Digitalizing Land Records in Bangladesh: A Case in Mundanity for Change Management

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ii. Retrieved from
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Abstract

Bangladesh transitioned into independence in 1971. However, its administrative systems remained confounded within the rules and procedures set in eighteenth century colonial administration of the erstwhile British Raj. The 1947 partition of the Indian sub-continent and the creation of Pakistan and the abolition of the landed aristocracy in the-then East Pakistan did little but exacerbating the differences between the status quo controlling the land titles and the general population accessing and exercising its franchise on the land in an open and fair manner. The problem became worse with land-related cases amounting to more than two thirds of the 1.8 million cases pending in the country's upper courts. To resolve the problem from the root and establish agency of the general population on the opaque land registry – a unique measure of digitalization of the land record systems coupled with process innovation at a governance startig from 2007, resulted in a drastic reduction of court cases and reportedly ensured irretrievable and corruption-free returns to the people of Bangladesh. This article draws benchmarks and standardizes the lessons-learnt from the perspective of the Oxford vantage points of Technology-Markets-Organizations under conditions of mundanity.

1. Introduction

Bangladesh is the 8th largest and the most densely populated country and the 33rd largest economy in the world. The country has been undergoing a series of innovative interventions at the public sphere which are aimed at institutionalizing information and communication based technology (ICT) for delivering services which had hitherto been done by paper-based and human-intense systems. The experience of Bangladesh in indoctrinating itself into an ICT spectrum is an expedition worth investigating and documenting for drawing lessons and benchmarks for the developing south in general. This article contends itself with answering what worked well and what did not in the case of an ICT-based land administration reform and test whether applying modern innovation systems work well in deliveries which are anachronistic in their conceptualization. Bangladesh economy is surging ahead with a 6%-average for more than a decade now (www.tradingeconomics.com, 2017). Bangladesh also enjoys a relatively stable Purchasing Power Parity (www.statisticstimes.com, 2017). With a 1,44,570 square kilometers landmass, the country is constrained with the lowest land-man ratio in the world at 0.06 hectares per person (FAO, 2017). Land, by far, is the most expensive in the asset categories and is the single most important indicator of wealth in the country (Islam et al., 2015). A plethora of laws and regulations determine the landed ancestry and agency of the individual, or for that matter the legal individual, access and control over land in Bangladesh (Islam et al., 2015), which includes amongst others, the Land Survey Act 1875; the Bengal Tenancy Act 1885; the Transfer of Property Act 1882; the PDR Act 1913; the Survey and Settlement Manual 1935; the Nonagricultural Tenancy Act 1949; the State Acquisition and Tenancy Act 1950; the Land Development Tax Ordinance 1976; the Land Reforms Ordinance 1984; the Immovable Property (Acquisition and Requisition) Ordinance 1982; the Land Reform Board Ordinance 1989; the Land Appeal Board Ordinance1989; and the Land Management Manual 1990.

Reviewing the sequence of events in retrospect and with hindsight, it can be visible that that to resolve the ownership conundrum which resulted from an estate-based tenancy to a republican architecture, several transitory procedures were put in place between 1954 and 1974. However, the ownership patterns continued to display fault-lines which caveated themselves through litigations. (Mahajan, 1998: p. 324, 332). Contested land ownership and registry resulted in more than three fourths of all legal cases (approx.. 80% cases) **"including civil and criminal (procedures)"** arising from land disputes (Hoque, 2000: p. 255). The complexity associated with the record and updates of the land registry has created a virtual glass ceiling for individuals wishing to exercise their franchise and has thus excluded a significant majority of the population from effectively administering their rights to the land – which in turn has created a new power elite vested in the control over land and the processes associated with it (Mahajan, 1998: p. 332).

2. Methodology

To secure a strong test result for a resolution of the land-registry conundrum with the help of innovative mechanisms, several theoretical and empirical devices have been deployed. Trend data on the administrative milieu of land management has been superimposed on in-depth personal interviews to appreciate the characteristic traits and possible scenarios which could render an indication of the nature and contours of the relationship that the registry sponsors (Figures 3, 4, and 5) and how infusing technology could exemplify the socio-economic multipliers to take roots.

A detailed analysis of the various networks at play has been devised to secure all available secondary information. Personal depth-interviews have been conducted across the administrative hierarchy from the senior-most to the entry-level official for charting out the path and markers denominating both their past and present portfolios and also the possibilities that each is projecting into the future, i.e., those which are relevant

for the land management ecosystem. This is closely related to the understanding drawn from the design of an innovation engine inside-out. The objective of such a detailed study is to connect the paper trails backing up the transfer and retrieval of the registration certificates in a legally-sustainable manner. A story-format is utilized to present the case in a coherent manner.

Since recorded trend data is virtually absent in case of Bangladesh, first-hand information was collected from various stakeholders of Bangladesh Government and the leading civil society bodies working in the rights area. Focus group discussions and in-depth interview have been carried out with UN officials to test the efficacy of the land-registry innovation schema. This stage of the research has been conducted with an aim to connect the evolution of the administrative changes with the realization of Sustainable Development Goals 1, 3, 5, 8 and 13.

3. Findings and Discussion
3.1. Setting the Boundary Conditions

The boundary conditions for the purpose of this essay include several political economy variables and have solid business implications. The variables include, amongst others, a very low land-availability per person due to a very large population contained within a very short space of land. The set of variables also include an imperfect and incomplete land-record system which remained as a memorabilia of a pan-Indian British colonial architecture (Nahrin et.al., 2009; also, administrative architecture exemplified in figure 1). Given the rent status accorded to land and landholdings, thus, the essay has been devised to answer politico-administrative optimization programming. A case is also made to outline a technology-driven initiative for delivering verifiable and retrievable records for land holdings to the individual and the institution. Such a change curriculum is imagined, of course with the right theoretical underpinnings to be central to the functional well-being of a fully formed rule-based capital architecture.

This is where the inquest for this essay originates. Here, we establish through corroboration with a pre-formatted set of established benchmarks and literature review a 'story of change'. We show through evidence how an imaginative set of transition protocols are infused with a plethora of both advanced and indigenous technologies which can distill learnings at each bend in the cascade of change. We also show how installing "mundanity of practices" put the issue into perspective. However, as is endemic to such an endeavor, such an effort requires delving deeper into the overall political and historic domain of the country and the essay sufficiently portrays the details with evidence. Fitzgerald and Carroll's (1989) illustrative records on land registry practices world over has been utilized for creating the markers for the infographics presented across the article. Also in this regards, Williamson et al.'s (2010) influential work on positively connecting land registry to sustainable development has been used to argue that such an adaptation might also be useful for Bangladesh.

The change curriculum introduced in this article stems from an idea to test the hypothesis on the basis of experience elsewhere. Ploeger and Van Loenen's (2004) ideas for a triple marked multiplier in providing information on land registry across Europe was based as an intellectual marker for introducing information-communication-technology enabled ecosystem for resolving the land conundrum. By the same token, Deininger and Goyal's (2012) postulations have been used in understanding the credit rating ameliorations in landed assets in India. Huber et al.'s (2009) findings on a case study in Tanzania has been utilized to create the testing benchmarks in creating platforms for accumulating wealth indices with special reference to the positive correlationship between land-ownership registration information retrieval to the augmentation of prices and induced accrual of critical individual, or for that matter, familial transferable wealth.

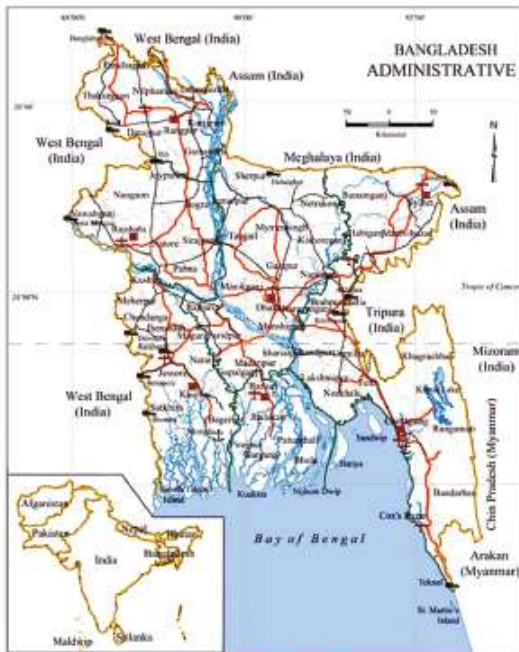As regards to formulating an understanding of the Bangladesh case, two resources have been widely

Figure 1: Bangladesh Administrative Map
[© http://en.banglapedia.org/images/2/22/Administration.jpg]

investigated, Kosters et. al.'s (1997) work on utilizing GIS for land-registry digitalization, Ossko's (2002) work on finding the loopholes in connecting old land registries to information-enabled systems, and Jibril's (2006) on connecting good governance vertices to a basic infrastructural set-up in land registry – which has been found to be positively correlated and is found delivering on their economic multipliers. Also in this regard, French and Bax (1998) work on investing in upgraded infrastructures has been investigated to formulate ideas for testing in the group surveys on public servants and public intellectuals for deriving the existing status quo imprints with regards to land registry automation and digitalization.

3.2. Change Chronicle

Bangladesh is essentially a post-Westphalian postscript of a country superscripted on the millennia old history of the greater Indian sub-continent. Unfortunate as it may be, the country never experienced a smooth transition between and through epochs (Moniruzzaman, 2009; Muller, 1985) which marked its evolution from being an essentially agrarian and distributed feudalistic administrative architecture to a service-led early-stage industrializing conglomeration of capitalistic interests contained within the bounds of a highly centralized governance structure. The roots of modern Bangladesh, as it stands today, are firmly grounded in the late nineteenth century aspiration of the East Bengal peasantry led by a small middle-class dominated intellectual elite which wanted a homeland free not only from a colonial control but also from that of the perceived hegemony of its subcontinental brethren (Sreeradha, 2005; Gulati, 1988).

Administrative changes in the People's Republic of Bangladesh, as it stands today, are relatively slow in their fermentation (Khan, 1988). Another defining characteristic of the changes that the country has experienced in the administrative domain is marked by sharp and abrupt course correction because of regime change at the helms (Morshed, 1997). Both these traits are usually underpinned by a marked absence of participatory decision-making and legislative indifference (Obaidullah, 1999). It is said that the birth of Bangladesh was midwifed by a deadly war of liberation in 1971. Subsequently, the assassination of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman and consecutive military coups afterwards ensured that a very unstable pattern emerge as the route-marker denominating the transition of the country from a disenfranchised colony to a sovereign secular democracy. Hence, looked with the clarity of hindsight it can safely be claimed that the country suffers from an acute and generic tendency to shy away from synchronized orchestration of its administrative architectures. This could be symptomatic of a spatiotemporal spirality (Mascarenhas, 1986; Lifschultz, 1979; Ali, 1970). The changes and its constituent portfolios of transitions were both indistinct in focus and almost ubiquitously ambiguous in their conceptualization. For that matter, even the intended effects went mostly without a publicly articulated guideline and without a specific contour for either initiation or completion (Sarker, 2004).

Bangladesh's administrative domains in both the public and the private sectors

are inscribed in the paper-based system of a colonial administration left in place first by the British and then by the Pakistanis during their reign. Even after its independence in 1971, Bangladesh literally miscarried to build a governance-architecture beyond the algorithms left her colonial masters. Bangladesh's evolution as an independent country was punctuated by sluggish economic growth, public disenfranchisement and occasional military interventions in the guise to reinstate a semblance of stability at regular intervals (Ahmad, 2007).

Changes accelerated and took a more definitive shape since 2008 when, after a two-year intermission of democracy under a military-backed so-called 'caretaker government', a democratic regime was elected to the parliament. For the first time in her recorded history, a political party with a definite and broad-based public agenda titled, 'Vision 2021' (Planning Commission, 2012) was 'elected' to power.

'Vision 2021', delineated development priorities across vectors such as ensuring broad-based growth, reducing poverty, and ensuring effective governance and sound institutions. The agenda aimed towards establishing a caring society, and promoting innovation in a knowledge-based society. It essentially promised to take Bangladesh to a middle-income country status by the year 2021 – her Golden Jubilee of Independence. 'Digital Bangladesh' and Information and Communication Technology based reforms constituted the nucleus of the Vision 2021. Ideologically, the 'vision document' was a promise to grant freer access to an unyielding and archaic ruleset which defined government entitlements (WSIS, 2005) and enable the same set of structures to render services for spawning a gamut of hybrids where both the public and the private sectors would join hands and commission what is essentially a PPP (Public-Private Partnership) enterprise.

The Government over last nine years has been more than successful in spite of its constrained resources. The government started by helping setting up over 5,000 ICT based one-stop outlets run by 'citizen entrepreneurs' – resulting in setting up of one such center within 4 km radius of each citizen and converting old post offices into information windows (Tothyo Batayon, in local dialect). Results are more than impressive. More than 4.5 million citizens were provided access to public information and services (i.e., birth certificates, land records, passports, and application to various other government services) as well as private services (mobile financial services, insurance, various types of computer and vocational training, etc.) each month (a2i, 2018). The government-run National Portal can proudly boast to be the world's largest government portal. It has more than 2 million in number of content. The portal generates in excess of 90 million hits. It virtually integrates nearly 42,000 offices of the government in one address www.bangladeh.gov.bd (a2i, 2017).

The crux of this essay is based on the efforts for digitalization of land records which lies at one of the epicenters of the administrative manifestation of the Vision 2021. Aimed at ensuring a culture of transparency by combining accountability and responsiveness of the Government, the initiative renders a more comprehensive approximation of both the political and economic characteristic of the transformation of the state. Assessing the dynamics of the evolution is crucial for a better grasp of the cauldron where systemic changes alternate in consecutive learning phases of actions, inactions and reflections (Vince, 2008) in the public domain.

3.3. Historicizing Land Records
The modern roots of recorded and collateralized legal pedigree of land rights and records in Bangladesh stems from the Cadastral Survey (CS) conducted between 1888 and 1938 under 'The Survey Act, 1875'. The CS recorded and documented the "Records of Rights", i.e., ROR (Khatians, in local dialect) across the-then Bengal presidency of India (Islam, 2013). The first such set of records (Khatians) included details of land-holdings, including names of the owners/zamindars

(landlords), occupants, description of land, and amount of revenue (historically collected and/or expected to be collected on the first day of the Bengali New Year, Pahela Baishakh; Guhathakurta & Schendel, 2013).

The district record room and zamindars' tax office (i.e., kachari/tehsil offices in the local dialect) acted as the repositories of the certified true copies of those records were preserved in. This act, for the time first time in history, gave the individual land rights as tenants (rayats) and designated their legal status as 'subjects' of British India (Islam, 2013).

The British political masters drew both their legitimacy and political support from the mutually opposing forces of political franchise based on universal suffrage and demands for citizenship rights contesting the entrenched feudalistic order, when both in themselves drew their legal mandates from the British colonial administration. This was a peculiar three way manifestation of a complex political nature. The process resulted in the government enacting 'The Bengal Tenancy Act, 1885' to ensure tenants' right (Alamgir, 1981). Peasants' occupancy right to land and mutation for tenants to land records (as occupants) were addressed by this law (Islam, 1977).

But this effort remained less fruitful than originally intended. As a result of continued unrest from the farm-holds and the peasantry, an inquiry commission was established after enactment of 'The Government of India Act, 1935' by the British government (Misra, 1970). This commission recommended for an acquisition of all 'zamindaris' (landed-estates) with due compensation and bring the peasants and the farm-holds directly under the administrative control and jurisdiction of government for the first time (Kochanek & Hardgrave, 2007).

1947 partition of India was a watershed moment in history and the recommendations mentioned above was implemented in full only by the Government of the East Bengal, State of Pakistan – while the western part of the newly formed Pakistan resisted and ultimately succeeded in stopping the implementation of the recommendations in West Pakistan. The then provincial government of East Pakistan enacted 'The East Bengal States Acquisition and Tenancy Act, 1950' and acquired all estates. This also resulted in the state requisitioning all estates with all rent receiving interests and thereupon brought all peasants directly under the government as land-owners.

Subsequently, a short survey known as 'State Acquisition' (SA) was made to prepare compensation assessment roll for giving compensation to erstwhile landlords/zamindaris and to redistribute land to the tenants (rayats) under lease from the Government. Handwritten Records of Rights i.e. RoR (Khatians, in local dialect) were prepared under the auspices of this survey. Stenciled copies of these records were preserved in the district record room, the then thana (sub-district) revenue offices (now Upazilla Land Office), and tehsil (now union land) offices (Islam, 2013).

1971 rendered a deadly blow to the evolution of gradual political-economy build-up which had started taking roots after 1954 but was halted time and again by the West Pakistani industrial and landed elite (mentionable, the landed estates still remained in force in West Pakistan) with active support by the military usurping power at the center (Hussain, 1979; Rizvi, 2000). With three million war dead and three hundred thousand women abused, Bangladesh emerged from the scourge of a genocide victorious, yet operationally devastated (Islam, 1981; Akmam, 2002).

Government record offices suffered the worst possible consequences of the war. A post-war famine, creeping hunger, successive coup-d'états, struggles for democracy, two major floods and several cyclones later, it was rather a miracle that any trace of the records could even be cited. Both the population and the disputes related to property – inheritance and acquisition – were increasing (Barakat & Roy, 2004). Misinformation,

disinformation, and ultimately, corruption ensured that legal battles between and amongst the state, the individuals and the institutions continued unabated.

The consequent toll on the economic and social wellbeing of the nation was visibly getting higher. It was highlighted by investigative journalism and administrative notes that at a certain point in time, more than one-fourth of all land records stood disputed, resulting in nearly 3.2 million pending litigations involving around 150 million people — with each dispute taking an average of 9.5 years in litigation (Zaman and Rokonuzzaman, 2014).

Civil suits often accompanied an extra load of criminal proceedings as the costs in time and money associated with amicably resolving disputes amongst contradictory trails of official records exasperated civilized efforts for resolution and individuals, more often families, resorted to violence. The conundrum further degenerated the tensions in the social fabric and resulted in a concentration of land rights to a greater degree with the status quo political power (Lewis & Hossain, 2008; Cain et al., 1979).

3.4. Land Records Architecture

Land administration in Bangladesh rests on three pillars - land management, land survey and land transfer registration. Each of these functions is handled by a different category of offices (Rahman, 1994). Several offices perform land-registry and management related activities from Union Level to National level **(Figure 2)**.

Figure 3: Land Information System (adopted from Nahrin, Kasphia. 2012. "Land Information System (LIS) for Land Administration and Management in Bangladesh" iii).

Mutation and updating land records are the two most important services provided by the office. Interestingly, this seemingly small task-profile masked what later turned out to be one of the most impactful public service innovation points in Bangladesh (Islam, 2013).

The mission-critical part of the entire 'land records chain' is 'mutation' (Naamjari, in local dialect; Figure 4) – the 'process' by which an individual can establish his/her right over land, e.g., by inheritance, by a transfer like sale/purchase, through will, mortgage, lease, exchange, auction, decrees of courts and settlement by the government.

Any such change requires the name(s) of the legal owner(s) recorded through 'mutation' for updating the central land registry and records. The collector, i.e., the Deputy Commissioner (DC) is both the repository and arbiter from the part of the Government for any ad-interim change, amendment, correction and updating of land records. AC (Land) of Upazilla land offices render this service as representatives of the Deputy Commissioner.

The comprehensive burden of corruption and discomfort forced the government look at the situation with more attention. So, in order to ease the process, to reduce harassment of the service seekers and ultimately to curb corruption and deliver faster, and in general, to take back control of land registry into the administrative domain, the Government initiated a project for digitalizing the land records in 2008 (Feldman & Geisler, 2012).

Reforms which were planned included computerization of land records and simplification of land transactions and land registration protocols. The preferred mode for entry, as it ought to have been in hindsight, was the point of "mutation" for land records (Figure 6) based on GIS-mapping and Land Information Systems.

v. Retrieved from
https://www.semanticscholar.org/paper/Land-Information-System-LIS-for-Land-Administratio-Nahrin/7169223b396546fe84d3856fc13a3107591ddd4c?tab=abstract, accessed on 04 November 2017 at 1800 hrs

vi. To be found in
http://lab.portal.gov.bd/sites/default/files/files/lab.portal.gov.bd/forms/f5e6b036_da33_4209_bd7e_3779b5057cc2/Editable_Mutation%20Form_converted.pdf
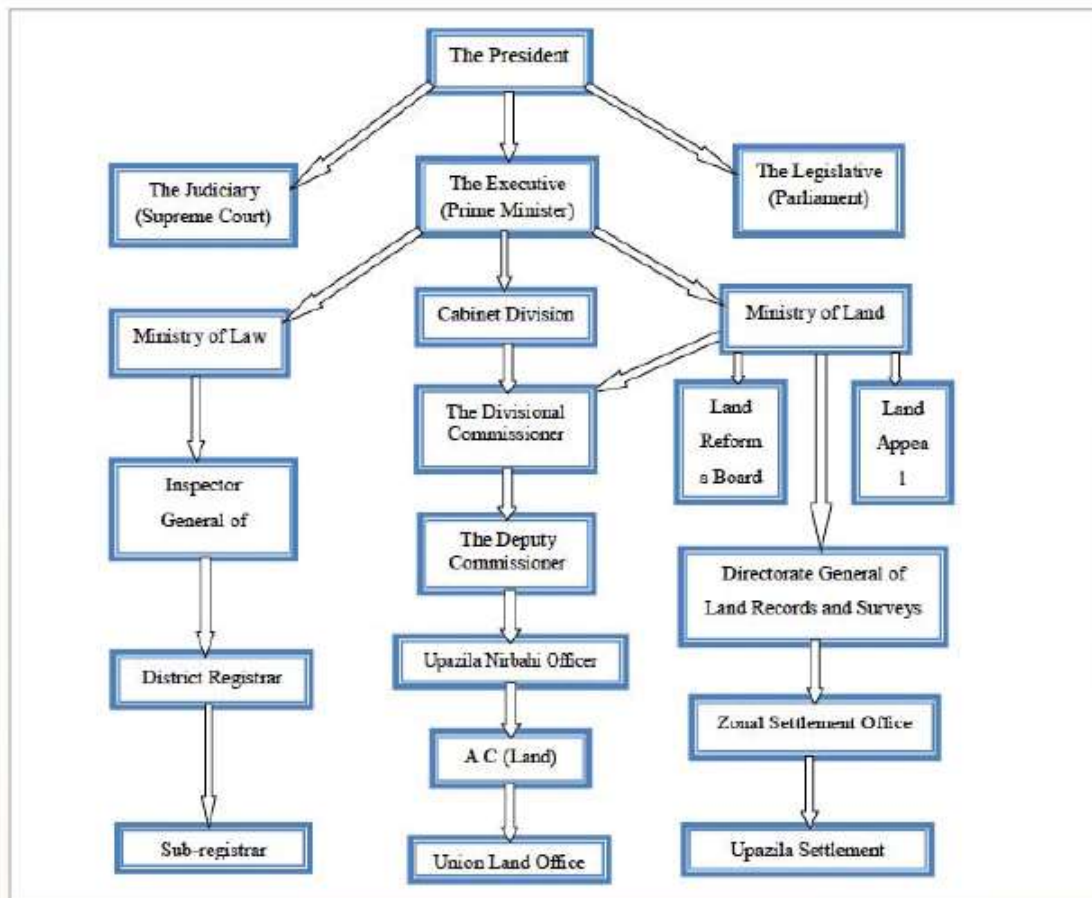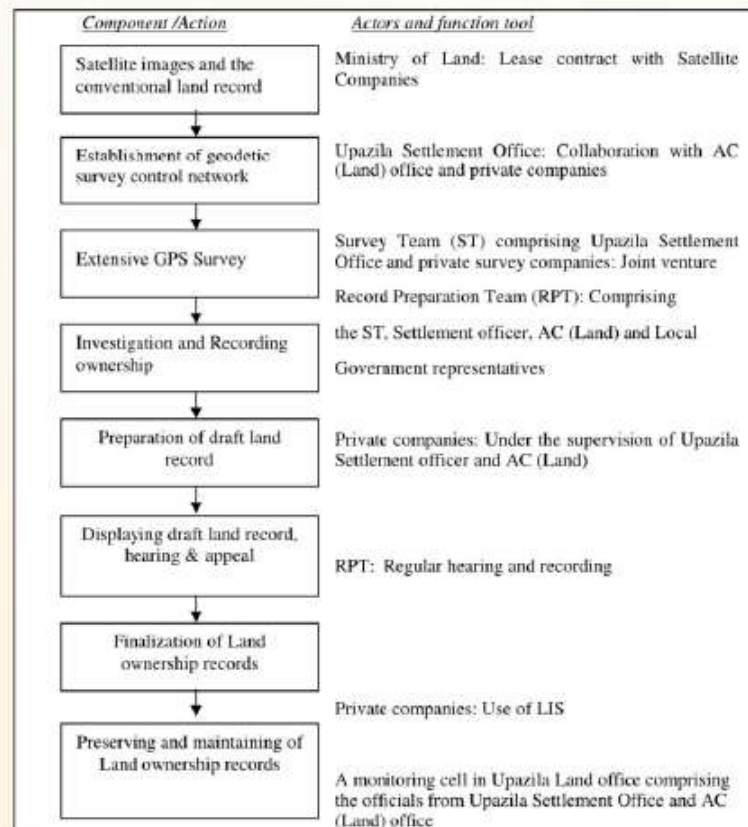
Figure 2: Organisational Hierarchy of Bangladesh Land Administration (Islam, 2013ii)

However, Upazilla (sub-district) land offices (Assistant Commissioner, also known as the AC Land) are the backbone of the entire land administration of the country (Figure 3).

Source: Developed by Author, 2008

The process was relatively simple in its conception and incorporating the learnings from observing the resistance it encountered for more than two years, the government ordered a maximum time limit for mutation to 60 days in city areas and 45 days in areas which did not fall within the jurisdiction of a city in 2010. Service charge for mutation was fixed at Taka 250 (approx. 2.5 British pounds) through this order vi. All pre-requisites and required documents for mutation was prescribed in the order.

The expectation was that the new engine of innovation would eliminate the entrenched status quo in one go (Figure 5).

3.5. Change Curriculum: Politics and Economics

As is the dynamics of the political economy of Bangladesh, the 'vision' for a "Digital Bangladesh" has also been evolving. What started out as a 'promise' in 2008 started taking a more definite shape and growing roots with each passing year and especially with the trading sector of the economy taking off.

A more careful study of the procedure followed and the protocols institute since 2009 allow the discretion o hindsight and transposing actual result onto the intended outcomes of th project with more vivid details. Th existing official literature have bee scrutinized by this author from theoretica angles propounded by severa frameworks found in the domains o business and corporate arena fo assessing and appreciating the 'expected transitions and their course of eventua evolution for the purpose of this essay.

We find that Kotter's 8-steps (2012) fo "managing change" can be deployed fo calibrating the lenses to analyse the idea conditions which could underwrite th work-in-progress for the undertakings o the government at the functional leve and operational lines. We also find tha Roger's Choice-Cascade (2010 framework can explain some of th operational underpinnings and ca substitute as the de facto engine drivin the practices. The choices which ar made and the consequences which ar experienced by the choice-maker slowl
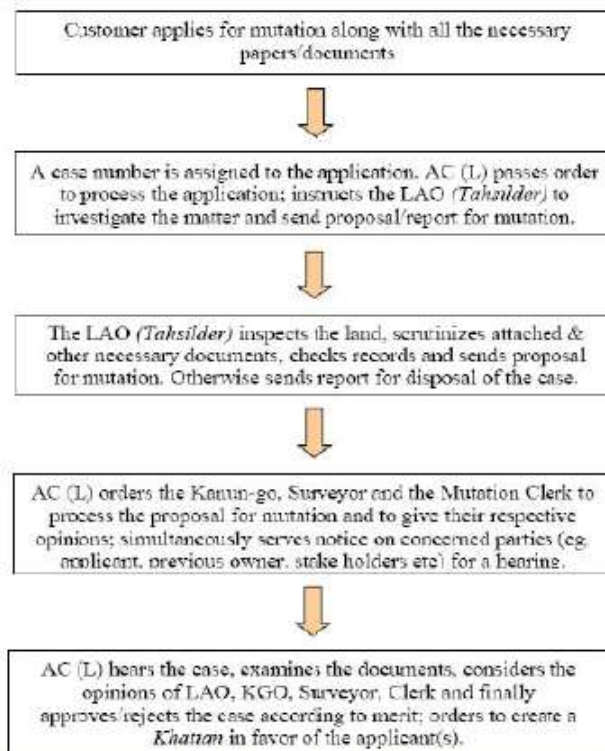

Figure 4: An Overview of the Mutation Process (Adopted from various sources at the Land Ministry Websites of Bangladesh Government, 2018)

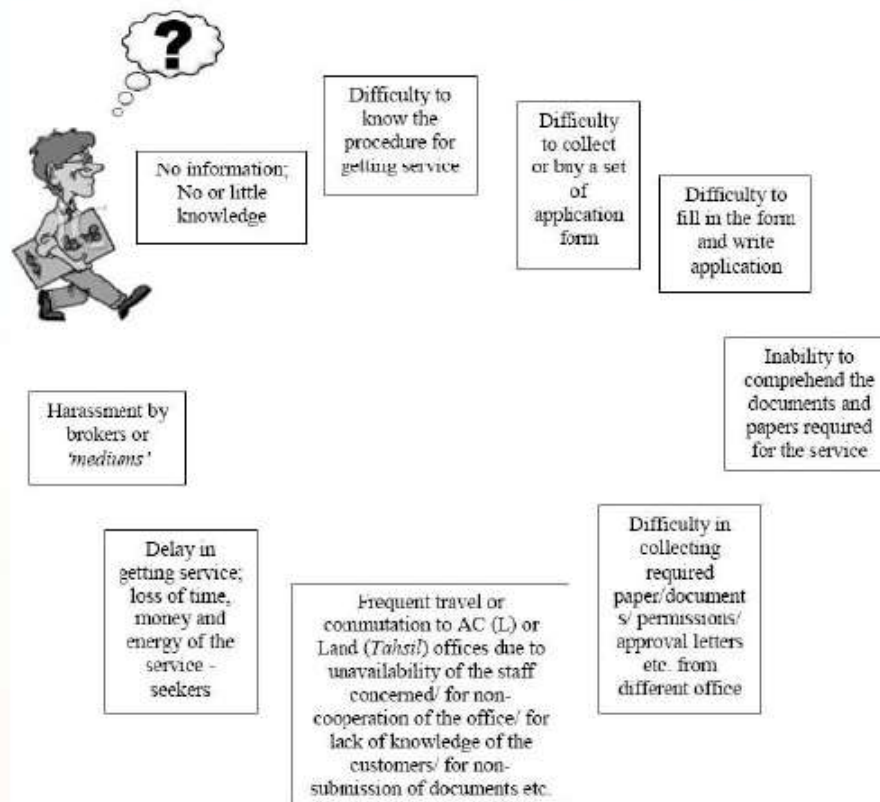**The process used to be both difficult and complicated (Figure 5).**

Figure 5: The Citizen's Plight at Land Records of Bangladesh
(adopted from Islam, 2013)

form the terra firma of the change paradigms that the state apparatus experienced. This is more so as a political government put in power by popular vote inherited the change sequence initiated by a military backed hybrid of unelected administration. However, as both the land-centric stakeholders (such as, the bureaucracy, the unauthorized middlemen, the political agents, the land owner, etc.) and the intended beneficiaries of the services (who again, are stakeholders of the same process) continue to learn, unlearn, relearn and indoctrinate themselves in various stages of the change process and the consequences that each experience as a result.

When we infuse Kotter's (2012) with Roger's (2010), what we come up with is protocols which are characteristically similar to the Kübler-Ross Change Curve (1969) – albeit in very different ways. It may be remembered that Land Administration Reforms through the use

of ICT is related to a concept of Bangladesh itself as a republic and as an aggregation of sovereign and individual agency as it emerges from a prolonged "neutral zone" effected by the War of Liberation in 1971. Essentially, it is an ideational and ideological contest between a version of the past and a vision of the future (Hughes, 2013).

But if we would take a look at the details of the change curricula and the individuals and systems designated to draw out the contours of the change, we see that there is a definitional challenge to how a post-Westphalian state system can be conceived. While it is too early to make a definitive empirical assessment of the scenario which is still in the making and which has both fork and tangential avenues to roll out in the years ahead, it would not be unwise to keep the perspective for future references and also for future research how this nominally small change in the way land administration was maneuvered ultimately

Features	Existing system	Proposed system
Form of Surveying and mapping.	Centralized system by DLRS at Zone (Old District) level.	Decentralized at Upazila level with collaboration of Settlement offices, AC(Land) and private companies.
Survey method	Traverse survey, chain survey etc	Satellite image, GPS
Nature of Surveying	Periodic and seasonal.	Regular and continuous.
Composition of a Survey team.	Mostly seasonal temporary employees headed by a Surveyor.	Surveyor of Settlement office, officials from Upazila Land office, staff of private companies
Information Access	Manual and time-consuming.	Computerized LIS (i.e. with GIS software), continuous
Record preparation	Manual, periodic and time consuming	Computerized LIS (i.e. with GIS software), regular
Updating records	Periodic updating and lengthy mutation.	Continuously updating by LRO
Land Registration	Isolated function by Registration Department.	Integrated with LRO and registration officer during transfer.
Mutation	Though LT notice, time consuming	Continuous with land transfer registration
Ownership Rights/ ROR	*Khatian*, deed and mutated documents are together determinants of ownership.	Unified Land record
Other Rights and Encumbrances.	Clouded, ambiguous, irregular updating	Continuously updating by LRO
Community Participation.	Unlikely	Local Government bodies assist RPT
Land administration and management	Settlement, Management and Registration are three disjointed streams.	Settlement, Management and Registration streams are unified through information sharing.

Figure 6: Land Information System, Entry Point (Adapted from Nahrin, Kasphia. 2012. "Land Information System (LIS) for Land Administration and Management in Bangladesh"

paved the way for the evolution of the institution of a rigid, rule-based, institutionally- void soft state evolved into a very different league of governance.

Hence, for the purpose of the essay, the process can be problematized as not only a process-based learning in change management but something which is deeply connected at a much wider and more complex rubrique of political matrices and argumentations and like any other evolution in the political domain, it entails conflict of interest and conflict of status quos populating various stages and dominions of the political machinations. Given the nature and manifestation of such conflicts, resolving such sequence of 'events' requires

resolving complex equations of interest and indoctrination. Algorithmically, resolving such equations require creating coalitions amongst factors and variable which could sponsor a form of acceptance as practice by various layers of the polity (Rotmans & Loorbach, 2009). In all, it is a circular movement resulting in a spiral of outcomes where the conditions defining the initial entry points change and recombine the learning into a framework of the 'shifts' already experienced by the paradigm and come to a negotiated solution which would variously accommodate the needs and demands of the status quos populating the new plains or paradigms.

3.6. Transitions and Resistance

Against Innovation

The reform project itself was targeted for completion by mid-2016. With more than 10 million British pounds allocated in local currency to complete the digitalization project – the roll out remained short of fulfillment till the end of 2017 (Hossain, 2017).

A deeper introspection of the project reveals surprising learnings. One of them was a strong sense of 'disbelief' by the intended beneficiaries of the project. The rather simple and essentially "pro-people" methods to digitalize land records and render all services electronically were not taken as something which could be done in a developing country like Bangladesh. Restricted survey-results indicate that the general population, and even many bureaucratic agents considered it "impossible" to carry out the tasks with information and communication technology – completely negating the need for paper except for copy-keeping. The next in line was "suspicion" - as literally many from all stakeholders and beneficiaries suspected foul play with political or financial ends. Third in line was "uncertainties" as to the nature of the operation and the delivery of the outcome.

It was found that while the need for transitions into an ICT-based architecture was clearly articulated by the top-echelons of the national governance, they were fuzzier and less-clear in the circulars which were supposed to be read by the last-person, the individual (for that matter, the legal individual), in the land-chain. A peculiar observation which came up from the record-trail suggests that while everyone 'believed' that they "understood" that 'khatians' could now be accessed by their cellphone sets– very few actually comprehended how the cellphone sets could be connected to either the Tehsil office or the office of the AC Land (Islam, 2013) and how the services would be delivered at the point of contact or for that matter, if there were a point of contact at all. This was a dampener for the project had already been rolled out and there were few avenues if any to make amends in the process.

Strong resistance came from coteries which depended on bribes and corruption as central to the political economy of the land records and registry. A broad-based study found that land administration contributed to nearly 40 percent of all bribes paid at the local level in Bangladesh (Siddique, 2012; TIB 2012). To contextualize the gravitas of the situation, another survey reveals that 59% of all households in Bangladesh experienced corruption while staking their claims for government services and estimated annual amount of bribes given by Bangladeshi households was found to be 226 million pounds per calendar year (TIB, 2012).

Possibly, a much stronger opposition emerged from the entrenched middlemen rendering 'privileged' access to land related data, hand-drawn maps and records of ancestral holdings of individuals and families with competing claimants aggravating the situation even further (TIB, 2012).

A fourth source of resistance rose from quarters which "hosted" the field-middlemen "inside" the physical infrastructure, i.e., the officials compounds of the public record offices across the country (TIB, 2012). The situation was made more complicated by officials who manned the approval channels of the bureaucracy in the land administration (UNPAN, 2010).

The fifth source of resistance to change was found amongst the intended beneficiaries themselves. Citizens who believed that they lacked necessary technical support or know-how to access the information and benefit from the enhanced service profiles because of their inability or confusion to utilize phone and web services (as they were not either computer literate or were not comfortable in using information technology) for accessing government records formed an inert block which coupled itself, may be unintentionally, with the official channels which promised to deliver the records at their doorstep for a certain fee. This circular loop was immune to external shocks and needle-pricks. Ignorance created the greatest roadblock to change.

3.7. Managing Transitions by Learning from Resistance

Lomborg (2016) analyzed the stakeholder patterns affecting land administration and reforms. A value optimization research shows tell-tale signatures that introducing digitalization as a service protocol for land record authentication and renderings would provide nearly six hundred percent economic benefits (Lomborg, 2016; Rahman, S H and Talukdar, S K IN: in Lomborg, Bjorn. 2016).

Digitization costs would include BDT 77.28 million for procuring both hardware and software and BDT 650 million to scan more than 50 million existing records (The Daily Star, 2016). Staffing would cost another BDT 90.42 million- leading the total to a cost of BDT 2.8 billion. However, the costs are more than well justifiable. A typical transaction involving land records costs BDT 1,045, and takes between a month and a month and a half. It requires five different visits to various offices. With digitisation of the system, however, the cost would fall to only BDT 80, and it would take 15 days and two visits ("Service delivery process innovation: insights from Digital Bangladesh, Innovation and Development", Hasanuzzaman Zaman). With lesser number of steps and transactions and fewer bribes, the total direct benefits are estimated at BDT 481.8 million per annum. Each taka (local currency) spent to digitise the land records system would bring more than three takas (local currency) of direct benefits. However, the additional dimension to consider is the increased security of the documentations and rights. Experts predict that land digitisation would bring benefits of more than BDT 160 billion over the next 15 years, and possibly more than BDT 1.3 trillion by 2070 - snowballing into indirect benefits of BDT 616 for each 1 BDT spent (ibid).

By 2018, the government has completed conversion of nearly the entire range of land records into an ICT-based matrix. Last nine years saw a plethora of forces, both from within the service lines and from the civilian domains, contesting the strategic space opening out of the digitalization efforts. While these can be viewed as a contest between what is new and what was old (Farvacque & McAuslan, 1992), it could also be viewed as a solid political economy rent distribution contest which favours shifting the control of the land-related rent sets from more informal and distributed channels to organized and centralized mainframe government (Imran & Gregor, 2011).

The nature of the contest and the contending parties themselves indicate that it is more economic than political. However, the economic considerations are enough to warrant a political action in the case of land administration (UNPAN, 2010). The intended beneficiaries of the protocol reforms were also successful in effecting a slowdown of the rollout package. However, the Government displayed remarkable consistency in delivering the project and leading it to its intended outcome.

Several factors strengthened the appreciation of the government's stronger-than-usual role in delivering the project. These include, amongst others:

i. i. The Head of Government's personal involvement in delivering decisive policy signals rendering a political mandate from the highest level and negating the local level machinations.

ii. ii. The Head of Government's statements categorically solidified the political "irrevocability" of the measures undertaken by the apolitical administrative architecture and ensured that the political circles adjusted themselves to the new realities.

i. iii. Land record officials were trained in stages – from the highest to the lowest stratums – ensuring that possibilities for policy ambiguity and dissonance were reduced.

ii. iv. Legal documents were modified to render small yet measurable and verifiable changes in both the procedures and protocols of the new land registry. This allowed time for adjusting the localized and situated political economy rents to different

domains.

iii. v. Cabinet level decisions were codified and rendered into legal rulings in stages so that no abrupt dysfunctionality could take place.

iv. vi. The parliamentary standing committees were utilized to build multi-party, multi-stakeholder coalition-building from the legislative body – ensuring that all political parties were taken on-board and had their fair share of authority and accountability in the way legislative actions were undertaken.

v. vii. Consistent oversight on the Ministry of Land and its directorates by the Parliamentary Standing Committee ensured that the reforms had constant exchange between the executive and legislative domains. One critical element which proved to be very successful as a measure was the appointment of a land ministry official, one of the design pioneers for the ICT protocols as the chief of staff of the parliamentary standing committee chairman. This ensured that the parliament was adequately appraised about the contours of the reform and the Ministry was appraised about the political sensitivity of the parliament. This also ensured that the judiciary also synced in.

vi. viii. A special department under the Prime Minister's Office (PMO), entitled the a2i (access to information), was deployed to design and administer an empathy-based toolkit which reduced the TCP (Time, Cost, Visit) and enhanced the SPS (Service Process Simplification). The a2i also created a social-network based (Facebook) peer support community to discuss, assess and develop the land record and survey services delivery under its wings.
One of the most important elements which transpired during the course of the roll out of the whole project was the innovation-orientation for the entry-level officials of the government. For the first time in the recorded history of the Bangladesh civil services, the AC (Land) level officials were encouraged to exercise more latitude in mainstreaming innovation in service. This was allowed

even within the strict rulesets outlining the duties and responsibilities of the AC (Land) and in extension the district land offices to bring both access and delivery ease to the service seekers. The selected practices were replicated as best practices across the country for standardizing the protocols .

Another cornerstone which determined the success of the roll out was the effort to tie performance to the distribution of service benefits. This was a step in the right direction albeit contrary to the existing customs and practices of a secured and nearly unaccountable administrative service structure inherited from the British colonial architecture. The Government introduced awards for officials successfully finding, designing and implementing innovative practices.
The third step in this regard came at an institutional level. In 2016, the Government designed and introduced the "Annual Performance Agreement" (APA) connecting service delivery to career advancement under a contract signed between the Secretary (i.e., the executive head of the Ministry) on behalf of the Ministry/Department being represented and the Cabinet Secretary (this highest-ranking civil servant of the country) on behalf of the Prime Minister. The eight tactical measures and the three strategic approaches can be analyzed from two different viewpoints.

First, from a political-angle, the government ensured that the executive did not have to work in an environment marked by voids emanating from "incomplete, inaccurate, or idiosyncratic policy interpretations" (Horn and Meter, 1976). The same also ensured that the executive was 'indoctrinated' and 'calibrated' before it was asked to deliver – which could differentiate between success and failure (Hill, 2003). To negate 'uncertainty' and to offset 'distance' in the administrative milieu of the executive (Hofstede & Hofstede, 2005), various layers of the administrative pyramid were encouraged to exchange ideas and information across service lines between the legislative and the judiciary. A third dimension to it was the extensive use of the social media to garner public stake-holding and mandate for pre-empting resistance (Rothstein, 1998).

Analysis of causes, consequences and impact in land management and service provisions
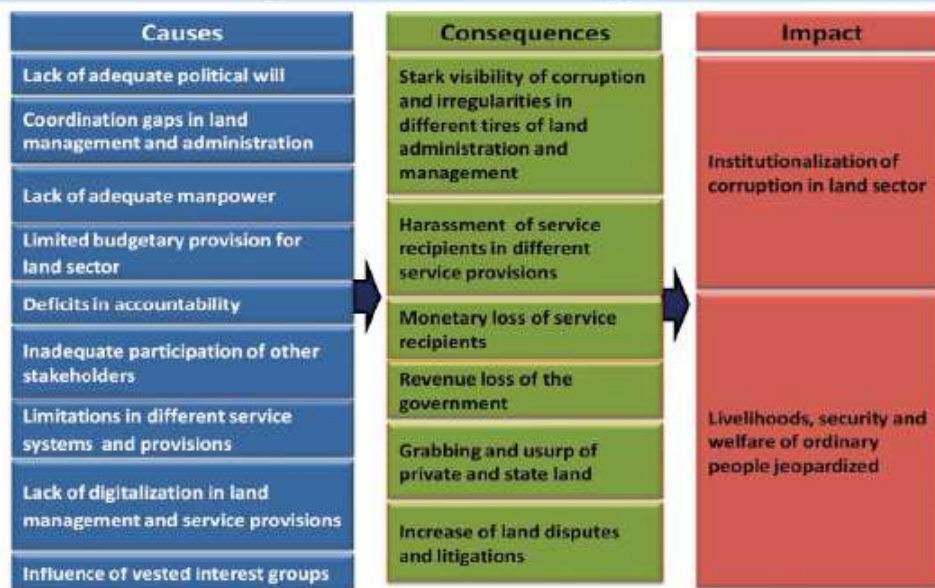
Figure 7: Causal Relationships in Land Administration

Second, from the angle of innovation and introducing change, a management perspective which encouraged a gradual transition instead of direct cross-over. This could also be equated with the classic Virtuous Strategy Cycle (Zahra, 2008; Watanabe et al 2000). Instead of a grand last post, the a2i designed several consecutive 'Quick Win' mileposts. The arrangement ensured that consistent augmentation of client confidence continued and loyalty of the intended beneficiaries remained unflinching (Box 2). The issue was not as easy as it might appear in hindsight. Because of the obvious 'hidden commitments' (which are difficult to be quantified or for that matter even objectified; Cross et al, 2004), it was important that social networks were utilized inside the administrative channels to carry out the change strategy originally designed. Integrity and continuity of service lines within the land administration architecture sustained the effort in a coherent and positively augmenting spiral of service delivery channel.

4. Conclusion

Several weak-links are still preventing the completion of the project on time and the fulfilment of its stated objectives. Two critical components in the channel include instilling a routine and creating mundanity in the deployment of the processes which can easily induce at least a temporary halt, or in an extreme case, a reversal in the roll-out.

These are essentially more political economy than technical in nature – worsening both before and during election times thanks to actors which were disenfranchised by the project. More importantly, the fear is, once stalled, the process would be difficult to reconstitute into a meaningful whole.

For an advanced country, it is nearly intuitive to pursue a reform process under due diligence and a strong parliamentary oversight. But the situation is not similar in the developing world where contradictory practices and institutional voids spawn deep information asymmetries. Though written records are between far and the few, essentially in the developing south, changes in regime have often configured an often unwarranted change of policies and stalemates of programmes. It is observed across the developing country paradigm that institutionalizing the critical

processes require rigorous measures to indoctrinate the elements as regular or mundane activity works better. For the case of Bangladesh, this phenomenon has been observed across many previous development programmes which were left abandoned after the change of the regime in power.

In depth discussions reveal that granularizing the concept and injecting the idea behind the project across the stakeholders spectrum works best for the administration to achieve its intended results.

Across developing countries, often, differences in opinions and sensitivities to political underpinnings are overshadowed as coterie politics takes over. But problems can not simply be washed away. Bangladesh has already achieved what very few developing nations could do – conceiving parts of the core administration from the citizen's angle with the help of ICT-enabled innovation. The question now is how this could be sustained and augmented.

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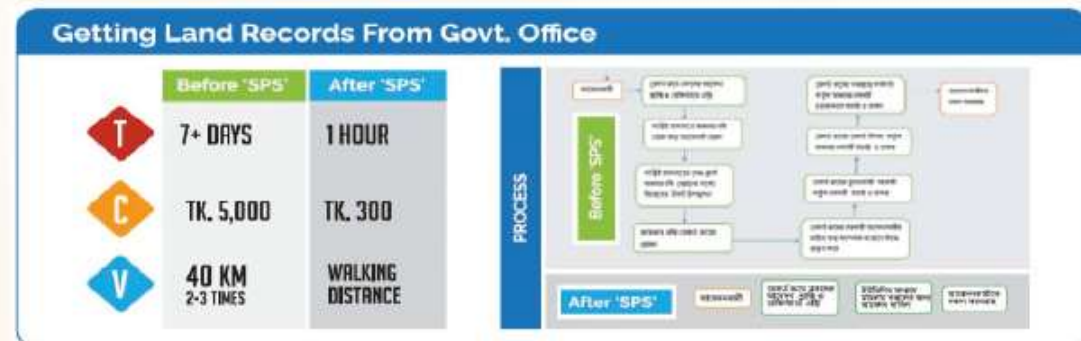6. 6. Cain, M., Khanam, S.R. and Nahar, S.,

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