Evaluation of Bhoomi Project in Karnataka: A case study from Kodagu District

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Abstract: Among the various e-governance initiatives of the government of Karnataka, a digitized land records management system known as Bhoomi, implemented in the year 2001, has been a most successful project. Bhoomi has brought about transparency in maintenance and updating of land records. Bhoomi has provided farmers easy access to their land records as it provides printing of RTC as and when required. This case study is undertaken in Kodagu district. This study aims to assess the efficacy of the Bhoomi project in Kodagu district, on the basis of people`s opinions and experiences of having used the services of Bhoomi in Kodagu.

Key Words: Bhoomi, Computerised land records management, e-Governance, transparency

Introduction:

Karnataka has been among the front ranking states in adopting e-Governance and has implemented several projects for improving the internal efficiency of the government and delivering better services to the citizens. Many initiatives of Government of Karnataka have been unique in the country and have set the agenda for national initiatives by Government of India. Initiatives launched by e-Governance Department of Government of Karnataka have brought about profound changes in the working of the government by increasing transparency and accountability in administration; which has led to better delivery of services to the citizens by bring about reduction in transaction costs and by providing convenient access to citizens services under one roof. Karnataka. The successful implementation of Computerisation of land records under the software Bhoomi has made the Government of India to replicate the same in other states, like *Mee Bhoomi* in Andhra Pradesh, *E-Dhar* in Gujarat, *Bhu-Abhilekh* in Bihar, HALRIS (Haryana Land Records Information System and Property Registration) in Haryana, *Him- Bhoomi* in Himachal Pradesh etc.

Computerisation of Land Records in Karnataka:

Land records management system known by the name Bhoomi, was implemented by government of Karnataka in the year 2001, in collaboration with National Informatics Centre (NIC) as a technical partner. Revenue department in Karnataka has computerized 200 lakh records of land ownership of 67 lakh farmers in the state. (Electronic Integration of Bhoomi with Stakeholders, Karnataka, 2014)

In the past, under the manual system, land records were maintained by 900 village accountants, each serving a cluster of 3-4 villages. Farmers had to approach village accountant to get a copy of the Record of Rights, Tenancy and Crops (RTC) a document, which was needed for various purpose such as – for obtaining crop loans, hypothecation of land, getting electricity connection, subsidies, sale of land, creating partition deed etc.

Village accountants were not easily available and the time taken by village account to provide RTCs would range from 3 to 30 days. There were chances of manipulating the land records. In the past, mutation request to alter land records (upon sale or inheritance of a land parcel) had to be filled with village account. Notice to the interested parties was to be issued by the village accountant and a notice was pasted at village office. It was often that neither of the actions were carried out. And an update of land record which could be done by Revenue Inspector after 30 days of issuing notice, would usually take one-two years (Chawla-).

In the year 1991, Government of Karnataka initiated a project for computerization of land records and Gulbarga district was selected for pilot implementation, but the project did not succeed due to poor management (Patnaik, 2008).

However, by 1996, projects for computerization of land records were sanctioned for all districts in Karnataka. The first RTC kiosks centre was started in Maddur taluka of Mandya district on 6th February 2001. An amendment was made by Karnataka government to the Karnataka Land Revenue Act of 1964 abolishing manual written RTCs`. The Karnataka government gazette notification in this regard and the amended Karnataka Land Revenue (amendment) rules, 2002, came into force from June 13, 2002. The notification declared only computerised RTCS duly signed by the authorized person would be valid henceforth for all legal purposes (Rabha-).

Any change[1] to the records of rights now takes place through online mutation application Bhoomi only. In 2005 all the taluk servers were connected to State Data Centre (SDC) through a V-Sat based network(now upgraded to KSWAN) SDC helps in recovering data in case it is lost due to any reason in the taluk server.

Objectives of Bhoomi project:

The objectives of the Bhoomi project when implemented by the Govt. of Karnataka were:

- To facilitate easy maintenance and prompt updating of land records.
- Making land records tamper proof.
- To facilitate farmers to have easy access to their records.
- Construct a database combining all the information regarding land revenue, cropping pattern, land use, etc.
- To utilize the data for planning and for formulating development programmes.
- Integrating all the land related activities electronically with Bhoomi and to update all ROR with minimum or no human intervention.
- Enabling the usage of Bhoomi database by banks, private organization and companies(Bhoomi Karnataka-Comprehensive system of Land Management)

The service offered in Bhoomi centres has been beneficial to the people.[2]All the expenditure relating to purchase, maintenance of hardware and infrastructure, technical manpower, stationery etc. are met out of the user charge collected at kiosk centres. Bhoomi is a self-financing project. (Rabha-)

Integration of Bhoomi with other departments and services:

The Bhoomi project has been used not only for computerisation of land records, but also has been integrated with various other departments and projects such as the Survey department,[3] Bhooswadeena project (Land Acquisition Software),[4] Kaveri application (Department of Stamp and Registration),[5] and integration with the Banks.[6]

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[1] Changes to RTCs may be due to sale, partition, inheritance, pledge, release, government order, court order, phodi etc, online mutation application handles all type of mutation without any manual intervention in updating land records database. (Bhoomi Karnataka-Comprehensive system of Land Management)

[2]Digitally signed and bar coded RTCs are available at the cost of Rs 10, Mutation extracts- which gives the details about acquisition of rights is available at the cost of Rs fifteen, RR5 and RR6 (Records of Rights form 5 and form 6)-These documents give history of transactions chronologically for a particular village and on a particular survey number for a given period respectively, Khatha Extract- All the land parcels owned by a person in a village will be listed in the Khatha extract, Mutation status- gives the details of the stage at which the requested transaction is currently, Scanned copies- of served notice having signatures of the interested parties,mutation order with the signatures of village accountant and Revenue Inspector, Tippan - Scanned image of sketch of land parcel. (Bhoomi Karnataka-Comprehensive system of Land Management).

[3]The amended Karnataka Land Revenue Act has mandated the pre-mutation sketch a pre-requisite for any sale transaction to happen. Whole of this activity of issuing pre-mutation sketch has been simplified using software called 'Mojini'. Mojini uses the Bhoomi database and is fully integrated with it for creation of any sketch. (Bhoomi Karnataka-Comprehensive system of Land Management)

[4]The electronic integration of 'Bhoomi' with Bhooswadeena commenced in 2011. Previously land acquisition process was carried out offline, consequently most of the transactions were not incorporated in the RTC. As a result in several cases, land acquisition used to take place multiple times. Integration of Bhooswadeena

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Studies undertaken to examine the effectiveness of computerization of land records in two districts of Karnataka namely, Tumkur and Gulbarga indicate that after computerization of land records, the average time required for obtaining an RTC has decreased, the opportunity to manipulate the land records and land related disputes have reduced and it has made the process of obtaining crop loan easy (Lokesh S.B,2008).

Studies undertaken to examine the effectiveness of Bhoomi project in Davangere district in Karnataka state indicates that Bhoomi project has brought about transparency in land records (ShrinivasK.G, 2011)

Background of the Field Site and Land Laws of Kodagu:

This study was undertaken in the Kodagu District of Karnataka. Kodagu-the anglicised form of which is Coorg, is a tiny tract of land forming its own administrative unit. The word Codagu literally means 'inside west', means situated to the west. (Muthanna1953.p.1) The state stands in the ridges of the Western Ghats and is bound on the north by the Hassan district, on the east by the Mysore district, on the west by the South Kanara district, and on the South by the Cannanore district of Kerala state. (Satyan.1965.p.1) Coorg is the smallest district in Mysore state and its population according to 2011 census is 554,519 persons. Kodagu has three taluks namely Madikeri, Somwarpet and Virajpet in total of 4,102sq.kms. Madikeri has four hoblies and twenty six grama panchayats, Somwarpet has six hoblies and forty grama panchayats and Virajpet has six hoblies and thirty eight grama panchayats. (Kodagu District Statistics at a Glance- 2015-2016- District Numerical Collector. Kodagu District. Government of Karnataka) There are 296 revenue villages including five uninhabited villages. Kodagu`s economy is driven by the primary sector, specifically due to coffee plantation. Kodagu produces 1/3rds of the nation`s coffee and more than 25 percent of the land under coffee in India is found in Kodagu. In educational status, Kodagu is comparatively better than other districts. It is slightly short of the national target of 85 percent literacy by 2012 (Kodagu District- Human Development Report (HDR), 2014, Executive Summary.pp. 24-25)

Agriculture is the most important factor that upholds the economy of Kodagu and the main crops cultivated in this region are rice and coffee. Total agricultural land holders in Kodagu district is 68881, out of it 2166 are large agricultural land holders (more than 10 hectares), medium agricultural land holders 7787 (4-10 hectares), semi medium agricultural land holders 13455 (2-4 hectares), small agricultural land holders 16945 (1-2 hectares) and marginal agricultural land holders 28101 (below 1hectares). The total area under cultivation is 167861.74 hectares. (Kodagu District Statistics at a Glance- 2015-2016- District Numerical Collector. Kodagu District. Government of Karnataka.)

Kodagu has a unique land tenure system like Jamma Tenure, Jagir, Batamanya, Sarvamanya and Jodi, Mathamanya, Gowdumbali and Naimannu, Umbli Tenure, Sagu Tenure

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with Bhoomi was aimed to facilitate the activities of land acquisition to be reflected on the land records with the help of digitally signed XML (Bhoomi Karnataka-Comprehensive system of Land Management)

[5]Online integration of Kaveri and Bhoomi was implemented in the year 2011.All types of transaction except inheritance happens in sub-register office with respect to agricultural land KAVERI application is dependent on Bhoomi database. Registration department import agriculture land details, owner details from Bhoomi database. If the survey number does not exist in Bhoomi database then registration does not take place. Once the registration is over in sub-registrar office, everyday an XML file is generated giving the details of the transactions and uploaded to SDC (State Data Centre). From SDC this XML file will be routed to respective taluk. Manual J-slip will also follow the electronic data, an acknowledgement number will be generated from Bhoomi system after sending the XML. The mutation process is initiated on FIFO basis citizens are intimated about the various stages of mutation process in Bhoomi system through SMS. (Rabha,-)

[6]The integration of bank and Bhoomi was intended to facilitate the charge creation process (pledge or release). On agricultural land banker is now able to access the RTC information online from Bhoomi database and confirm the ownership, extents owned by the farmer, other liabilities that the farmer has. After confirming these details, the banker initiates the charge creation processsa online. The request is then sent to the Bhoomi centre where the revenue inspector examines the transaction and has to approve it. As soon as the transaction is approved, the charge is created against the owner and is reflected in the updated RTC. The same process is followed to release the charge after repayment of loan. Crop details has to be updated in RTC season wise every year, which forms the important base on which the crop loans and crop insurance is sanctioned to the farmers. . (Rabha,-)

Jamma tenure is the most important land tenure in Kodagu. It was basically land granted by the Kings on performance of military or semi-military service. The British also continued this system upto the year 1895, when it was ordered that no more land shall be given on this tenure. (Satyan.1965.p 316) Jamma holders who free themselves from the obligation of military service had to pay double the revenue. (Kamath1993.p.516)

Jamabandi register is the records of rights in Kodagu district. This register which is prescribed under the Coorg Land and Revenue Regulations 1899 are written and maintained as per the terms enunciated in Revenue Settlement of Coorg 1910. (Kamath.1993.p.518)

The various land tenures in Kodagu had been brought under the Kodagu Land and Revenue Regulation of 1899 and later under the Mysore Land Revenue Act 1966. However, the privileges attached to the various tenure were safeguarded under section 202 of the new Act. (Kamath.1993.p. 529)

The Karnataka land revenue (Third Amendment) Act, 2011 received the assent of the President on 22nd January, 2013. (Karnataka Land Revenue (Third Amendment) Act,2011) The amendment brings Jamma Baane in Kodagu under the Karnataka Land Revenue Act and land owners got the ownership of the land (Coorgtourisminfo.com- Coorg News, 2011). It is feared by many natives of Kodagu that the new legislation which allowed the disposal and sale of Jamma land in Kodagu would lead to ecological disaster and also take its toll on the customary laws, traditions and culture of the indigenous communities. With tourism boom in Kodagu, many local communities may sell their lands. Hitherto, there was a ban on the sale of the Jamma land, which was granted under 'Sanads' by the Kings in return for military services on payment of half the assessment. The cultivator was only a 'deemed owner'. Jamma lands could not be alienated. The ownership of the Jamma land was jointly held by the clan and managed by the head of the clan. The new legislation would confer the title of 'occupant owner' and allows the sale of land (Bopanna.2013)

Given such background, it is important to understand how Bhoomi an e-Governance initiative by the government of Karnataka to bring in transparency has helped the land holders/farmers.

Objectives and Methodology of the study:

This study aims to assess the efficacy of Bhoomi project in Kodagu district, on the basis of people`s opinions and experiences of having used the services of Bhoomi in Kodagu.

To have an understanding of the advantages and disadvantages of the Bhoomi e-governance initiative by the Karnataka government, a case study of the Kodagu district was undertaken. All data has been gather through semi-structured questionnaires along with qualitative interviews with the farmers, land owners and government officials

Main Findings of the Study:

Access to Records of Rights, Tenancy and Crop (RTC)- Farmers need a copy of RTC for various purpose, such as obtain a crop loan, bank loan, subsidy for manure, to construct drying yard for coffee, to dig bore well, to buy plants in coffee board, to obtain income certificate, and to receive numerous types of government benefits, compensation for elephant menace or for crop loss. Earlier in the manual system of record keeping Jamabandi was issued by village accountants, who were in charge of 3-4 villages. The respondents were of the opinion though village accountants were courteous towards them, it was difficult to get a copy of Jamabandi as most of the time he was not available. With the computerisation of land records respondents are happy that they are not dependent on village accountant and RTC`s could be obtained within 15 to 30 minutes, depending upon the season.

However, there are various problems in this regard as well. They are of the opinion that in the month of June-July when farmers need RTC to apply for loan for agricultural purpose, the time required to get RTC

may get extended up to 2-3 hours due to long queue. And sometimes they may have to visit Bhoomi centre or Nad Kacheri again the next day due to non-availability of government employees, non- functioning of computer system, disruption of electricity, server problems and even non availability of paper to print RTC. On site visit to taluk office and Nad Kacheri (Hobli office) revealed that the work gets delayed mainly due to server problem and shortage of employees. As Bhoomi centres are located only at taluk level, the farmers usually obtain there RTC at Nad Kacheri (Hobli office). Field study indicates that most of the farmers are dependent on middle men, to obtain RTC and mutation extract as they feel travelling to hobli office or taluk office is time consuming, and takes valuable time away from their agricultural activities. The non-availability of appropriate public transportation or personal conveyance is also a road-block in obtaining the papers on time.

Awareness about land records available on the web portal- Though respondents were aware of the computerisation of land records, only few young respondents had accessed the land details through web portal. Those who had accessed the land details, had mainly done it to keep a track of their ownership, to check if crop details were updated in RTC, to purchase land and to check the mutation status.

Accuracy- RTC is the primary evidence of ownership of property, it provides information on extent of land, survey number, type of crop grown, revenue rate determined on land, irrigation facilities, loans taken by the occupants on the land, etc. For any transaction on land, whether it is taking loan from banks or selling / purchasing of land, the land records needs to be accurate. Agriculturists are of the opinion that RTCs are not all accurate. Wrong entries of name, acreage of land still persists. And a long cumbersome procedure to get the wrong entries corrected requires many visits to taluk office. The field study revealed that when Jamabandi were converted to RTC`s free copies were distributed to agriculturists to check any discrepancy and corrections were done in RTC`s, But even then few discrepancy still exists.

Manipulation of land records-Earlier to computerisation of land records, land titles were unclear and poor administration of land records, led to several legal disputes related to land ownership. Farmers could obtain falsified crop records from village accountants to claim various government benefits. Agriculturist was of the opinion that after computerisation of land records manipulation of land records has come down. As computerisation of land records has reduced the discretion of village accountants to issue the records of rights. It was reported that in manual records, it was easier for agriculturist to prepare wrong records by paying bribe to the village accountants. The common form of manipulation was increase in acreage of land to get loan. With the computerised land records crop data printed on the RTC which is the only document that can be used to obtain loan and claim benefits of various government schemes.

Transparency of land records-Computerisation of land records has brought about transparency in land records. The respondents were of the opinion that computerisation of land records has led to transparency and clarity in land related information. Earlier in manual records keeping system, issuance of Jamabandi was at the discretionary powers of village accountants and were not open for public scrutiny. In the manual Jamabandi, as the loan taken from banks on a land was not mentioned, there was chances of taking loans from different banks on the same land. With the computerisation, every loan on a particular land is printed in the RTC, so agriculturists cannot take loan more than once on the same piece of land. The online integration of Bhoomi and Kaveri ensures there is no fraudulent transaction. With the computerisation, the RTCs are available for viewing on the web. The purchaser can be sure of the seller and extent of land in a particular survey number, thereby be sure of his safe investment. But the field study indicates that though transparency may be a factor for increase in purchase of land in Kodagu, but respondents were of the opinion that boom in tourism, and open market for cash crops like coffee, pepper may also be a reason for increase in purchase of land.

Reduction in time to access and issuance of land records- With The computerisation all request in Revenue department are handled on a first-in -first-out (FIFO)basis, it has reduced the discretion of revenue staffs to pick and choose the files. Respondents reported that average number of days required to access and for the issuance of land records has come down from one week to one day after computerisation of land records. And it was reported that mutation which could take 5-6 months takes place within 30-45 days after

computerisation of land records. However, one of the problems reported by the respondents was that due to the complexity of procedure in the computerised system of record keeping, even a small corrective revision to RTC leads to delay and requires numerous trips to taluk office.

Encroachment of government land- Respondents were of the opinion that with the computerisation of land records the encroachment of forest land, land granted to Schedule caste, Schedule tribes has come down. This is because the agriculturists cannot manipulate the land records under computerised system of land records keeping.

Bribery- Field study reveals that, the computerisation of land records, has taken away the discretion village accountant to issue land records, as a result bribery at the grassroots level has come down. In the manual system of record keeping agriculturist had a chance to manipulate the land records by paying money to village accountant. With computerisation of land records, bribery has shifted to top brasses of the organisation. The respondents said that that no work gets done in land revenue office without paying money. As the agriculturist are not able to understand the procedure in computerised system of record keeping, the middle men project the system in a complicated manner, and agriculturist end up paying bribe for correction in RTCs, change in ownership, fixation of taxation on land, to get individual records of rights on Jamma land, updating of crop information in RTCs, to get 11E sketch, and to get any documents from land revenue office. It was also reported that the bribery depends on acreage of land and urgency of document. News[7] of one of the Deputy Tehsildars of the taluk being trapped in a corruption case was also reported in May 2018.

Concluding Remarks

The experience of agriculturists with the Bhoomi project in Kodagu district, indicates that the project has been advantageous to them, especially reduction in time to obtain RTC. The agriculturists are mostly satisfied with the minimal time and effort that they have to put in to obtain the required documents now. With the computerisation of land records, the manipulation of land records has come down, as it has reduced the discretion of village accountants to issue the records of rights. Computerisation of land records has brought about transparency and clarity in land records. With transparency of land records and easy accessibility of land records through web, the purchaser of land is able to get accurate information and can be sure of his investment. With the computerisation of land records, the mutation period has come down to30-45 days.

However, this computerisation is not completely flawless. Some of the problems that still exist, and have been voiced by the beneficiaries of Bhoomi are: wrong entries of name and acreage in the records, corrections and changes in RTC leads to delay and requires numerous trips to taluk office, due to complexity of procedure. The field study indicates that Bhoomi centres are most often plagued by problems of non-availability of employees, dysfunctional computer systems, disruption of electricity, server problems and non-availability of paper to print RTC, which causes delay in the issuance of documents. As the crop information are not updated season wise, it poses a problem for the agriculturist to obtain bank loan. With computerisation of land records, bribery has shifted from grass root officials to the top brasses of the organisation, as it was noted by some of the beneficiaries that no work gets done in land revenue office without paying money.

However Bhoomi has tackled a lot of delays and inefficiencies of the manual record keeping. Bhoomi has brought about transparency in maintenance and updating of land records. The program has provided farmers easy access to their land records as it provides printing of RTC as and when required. It has reduced the discretion of officials as First in First out (FIFO) strategy has been adopted in disposal of all types of mutation cases in Bhoomi. It won the National e-governance award in2005. The successful implementation

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[7]It was reported in newspapers that Madikeri Deputy Tahsildar was caught by Anti-Corruption Bureau (ACB) on May 17, 2018, for accepting a bribe of Rs.5000 from a retired ex-serviceman, who had approached Deputy Tahsildar for issue of RTC for his 6 cents land

of computerisation of land records under the software Bhoomi has made the Government of India replicate the same in other states.

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