ended questions: These allowed respondents to further elaborate on their perspectives.

### Employee and Customer Perceptions

Employees expressed mixed opinions on the impact of green working premises on their satisfaction and productivity. The highest-rated statement, with a score hovering around the neutral "somewhat agree" (3.3 on a likely 1-5 scale), acknowledged a potential positive connection. However, the lowest rating (2.89) was assigned to the item directly assessing the present state of the organization's greenness and cleanliness, indicating dissatisfaction with

current practices. This discrepancy highlights a disconnect between the perceived potential and the realized experience, suggesting a need for further effort in implementing and maintaining effective green initiatives within the workplace.

Fig 2. Mean Values of Items for Perceptions of the Impacts of a Green and Clean Public Sector, Employee Survey

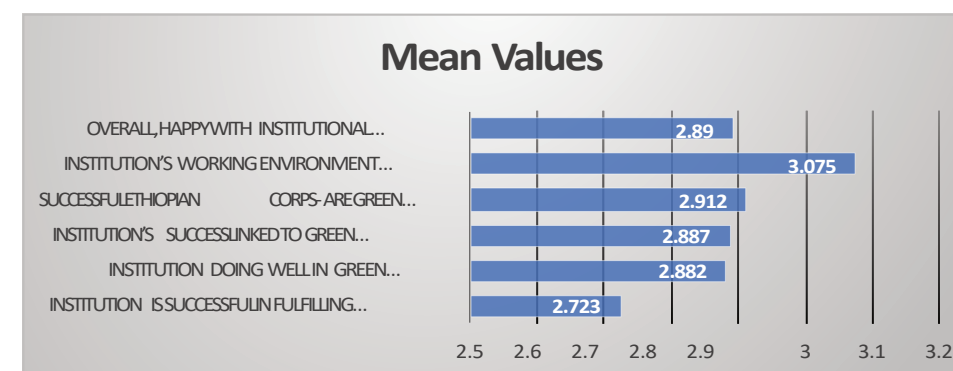


While not overwhelming, employee responses suggested a positive but cautious acceptance of green and clean workplaces enhancing satisfaction and performance. The highest-rated item aligned with our hypothesis, linking successful public sectors to a green and clean image (mean around 3.3). However, the item directly assessing the perceived "greenness and cleanliness" of the organization received a lower rating (2.89), highlighting a potential gap between aspirations and reality.

Thematic groupings confirmed this trend, with both "successful-green" and "performance-green" themes averaging around 3.1-3.3. Notably, there was remarkable consistency across cities, sectors, and even gender, implying widespread recognition of the potential benefits. Bahir Dar and the Municipality/Water & Sewerage sectors did show slightly higher agreement.

Customers displayed similar sentiment, albeit with slightly lower mean values. Interestingly, they also prioritized the link between a green-clean public sector and organizational success as the most positive feature.

Fig. 3. Mean Values of Items for Perceptions of the Impacts of a Green and Clean Public Sector, Customer Survey

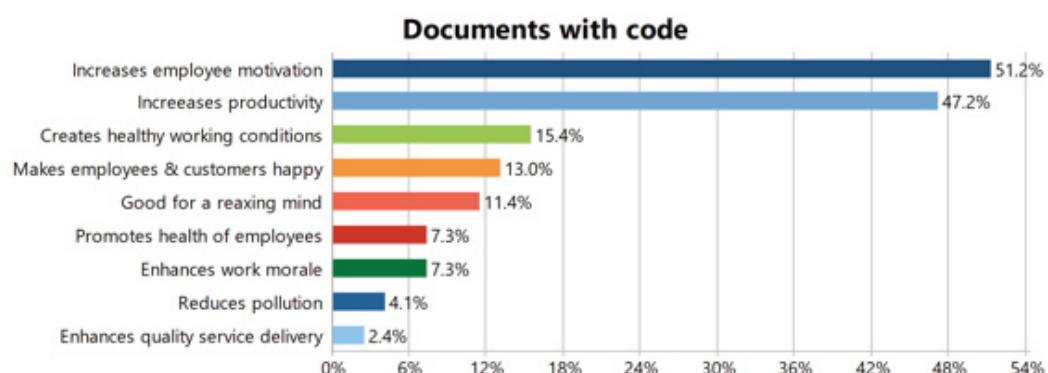


While customers generally agreed with employees on the benefits of a green and clean public sector, their ratings were slightly lower, averaging around 2.8-2.9. Interestingly, the pattern of higher ratings for Bahir Dar, females, and the Municipality sector remained consistent, but the education sector took the second-highest spot in this case. This suggests potential differences in the specific aspects valued by different groups.

Nine key themes emerged from analyzing employee open-ended responses, showcasing the multifaceted impact of green and clean workplaces. A majority (51%) perceived it as a strong motivator, while nearly half (47%) noted its potential to improve productivity (Fig. 3 provides details). The theme of health and well-being stood out, with employees frequently mentioning feelings of relaxation and a connection to improved health. Notably, many emphasized the positive impact on mental health, citing reduced stress and enhanced focus as direct benefits.

The figure showcasing the major themes influencing employee productivity in a green and clean environment highlights the specific aspects resonating most with respondents. This visual representation, based on frequent phrases and terms used, offers valuable insights into employee perceptions, and provides a deeper understanding of their motivations and work experiences.

Fig. 4. Perceptions of the Impacts of a Green and Clean Public Sector, Employee Survey



Like employee surveys, 26% of key informant interviews identified motivation and productivity improvements as a primary outcome of green and clean workspaces. However, a thematic analysis using frequency of key terms and phrases revealed fascinating nuances: Health and well-being: This theme dominated responses, with terms like "peace," "healthy," "relaxed," and "climate" appearing most frequently. One informant exemplified this by stating, "It promotes peace, healthy society, relaxed mind, and regulates climate."

Employee attraction and engagement: Terms like "calm," "happy," "love," "family," and "focus" frequently emerged, suggesting a positive impact on employee sentiment and dedication. As one leader noted, "An employee stays calm and happy... happily comes to work. .. focuses on the work rather than the strife."

Customer relations and morale: Key terms like "morale," "smooth," "customers," and "productivity" appeared together, indicating a link between green spaces and improved employee morale and customer interactions, leading to higher productivity. An informant stated, "...The existence of clean and green working environment boosts the working morale of staffs and helps to create smooth relationship with the customers which in its turn are fundamental for increasing work productivity."

Motivational impact of aesthetics: Terms like "beautiful," "wonderful," "stimulate," and "encourage" frequently occurred, implying the visual appeal of green spaces directly motivating employees. One informant succinctly summarized this aspect: "[Clean and green environment] has a very positive effect. It encourages. It boosts work morale. The very sight of various beautiful and wonderful things stimulates; it encourages the employees."

These findings, quantified through frequency analysis, paint a detailed picture of the multifaceted benefits of green and clean public sectors, extending beyond mere productivity to encompass employee well-being, engagement, and even customer relations.

Our study demonstrates that most participants, both in surveys and interviews, view a green and clean public sector as a catalyst for increased civil service productivity. The benefits identified align with:

- Physical well-being: Fresh air from green spaces and clean environments promote a sense of good health.
- Psycho-social well-being: Increased motivation, contentment, and aesthetic appreciation are fostered.
- Employee engagement: Attractive workplaces lead to enhanced staff retention and productivity.
- Customer satisfaction: Green settings and improved service quality from satisfied employees contribute to positive customer experiences.

These findings suggest that promoting a green and clean public sector holds significant potential for improving both employee and customer well-being, while enhancing overall productivity and service delivery.

## Discussion

### The Nexus of Sustainable Development and Public Service Organizations

The pursuit of sustainable development, healthy communities, and clean and green public sectors is central to achieving both socioeconomic well-being and environmental health (Morales-Gómez et al., 1999; UNDESA, 2018). Anthropogenic environmental crises and their societal consequences pose some of humanity's greatest challenges (Catton Jr. & Dunlap, 1978; Lueck, 2007). Recognizing this urgency, the international community has increasingly prioritized environmentally sustainable practices, including within public service organizations (Conway & Schipper, 2011; Dove, 2014; Salick & Ross, 2009). This aligns with several of the Sustainable Development Goals (SDGs), particularly those promoting access to clean energy, sustainable cities, and biodiversity conservation (UN, 2015). Public service organizations play a crucial role in implementing these goals by formulating policies, coordinating efforts, and fostering societal change (Millennium Ecosystem Assessment, 2005).

The connection between development, public service, and the environment has grown increasingly prominent in recent years. Environmental concerns are now intertwined with social policy, public service delivery, and even the physical spaces where we work and live (Cahill, 2002). Achieving national socio-economic development aspirations hinges on the multi-faceted contributions of the public sector. The SDGs, encompassing diverse areas like health, education, and peace-building, all share a connection to the concept of a clean and green public service, highlighting the need for livable and sustainable workspaces in cities.

Clean, green, and environmentally sustainable public sectors are becoming increasingly vital in the global pursuit of a sustainable society and green development. They serve as both engines

of action and accountability, coordinating efforts across government, private sector, and civil society (Department for Business, Energy & Industrial Strategy, 2017; The UN, 2011; World Bank Group, 2019).

Promoting sustainable, natural resource-respecting lifestyles is another key aspect. Environmental social scientists emphasize the reciprocal relationship between humans and their natural environment, noting how both individuals and social structures are shaped by these interactions (Bonnes & Secchiaroli, 1995). Local perceptions, feelings, and beliefs regarding the environment have a significant impact on health and well-being, and vice versa (Anderson, 1996; Ingold, 1992). Studies within social policy, health, and environment further highlight the role of healthy environments in promoting human well-being, particularly for local communities (Kaplan, 1995; Ouellette et al., 2005).

In Ethiopia, contemporary debates about the nexus of sustainable development and public service organizations resonate strongly due to the growing environmental consciousness and the impact of climate change on various sectors. However, empirical observations reveal that efforts towards establishing green and clean public sectors, encompassing cleaner workspaces, greener public services, and sustainability ethics, are still in their early stages, both at the community and workplace levels.

Despite existing frameworks like the Ethiopian Constitution and environmental policies (FDRE, 1995; FDRE EPA, 1997), their practical implementation often falls short (Keeley & Scoones, 2000). These frameworks can sometimes appear more like principles than tangible realities, and their enforcement may be driven by external funding requirements rather than genuine commitment (Ruffeis et al., 2012). Nevertheless, recent national development policies advocate for combating climate change and promoting sustainable practices in living, working, and public sector operations (EnDev/Environment and Development Consultants, 2015). Additionally, regulations and protocols have been established to guide financing of development projects within the framework of Ethiopia's development agendas and climate resilient green economy, emphasizing environmentally friendly and sustainable practices in public sector projects (Development Bank of Ethiopia, 2017; Ethiopian Investment Authority, 2018; Ministry of Environment, Forest, and Climate Change, 2015).

### **Employee Perceptions of the Effects of Green-Clean Public Sector**

Our study participants revealed the positive energy generated by a green and clean public sector, attributing its benefits to several key factors:

- Physical well-being: Fresh air from green spaces, clean surroundings, and a sense of hygiene promote good health and well-being.
- Psycho-social benefits: Increased motivation, contentment, and aesthetic appreciation boost morale and job satisfaction.
- Productivity enhancement: Attractive work spaces lead to increased employee retention and dedication, ultimately enhancing productivity.
- Customer satisfaction: Green and clean settings, coupled with improved service from satisfied employees, contribute to enhanced customer satisfaction.

This alignment with existing social science research further underscores the link between healthy environments and human well-being (Anderson, 1996; Ingold, 1992). Studies even suggest a correlation between green working environments and increased organizational productivity (Horrevorts et al., 2018; Vitali, 2017).

Our findings resonate with the experiences of public sector employees in Ethiopia. They report increased willingness to dedicate time and effort to their work when their workplaces are green and clean (Samaranayak & Silva, 2016). Furthermore, organizations with sustainable and clean practices tend to have more competent and satisfied employees, unlocking their full potential for productivity (Grove et al., 1996; Wong et al., 2013).

This observation is exemplified by Ethiopian organizations like Ethiopian Airlines, the Ministry of Mines and Petroleum, and the Ministry of Finance, all recognized for their green and clean working environments and consistently performing well. Similarly, our surveys in Bahir Dar and Adama revealed that public sector organizations with cleaner and greener premises often receive higher public recognition and exhibit better performance. Notably, aerial views of some surveyed institutions, like the Health Bureau in Bahir Dar and a high school in Adama, showcased an abundance of greenery and cleanliness, coinciding with reports of their high performance.

Despite this evidence, a review of existing literature on green and clean public sectors in African countries, including employee and service user perceptions, reveals a paucity of information (Musau, 2019; UNEP, 2022). However, the continent's contemporary focus on green initiatives, evident in efforts like building green economies and promoting clean energy (Aminu Umar & Khamidi, 2012; Government of Norway, 2016), suggests an underlying awareness of the importance of sustainable practices in the public sector.

While some African nations like South Africa and Nigeria are implementing green procurement and infrastructure development in the public sector (SEED Urban, 2019; Wahab & Falola, 2014), there seems to be a general lack of comprehensive data on employee and customer experiences (Pasquini & Enqvist, 2019; Gebu, n.d.).

Studies across various sectors, including hospitality (Ge & Zhi, 2016; Wong et al., 2013; Kim & Choi, 2013) and public service (Babagbale, 2019; Karl et al., 2013), provide insightful comparisons. These studies indicate a positive correlation between green practices, employee satisfaction, and organizational commitment, reinforcing our findings on the link between a green and clean public sector and a productive and motivated workforce.

In conclusion, based on our Ethiopian study and existing research, it is evident that green and clean public sectors generate positive outcomes for both employees and the public at large. While initial progress has been made in Ethiopia, there is still significant room for improvement in implementing comprehensive green and clean practices across the public sector. By prioritizing these efforts, Ethiopian cities can cultivate healthy, productive work environments that contribute to a more satisfied and well-being society.

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