WAQF PROPERTIES' MANAGEMENT AND ENCROACHMENT DETECTION – AN INITIATIVE TOWARDS E-GOVERNANCE

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ABSTRACT

Waqf properties constitute a large part of societal wealth with high potential to address financial issues among Muslim Community in India. Waqf establishment faces numerous difficulties among others such as absence of financing, under-development, mis-management, encroachment, litigations etc. It has been observed through data analysis that computerization indeed influenced the revenue of the Waqf properties in India. Recently, during the computerization, the administrative procedures of the Waqf properties were peacefully moderated and each process of management has been enhanced to an abnormal state. All the information is made available to public through Internet without any password. This makes the whole process transparent. All the stakeholders can monitor each and every aspect of Waqf Properties in India on daily basis. They can also vouch for any mis-management and report the wrong doings to an appropriate & competent authority for their redressals. This paper illustrates how computerization took place in India and how it has upgraded the income of Waqf properties in India and helping the decision maker in detecting the encroachment using GIS & Remote Sensing Technologies.

Keywords: Wakf, Waqf, Wakf property, Waqf property, Trustee, Mutawalli, Muslim, Islam, State Wakf Board, State Waqf Board, WAMSI, WAMSI On-line System, ORE Documents, Income, Prosperity, Efficiency, Transparency, Management, Encroachment, GPS, GPS Coordinates, Remote Sensing.

I. INTRODUCTION

The Wakf properties are spread out all over the country but even the basic survey of waqf properties has not been done in most States. There is hardly any development of waqf properties and a very substantial income that the waqf properties could have generated for the welfare schemes of the community are lost because of non-development and large-scale encroachment on Waqf properties. Therefore, to streamline record keeping, introduce transparency, and to computerize the various functions/processes of all the State/UT Waqf Boards and to develop a single web-based centralized software application, Joint Parliamentary Committee on Waqf, in its

9th Report, recommended computerization of the records of the State/UT Waqf Boards with central government financial assistance [1].

The broad objectives of computerizing the records of the State/UT Waqf Boards were:

- ✓ Waqf Properties Registration Management
- ✓ Muttawalli Annual Returns Management
- ✓ Leasing of Waqf Properties Management
- ✓ Litigations Tracking on Waqf Properties Management
- ✓ ORE Documents Archiving & Retrieval Management
- ✓ GPS Mapping of Waqf Properties
- ✓ Funds Management to Mosques, Durgah, Kabristan, Imams, Muazzins, windows, girls marriages, scholarships, schools, hospitals, Dispensaries, Musafirkhanas, skill Development Centres etc.
- ✓ Loans Management for Development Of Urban Waqf properties
- ✓ Right to Information Act compliance

Computerization of State/UT Waqf Boards and making services accessible on the web is being undertaken. Moreover, ICT Infrastructure is to be established to create e-availability of the Waqf Records. Beside these, estimation of the old records is to be accomplished with the end goal of electronic copy of Waqf Records, as they are very old, and there exist a reliable probability of burglary or harm to these records.

Accordingly, each of the central procedure was depicted as a point of interest in the records, and stream of processes or outlines were made for further examination. It was observed that however the capacities are practically same in all the State/UT Waqf Boards, yet the procedures look little bit different. Some of the State/UT Waqf Board has taken active part in computerization; however the degree of computerization is extremely constrained.

A broad review of the various registers kept-up at the State/UT Waqf Boards was additionally led to watch the arrangements, parameters, and nature of the registers, are diverse in a few or different perspectives. It is believed that after computerization their administrations and management of Waqf properties will be impacted which thus influenced the income.

Moreover, encroachment of land resources is a common problem created by vested interests or neighbors having adjacent farming lands. For instance, it has been observed that during crop sowing & monsoon season, soil boundaries are naturally altered, vanished or even deliberately broken down. Farmer keep-on remaking such boundaries after each monsoon season and thus, boundaries are likely to be altered slightly from their earlier locations. Consequently, even a small alteration every time may become a large alteration over a period of time, which lead to accumulation or loss of larger area of farming land. This illegal accumulation (or we can call it as an encroachment) creates major challenges for managing the land resources. Encroachment is severe in case of Waqf Properties as their ownerships lies with the Almighty and therefore, no body is bother to protect them.

II. BUSINESS PROCESS RE-ENGINEERING FOR BETTER MANAGEMENT

Waqf Board is an association, which is set up in each State/UT for the administration of the Waqf properties in that State/UT. These State/UT Waqf Boards function independently. They are not only supporting Mosques,

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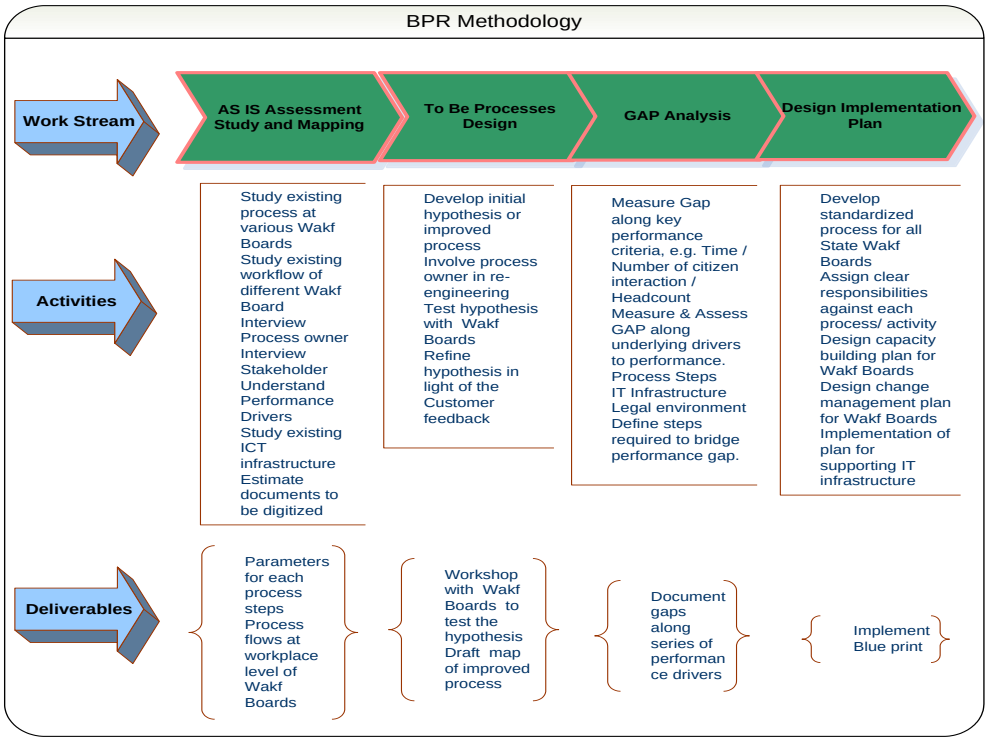
Dargah and so forth, but many of them support Schools, Colleges, Hospitals and Musafirkhanas, which are implied for the social welfare measures.

"The Waqf properties are spread out everywhere throughout the nation, yet even the fundamental review of waqf properties have not been done in many States. Some of them are straightforwardly overseen by Waqf Boards (erstwhile Punjab Waqf Board) and rest are overseen through Mutawallis" [3]. Some of them are in unlawful ownership, infringed, and few are under suits. These properties are not being appropriately used for producing ideal income that could be utilized for more welfare exercises.

During the study of the existing system, it is found that the core processes are similar in all the State/UT Waqf Boards, but their execution varies from State to State. So, with a specific end goal to streamline the observing procedure of the Waqf Properties, Ministry of Minority Affairs, Government of India aimed to build an electronic Waqf Management System of India (WAMSI) that might be taken-off over all the State/UT Waqf Boards. As an initial step, it is required to ponder the current framework at vital areas crosswise over India with a perspective to have a clear picture of the distinctive structures that looked-after by all the State/UT Waqf Boards and to write-up a Detailed Project Report.

Therefore to streamline and computerize the various functions/processes of the Waqf Boards and to develop a single web based centralized application, it was imperative to develop standardized processes to be followed at Pan India level. To accomplish this task, Business Process Re-engineering (BPR) was carried out for core functional requirements like Properties Registration Management, Muttawalli Returns Management, Leasing of Properties Management and Litigations Tracking Management.

Various tools and techniques as well as BPR principles were used to arrive at the final solution. The aspired end-state was achieved through a comprehensive iterative approach whereby the initial hypothesis was tested and refined through successive discussions with the end-users.



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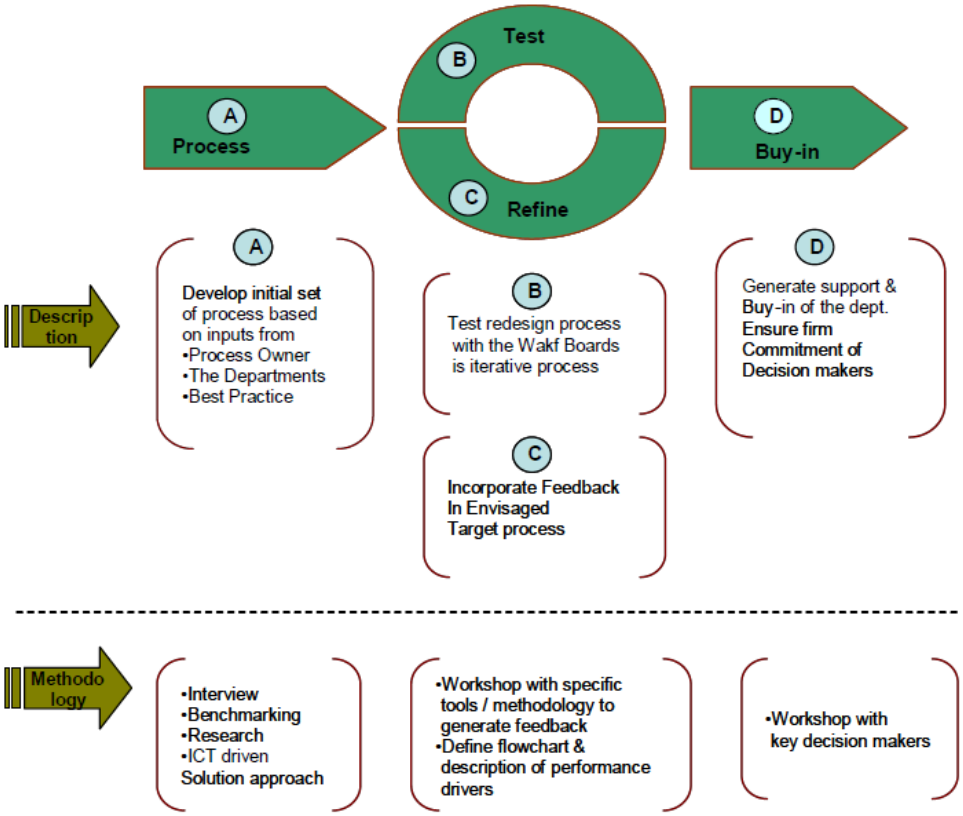
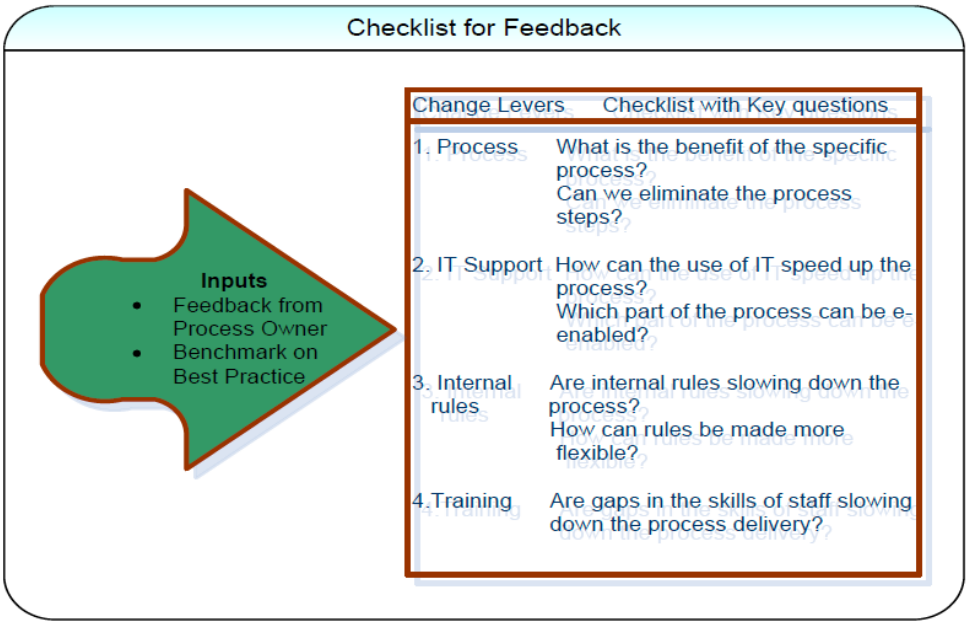


Feedbacks are taken seriously during BPR process with the following Checklist kept in mind



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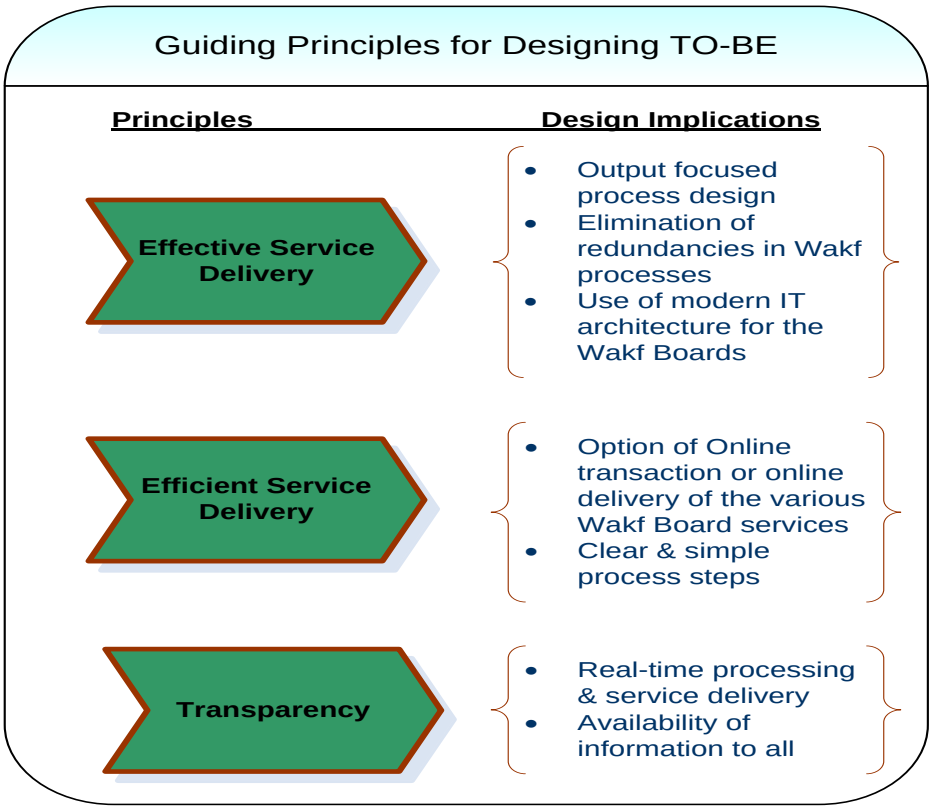
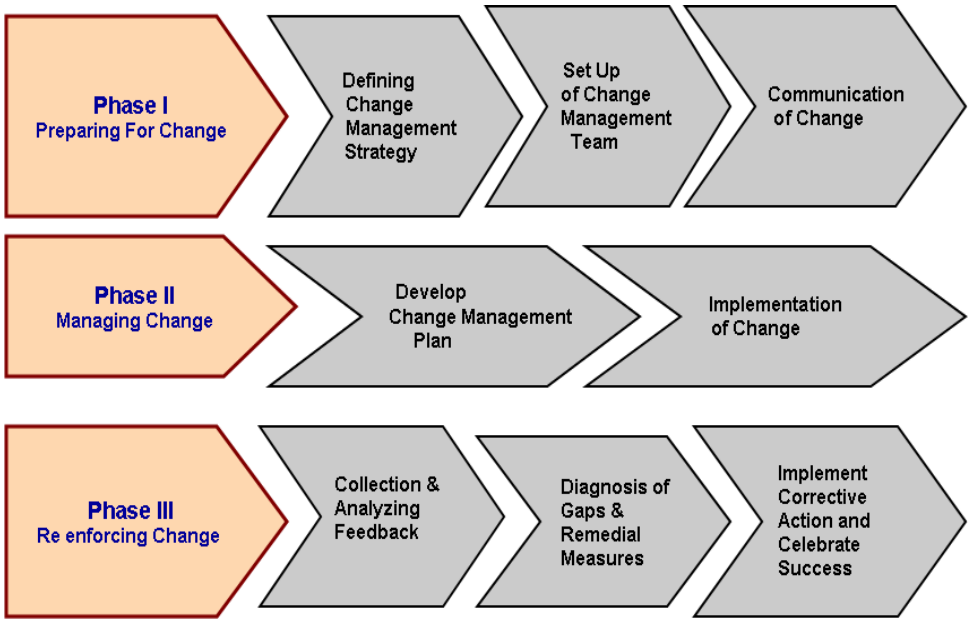
Guiding Principles for designing a good "To-Be" System were as follows:



Change Management was dealt-with in 3 Phases, which are as follows



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Gaps were identified and categorized Area-wise:

Areas	GAPS
Information	• Information flow within the Wakf Boards • Complete visibility across all levels
Technology	• Use of ICT for service delivery within the Wakf Boards • Maintenance of database • Generation of real time MIS reports
Processes	• Different processes for same functions across all State Wakf Boards • Turnaround time for each transaction • Number of touch points for each transaction • Traceability of records across the entire process cycle • Whether there are built in mechanism within the processes to discourage corruption • Interface with external government bodies
Staffing & Skills	• Inadequate number of skilled staff with IT knowledge • Inadequate training and skill sets in utilizing ICT tools of the Wakf board officials

After iterative procedure of Business Process Re-engineering, each process of State/UT Waqf Board was refined keeping in mind the objectives of a centralized "To-Be" System, a set of standard & common workflows for different processes applicable to all State/UT Waqf Boards were adopted, which are as follows:

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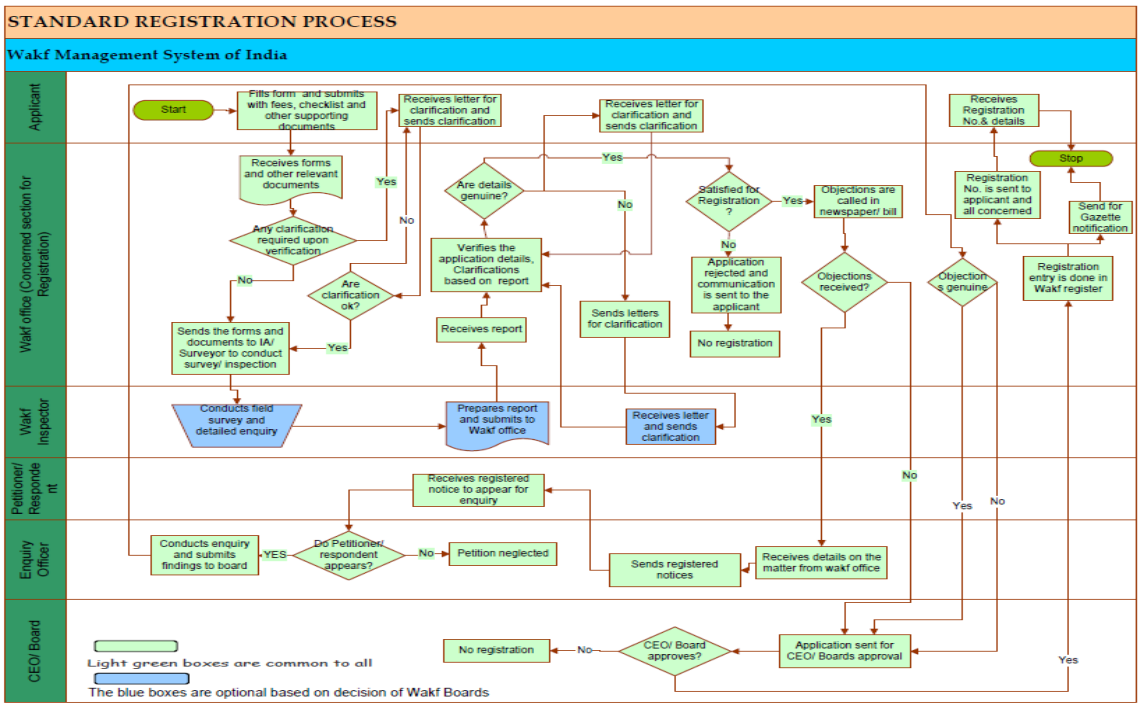

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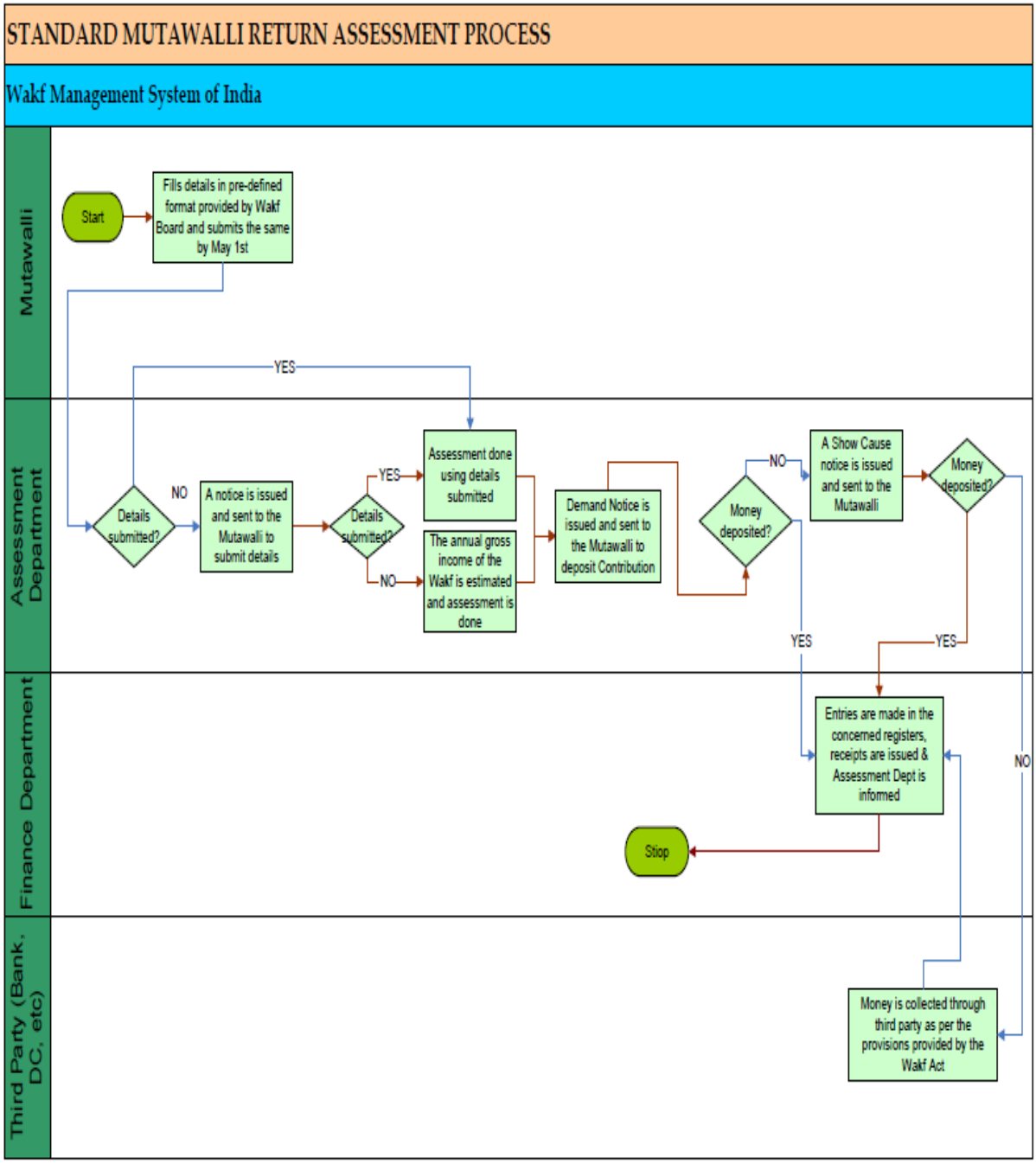

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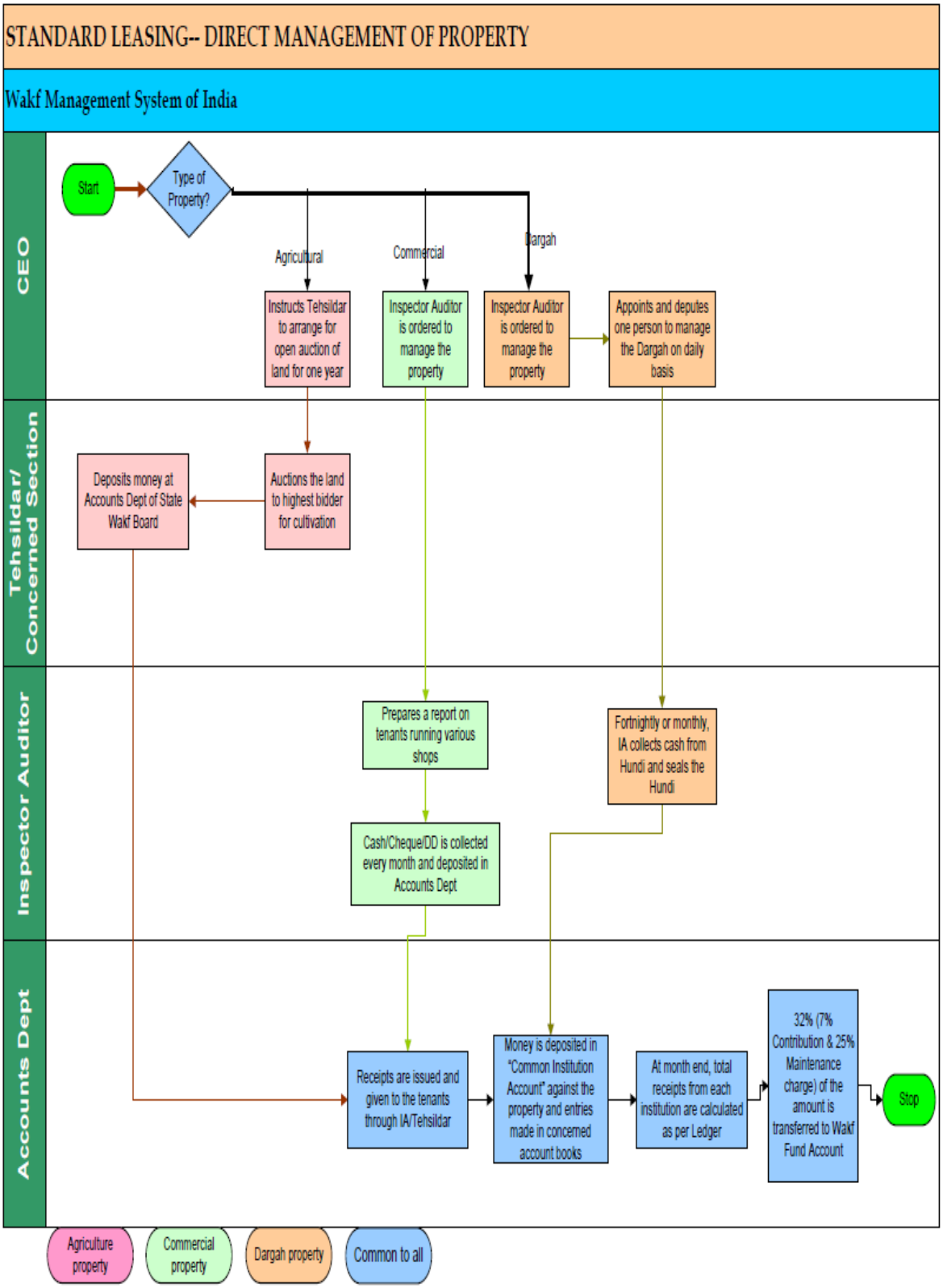

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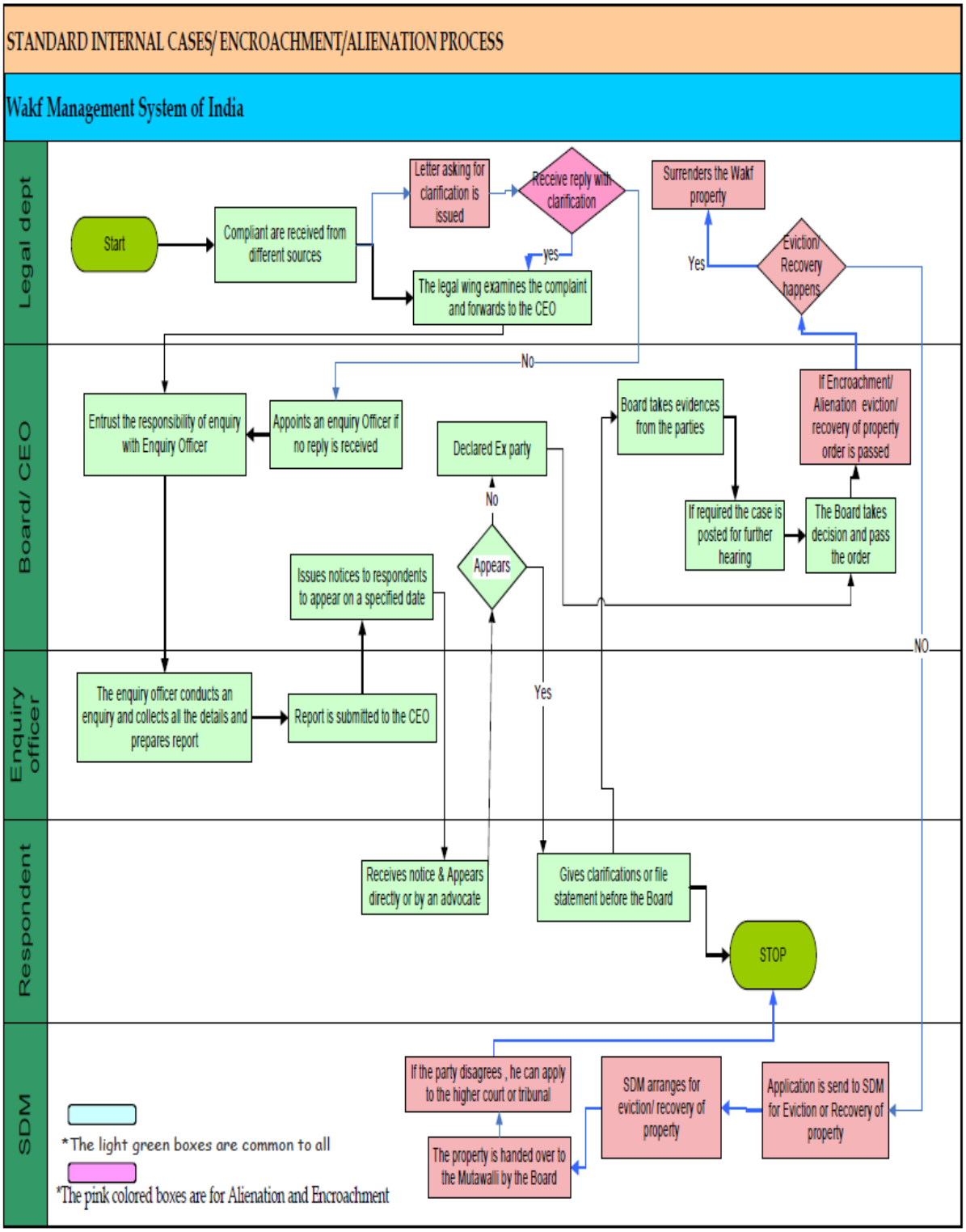

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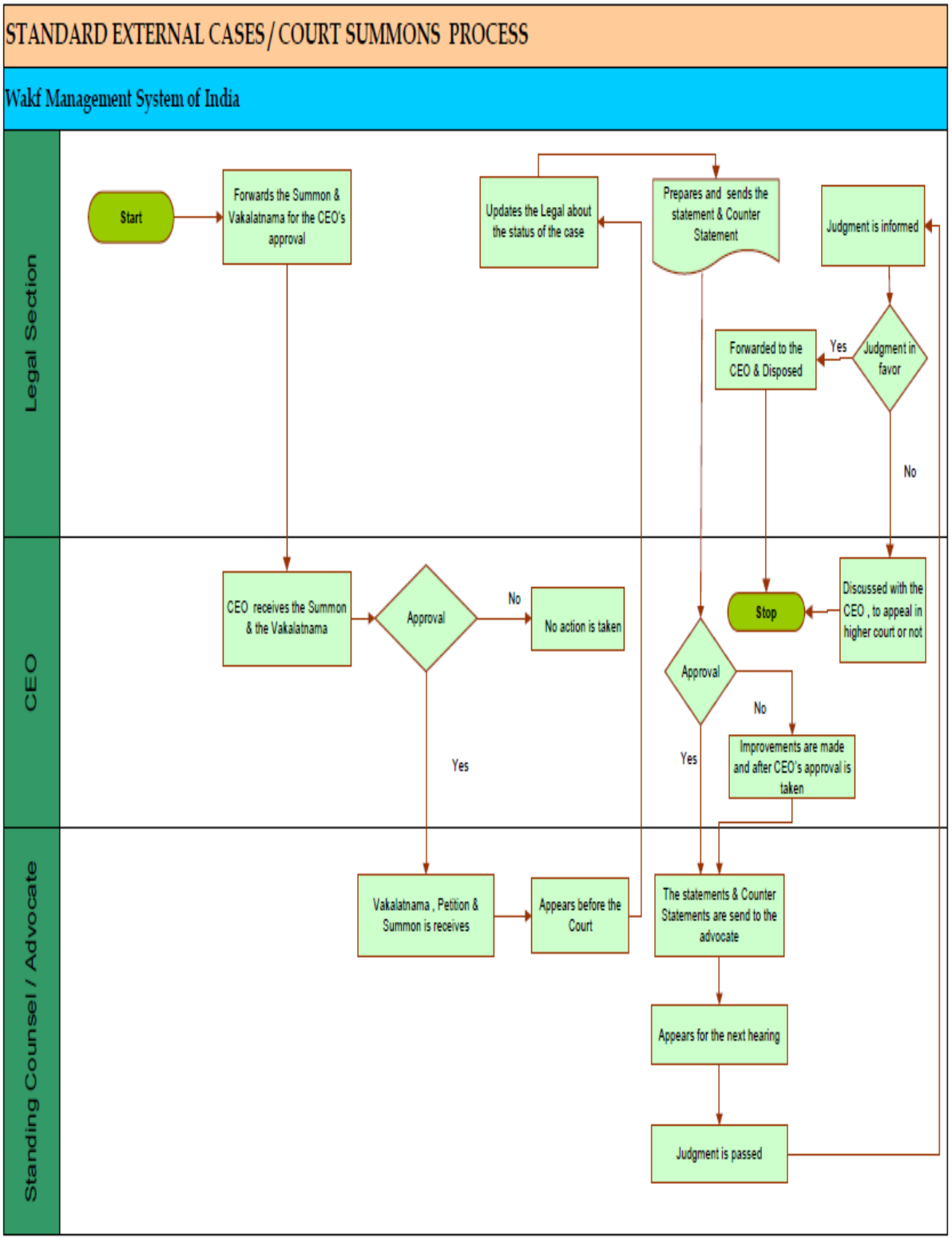

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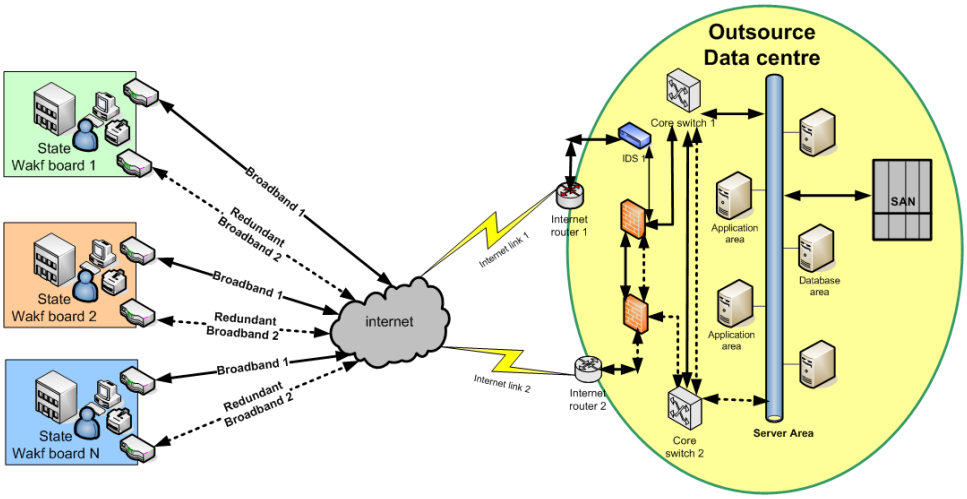
Thus, WAMSI On-line System was designed on the basis of the best practices followed by various State/UT Waqf Boards in India. The workflow processes has been re-engineered for better system efficiency.

Finally, WAMSI On-line System was developed & implemented as per the given Network Diagram:



Network diagram of Wakf management system of India

III. REVENUE GENERATION BEFORE & AFTER COMPUTERIZATION

It is observed that actual computerization started from the Financial Year 2010-11 and improvements in the management of Waqf properties started reflecting in the database. Therefore, it can be very well said that computerization improves the management of Waqf properties by using Waqf Management System Software. Also, the information is maintained in standardized formats for all the State/UT Waqf Boards, so inter-boards comparison or consolidation could be carried out. Since Waqf ownership establishing records are quite old and there exist a strong possibility of theft or damage to these documents, this system also digitizes all such ORE (Ownership Right Establishing) Documents.

This software also covers finances of the State/UT Waqf Boards and able to generate annual balance sheets of the State/UT Waqf Boards automatically. The software is interactive with specific access to the users at different levels. For example, at the lowest level, Data Entry Operator is able to add the basic information regarding the Waqf properties. Similarly, at the Supervisor level the information is either edited or approved for its consumption. Permission to delete the information is rest with the administrator of the system.

Each State Waqf Board requires a strong legal, accounting, administrative and enforcement wing. Computerization made this easy and effective which is responsible for the effective work and income generation [4]. The scheme of computerization is uniformly applied to all State/UT Waqf Boards including J&K and spearheaded by Programme Steering Committee.

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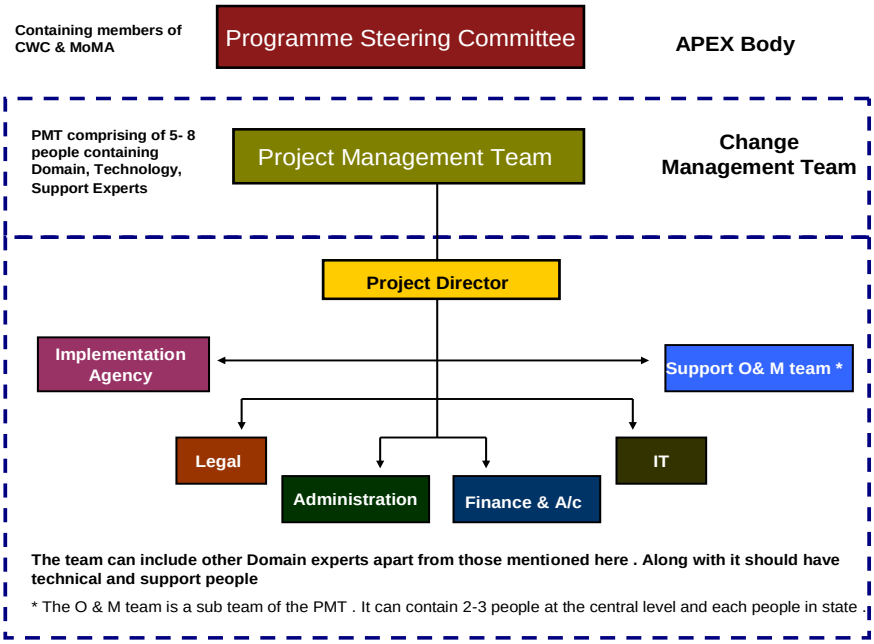

After computerization i.e., Financial Year 2010-11 onward, income of the Kerala State Waqf Board has been increased (see Table1) but before computerization, Income generation was quiet slow in Kerala State Waqf Board (see Table 2) [5].

S.No.	Financial Year	Income Rs. (In Crores)	Total Nos. of Properties	Annual Return filed
1	2010-11	1.0713654	37923	95
2	2011-12	2.6813619	37923	154
3	2012-13	7.6090657	37923	343

Table 1: Income trends of Waqf Properties after Computerization

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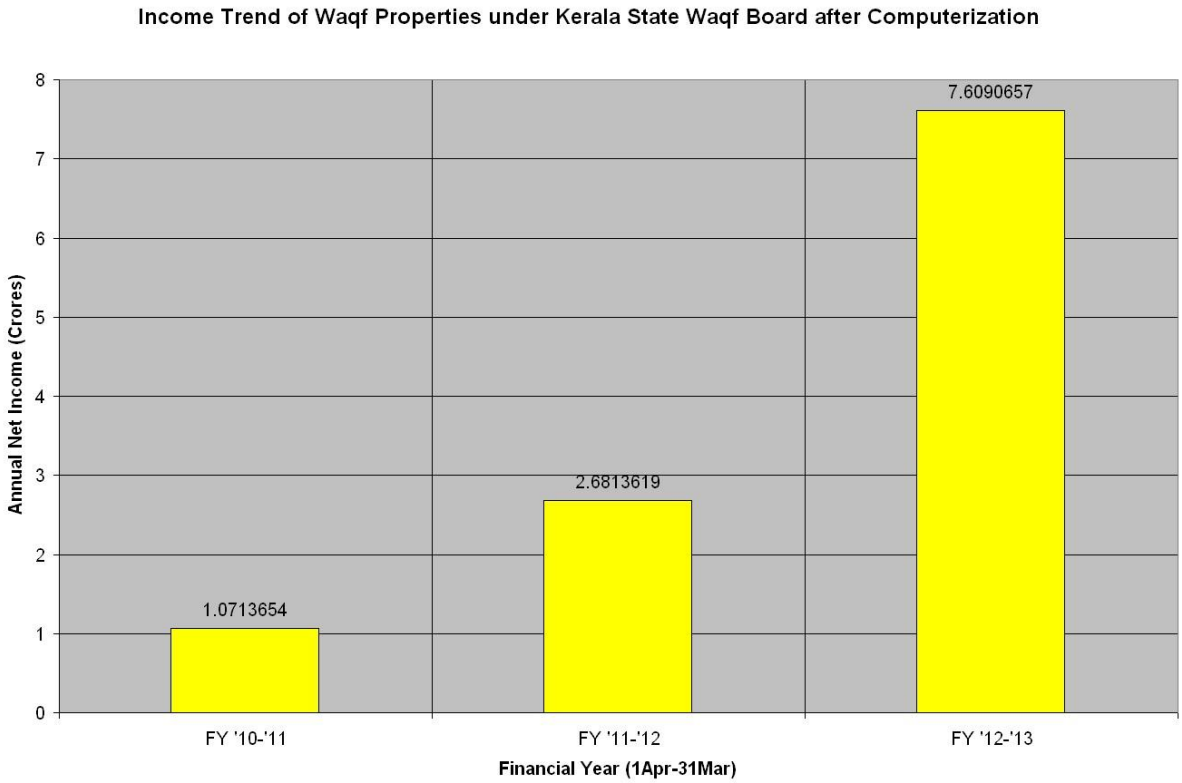

Figure 1 Income trends of Waqf Properties after Computerization

Figure 1 & Table 1 illustrates that the financial year 2012-13 was extremely growing year after computerization in terms of Income Generation and Annual Return filed.

S.No.	Financial Year	Income Rs. (in Crores)	Total Nos. of Properties	Annual Return filed
1	2007-08	0.2048041	37923	50
2	2008-09	0.3069498	37923	57
3	2009-10	0.5783657	37923	69

Table 2: Income trends of Waqf Properties before Computerization

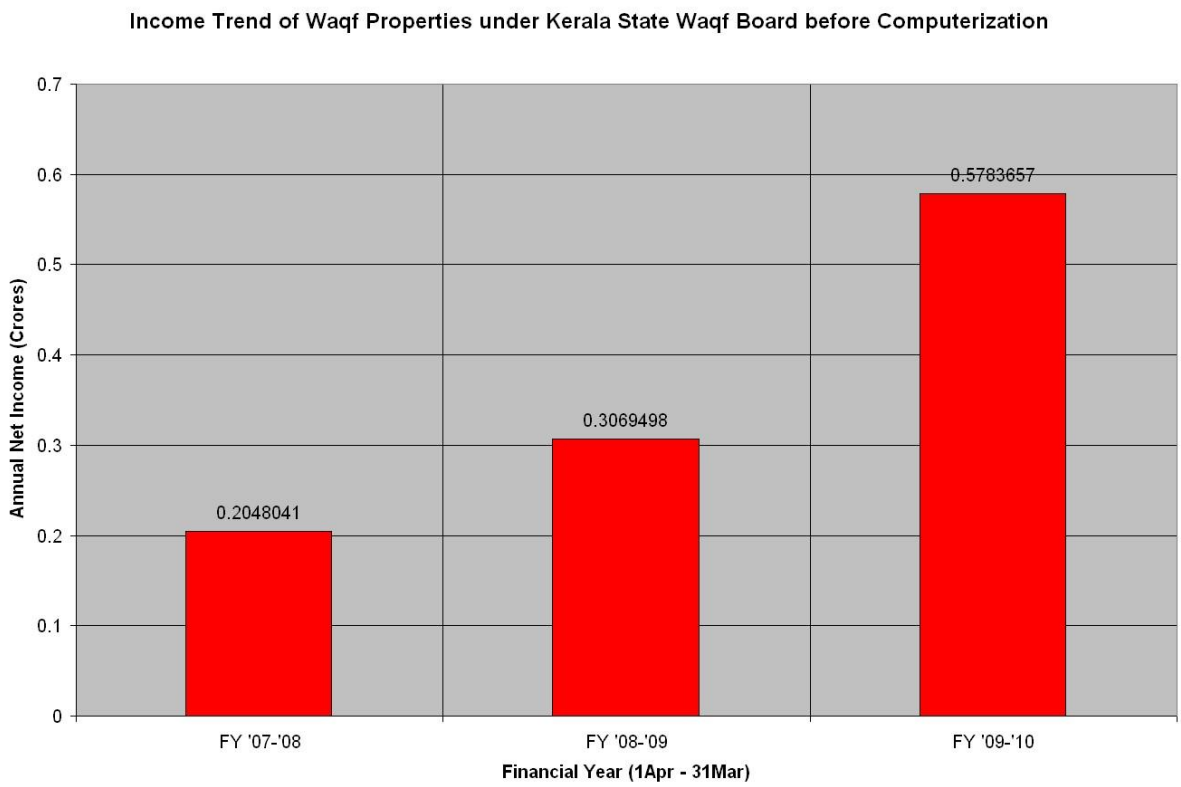

Figure 2 Income trends of Waqf Properties before Computerization

While before computerization i.e., Financial Year 2009-10 & below, Figure 2 shows that financial year 2007-08 was extremely lower in Income generation from the Waqf properties in Kerala State but it got slightly increased as the development in the Waqf properties increases.

During 2009-10 (just before the computerization process started), the income generation was around Half Crore in Indian Rupees. But in the next Financial Year 2010-11 (when computerization started), Income rose to more than One Crore in Indian Rupees i.e., Income was doubled at the start of the computerization.

IV. ENCROACHMENT DETECTION -GPS & REMOTE SENSING TECHNOLOGIES

Encroachment of land resources is a common problem created by vested interests. Encroachment is severe in case of Waqf Properties as their ownerships lies with the Almighty and therefore, no body is bother to protect them.

GPS Coordinate System is utilized to map the Waqf Properties along with other parameters in the database. Since GPS Coordinates are permanent in nature for all practical purposes, so, linking vertices (represented by their pair of GPS Coordinates i.e., Latitude & Longitude) in a cyclic manner will generate a permanent layout on the Earth Surface. If we overlays this permanent layout on different Historical Satellite Imageries of the same area on the same scale then we can find-out or detect when the change took place on the Ground (i.e., When & where encroachment took place). This methodology is adopted in Waqf Management System to detect the encroachment on the Waqf properties.

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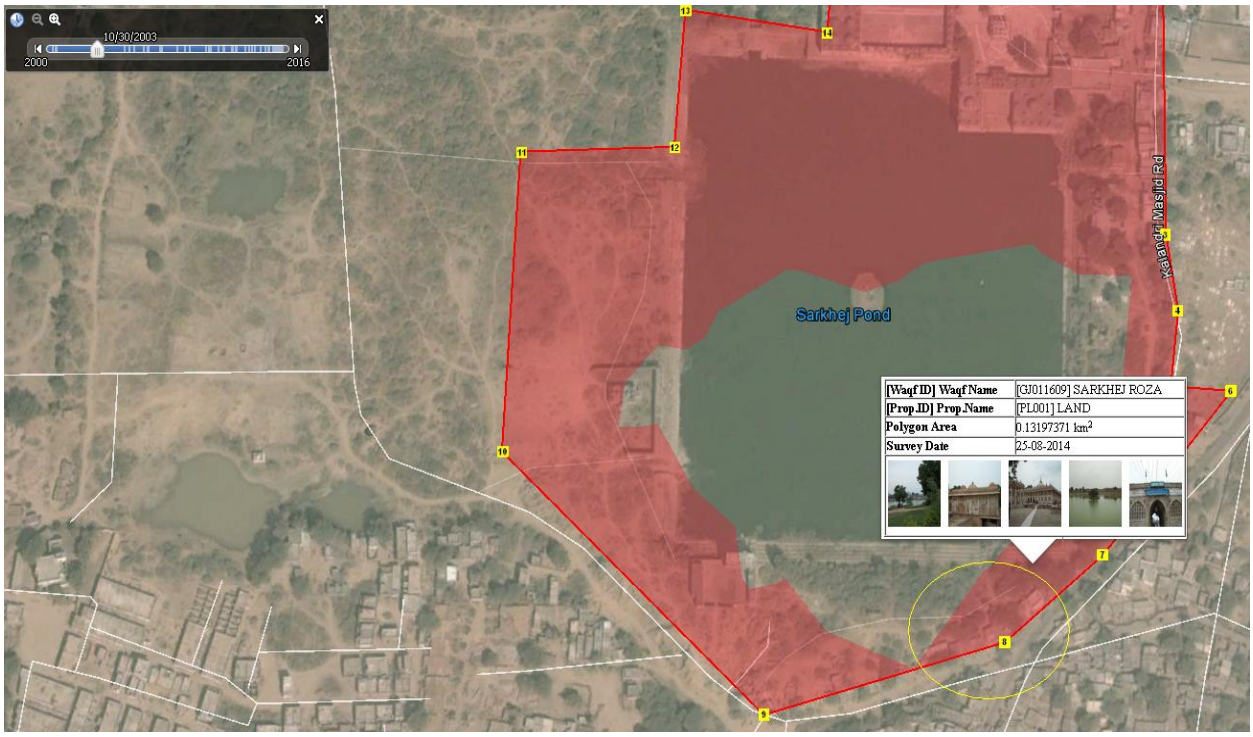
As an example, we have taken a Waqf Property (i.e., a Plot of land having a pond in it) in the Gujarat State identified by its Waqf ID as GJ011609 & Property ID as PL001 in the Waqf Management System of India. This Plot is comprises of 14 Vertices for which GPS Coordinates were recorded through a hand-held GPS Receiver GARMIN eTrex10 and inputted in the System. System generated layout is shown in two different Satellite Imageries dated 30-OCT-2003 and 03-SEP-2005.

It is observed in the **Yellow Circle** on both the Satellite Imageries under the same Layout that encroachment was present in the Year 2003 but the same was absent in 2005. When enquired with the Manager (Mutawalli) about any encroachment on the said Waqf Property, it was clarified that indeed there was an encroachment but the same was removed by force in the Year 2005 with the help of Government Authorities.

So, a very challenging task of encroachment detection & when that happened, for any land resource administrator is made easy with the GPS as well as Remote Sensing Technologies in the Waqf Management System of India. Since this is a part & parcel of Waqf Management System of India, State/UT Waqf Boards are finding it very useful in taking right decision at the right time for the protection as well as better management of their Waqf properties.

In the Year 2003, an encroachment near boundary detected (Satellite Imagery 30-OCT-2003)



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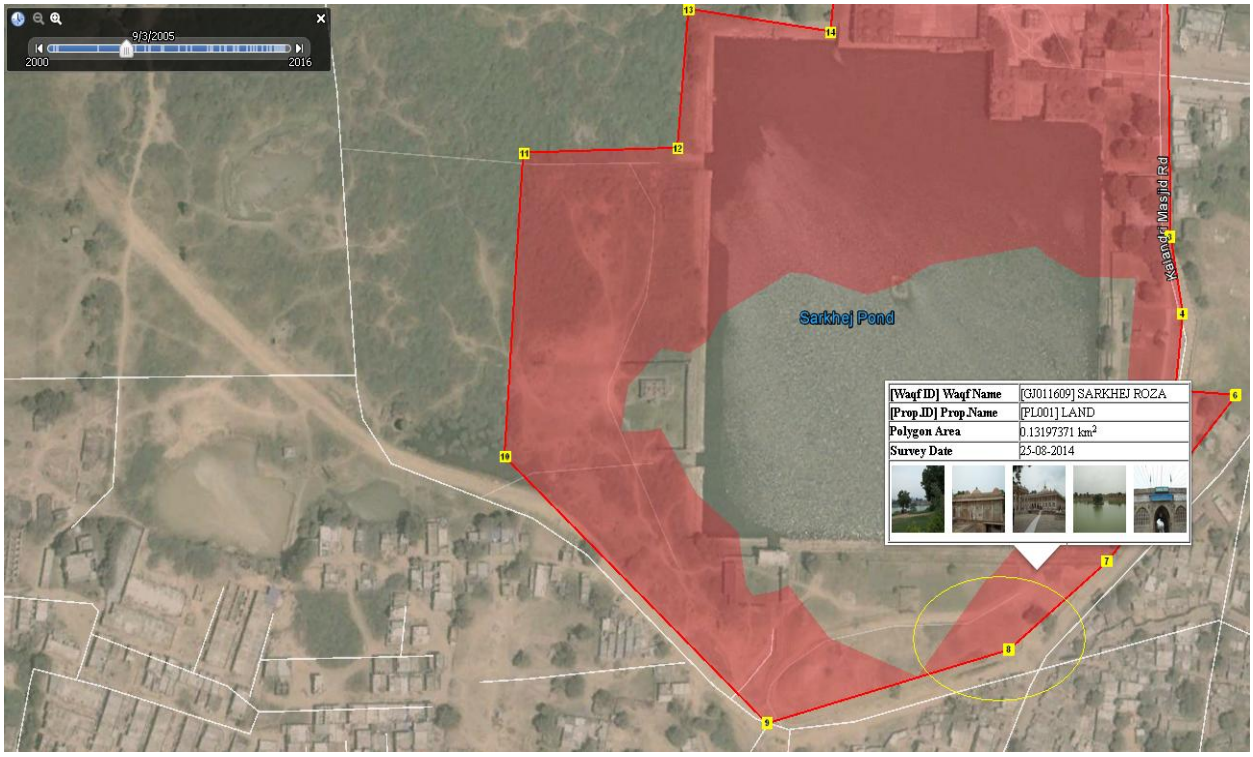
In the Year 2005, the encroachment near boundary cleared (Satellite Imagery 03-SEP-2005)



V. CONCLUSION

The trends of income and expenditure of the various Waqf Boards reveals that there is no uniformity in the pattern of assistance given by various State Governments to their respective State Waqf Boards. It has been observed that computerization makes management efficient and transparent. It transforms all works as easy tasks; hence, maximum work can be carried-out in less number of times, which in turn would be effective for the income generation.

In Section "Revenue Generation before & after computerization" it has been found that the Waqf properties before the computerization indicating income generated by the State Waqf Boards was quiet slow in Financial Year 2007-08. When computer-aided services are used by the State Waqf Boards from Financial Year 2010-11 to 2012-13 the income generation was quiet high. Hence, it is concluded that the computerization of Waqf properties affected the income of the State Waqf Boards tremendously.

With the use of GPS & Remote Sensing Technologies in the System, a very challenging task of detecting the encroachment is made easy for the protection as well as better management of Waqf properties. It has been demonstrated when & where encroachment took place on the Waqf Property using Historical Satellite Imageries as a Decision Support System for Waqf properties Administrators to take further necessary action for removal of such encroachments.

VI. ACKNOWLEDGEMENT

It is our great pleasure to thank Ministry of Minority Affairs, Government of India for the valuable information & data accessed through WAMSI Project Website & WAMSI On-line System's Public Interface for Annual Income Analysis and Encroachment Detection over a Waqf Property in this research paper.

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