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▶ To cite this version:

Cecilia Strand, Mathias Hatakka. Anti-corruption Efforts in National ICT Policies. 15th International Conference on Social Implications of Computers in Developing Countries (ICT4D), May 2019, Dar es Salaam, Tanzania. pp.520-531, 10.1007/978-3-030-18400-1_43. hal-02285310

HAL Id: hal-02285310 https://inria.hal.science/hal-02285310v1

Submitted on 12 Sep 2019

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Anti-corruption efforts in national ICT policies -A study of policy environments in Sub-Saharan Africa

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Abstract. Many countries in sub-Saharan Africa suffer from endemic corruption, which disrupts development efforts. Although ICTs is no magic wand, several studies indicate that ICT can serve as an important tool for combatting corruption by increasing transparency, and enable citizens to hold public officials accountable. Anti-corruption efforts are however dependent on strong political will and rule of law to be successful. A policy typically contains description of government intentions formulated into concrete objectives, as well as the rationale behind government targets. Furthermore, policies guide programmatic responses. The aim of this study is to explore how ICTs' anti-corruption potential have been understood at the policy level over time in ICT policies from nine Sub-Saharan African countries between 2000 and 2018. The study concludes that although there are signs of a growing understanding of ICTs as a multipurpose tool for anti-corruption towards the end of the period, most policies fail to produce a comprehensive and explicit narratives as well as statements affirming political will. The policy environment's development trajectory, albeit positive, thus leaves room for improvement in terms highlighting ICTs potential contributions.

Keywords: corruption, ICTs, transparency, accountability, Sub-Saharan Africa.

1 Introduction

The past decade has seen a growing consensus amongst governments across Africa and development partners that corruption threatens to undo past development gains. Corruption, defined as "the misuse of a public or private position for direct or indirect personal gain" (p.23) in The United Nations Convention against Corruption [1], makes future development targets outlined in the Sustainable Development Goals unattainable. It is estimated that nearly 148 billion USD a year is lost to corruption In Sub-Saharan Africa [2]. At the macro level, corruption threaten economic growth [3] and is a key deterrent for investors and a major constraint to business operations [4]. Furthermore, corruption disproportionally hurt the poorest citizens as they are more dependent on publicly funded services [5]. Corruption erodes societies by moving away resources from its intended purposes and no sector or actor is immune to its adverse impact on daily life. However, despite strong consensus amongst donors, business and political leaders concerning the negative effects of corruption, as well as impressive legal reforms with many countries adopting key international anti-corruption conventions, corruption levels remain high in most of Sub-Saharan Africa [6]. If has

even been suggested that corruption has gotten more entrenched with the efforts to stem it. Person et al. argue that failures of anti-corruption reforms is the result of an implementation deficit.

As the particular drivers of corruption to a degree is both context dependent and a result of perspective in the sense that the political, historical, social, cultural and/or institutional lenses color the analyses; the knowledge base on effective anti-corruption measures is still incomplete. A key constraint in research on corruption is that many studies have low general applicability, as different disciplines places different weight on different drivers, and thus advocate for different ways to address corruption. Despite these caveats, this study aligns with research that argues that political will and political commitment [4, 7-9] is of an overriding importance to the success of any measures and its implementation. Addressing systematic misuse of power is only possible with resolute political will. Establishing and sustaining political will is paramount and supersedes other often referred to counter-measures, such as strengthen media institutions for greater accountability [10], legal and law enforcement reforms [11] and international reform pressure [4, 9].

It has been repeatedly argued that Information and Communication Technologies (ICTs), can be an important tool for anti-corruption efforts. ICTs main contribution, lies in their ability to address the traditional information asymmetry between government and citizens [12-14]. Access to relevant government information is essential for citizens' awareness and mobilization to hold officials accountable for lack services or requests for unlawful fees. Citizens equipped with not only knowledge of the government's service contract, but corruption as a topic in general, significantly increase the risk of detection of corruption [13]. Furthermore, mobiles can facilitate citizens' mobilization around poor service delivery, as well as make reporting of mismanagement and corruption easier and affordable [15]. In short, ICTs support multiple important processes, which combined could create a non-conducive environment for corruption.

With most of Sub-Saharan Africa continuing to display high corruption levels, this study aims to *explore how ICTs'* anti-corruption potential have been understood at the policy level over time, as well as if the policy texts contain an explicit declaration of political will to explore ICTs for anti-corruption purposes. As a policy is a set of principles and strategies developed to guide actions [16], they are suitable for analyzing intent. Policies traditionally also contain description of the rational for policy direction, and as such, suitable for gauging policy makers' understanding of ICTs over time. Furthermore, policy language plays a key role in informing and guiding programmatic responses.

1.1 ICTs potential role in anti-corruption efforts

ICTs in general and mobile phones in particular, can be instrumental in addressing a key corruption enabler - the lack of government information. It has repeatedly been suggested that one of ICTs primary contribution to anti-corruption efforts, is its ability to spread information and thus increase transparency. In a study of 70 countries, Internet adoption was found to cause corruption levels to go down, but the effect was small, arguably because Internet's potential was yet be fully realized [12]. Gaskin [15] comes to a similar conclusion and argues that access to Internet can have a sig-

nificant impact on corruption by increasing transparency, and that although mobiles also have a statistically significant impact on transparency, it is weaker [15]. Goel, Nelson, and Naretta [13] study on web-searches suggests that access to information that leads to greater corruption awareness reduces both corruption perceptions and corruption incidence. They suggest that greater corruption awareness and overall understanding of the phenomenon is pivotal for bringing down corruption levels.

The fast proliferation of mobiles has been of particularly interest, as they offer opportunities for by-passing government-controlled channels and open up for citizen-led horizontal crowd-sourcing of information, as well as a way to easily and affordably mobilize around corruption. Mobiles can support anonymous reporting of absences of a service or if the public officials requested an unlawful fee. Kanyam, Kostandini and Ferreira [17] argues, in their study of 44 countries in Sub-Saharan Africa, that mobile phones in particular can be instrumental for raising the level of corruption awareness, and be an effective tool for reporting corruption. They conclude that although it is difficult to assert the causal linkage in the midst of a myriad of interacting factors between corruption and mobile phone penetration; the "empirical findings suggest that mobile phone penetration is a powerful tool in combating perceived corruption" (p.279).

Bailard [18] finds a significant correlation between higher mobile phone penetration and lower levels of perceived corruption in 46 African countries. Bailard suggest that mobile's main contribution lies in the ability to directly challenge government's traditional information monopoly. It is argued that "corruption prefers the shadows and abhors transparency" (p.337). Mobiles poses a direct threat to corruption as they decentralize the control over information, and decrease the opportunities to commit corrupt acts undetected.

ICTs contribution to citizens' efforts to hold public officials accountable for their actions is a reoccurring theme. While mobiles by no means automatically turn into an anti-corruption tools, even in corrupt-ridden contexts; there are multiple empirical cases of mobiles being used to that particular end. Zanello and Massen [19] finds in their study that there are enough data to conclude that mobile can be a useful tool for pushing authorities to improve service delivery, and when given the opportunity, mobiles become an important tool for strengthening citizen agency.

Other studies have however cautioned against techno-optimistic and wishful thinking when it comes to ICTs as an anti-corruption tool. Without an independent judiciary and strong law enforcement agencies, detected corruption will go unpunished, or even worse, be silently endorsed by the same institutions. Sassi and Ali [11] conclude, in their study of 47 African countries, that there is a "high corruption inertia in Africa" (p.662). The study finds that although transparency is an important aspect to anti-corruption efforts, the rule of law is the strongest factor determining the level of corruption.

With political will accepted as a necessary condition for successful of anti-corruption measures, what policy priorities should be made based on the literature? First of all, as corruption thrives in contexts with high information asymmetry, where citizens and business are largely ignorant of the government's service contract; increased transparency constitute an key component in anti-corruption efforts. [20, 21]. With

improved transparency, citizens become aware of what type of laws and regulation that govern a particular sector, as well as what services they are entitled to and to what cost. Lindstedt and Naurin [22] argues that transparency indeed is an effective tool for combating corruption, but not enough, which inevitably introduces a second key concept; that of accountability. Just making government information available will not prevent or deter corruption, if there is no one to hold governments accountable such as a free press or free general elections where citizens hold government's accountable for their action [22]. They conclude that reforms targeting increasing transparency are unlikely to be effective unless they are "accompanied by measures for strengthening citizens' capacity to act upon available information if we are to see positive effects on corruption" (p.301). Even if greater transparency does not automatically lead to citizens holding their public servant and politicians accountable, it is a necessary precondition. Accountability is impossible without access to information. In short, transparency is a prerequisite and enabler for citizens' empowerment, but alone not sufficient to lead to accountability or create a culture of accountability. Furthermore, as suggested by Goel et al., [13] an accountability readiness amongst citizen, is dependent on not only an awareness of the government's service contact, but a understanding of corruption as a phenomena, as well as context appropriate responses to corruption.

With the input from the literature review, we constructed a conceptual framework that revolves around the two mutually reinforcing concepts – transparency and accountability.(see Fig. 1). The framework served two purposes. Firstly to create an overview of ICTs anti-corruption potential by increasing transparency and enabling accountability, as well as the concepts' inter-dependence. Secondly, the framework informed and guided the analyses of ICT policies.

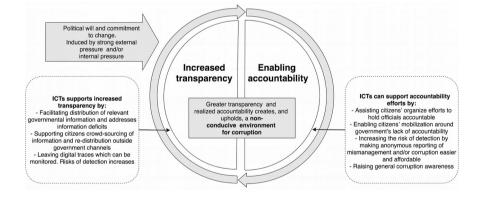


Fig. 1. ICT/anti-corruption framework

2 Method

With an aim to explore how ICTs' anti-corruption potential have been understood over time in Sub-Saharan Africa as well as assess political will to explore ICTs for

anti-corruption purposes, ICT policies and strategy documents deemed a reasonable source. An initial cursory review of the potential material found that documents labeled national "ICT strategy", was not markedly different from what other countries labeled policy. Both document types were thus included. While most of the 46 countries in Sub-Saharan Africa have ICT policies, we chose to limit the selection of included policies based on the following criteria: 1) The country should display a minimum level of political will and commitment to fight corruption by having ratified at least one of the main international legal documents (AU Convention against corruption, SADC Protocol: against corruption, or UN convention Against corruption). 2) A limitation in time was set. The growth in access and affordability of the ICT, as well as mobile phones becoming affordable can be roughly dated to early 2000s. The majority of Sub-Saharan countries launched their first ICT policies in the first few years of 2000s and the collection period was set from 2000 to 2018. 3) In order to ensure that policy-environment were equivalent in terms of it being actively reflection of government priorities, sample countries needed to display a commitment to continued policy development. Over an 18-year period it is reasonable to have developed a minimum of five ICT related policies. Countries with five or more policies or strategies were included. 4) As e-government began to be adopted and grow into a separate policy area during the selected timeframe, we deemed it likely that an exploration of ICTs as a potential anti-corruption tool could potentially move from a generic ICT policy into e-government policies. Consequently, the latest e-government policy was also included.

The data set came to consist of two generic ICT policies per country and the country's latest e-government policy (if it exists). In total, 18 generic ICT policies were analyzed and six e-government policies (see table 1).

Table 1. Policy documents

Country	Policy documents	
Botswan	2004 - National ICT Policy - Legislative Framework & Change Report	
a	2011 - Botswana's National e-Government Strategy 2011-2016 *	
	2012 - Parliament of Botswana - ICT Master Plan	
Kenya	2006 - National Information & Communications Technology (ICT) Policy	
	2016 - National Information & Communications Technology (ICT) Policy	
Malawi	2003 - Malawi Information and Communications Technology (ICT) Policy	
	2013 - National ICT Policy	
	2014 - Public Service ICT Standards *	
Namibia	2002 - Information and Communication Technology Policy	
	2014 - e-Government Strategic Action Plan of the Public Service (2014–2018) *	
	2009 - Strategic Plan of the MoICT in the Rep. of Namibia 2009 to 2013	
Nigeria	2001 - Nigerian national policy for information technology (IT) - 'use it	
	2012 - Nigerian information communication technology (ICT) policy	
Rwanda	2001 - ICT-led Socio-Economic Development Policy and Plan 2001 – 2005	
	2015 - ICT Smart Rwanda 2020 Master Plan	
South	2001 - The Digital Future - A Public Service IT Policy Framework	
Africa	2017 - The National e- Government Strategy and Roadmap. *	
	2016 - National Integrated ICT Policy -white paper	
Tanzani	2003 - National Information and Communications Technologies Policy	

a	2013 - Tanzania e-Government Strategy *
	2016 - Ministry of Works, Transport and Communication National ICT Policy
Uganda	2003 - National Information and Communication Technology Policy
	2011 - National Electronic Government (e-Government) Policy Framework *
	2014 - National Information and Communications Technology Policy

^{*} E-government/governance policies

2.1 Document analysis

The document analysis commenced with identifying all instances where the key concepts: corruption, corrupt, transparency, transparent, accountable and accountability, occurred in the policies and strategies. Relevant texts excerpts were copied into a spreadsheet. After the text collection, a content analysis informed by our ICT/anticorruption framework began. The initial content analysis focused on how the concepts and their interdependence in relation to anti-corruption efforts, as well as how ICTs were enlisted or not. Through this qualitative content analysis, differences in terms of how key concepts were refereed to became discernable and was later grouped into three categories depending on the texts' interaction and level of acknowledgement of ICT as a potential multi-purpose tool against corruption. After refining the category descriptions, all country's policies were identified as belonging to one of the following types: *under-developed*, *nascent* or *comprehensive* (see table 2).

Policies were also scanned separately for explicit statements declaring political will to explore ICTs for anti-corruption purposes.

Table 1. Categories - under-developed, nascent or comprehensive

The under-	The nascent approach	The comprehensive approach
developed approach	11	1 11
	T	ICT:
ICTs are not	Transparency and accountability are	ICTs are understood as a
directly linked	referred to as ideals that should	multi-purpose tool against
to	guide state and non-sate actors.	corruption, where ICTs con-
transparency,	ICTs (and e-government) are re-	tribution lies in their ability to
	` 0 /	9
and	ferred to as a tool to increase trans-	increase transparency and di-
accountability	parency, and/or accountability in	minish information asymme-
or corruption,	generic terms.	try between state and non-
although one or	ICTs are not directly identified as	state actors, which enables
several of the	anti-corruption tools, although cor-	non-state actors' to exercise
	1 ,	
concepts may	ruption may be mentioned as a de-	oversight, i.e., to hold the sate
be textually	velopment barrier.	accountable. ICTs are explic-
present as		itly identified as a tool
generic		against corruption.
•		O
concepts.		

3 Results

The studied countries are all signatories to international and regional instruments to combat corruption [2], and thus recognizes corruption as a development barrier best addressed through reforms. The persistent high corruption levels, with the notable exceptions of Botswana and Rwanda, does however indicate that political rhetoric has not been followed up by necessary reforms (Fig. 2).

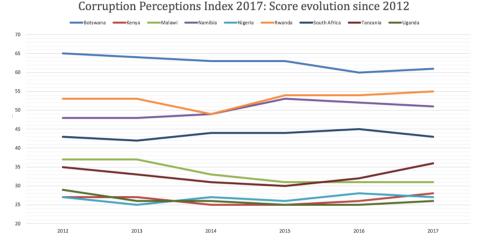


Fig. 1. Case countries' corruption perception trajectory over time (higher value is connected to lower corruption perception levels). TI data ranking 2012-2017 [6]

3.1 Transparency, accountability and corruption

Almost all policies include a reference to *transparency/transparent*, and the concept is more frequently featured to than accountability or accountable. The text references are however often general in nature or in conjunction with accountability and then often without a clear distinction between the two terms. The Namibian E-government policy (2014) will serve as example when it lists the following objectives in relation to its ambition to developed a citizen-centric service delivery: "To enable transparency and accountability in governance and promote civic engagement through greater access to information" (p.17). The surrounding text does not shed further light on how the two concepts are "enabled" by ICTs or how they are inter-related. Nigeria (2000/2001), similarly identifies transparency and accountable as important aspects of services delivery, without providing details on the envisioned virtual forums.

"Bringing Government to the doorsteps of the people by creating virtual forum and facilities to strengthen accessibility to government information and facilitating interaction between the governed and Government leading of transparency, accountability and strengthening of democracy". (p.40)

If the concept of transparency is vague in the policies, *accountability* is even more so. Accountability typically refers to the expectation that governments are liable and are accountable for its actions. Accountability is closely related to the concept of being held accountable by someone, for example a citizen. As described earlier, access to relevant and up-to-date government-related information is a prerequisite for citizens being familiar with their government's service contract and when necessary, hold those in power responsible for deviations. There are hints on how this should be achieved in some of the policies, e.g., In the Botswana ICT master plan (2012) they state that ICT can be used to:

"[s]trengthen transparency and accountability by using an information system which monitors and tracks government assurances and helps to hold the Executive branch of government accountable" (p.23)

Accountability often appears in the material as an ideal, rather than as an active verb, as in "being accountable" or "held accountable". The Namibian 2009 policy refers to accountability as a value "our [The Ministry of I&CT's mission] behaviour is ruled by a set of core values. These values are: Openness, Responsiveness, Integrity, Caring, Accountability" (p7). Accountability is later described as "MI&CT keeps the nation informed on existing and future Government policies, projects, programmes and activities and openly provides information on the use of the resources at our disposal" (p19). Accountability, in this instance, however appears to be synonymous to transparency. Furthermore, accountability is often featured as an aspect of governance, which cannot be assumed to include anti-corruption efforts, unless it is clearly stated

Even if few policies explores the linkage between the transparency and accountability, as well as how ICTs could increase transparency and enhance accountability, which jointly could have an impact on corruption levels; there are a few exceptions. With incomplete narratives around the three key concepts, transparency, accountability and corruption being the norm, two out of the nine policies were however labelled as comprehensive. The two policies - Tanzania's National ICT policy (2016) and Uganda National Electronic Government (e-Government) Policy Framework (2011), were categorized as comprehensive as they included not only references to transparency and accountability, but also linked them to *corruption*. The policies also outlined how ICTs can support efforts to increase transparency around governance processes and government services; and thus enable accountability, which combined creates a non-conducive environment for corruption. The Tanzanian ICT policy also problematize ICTs, which signal critical awareness. That is, ICTs is not a magic wand.

"ICT offers concrete opportunities for local and central governments to improve their performance in terms of transparency, accountability, citizen participation and decentralization. At the same time, it offers citizens to know the services they are supposed to/or receive from their contribution through taxes. The mainstreaming of ICTs within planning and design of development strategies helps to strengthen the establishment of efficient, effective and transparent governance systems. Online tools can significantly improve the rendering of services and information flows from administrations to their constituencies; communication between

administrations and citizens can be enhanced and ICTs offer unique opportunities for broadened citizen involvement and participation in the decision making process. Various endeavors were made by the Government to ensure that ICT support good Governance. These include provision of online services, which increases transparency, accountability, citizens' participation, and reduced corruption. However, there are challenges that need to be addressed which include mainstreaming the use of ICT in government operations in order to increase government accountability, transparency and reducing corruption" (p.32)

While not as explicit, the Uganda e-government policy, signal an understanding of ICTs as a tool for increasing citizens' access to relevant information, and ability to hold government accountable:

"The GOU believes that ICT should be utilized in this era of e-Government aimed at; providing greater access to government information; promoting civic engagement by enabling the public to interact with government officials; making government more accountable by ensuring its operations are more transparent and thus reducing the opportunities for corruption. (p.19)

It should however be noted that although both policies were categorized as comprehensive, they both fell short of explicitly articulating ICTs as a multi-purpose tool as presented in our proposed framework (Fig 1). The framework does attempt to highlight that ICTs could, or even needs to support parallel and multiple government driven and citizens-initiated processes, to be fully effective in terms of creating a non-conducive environment for corruption.

3.2 Main findings: positive trend despite silence around corruption

Our analysis generated three main findings. Firstly, there is an overall positive trend in terms of how policies engage with the topic in the 18 years under study (see table 3). Later policies show a greater understanding of how ICTs could be used to create a non-conducive environment for corruption, and in particular ICTs usefulness for increasing transparency. The main reason for earlier policies being categorized as under-developed is their near total absence of references to corruption or how ICTs could contribute to increasing transparency and enhancing accountability, even in instances where the two later terms are present in the policy texts. This finding is closely related to the second finding; the absence of references to corruption and acknowledgment of corruption as a development challenge. The silences around corruption in noteworthy in policies where other development challenges are both identified and discussed. Indeed, most policies contain both background sections outlining key barriers to development, such as, lack of basic infrastructure, education and skills deficits amongst policy makers, public officials and the public to utilize ICTs, and sections outlining development aspirations. A third finding is that e-government policies, which typically addresses governance issues and the systems which public services gets delivered; did not replace the generic ICT policy as the preferred space to explore ICTs as a multi-purpose tool against corruption. Nor does e-government policies appeared to have sparked a greater interest in the topic. Most e-government policies failed to demonstrate a clear understanding of the inter-dependence of transparency and accountability, as well as how ICTs can contribute to greater transparency and accountability.

Finally, referring back to our framework (Fig. 1), we maintain that anti-corruption efforts needs to be guided by a clear understanding that transparency and accountability are sides of a coin and only jointly will they create a non-conducive environment for corruption. In the policies analyzed, however, only two of them expressively linked all three constructs (transparency, accountability and corruption). Indeed, most policies in the sample, even when containing multiple references to all three concepts, transparency, accountability and to a lesser degree, corruption, have incomplete narratives of the three concepts' interconnectedness. The inter-dependence of transparency and accountability, as well as how ICTs contribution is vague at best. A somewhat harsh summary would be; ICTs are perceived to be useful for a range of sectors and processes, but anti-corruption is seldom one of them. Table 3, summarizes the findings.

"Old/Early" Policy "New/latest" Policy E-gov Policy Country Botswana Under-developed Nascent Under- developed Kenya Under- developed Nascent N/A Under- developed Malawi Nascent Under- developed Namibia Under- developed Under- developed Nascent Nigeria Nascent Under- developed N/A Under- developed Rwanda N/A Nascent South Africa Under- developed Nascent Nascent Tanzania Nascent Comprehensive Nascent Uganda Under- developed Nascent Comprehensive

Table 1. Summary of the policies

4 Discussion

The analysis of the policies suggests an overall positive development in the sense that the understanding of how ICTs could be useful by addressing the traditional information asymmetry has increased, and that by ensuring access to government-related information, citizens become better equipped to hold public servants accountable. In Sub-Saharan Africa, where corruption levels have been consistently high, policy makers' improved understanding and willingness to explore new tools to address citizens' lack of information is a welcomed change. However, only two policies were labeled as *comprehensive* along the lines of our proposed framework (see Fig. 1). Although Tanzania and Ugandan policies should be given credit, they did not include all aspect of the proposed framework. While we recognize that the generic ICTs policies may have another primary purpose and thus approach ICTs from a general development perspective; we argue that in contexts with high levels of corruption, policies should reflect corruption as part of the overall package of development challenges. Furthermore, we find it quite worrying that most policies, and e-government policies in par-

ticular failed to acknowledge corruption as a key development barrier and consequently explore ICTs' potential contribution to anti-corruption efforts. The reviewed policies' almost compact silence around corruption, or cursory mentioning at best, could be argued to indicate unwillingness to acknowledge the issue. The fact that we failed to find a single instance where policy makers explicitly pledged to explore ICTs as a multi-purpose tool to fight corruption, would lend further support to this interpretation. The general lack of details outlining how and which ICTs are to be explored for increasing transparency and enabling accountability could be taken as another indication of reluctance to utilize ICTs to increase transparency and thus equip citizens with at least one of the necessary conditions for holding official accountable.

A more benevolent interpretation of the results is that the non-existing or incomplete narratives around ICTs' anti-corruption potential reflect a knowledge gap as opposed to unwillingness to engage with the topic. The fact that all countries in the study have signed international anti-corruption conventions and/or protocols, could lend some support to this hypothesis. But if that was indeed the case, other reforms should have made a dent in corruption levels, and that is not the case in the studied countries (Fig.2).

Our study cannot provide a definite answer as to why ICTs are not more prominently featured. But we did find it worrying that e-government polices did not explore ICTs as part of a toolbox against corruption. After all, an e-government policy is tasked with mapping out how the use of ICTs can improve governance, increase efficiency and effectiveness in the delivery of public service as well as facilitate citizens' and businesses' general interaction with the Government. Indeed, it is hard to envision how a credible e-government policy can ignore one of the major barriers to arearelated outcomes. We thus come back to our initial tentative conclusion. Anti-corruption efforts, even at the most elementary level, in the shape of policy document is hampered by a lack of genuine political will and general anti-corruption inertia.

Finally, although, the paper's geographic focus is limited, it is our hope that the proposed framework which guided the analysis of policy environments can contribute to and inform development partners' critical dialogue with partner policy makers. and inform With political will being pivotal to change, international partners may have an important role to play here. It has been suggested that political momentum for change may not always have to be of domestic origins. Instead, international community, i.e., business community and development partners who understands the specific drivers of corruption as well as knows the context-specific values and moral environment, can play an important role in exerting significant pressure on partner governments [4] to start exploring the Terra incognita of ICTs as tool for anti-corruption efforts.

References

- [1] United Nations, "United Nations Handbook on Practical Anti-Corruption Measures for Prosecutors and Investigators," United Nations, Vienna 2004.
- [2] D. Barkley and C. Maduka, "The Impact of Anti-Corruption Conventions in Sub-Saharan Africa," in *Poverty Reduction Strategies in Africa*, T. Falola and M. O. Odey, Eds. 1st ed.: Routledge, 2017, p. 300.

- [3] K. Gyimah-Brempong, "Corruption, economic growth, and income inequality in Africa," *Economics of Governance*, vol. 3, no. 3, pp. 183-209, 2002.
- [4] T. Søreide, Drivers of corruption: A brief review. The World Bank, 2014.
- [5] M. K. Justesen and C. Bjørnskov, "Exploiting the poor: Bureaucratic corruption and poverty in Africa," *World Development*, vol. 58, pp. 106-115, 2014.
- [6] Transparency International. (2018, August 8, 2018). *Corruption Perceptions Index 2017*. Available: https://www.transparency.org/news/feature/corruption_perceptions_index_2017
- [7] A.-G. Abdulai, "Political will in combating corruption in developing and transition economies: A comparative study of Singapore, Hong Kong and Ghana," *Journal of Financial Crime*, vol. 16, no. 4, pp. 387-417, 2009.
- [8] D. W. Brinkerhoff, "Assessing political will for anti-corruption efforts: an analytic framework," Public Administration and Development: The International Journal of Management Research and Practice, vol. 20, no. 3, pp. 239-252, 2000.
- [9] C. W. Gray and D. Kaufman, "Corruption and development," 1998.
- [10] L. Camaj, "The media's role in fighting corruption: Media effects on governmental accountability," *The International Journal of Press/Politics*, vol. 18, no. 1, pp. 21-42, 2013.
- [11] S. Sassi and M. S. B. Ali, "Corruption in Africa: What role does ICT diffusion play," *Telecommunications Policy*, vol. 41, no. 7-8, pp. 662-669, 2017.
- [12] M.-C. Lio, M.-C. Liu, and Y.-P. Ou, "Can the internet reduce corruption? A cross-country study based on dynamic panel data models," *Government Information Quarterly*, vol. 28, no. 1, pp. 47-53, 2011.
- [13] R. K. Goel, M. A. Nelson, and M. A. Naretta, "The internet as an indicator of corruption awareness," *European Journal of Political Economy*, vol. 28, no. 1, pp. 64-75, 2012.
- [14] C. Strand and M. Hatakka, "Mobile Phones as a Citizen-Controlled Anti-corruption Tool in East Africa-A Literature Review," in *International Conference on Social Implications of Computers in Developing Countries*, 2017, pp. 753-764: Springer.
- [15] L. E. Gaskins, "The effect of Information and Communications Technology (ICT) diffusion on corruption and transparency (a global study)," Texas A&M International University, 2013.
- [16] A. Andersson and M. Hatakka, "Victim, Mother, or Untapped Resource? Discourse Analysis of the Construction of Women in ICT Policies," *Information Technologies & International Development*, vol. 13, p. 15, 2017.
- [17] D. A. Kanyam, G. Kostandini, and S. Ferreira, "The Mobile Phone Revolution: Have Mobile Phones and the Internet Reduced Corruption in Sub-Saharan Africa?," *World Development*, vol. 99, pp. 271-284, 2017.
- [18] C. S. Bailard, "Mobile phone diffusion and corruption in Africa," *Political Communication*, Article vol. 26, no. 3, pp. 333-353, 2009.
- [19] G. Zanello and P. Maassen, "Strengthening citizen agency through ICT: an extrapolation for Eastern Africa," *Public Management Review*, vol. 13, no. 3, pp. 363-382, 2009.
- [20] P. Sturges, "Corruption, Transparency and a Role for ICT?," 2005.
- [21] M. Garcia-Murillo, "The effect of internet access on government corruption," *Electronic Government, an International Journal*, vol. 7, no. 1, pp. 22-40, 2009.

[22] C. Lindstedt and D. Naurin, "Transparency is not enough: Making transparency effective in reducing corruption," *International political science review*, vol. 31, no. 3, pp. 301-322, 2010.