

# T16P20 / The Use of ICTs to Improve Governance and Accountability Outcomes

**Topic :** T16 / Sustainable Development and Policy

**Chair :** Shahjahan Bhuiyan (American University in Cairo)

## GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

**Note:** *This Panel is eligible for the GCPSE (UNDP) Grant.*

Enhancing the use of information and communications technologies (ICTs), citizen participation, transparency and accountability explicitly appear as key components of seven goals (4, 5, 6, 10, 13, 15 and 16) of the United Nations' 2030 Agenda for Sustainable Development. Furthermore, promoting ICTs that empower citizens and building effective, accountable and inclusive institutions are treated simultaneously as ends and means to attain the Sustainable Development Goals (SDGs). This panel will address the question on whether the promotion and use of ICTs may improve governmental outcomes (particularly, regarding the delivery of the SDGs). Moreover, the panel will explore both bottom-up and top-down initiatives in different regions of the world.

In recent years, we have witnessed a global trend towards the promotion of citizen participation, transparency and accountability. A significant number of these initiatives promote the use of ICTs to reach their goals (Callen, Gibson, Jung, Long, 2016). For instance, some initiatives from civil society seek to foster citizens' accountability efforts by reducing some of the obstacles related to participating in policy-making processes[1] and reporting[2] and monitoring[3] corruption and fraud. Likewise, governments have also used ICTs to improve development outcomes. In many developing countries, e-governance promises to broaden access and enhance delivery of public goods and services, making it less contingent to citizen-bureaucrat relationships.

Additionally, these initiatives have been led by a diverse array of supranational organizations, national and subnational governments, NGOs, academic institutions and social organizations. The basic assumption behind these endeavors is that citizen participation and transparency of information may have a positive impact in governance and, ultimately, in the improved capacity to deliver developmental goals. However, the empirical evidence on the effectiveness of these initiatives over the conduct and incentives of incumbent governments, politicians and civil servants is still inconclusive (Khagram, S., de Renzio, P., & Fung, A., 2013; Mejia 2013; Molina, 2014; Paler, 2013). Up to date, most of the literature has focused on evaluating the intermediate outcomes of these initiatives (e.g. whether citizen participation or transparency increased), while the academic efforts to collect and process evidence on whether governance or delivery of outcomes is improved is an emerging strand of the literature (Mejia 2013).

The main objective of this panel is to contribute to fill this gap in the literature by exploring qualitative and/or quantitative evidence on the effects of the use of ICTs to foster citizen participation, transparency and accountability in the delivery of public goods and, ultimately, in the governments' capacity to achieve developmental goals.

[1] See for instance, "Intelligent Vote" an online political petition's platform created by a civil society organization in Chile.

[2] See for instance "I paid a Bribe", an online platform created by a civil society organization that allows citizens to report bribery.

[3] See for instance experimental evidence of the application of ICTs to monitoring elections in Uganda and Afghanistan.

## CALL FOR PAPERS

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## Session 1

Friday, June 30th 10:30 to 12:30 (Block B 3 - 4)

### **Can E-Governance Reduce Corruption? Views from Three Countries of Asia and North Africa**

Shahjahan Bhuiyan (American University in Cairo)

There has been a growing interest among many governments in developing and transitional countries to use Information and Communication Technology (ICT) as a tool to promote transparency in governmental operations and thus reduce corruption. This is because corruption remains one of the biggest concerns for the successful operation of public administration in those countries. The main purpose of this paper is to understand the role e-governance plays to reduce corruption in three Asian and North African countries, Bangladesh, Kazakhstan, and Egypt. The study, therefore, seeks to answer the following research questions: (1) what are the current developments of e-government in Bangladesh, Kazakhstan, and Egypt? and (2) How e-government contributes to reducing corruption? Based on the data and information on the selected countries, the study finds that e-government plays a limited but positive role in curbing corruption. The findings of the paper further argue that the government's ability to reduce corruption is largely dependent on the governance quality.

### **Effect of Electronic Public Procurement: Evidence from Bangladesh**

Wahid Abdallah (BRAC Institute of Governance and Development (BIGD))

This paper looks into the effect of electronic procurement on the performance of the public procurement system in Bangladesh.

Public Procurement in a developing country is often plagued with collusive practices and various forms of corruption. In addition, the public procurement at local government level is also subject to local and political capture. The political influence at the local government procurement often takes the form of blocking non-political contractors to participate physically in the bidding process. Since these local political elites are also well connected to the local law and order administration, the complaint mechanism is mostly ineffective. As a result, many bidders either fail to participate or shy away from placing bids.[1] This paves the way for the politically connected bidders to collude with each other. This lower participation and competition from non-political bidders and higher opportunity to collude at procurement process can be expected to result into high procurement price. Had there been no such influences, the price should have been lower.

A more transparent and IT based electronic procurement system may play an important role in curbing this sort of political influences and also increase competition. First, an electronic procurement system can allow more bidders to participate in the bidding process at a minimal cost from any location without physically visiting the procuring entity's office. Second, the opportunity for remote bidding minimizes the possibility of physical inhibition that are otherwise present in the traditional procurement system. This therefore will raise competition and reduce price.

In this paper, we investigate the effect of such an electronic Government Procurement (e-GP) system on contract prices of procured items by the Local government Engineering Department (LGED), organization responsible principally for building local roads, bridges and culverts. Since the contract price may differ depending on size and type of the procured item, we normalize the contract price with the agency's own cost estimates. We then investigate whether there is any systematic differences in items procured under traditional and e-GP systems. The differential adoption rate of e-GP across different districts provides us a quasi-experimental setting to identify the effect of e-GP.

We find two important results. Using data on more than six thousand procured items over more than four years, we find that e-GP has resulted into more than 11% decrease in procurement items, controlling for

agency cost estimates and district fixed effects. Second, an analysis based on news related to procurement-time violence and conflict in four newspapers over the same period reveals that procurement related violence has gone down significantly in LGED procurements whereas degree of such violence has remained the same for other agencies.

[1] The news regarding such influences are abound. For recent example, see an incident reported in the online edition of Daily Star published on the March 26, 2014.

### **Examining the Impact of Citizen Participation and e-Government: Collaborative Policy Design and Service Delivery in Cases from Five Countries**

Khasan Redjaboev (Centre on Asia and Globalisation, LKYSPP, NUS)

Azizbek Marakhimov (Dongguk University)

We intend to study the relatively new concept of collaborative public service delivery through ICTs in the framework of innovation diffusion in public policy processes. The reason is that an undeniable domination and unprecedented integration of the new age information technologies, social media and internet of things allow for new level of client (citizens) to agent/principal (government) relationships. Thus, this research aims to examine and build upon interdisciplinary research and robust theories on how citizen participation in new policy design, implementation and evaluation processes can enhance collaborative policy experiences and overall governance in varying political frameworks and state of the economies. Employing a generic innovation diffusion model and system dynamics modelling with the comparative public policy research tools, we explore our hypotheses on citizen participation-led efficiency through five case studies in five diverse political economies to control for contextual differences. Our cases look at e-government in Uzbekistan (President's virtual office), post-2014 Crisis Ukraine (anti-corruption), business e-registration in Kazakhstan, crowd-sourced design of the "Law on Police" in Russia and utilities payment and taxation in Singapore. We finalize our paper by exploring implications of our research for and assessing the importance of government institutions, donor funding and international development agencies in relation to the use of ICTs.

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### **Does Organizational Structure Moderate the Effect of ICT Usage on Government Outcome?: Empirical Evidence from South Korean Government Cases**

Jungin Choe (Yonsei University)

M. Jae Moon (Yonsei University)

With strong e-government initiative taken by the Korean government, the Korean e-government has been recognized as a top e-government performer not only in back-office applications but also front-office applications of information communication technologies (ICTs) (Ministry of Information and Communication 2007; West 2008; Im 2011, UN, 2012, 2014, 2016). Despite rich body of case studies of individual e-government system, there is a paucity of empirical studies on specific effects of ICT and their interaction with organizational structure (decentralized versus centralized structure) on the improvement of governance and accountability along with the contingencies that may moderate these effects. In order to fill this gap in the literature, this study aims at answering the following questions. First, what are the effects of ICT to facilitate governance and accountability outcomes? The study investigates the government outcomes in terms of citizen participation, transparency and accountability in Korean context. Second, in what way organizational structure moderate the effects of use of ICT on governmental outcomes? More specifically, the study tests the hypothesis that organizational structure will moderate the effect of ICT usage on government outcomes such that a more centralized and formalized type organization will have a stronger effect than decentralized and informalized type organization or vice versa. Using ordinary least square regressions, the data for the analysis is obtained from Korean central and local governments with 600 national public employees and 900 local public employees in 2011.

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## Session 2

Friday, June 30th 13:45 to 15:45 (Block B 3 - 4)

### **ICT and Zero Hunger: A Comparative Study of Food Security Policies of Two Indian States**

Kiran Kumar Gowd (Center for Politics and Policy Studies (CPPS))

### **ICT and Zero Hunger: A Comparative Study of Food Security Policies of Two Indian States**

The first goal of Millennium Development Goals (MDG) aimed at the reducing poverty and hunger by half between 1990 to 2015. After an evaluation, the United Nation's Millennium Development Goals (MDGs) are characterised as Sustainable Development Goals (SDGs). The second of the total seventeen SDGs is framed as "End hunger, achieve food security and improved nutrition and promote sustainable agriculture". The main objective of this goal is to eliminate the hunger and poverty. Though the goal seems to be a simple, there lie highly complex actions. About 800 million are reported to be poor in extreme poverty and hunger (FAO, 2015). According to UN report, 90% of the hungry (i.e., 790 million) are from developing countries - Sub-Saharan Africa and Asia. Nearly 200 million people are undernourished in India (FAO, 2015). The role of India is crucial in achieving the goal of zero hunger. Towards this goal, India enacted the National Food Security Act (NFSA), 2013 for attaining the target of reducing poverty and hunger. The act stressed for leveraging the Information and Communication Technologies (ICT) for effective implementation of the policy intervention for ensuring the transparency, accountability, and effectiveness.

National Food Security Act 2013 provides subsidised food as a legal right to 75 percent of the rural population and 50 percent of the urban population. That implies about 80 crores of the 120 crores Indian population entitled to the food subsidies. There are certain policy issues like corruption, leakages, poor governance, and unavailability of food grains that are mentioned by Dreze and Khere (2015), Mathew (2015), Choithani and Pritchard (2015), Masiero and Prakash (2015). Various researchers also found differences in various states implementation of food security policy. Some States like Chhattisgarh, Tamil Nadu reduced the leakages drastically whereas some States like Rajasthan, Gujarat have the 'abnormal leakages'.

The paper attempts to understand the role of ICT tools in reducing the corruption and 'leakages' in food security policy of India, concerning Public Distribution System (PDS) programme for reducing the hunger. In the federal system of India, states play a crucial role in the implementation of the PDS programme and the states are advised to leverage the ICT tools in the NFSA. There are differences in the food policy implementation of various States by improving their Information Technology (IT) governance structure. Hence, a comparative study of two Indian states - Chhattisgarh and Telangana e-PDS projects will give valuable inputs for improving the policy and hence in reducing the hunger. The paper is based on the field level experiences of beneficiaries and interviews with the technocrats in both the states along with analysing the various policy documents of two states.

### **The 'Whistle-Blower', ICTs and Good Governance in Nigeria**

Adewale Kupoluyi, (Babcock University, Ilishan-Remo, Nigeria)

## Abstract

*Many developing countries have experienced monumental degrees of corruption that has contributed negatively to their development. However, little success has been recorded as more cases of corruption have been reported in greater magnitude and dimension, in spite of the series of programmes and projects implemented to curb corruption in such nations, including Nigeria. Hence, there is the need to adopt a different approach to curb this malaise. As a way out, the active and direct engagement of the citizens becomes more relevant in promoting transparency and accountability in the public sector for good governance and in line with the United Nations Sustainable Development Goals (SDGs). Very recently, the Federal Government introduced a project to give monetary reward to the 'whistle-blower' that reports corruption by aiding e-governance using information and communications technologies (ICTs). Unfortunately, many citizens cannot still participate due to administrative bureaucracy embedded in the scheme that is fraught with shortcomings such as non-protection of identity of the 'whistle-blower' and the manipulation of intelligence information. The main objective of the study is to promote citizens participation, transparency and accountability through the use of ICTs by the 'whistle-blower', to bring about good governance that can actually be measured. How can things be done differently to achieve better accountability outcomes? How can this be achieved efficiently and effectively? And how can such policy be sustained? The research is descriptive and quantitative. Sources of data were both primary and secondary. Primary data were obtained using the instruments of structured questionnaires and interview guide while relevant books, journals and government publications constituted the secondary sources. Relevant hypotheses were tested and the data obtained were presented using tables and percentages while Chi-Square and ANOVA statistical tools were used to analyse the data. Findings show that with the creative use of ICTs by the 'whistle-blower', the task of curbing corruption would become a reality in Nigeria.*

**Keywords:** Accountability, Corruption, Good Governance, ICTs, Transparency.

## Does Internet Usage Reduce Corruption?

Abarca Alejandro (Observatory of Development, University of Costa Rica)

A direct implication of globalization has been the widespread use of internet and information technologies in the entire world. In practice, information technologies have had central roles in social movements such as the Occupy movement in the USA, the arab spring and many other social mobilisations around the world. Thus, these technologies can serve as a leveling mechanism that empower citizens by providing them with additional information and in turn, encouraging political participation, civic monitoring and surveillance, and political accountability.

This paper addresses the question: Does more internet usage decrease corruption? This work contributes to this discussion by arguing that increasing internet usage can be a public policy solution to cope with corruption by providing extra information about political malfeasance and thus affecting the civic surveillance in a country. Method-wise, this work uses cross-country and dynamic panel instrumental variable estimations, where the instrumental variables were constructed using data of submarine fiber optic cables, which are cables used to carry data across the planet. To the author's best knowledge, this is the first work to use this data and follow this approach. Thus constituting a methodological innovation.

The results suggest that the information availability and institutional quality of the countries each country is connected to by submarine cables affect the corruption levels in a country. Implying that internet can transcend the real of simple information exchanges between nations and have real impacts on politics and institutions. These results are robust to different dependent variables and model specifications.

Therefore, this paper contributes to the "The Use of ICTs to Improve Governance and Accountability Outcomes" panel by providing quantitative evidence to claim that higher internet usage decreases the corruption levels of any given country around the world. Furthermore, it provides evidence that supports that fostering the use of ICTs does indeed improve transparency and accountability.