Case Studies on
e-Governance
in India

Sulekha Plan Monitoring System:
Facilitating and monitoring planning at the local government level

Abdul Muheet Chowdhary, *OneWorld Foundation India*

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About the Initiative

This publication is a part of the Capacity Building initiative under the National e-Governance Plan (NeGP) by NeGD with an aim to draw out learnings from various projects implemented in various States/ UTs and sharing this knowledge, in the form of case studies, with the decision makers and implementers to benefit them, by way of knowledge creation and skill building, from these experiences during planning and implementation of various projects under NeGP.

Conceptualised and overseen by the National e-Governance Division (NeGD) of Media lab Asia/DeitY these case studies are submitted by e-Governance Practitioners from Government and Industry/Research Institutions. The cases submitted by the authors are vetted by experts from outside and within the Government for learning and reference value, relevance to future project implementers, planners and to those involved in e-governance capacity Building programs before they are recommended for publication. National Institute for Smart Government (NISG), working on behalf of this NeGD provided program management support and interacted with the authors and subject matter experts in bringing out these published case studies. It is hoped that these case studies drawn from successful and failed e-Governance projects would help practitioners to understand the real-time issues involved, typical dilemmas faced by e-Governance project implementers, and possible solutions to resolve them.

Acknowledgment

NISG sincerely thanks all the authors for documenting and sharing their rich experiences in terms of challenges and lessons learned and allowing us to publish and use these case studies in various training programs of NeGD and NISG. NISG also thanks all the external and internal experts who helped review the submitted cases, providing critical observations and for helping in articulating and presenting the case studies, both for class room use as well as a reference article.

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Abstract

The Sulekha Plan Monitoring software was developed and implemented in Kerala in 2002 by the Information Kerala Mission, Government of Kerala, to facilitate decentralised planning at the local level. It is a Government-to-Government (G2G) project that provides end-to-end computerisation of the planning process across vertical and horizontal levels. Sulekha enables plan formulation, appraisal, approval, revision processes and expenditure tracking at the local body level. The system is a centralised database of plan-related information, containing details of previous plans that can be accessed in a graphical and analytical form by front-end users. It also contains guidelines, government orders and other plan-related information relevant to users. It is a centrally deployed, web-based system that is hosted at the Kerala State Data Centre and accessible to all 1,209 local bodies through the Kerala State Wide Area Network/Virtual Private Network.

Sulekha was implemented in the context of Kerala People's Plan Campaign of 1996. It is now an essential component of the planning process in Kerala. The workload it handles is increasing with an average of 2 lakh plan projects handled by local governments every year. It has brought about significant improvements in plan process efficiency and has standardised the process without taking away the agency of local governments to creatively solve problems. The project has won the Gold Medal in the category of Excellence in Government Process Re-engineering in the National e-Governance Awards 2009-10.

Key words: planning, decentralisation, process re-engineering, e-governance, automation, monitoring, decision support, analytics, workflow integration, central deployment, local governance, Kerala

Note to practitioners/instructors

This document is intended to provide an overview of the historical context that necessitated implementation of the Sulekha Plan Monitoring System, its functioning, the impact it has had, the challenges faced during its implementation and the manner in which they were overcome. The document focuses on the way technology has been used to provide a foundation for democratic ideals and highlights the strategy adopted for successful implementation of this award-winning project. The focus in preparation of this document is less on the *technical* aspect and more on the *social* aspect. Practitioners will find this document more useful from the perspective of *why* Sulekha is important, *what* social needs it fulfilled and *how* it was successfully implemented. When using this document for a training session, **instructors** could ask the following questions to their participants:

➢ Could the timing of implementing Sulekha been altered? What if the software was implemented after waiting for the institutional changes to 'stabilise'?

- What could have gone differently if Sulekha did not have a long-term strategy? Keep in mind the software was implemented under conditions of uncertainty regarding future trajectories.

- When seeking to replicate a project like Sulekha, what are the necessary conditions for its introduction and successful implementation?

- Highlight key policy decisions at the level of the political executive which contributed to the success of Sulekha

- What are the advantages and disadvantages of having a single body in charge of all e-governance initiatives for the local level?

- What is the role of political support in such a project?

Project Context

Kerala: A Demographic Introduction

The twelfth most populous state in India, Kerala ranks substantially high in human development indicators. It boasts of being the only State in the country with a positive sex ratio of 1084 and has the highest literacy rate of 93.91 percent in the country. Against the national level of urbanisation that stands at 31.16 percent, Kerala has an urbanisation rate of 47.72 percent.[1] However, Kerala ranks ninth out of all the States and Union territories in Gross State Domestic Product (GSDP)[2] and ranks seventh in terms of per capita net State domestic product[3]. While this is still a good ranking, when compared to the high levels of human development it is somewhat 'paradoxical' as standard economic theory assumes a growth in production to precede a growth in human development. This has led to the popular 'Kerala model of development' that is characterised by the 'paradoxical' situation of high human development indicators coexisting with somewhat low per capita incomes.

This model is also characterised by development being distributed across the population and a set of wealth and resource redistribution programmes being undertaken by the State.[4]

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[1]Government of India. 'Chapter IV – Trends in Urbanization'.*Provisional Population Totals.* Census of India 2011.Web. 9 January. 2013. , http://www.censusindia.gov.in/2011-prov-results/paper2-vol2/data_files/kerala/Chapter_IV.pdf/>

[2]Government of India. Planning Commission. 'Gross State Domestic Product (GSDP) at Current Prices (as on 15-03-2012)'. 2012. Web. 10 January. 2013. <http://planningcommission.nic.in/data/datatable/0904/tab_104.pdf/>

[3] Ibid

The Genesis of Sulekha

The Sulekha Plan Monitoring System had its initiation in context of the Kerala People's Plan Campaign undertaken in 1996. The campaign was one of the largest decentralisation initiatives in the world and was started in Kerala's Ninth Five Year Plan, following the 73rd and 74th Constitutional Amendments that institutionalised local governance, creating a three-tier system of Centre, State and Local governments.

It was expected that decentralisation of funds, functions and functionaries would enable economic development by mobilising both people and resources to strengthen the productive base, particularly in the primary sector, by creating and maintaining public and collective goods and add to already existing social infrastructure such as schools and hospitals[5]. It was believed that decentralisation would reduce Kerala's dependence on food grains from outside, make each *panchayat* self-sufficient in the production of eggs, meat, fish, fruits and vegetables and also allow for the resolution of issues that affect the production process[6]. The initiative was also influenced by already existing political commitments to decentralisation and social movements of Non-Governmental Organizations (NGO)[7] that argued for a more participatory approach to development.

Administrative Unit	Number
Districts	14
Taluk	63
Local Government Bodies	
Gram Panchayat	978
Block Panchayat	152
District Panchayat	14
Municipalities	60
Corporations	5

[5]Kannan, KP. "People's Planning, Kerala's Dilemma." *Seminar.* 2000. Web. 10 January. 2013.
[6]Sulekha Plan Monitoring System. Web. 4 January. 2013. <http://plan.lsgkerala.gov.in/Home.aspx/>
[7] Kerala Sasthra Sahitya Parishath. Web. 4 January. 2013. <www.kssp.in/>.

Table 1: Kerala's administrative disaggregation
Source: OneWorld Foundation India 2013

The local governance structure of Kerala is given in table 1. A massive 'process re-engineering' exercise took place to facilitate transition from a centralised to a more decentralised way of planning. Through various phases of institutionalisation, the details of which are given in figure 1, a concrete methodology for decentralised participatory planning was evolved at the sub-state level for the first time in an Indian state[8]. The People's Plan Campaign was launched to publicise the decentralisation initiative and mobilise, sensitise and involve stakeholders.
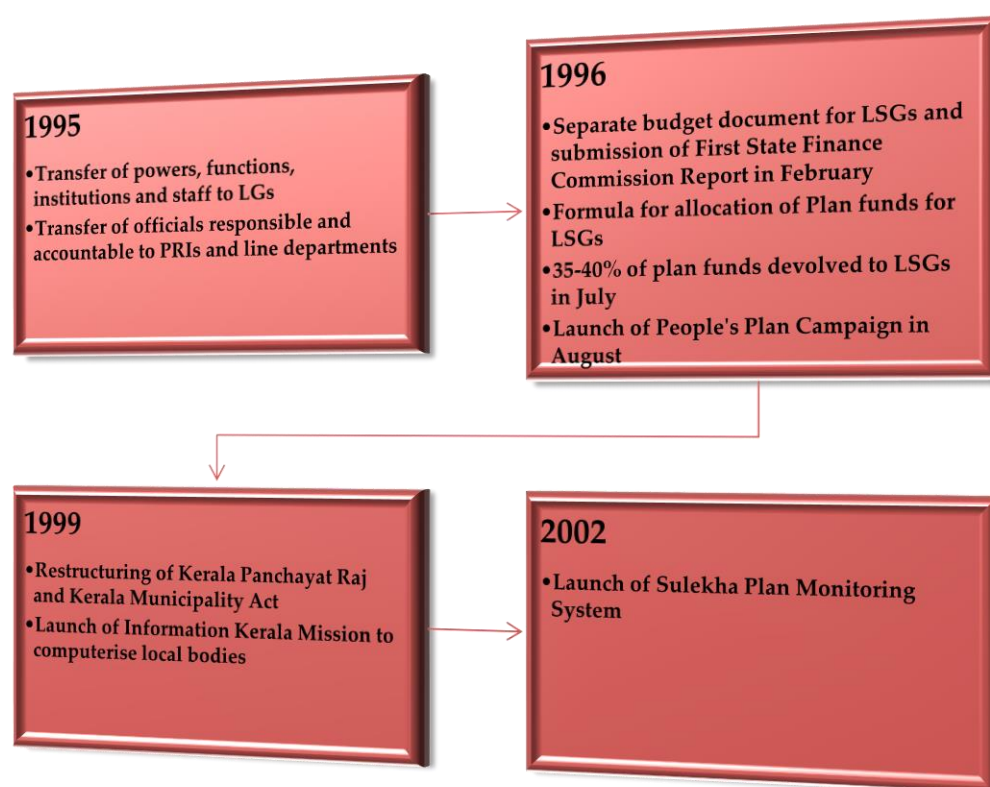
1995
- Transfer of powers, functions, institutions and staff to LGs
- Transfer of officials responsible and accountable to PRIs and line departments

1996
- Separate budget document for LSGs and submission of First State Finance Commission Report in February
- Formula for allocation of Plan funds for LSGs
- 35-40% of plan funds devolved to LSGs in July
- Launch of People's Plan Campaign in August

1999
- Restructuring of Kerala Panchayat Raj and Kerala Municipality Act
- Launch of Information Kerala Mission to computerise local bodies

2002
- Launch of Sulekha Plan Monitoring System

Figure 1: A series of institutional changes preceded the launch of Sulekha

[8]Sulekha Plan Monitoring System. Web. 4 January. 2013. <http://plan.lsgkerala.gov.in/Home.aspx/>

Source: OneWorld Foundation India 2013

Of the various institutional changes implemented, the decision to devolve 35 to 40 percent of plan funds to Local Self Governments (LSGs) – district, block and *grama*[9] *panchayats*, municipal corporations and Urban Local Bodies (ULBs) - was particularly significant. It necessitated new ways of planning, budgeting and reporting and posed severe challenges for monitoring and reporting of Plan-related information in the State. In addition, the manual processing of projects and their monitoring had become a difficult task for local governments, with the result that the government could not effectively monitor projects.

To address these imminent issues, the Information Kerala Mission (IKM) was set up by the Government of Kerala as a mission mode project in 1999 with a mandate to strengthen local self-governance through ICT applications. IKM was initiated as an e-Governance programme that would facilitate the decentralisation process through design, development, deployment and maintenance support of applications for LSGs. It is the largest and most comprehensive local body computerization project in the country, which envisages networking and computerizing the 1209 local self-government institutions in Kerala. It is not only in charge of computerising local bodies, but also develops and provides the application software (?) required for carrying out governance functions such as monitoring developmental projects, accounting and budgeting, financial management and human resource management. The larger of the IKM goal is to carry out capacity building for ensuring accountability, better productivity and service delivery.

The IKM also had to develop resource-based information systems and provide trained manpower for technical operations. However, one of IKM's key responsibilities was 'to develop a mechanism for regular monitoring of plan targets achieved by local bodies over the network and developing a local body centric management information system'[10].

Against this background, the Sulekha Plan Monitoring System was launched in 2002 as a comprehensive e-Governance solution to facilitate and streamline planning processes at the local governance level. The entire cycle – plan formulation, appraisal, approval, implementation and monitoring – was to be carried out through Sulekha.

By 2008, the Sulekha Plan Monitoring System was implemented in all three tiers: *panchayats*, municipalities and corporations.

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[9] Gram panchayats or village level governance bodies in Kerala are known as gram panchayats.
[10]Information Kerala Mission, Government of Kerala. Web. 5 January. 2013.
<http://www.infokerala.org>

Project overview

Figure 2: Screenshot of Sulekha Plan Monitoring System web portal
Source: Sulekha, 2013

Project Description

The planning process in Kerala at the local level is comprised of the following stages: *environment setting, situation analysis*, *need identification, vision setting*, *plan formulation*, *projectisation, plan vetting*, *plan approval* and *plan implementation.* To digitally enable the

planning process, the Sulekha Plan Monitoring system was conceived by the Local Self Government Department (LSGD), the State Planning Board, Directorate of Panchayats and the Information Kerala Mission (IKM) as a Government to Government (G2G) system that would handle all the stages from plan formulation till plan implementation and monitor progress after that. However the design, development and implementation of the application was carried out primarily by the IKM.

Sulekha was launched in 2002 and within five years covered the entire State of Kerala, covering all 1209 local bodies. Currently, Sulekha facilitates the formulation of nearly 2 lakh plan projects annually. Through significant process re-engineering and automation, it has reduced the time required for the

Salient features of Sulekha:

- Facilitates and tracks the entire planning process from plan formulation, approval, appraisal, implementation, monitoring, revision processes and expenditure tracking
- Provides consolidated plan and project data of previous plans
- Validates whether mandated government procedures have been followed in various stages of planning
- Integrates vertical processes
- Serves as a centrally deployed system covering all 1,209 local governments in Kerala

planning process by 33 percent[11], thus greatly speeding up efficiencies in project management. Stakeholders can formulate projects in accordance with governmental guidelines and enter the details onto Sulekha, which records various parameters such as financial and physical targets, schedules, achievements and beneficiaries.

Users can access data of previous Plans and Five Year Plans. The Plans thus made are monitored through its system of validation that ensures their compliance with governmental guidelines. The reports produced at various levels are incorporated onto it (refer to figures 13 and 14 for samples) and the workflow processes of different levels are integrated into it. For instance, the workflow process of the plan formulation stage involves local consultation in the grama panchayat and the workflow process of the plan approval stage involves assessment of local government plans at the district level. These processes at different levels would earlier be carried out manually and are now done online through Sulekha. At higher levels of local governance, Sulekha enables a holistic perspective as authorities can analyse plans prepared all over the state on a single platform.

As Sulekha is also a monitoring system, updates are periodically made and details such as outlay and expenditure data, category, group and sector wise expenditure, district-wise/local body wise expenditure, plan and project details and many other categories of information are available on the portal. The system is centrally deployed and is hosted on the Kerala State Data Centre and networked through the state WAN/VPN, thus enabling access from anywhere. The data and analytics available aid decision-makers and enable other stakeholders to draw insight and identify focus areas.

One of the major strengths of Sulekha is its synchronisation with various other applications developed by the IKM. It syncs with applications that perform functions of accrual based double entry accounting (Saankhya), cost estimation (Sugama) and council minutes (Sakarma) thereby effectively combining various aspects of the planning process.

Objectives

The Sulekha Plan Monitoring System was designed as a comprehensive e-Governance solution that would facilitate, streamline and track the entire planning process - plan formulation, appraisal, revision, approval, monitoring, and expenditure tracking of plan projects - at the local level and make the data available to both the Government and the Public for further use.

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[11] Based on a study conducted by the IKM. Details in 'Suresh Kumar M, Sudhakaran TP and Binu K. 'Sulekha – A Web Based Tool for Monitoring of Plan Projects of local bodies and state level reporting'. *Information Kerala Mission.* Web. 7 January. 2013.'

Implementation Strategy

Urban as well as rural local government bodies in Kerala are well equipped with infrastructural pre-requisites to facilitate use of a programme like Sulekha. Ninety- nine percent of local bodies in the state have access to the Kerala State Wide Area Network (KSWAN)/ Virtual Private Network (VPN).

Considering Sulekha's objectives, it was crucial to design the software so as to contain mechanisms for data acquisition and local reporting, aggregation of local body data at the various tiers that could facilitate vertical integration of local body plans and a mechanism for integrating the reporting system with performance audit and plan evaluation.[12]

The methodology of software development of Sulekha followed the human centred participatory software development strategy evolved for IKM. A number of persons involved in the peoples' plan campaign at the political, bureaucratic and activist level interacted in formulating the concepts. Prototypes of the reporting tool were developed to facilitate further interaction.

A three-phased implementation strategy was adopted that used network architecture suitable for the purpose. Figure 3 shows the network and its phase-wise evolution.

[12]Suresh Kumar M, Sudhakaran TP and Binu K. 'Sulekha – A Web Based Tool for Monitoring of Plan Projects of local bodies and state level reporting'. *Information Kerala Mission.* Web. 7 January. 2013.

Figure 3: Sulekha's phase-wise evolution connected a series of institutions to each other

Source: Suresh Kumar M, Sudhakaran TP and Binu K. 'Sulekha – A Web Based Tool for Monitoring of Plan Projects of local bodies and state level reporting'. *Information Kerala Mission.* Web. 7 January. 2013.
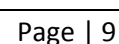
The first phase linked the local bodies with the District Planning Office, the State Planning Board and the IKM headquarters. These were essential to the planning process. The other two phases linked the GPs through Kerala State Wide Area Network (KSWAN) and the Virtual Private Network (VPN) connection. This was followed by synthesis with the State

information infrastructure.[13] The initial strategy of the IKM was to use a system of 'distributed individual databases'. This meant that each LG had its own database and IT support.

GPs, Block Panchayats (BPs), District Panchayats (DPs) and ULBs had autonomy to plan their projects in keeping with policies and procedures as prescribed in relevant statutory regulations and rules. To further the process of inclusion, attempts were made to include Tamil and Kannada scripts areas lying on borders of the state. However, Sulekha at present does not feature these additional languages. Multiple iterative modifications were made to cope with the varying demands noted and reported by LGs. Database structures were also modified several times and hence they support dynamic content that has been perfected through a decade of implementation experiences. Even though the databases were initially distributed, as the same Sulekha application was used the data structures were uniform.

The data transfer method for Sulekha went through a series of changes. Prior to 2006, data transfers to the TAG and DPC would take place manually through CDs as the amount of data was too large to go through dial-up.[14] Subsequently a CD-courier method was used with expenditure data transferred through dial-up.

In the third phase of Sulekha's evolution that began since the 12th plan's formulation, the application became web-based, centrally deployed and fully integrated with Kerala's information infrastructure. It is now hosted in the Kerala State Data Centre. LGs only require internet access to use Sulekha. The legacy data of nearly 20 lakh projects implemented in the past 10 years which was stored on the distributed individual databases was uploaded onto the SDC, creating a single, centralised database.

A crucial challenge Sulekha had to initially overcome in order to be sustainable was gaining acceptability from the stakeholders. *Local level officials were initially resistant to the software.*

In order to bring them on board, the strategy followed was of incentivising change through demonstrating effectiveness[15].The initial pilot of the software was held in five *panchayats*, of which Vellanad in Thiruvanathapuram was the first. It proved useful to both state officials and local level leaders. The former saw the new centrally digitised data as a better way of monitoring devolved funds and expressed a sense of empowerment at the new ability to

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[13]Suresh Kumar M, Sudhakaran TP and Binu K. 'Sulekha – A Web Based Tool for Monitoring of Plan Projects of local bodies and state level reporting'. *Information Kerala Mission.* Web. 7 January. 2013.

[14] Nicole Anand. 'Sulekha: Plan Formulation and Monitoring System for Decentralised Planning of Local Governments'. *Governance Knowledge Centre*. 2010. Web. 7 January. 2013.

[15]Nicole Anand. 'Sulekha: Plan Formulation and Monitoring System for Decentralised Planning of Local Governments'. *Governance Knowledge Centre*. 2010. Web. 7 January. 2013.

analyse allocations, especially to determine under or over utilisation of funds[16]. However after observing the advantages of the software their fears were alleviated.

The local governments had the feeling that the software restricted their 'freedom' in formulating projects and restricted their expenditure. In reality, it helped in their clear understanding of the project, made possible complete documentation, ensured consistency of data, and ensured timely implementation with adherence to guidelines. Once the local government leaders were brought on board through various orientation sessions led by the Local Self Government Department, they enthusiastically embraced the project.

Prior to project implementation through Sulekha, the planning cycle used to begin in March and it took up to January for plans to be approved. After Sulekha's implementation, the time was reduced to a mere two months, with plans being approved by July itself. Thus, all relevant stakeholders both in the executive and the legislature were brought on board.

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[16] Ibid

Stakeholders

Implementing Agency

Information Kerala Mission (IKM) the e-Governance project of the Local Self Government Department of Kerala has designed and developed the Sulekha Plan Monitoring System in house and is currently maintaining it.

Clients

State Government	• Local Self Government Department • Coordination Committee
Planning Bodies	• State Planning Board • District Planning Offices • Panchayat Directorate
Local Self Governments (LSGs)	• **Rural LSGs**: Gram Panchayat > Block Panchayat > District Panchayat > District Panchayat Office > Panchayat Directorate • **Urban LSGs**: Ward Sabha > Municipalities > Corporations • District Planning Committee • Working Groups • Kerala Institute of Local Administration • Resource Persons • State Performance Audit Officer

Figure 4: Government-end users of Sulekha

Source: OneWorld Foundation India 2013

Governance Services offered

Plan Formulation

1. Enables LGs to prepare their development plans within the boundaries of statutory provisions.

2. Incorporates details of *gram sabhas*, working groups, development seminars, and District Planning Committee (DPC) online.

3. Facilitates standard project accounting with the provision of fixing financial/physical targets, achievements, schedules, and such like.

4. Contains facility for checking previous years' expenditure details, ensuring adherence to government guidelines in respect of sectors and special programmes.

5. Codifies various parameters of projects such as sector, sub-sector and micro-sector, special programmes, type of beneficiaries, assets and their specification. This eases data identification and extraction.

6. Gives structured codes and masters for physical targets with selection and ranking criteria for beneficiaries.

7. Enables separate tracking of spill-over and multi-year projects and revision of projects.

8. Facilitates consolidation of formulation and expenditure data of the Five Year Plans (FYP).

9. Provides for calculating the shortfalls in plan fund utilisation from prescribed limits in current year under different heads of accounts (sectors) and necessary compensation in next year's budget.

Plan Appraisal

10. Validates mandatory conditions for fund allocation and blocks submission for appraisal if validation fails.

11. Validation takes place on the 12th Plan guidelines issued by the Government of Kerala.

12. Enables DPCs to review plans and submit their comments and observations.

Plan Monitoring

13. Generates validation reports to ensure that the plan processes pass through the relevant Government guidelines.

14. Online expenditure data updation from Saankhya to the Kerala State Data Centre by the concerned local bodies in a scheduled phased manner.

15. Carries out monitoring and expenditure reporting. Once expenditure details are reported to the central server, the figures cannot be changed and is as the same as Government level reporting. However there is a provision to change the figures after certain procedures are followed.

16. Has workflow at different levels and locks after processing at the next level. Thus there is validation at every level of implementation.

17. Detects deviation from guidelines. For instance expenditure violating guidelines could be quantified and compensation ensured in the succeeding year's plan can be traced.

User Services

18. Generates various graphs/charts for analysis and decision support.

19. Generates in real time category, sector and micro sector level MIS reports from the crystal reports at local body, district and state level based on user defined queries.

20. Gives plan projects a unique 12 digit ID to help with internal classification.

21. The expenditure details of all LGs are made available on a project/programme wise format to facilitate consolidated statements and reports for decision support and analysis. These details for the previous two plan periods are offered by IKM in the LSGD server at the Kerala State Data Center.[17]

Supplementary Software

Sulekha is part of a total system for local body computerisation. It works in collaboration with other applications designed by the IKM.

Application	Functionality
Saankhya	Records accounts in an accrual based double entry format, financial transactions in real time and allows for the preparation of Financial Reports including AFS and balance sheets. In conjunction with Sulekha, it carries out expenditure tracking at the local body level.
Sakarma	Records agenda notes, minutes, follow up actions on decisions, conformity/deviation with precedence. The council minutes functionality is performed by Sulekha in conjunction with this application.
Sanchaya	Computerises revenue systems of local governments, handles entire range of taxes and licenses, enables utility payments and identification of defaulters; e-payment of building tax with SMS facility
Sevana - Civil Registration System	Handles online registration of birth, death through hospital kiosks and marriage registration; online issue of authenticated birth, death and marriage certificates; facility for e-filing marriage application; sending SMS on successful civil registration and immunization schedule
Sevana - Pensions	Disburses various social security pensions to beneficiaries

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[17]Sulekha Plan Monitoring System. Web. 4 January. 2012. <http://plan.lsgkerala.gov.in/Home.aspx/>

Soochika	Handles file tracking, grievance handling and provides updated information on status of backend operations and public service transactions and SMS on file status. This application is used to perform the workflows of various administrative levels in Sulekha.
Sugama	Cost estimation tool for public works that allows users to record project specifications, handle intends, tender notices, consolidated statement of tenders, purchase orders, delivery challans, payments, etc. This functionality is used by planners throughout the planning process and is especially important at the formulation stage.
Sanketham	Submission and issue of building permits and send SMS on approval

Table 2: Functionalities of supplementary software that aid Sulekha in its functioning
Source: OneWorld Foundation India 2013

Categorisation of Plan Projects under Sulekha

The master data of projects of LGs is stored under three categories viz., development fund, maintenance fund and other funds. Plan projects (development fund) are divided on the basis of their fund source, viz., the general, Scheduled Caste Plan (SCP), and Tribal Sub Plan (TSP). In addition to plan project formulation, the LGs frame additional projects through their own funds, central Government funds, other state funds, loans, MP fund, MLA fund, Nirmal Puraskar share, NABARD share, share from DP and BP, externally aided programme, maintenance fund (road and non-road) etc.

Number of Categories	
Funds	
Development	6
Maintenance funds	2
Other sources of funds	19
Total	27
Sector	32
Sub-sector	164
Micro sector	906

Special Programmes	6
Assets - Construction	102
Assets - Purchase	263

Table 3: The master data of Sulekha is extensively categorised

Source: OneWorld Foundation India 2013

Process Flow

Plan Formulation
- Local bodies call meeting of grama sabha, working groups (WGs), and arrive at consensus of priority of schemes and strategies
- The allocated annual plan funds released directly to the individual Local Governments in three instalments

Consensus building at DS
- The annual plan and maintenance plan discussed and Village Development Report(VDR) circulated
- Details recorded online

Projectisation
- Projects prepared by WGs within governmental guidelines, automatically codified on the basis of parameters, entered online by the implementing officers using their login, validated by Sulekha and recorded online
- Some parameters are sector, sub-sector and micro-sector, scope of project, timeline, financials, type of beneficiaries and approval by the panchayat committee

Plan approval
- The individual plan projects prepared by the implementing officers are approved/rejected by the higher officials of the same department
- Once approved, the project implementation is initiated
- DPC examines whether the annual plans of LGs matches the district priorities as outlined in the VDR and can revise or reject them with remarks entered online and approved the total annual plan as such
- DPC can also generate progress reports for evaluation

Plan monitoring
- Project progress updates uploaded online by implementing officers
- Expenditure tracking is carried out in sync with Saankhya

State level planning
- The Planning Board, Local Self Government Department and SRG accesses local plan reports online and uses them to prepare the coming year's State level plan
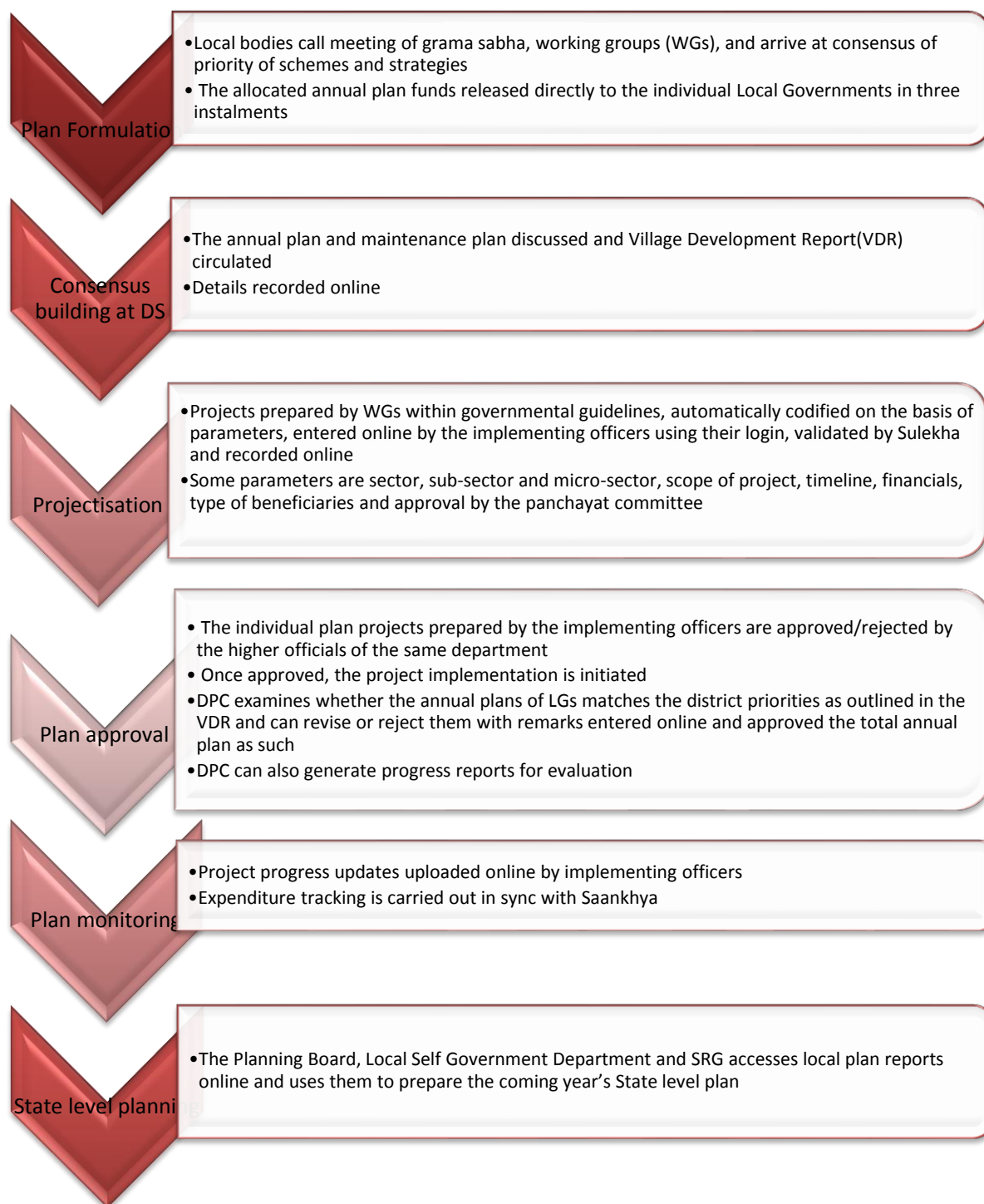
Figure 5: Planning process through Sulekha

Source: OneWorld Foundation India 2013

Note: 'Online' is to be read as 'onto Sulekha'. All reports mentioned uploaded onto Sulekha.

In case there is a disagreement between the LG and the approving authority, it is referred to an appellate authority at district level and if disagreement continues, it is referred to the Coordination Committee at the State level chaired by the council of ministers of LSG. For 2012-13, the entire planning formulation and approval process has been completed in a two-month period. The timeline began with plan project formulation in October. By December, all projects are entered onto Sulekha and approved and the implementation begins once project approval is granted by the implementing officers. The project formulation process for 2013-14 has already been initiated and data are being entered online through Sulekha.

Front End Services

Sulekha can be accessed at http://plan.lsgkerala.gov.in/Home.aspx, from where users can avail a variety of services – (i) search for projects along predefined categories and codes as well as details of expenditure incurred, (ii) view plan details at the state, district and local administrative levels, (iii) see data available on the portal in a graphical format, (iv) generate detailed plan reports, and (v) access government orders relevant to planning in the state of Kerala.

Project Search

Attingal Municipality 2010-2011							
Number	Project Name	Category	Sector	Development Fund Formulation	Total Outlay Formulation	Development Fund Expenditure	Total Outlay Expenditure
1	സമഗ്ര നെൽകൃഷി വികസനം	General	Production	150000	225000	150000	150000
2	നെൽകൃഷിയ്ക്ക് പവർ സ്പ്രെയർ വാങ്ങൽ	General	Production	75000	75000	75000	75000
3	സമഗ്ര പച്ചക്കറി വികസനം (വനിത)	General	Production	69450	104175	69450	69450

Figure 6: Project expected and actual expenditure details
Source: Sulekha 2013

Users can search for projects on the basis of the categories mentioned in table 3 and on the basis of their codification. Once selected, the outlay and actual expenditure details are available, as shown in figure 9. The portal also offers users the facility of printing and exporting the data in excel format.

Plan Details

Sulekha provides consolidated plan details, which can be viewed both at the macro state level and can be disaggregated and viewed at the district and local body level. Like project search, users can query for data on the basis of parameters such as category, sector group, sector, sub sector and micro sector.

Figure 7: Plan details on Sulekha. Above is a search for all-state details on public buildings constructed. The search results data is displayed in the same format as figure 12.
Source: Sulekha 2013

At the local body-wise level, users can search for project-wise details as well as consolidated plan details. The layout for the data is the same as displayed in figures 9 and 11.

Graphical Depiction of Plan and Project Data

This analytics function enables users to view data graphically. Sulekha generates pie charts and bar graphs for various types of data at the state, district and local level. Some samples are provided below.
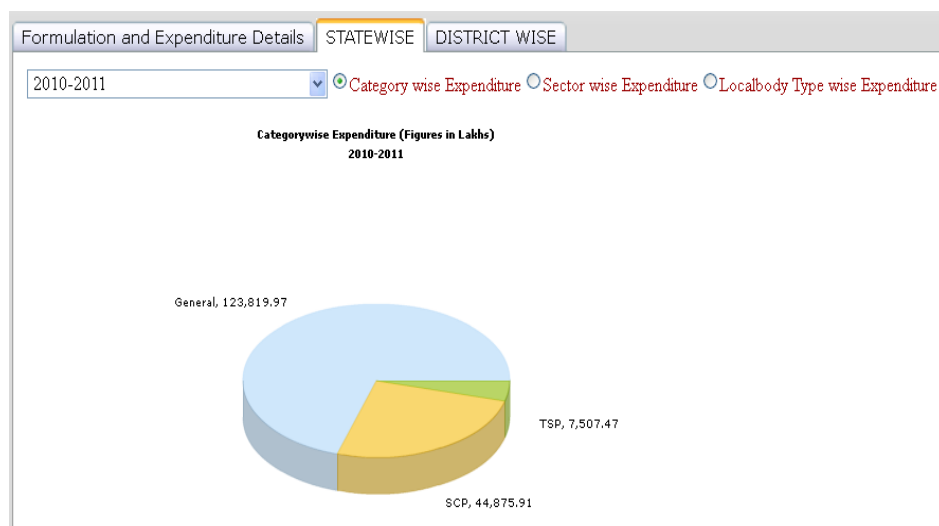
Figure 8: Statewise expenditure according to categories for 2010 - 11
Source: Sulekha 2013
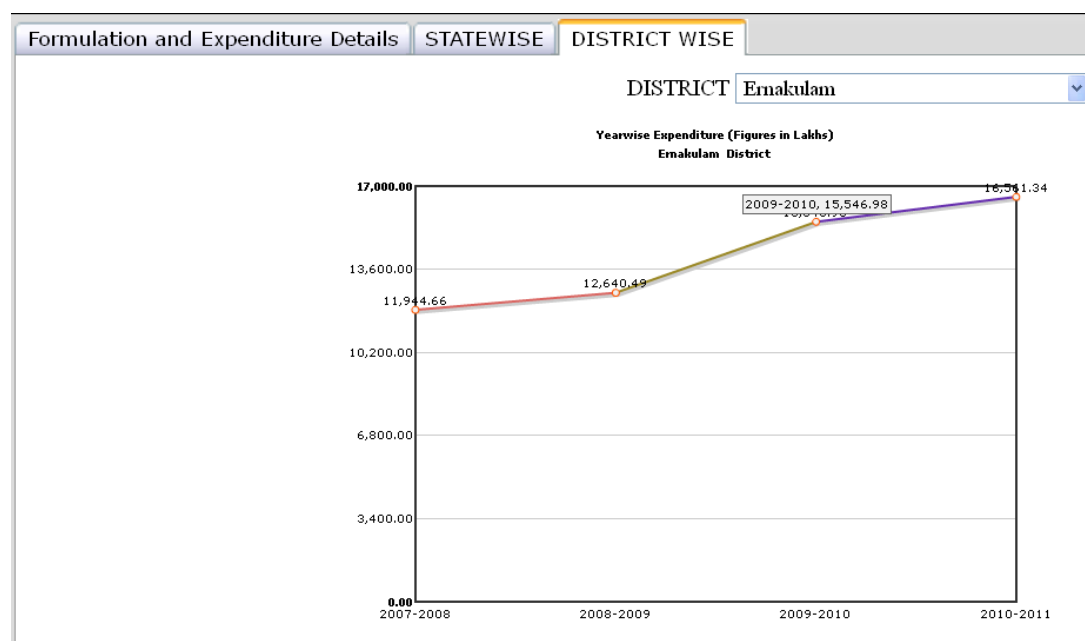
Figure 9: Year wise expenditure for a district can also be accessed. Sample of Ernakulam shown.
Source: Sulekha 2013

Detailed Plan Reports

Users can also access detailed plan reports based on various categories:

➢ Expenditure by sector type across category

➢ Project formulation and expenditure by sources of fund

➢ Project formulation and expenditure by micro sector

➢ Project formulation and expenditure by developmental sectors

➢ Local body wise distribution of project formulation and expenditure (category wise)

➢ Project formulation and expenditure by special programs

➢ Local body wise distribution of project formulation and expenditure (sector type wise)

➢ Monthly expenditure for sources of fund

➢ Budget and plan grant expenditure by type of local body

Sector Type	No: of projects				General			SCP			TSP			Total Planfund (6+9+12)	Maintenance	Total Others (7+10	Total (15+16+17)
	New	Spill Over	maintenance	Total (2+3)	Plan fund	Others	Total (6+7)	Plan fund	Others	Total (9+10)	Plan fund	Others	Total (12+13)				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Production	12430	2142	414	14572	2530749033	84543795	1376186984	79243712	4899464	564143176	43007513	13503445	56510958	953000258	48680142	043840860	5996841118
Service	41665	9469	9881	51134	3509211767	08202804	8591239815	35235257	17488649	876984121	567972739	5711895	25091690	442419763	72806613	650895863	13093315626
Infrastructure	48741	14589	25679	63330	2502634553	485979388	988613941	275512405	23550	483278674	06753987	6280749	13034736	992143664	89535869	592783687	13584927351
Not included in any sector	9065	1680	326	10745	5368408991	05546134	1423870332	21674987	27500325	04425019	23957863	28776856	52734719	614041841	99790714	666988229	10281030070
Total	111901	27880	36300	1397813	911004344	468906728	3799110721	8909080	9921910	428830990	941692102	205680001	1147372103	001605526	10813338	954508639	42956114165

Figure 10: Sample detailed plan report generated through Sulekha
Source: Sulekha 2013

Government Orders

Sulekha also has a search function that lists the government orders relevant to the planning process.

Technology

Till 2012, Sulekha used a system of distributed databases where each LG would have its own database and project formulation data transfer between institutions would take place through CD courier. The local governments used to report the project expenditure by entering in their local software and transferring it to the Data Centre over a dial-up. Since 2012, the system has gone completely online. The web-based version of the system was prepared within three months by a team of six. Sulekha is now a centrally deployed online system with a central database managed by a team of three. In addition to the centralized database, there is facility in the software for data sync to the distributed database of LGs from the central server.

Table 4: Technology architecture of Sulekha
Source: OneWorld Foundation India 2013
Note: Data obtained from IKM.

Component	**Technology Used**
Database and server	State Data Centre (SDC) is part of the State Information Infrastructure of Kerala and currently securely hosts more than a hundred government websites and web application software including Sulekha
Network connectivity	Virtual Private Network has 99% connectivity across the state. Current data transfer speed is 256 kbps from the LG level to the BSNL cloud and from there to the SDC it is 20 MBPS; shortly the transfer speed is to be increased to 512 kbps
Development tool	MS Visual Studio 2005, ASP.NET and C#
Web Server	IIS
Database server	SQL Server 2005
Report generation software	Crystal Reports
Graphical representation software	Fusion Charts
Application security	Hashing algorithms The almost 25,000 users are given login IDs by their higher authorities

	Multi-layer user authentication
Disaster recovery and backup	Regular backup mechanisms
	Disaster recovery mechanisms of the SDC apply to Sulekha as well
	Remote backup mechanism and mirror database at IKM
Front end requirements	Users only require a web browser and Sulekha can be accessed from Windows, Macintosh and Linux OS.

Training and Capacity Building

Compliance to Sulekha was initially ensured by making its use a mandatory condition for fund devolution to LGs. For capacity building, the IKM employed a Technical Assistant (TA) in each block to provide handholding support and to help with computer literacy of the government officials involved. District level coordination is made through District Technical Officers in each district who have sufficient exposure to application and domain.

The software is user friendly and a two days' decentralized training was sufficient to introduce modified online version of Sulekha to local government officials. Along with training on the domain aspects, the software was demonstrated online to the officials of local bodies. Owing to the already existing interaction with technology at the local level of administration, government officials were forthcoming in their willingness and capability to learn the use of Sulekha.

For domain level clarifications and technical, application related aspects, a State level helpdesk is operational at IKM headquarters, where single window help for domain, application and hardware level issues escalation are provided.

For assistance to plan project formulation, support at the District Planning Office (DPO) is also provided.

The decision makers and people's representatives were in a position to monitor the progress of the project entry, approval and expenditure tracking real-time through web and so welcomed the software.

Financial Cost

IKM being the nodal agency of the LSGD does not charge any fees for development of the software it develops, deploys and monitors in-house.

Outcomes and Benefits Realised

e-Governance projects generally carry out a combination of three functions: providing information, improving process efficiency and/or facilitating transactions.[18] In this context, Sulekha has had the following impact:

Standardised and efficient data management

Prior to Sulekha's implementation, there was enormous variation and delay in the recording, processing and maintenance of data across the state[19]. After the pilot was rolled out in Trivandrum district, the IKM brought out a paper in the 14th Kerala Science Congress, 2002, where it showcased the post-implementation improvements that can be seen in Table 5.

Table 5: Sulekha brought about a marked improvement in data management
Source: Suresh Kumar M, Sudhakaran TP and Binu K. 'Sulekha – A Web Based Tool for Monitoring of Plan Projects of local bodies and state level reporting'. *Information Kerala Mission.* **Web. 7 January. 2013.**

S. No	Type of attribute	% Improvement
1	Plan formulation	30%
2	Plan appraisal	85%
3	Plan approval	90%
4	Plan implementation	75%

[18]Department of Administrative Reforms and Public Grievances, Government of India. 'Report on Business Process Re-engineering for e-Governance Projects'. 2010. Web. 15 January. 2013. http://darpg.nic.in/darpgwebsite_cms/Document/file/BPR_eGov.pdf
[19]Details on how this challenge was tackled are provided in the 'Challenges Faced' section of the report.

Reduction in time and resources required for the planning process

Table 6: Impact of Sulekha on time taken for carrying out planning processes. Note: Time in months.
Source: OneWorld Foundation India 2013

	Project Approval	Generation of consolidated reports on financial and physical achievements
Pre implementation	10	1.5
Post implementation	4	0 (instantaneous)

As can be seen from figure 13, Sulekha has significantly reduced the time involved in the planning process, with the overall reduction by *one-third*.[20]

As a result, local bodies can view the results of project implementation within the stipulated time span of one financial year.

Sulekha's implementation has also reduced the resources required. The practice of taking project print outs have been dispensed with, thus saving more than INR 2 crore involved in paper and other printing charges. The earlier system of distributed databases has been replaced by the far more efficient centralized system of integration with the SDC and the KSWAN/VPN.

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[20]Nicole Anand. 'Sulekha: Plan Formulation and Monitoring System for Decentralised Planning of Local Governments'. *Governance Knowledge Centre*. 2010. Web. 7 January. 2013.
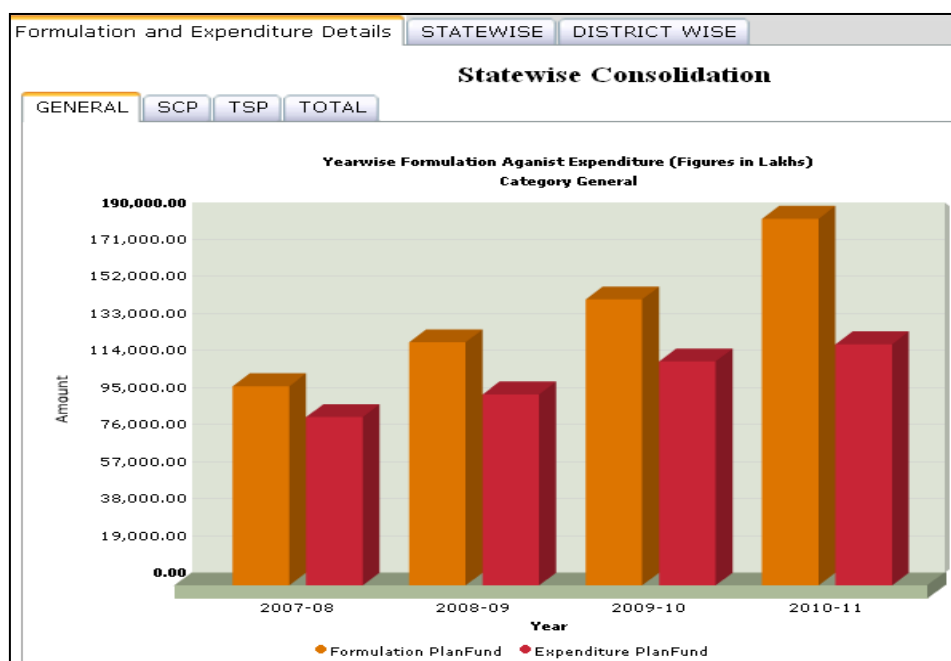
Increase in productivity

Figure 11: Year-wise formulation against expenditure 2007-11
Source: Sulekha 2013

As can be seen from figure 13, both plan funds and expenditure are increasing annually, from which the probabilistic inference can be drawn that there are increases in the quantity of plans and quality of their implementation.[21]

Sulekha handles a large number of projects with 1,80,000 projects approved in 2011-12 under more than 28 sources of funds and nearly *2 lakh* projects amounting to INR 8000 crore are formulated annually. In Kerala the entire plan formulation of LGs since the Tenth Five Year Plan period is undertaken online through Sulekha software. In 2012-2013, projects worth INR 8540 crores have been formulated by the 1209 Local Self Governments in Kerala.

Systematic and standardised compliance with government-prescribed guidelines

Sulekha's inbuilt system of checks and validation ensures that local bodies across the state are following governmental guidelines as issued from time to time. The software is updated periodically as and when new guidelines are issued and as it is a centralised system it saves the officials the effort of informing all the local bodies individually about the changes.

Centralisation and integration of data and workflows

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[21]An increase in expenditure is one of the standards by which performance is evaluated according to the Indian government's Performance Monitoring and Evaluation System (PMES). The inference is probabilistic as an increase in expenditure could also be explained by the theory that the number of plan projects has remained the same but their costs have increased and therefore expenditure has also proportionally increased.

Sulekha has a consolidated legacy master database covering nearly 20 lakh projects implemented during the past 10 years and stored as a central database with the facility to generate real time online crystal reports. The digitisation of this legacy data has made for easy formulation of budget allocations. Also, a central online database significantly enhances access of stakeholders to information, enables analytics on data and improves the planning process.

Sulekha also integrates workflows across the different vertical levels (local body, block/tehsil and district level) involved thus consolidating the planning process over a single portal. Stakeholders are saved the inconvenience of accessing multiple sources to obtain plan-related information and can carry out the entire planning process through Sulekha itself.

The consolidated data Sulekha makes available is also useful for the planning process itself. For instance, the provision for calculating the short falls in plan fund utilization against the prescribed limits in the current year under different heads of accounts (sectors) and necessary compensation in next year's budget are exclusive provisions of Sulekha. Stakeholders can therefore plan for future projects more efficiently with this access to past records. The data required for preparation of Economic Review is extracted from Sulekha by the State Planning Board.

Enhanced transparency and accountability

Sulekha is at its core a plan monitoring system and apart from facilitating the planning process it also provides updates on projects and plans. This information, which can be accessed from a single portal, enhances transparency, increases accountability and enables both the supply side (implementing agencies) to identify operational deficiencies and the demand side (beneficiaries) to know their entitlements via project details online.

Enhanced inclusion

1. Sulekha's simplicity of use and the ease it has brought to the planning process has resulted in increased participation by local elected representatives.[22] It operates in the local language of Malayalam as well as English, widening its access to the stakeholders involved. It also covers the entire state, with all 1209 local bodies covered under it by 2008.For its achievements, Sulekha has won the following awards:

   a. Gold Medal in the National Awards for e-Governance 2009-10 by Government of India under the category of 'Excellence in Government Process Re-engineering'

   b. CSI-Nihilent e-Governance Award of Excellence 2008-2009 in G2G category

   c. Sulekha also figures as the only project of the Kerala government selected by *Dataquest* magazine in its list of top 25 e-governance projects in India

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[22]Nicole Anand. 'Sulekha: Plan Formulation and Monitoring System for Decentralised Planning of Local Governments'. *Governance Knowledge Centre*. 2010. Web. 7 January. 2013.

Challenges faced

Design Challenges

Problem: *Standardising objectives, achievements and targets in a way that would not infringe upon the creativity of local problem-solving was extremely challenging as the pre-existing system involved the manual creation of highly context-specific documents.* For instance, project attributes such as date of temporary approval, whether project is disputed, beneficiary contribution, micro sector code, etc. differed significantly across panchayats and municipalities. Therefore, there was huge variation in project documentation across the state and to design state-level standards that would form the attribute definition of the software was the challenge.

Solution: State-level plan related data was collected from local bodies by the State Planning Commission. After analysing this data, IKM designed an improved proforma used by Trivandrum district on a pilot case and on the basis of which Sulekha's attribute definition was arrived at. In addition to attribute definition, it was ensured that the application was developed strictly according to the statutory provisions regarding decentralised planning. As the policies and procedures for these were uniform across the state for local bodies, this ensured that the application did not run into any legal difficulties.

The pilot was held in five grama panchayats of Trivandrum district - Ambbori, Kattakada, Madavoor, Vellanad and Vilavoorkal. The experience showed a significant improvement in data coverage and consistency shown in table 5. Subsequently, the application was up scaled across the entire state and encountered no resistance from the local governments.[23]

Problem: *Designing a reporting system for Sulekha in the initial stages when the decentralisation institutional mechanism was still being formalised.* Planning processes kept changing and this led to continuous changes in government orders.

Solution: The software had to accordingly adapt to accommodate those changes and a concerted effort by the implementing agencies was made to revise the system accordingly. This was facilitated by the fact that the Sulekha application had integration with the state government's online Government Order (GO) application (www.go.lsgkerala.gov.in), also developed by the IKM.

Problem: *Designing a physical target scheme for all projects*.

Solution: A scheme of 736 physical targets with additional attribute information was evolved prior to 2012-13.[24] These were grouped into productive sector and infrastructure

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[23] Dr. Samsuddin, M. Chairman, IKM. "IKM". Message to the author. 15 Feb. 2013. Email.
[24] Suresh Kumar M, Sudhakaran TP and Binu K. 'Sulekha – A Web Based Tool for Monitoring of Plan Projects of local bodies and state level reporting'. *Information Kerala Mission.* Web. 7 January. 2013.

and service sector projects. For the productive sector the targets and their attributes were classified into inputs, outputs, credit and market linkages and mechanisms for quality control. For the infrastructure and service sector projects, the categorisation was done into evaluation mechanism related, infrastructure mechanism related, service delivery related and institutional linkages for delivery of quality of services[25].

Implementation Challenges

One of the most important challenges currently faced involves the recording of physical achievements. This is imperative for monitoring real impact. Sulekha has facilities for recording physical achievements but compliance with recording this data is low. One of the difficulties faced involves measurement. Certain achievements such as construction of roads, wells and canals are easy to measure. However when it comes to issues such as women or SC/ST empowerment the situation becomes more complicated[26].

Another challenge faced is the integration of the various software developed by the IKM and their transposition to an open source system.

Key lessons

Systemic transformation involves process re-engineering at both the legal and technological ends. Sulekha won the Gold Medal in Government Process Re-engineering precisely because the implementing agencies devised formats and workflows that adequately captured the changed planning processes following the 1996 decentralisation drive. The changes in process as given in government orders was accompanied by according changes in Sulekha, thus ensuring a synchronisation between the legal and technological sides. This was important as it gave its functioning legal sanction and acceptability within the government.

This however would have been incomplete without the end-to-end computerisation that ensured that Sulekha was used across the state, eliminating the need for wasteful and inefficient manual processes.

Centralised infrastructure with decentralised inputs is an efficient and optimum way of decentralised planning. The implementing agencies of Sulekha planned for the future, envisaging that it would eventually merge with the State Information Infrastructure. The technique of distributed databases, where each LG had its own database which would record information and then transfer it across levels was resource-intensive and in the

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[25] Ibid
[26] Ibid

absence of network connectivity resulted in the slow data transfer method of CD courier. Sulekha is currently in the optimum stage where it is entirely web-based, accessible across the state and yet uses far less resources, relying on the State Data Centre and VPN/KSWAN for data storage and transfer. This change in the technological architecture has not changed the decentralised planning process itself, and is therefore an optimum mix of resource use which gives maximum freedom to the stakeholders.

Standardisation of procedure does not result in standardisation of content. Sulekha has proved that decentralised planning can be done in a way which is beneficial for the State government as it allows it to have uniform standards and procedures by which to evaluate performance and draw boundaries/set conditions. At the same time it is also beneficial for the local governments as within the defined boundaries and conditions they have maximum planning autonomy.

A key lesson learned has been that **centralised monitoring eases implementation**. It allows for regular feedback on the status of work through monitoring expenditure and provides a unified source of information to all the stakeholders involved.

Synchronisation strengthens the planning process. The decentralised planning process in Kerala is itself very bottom-up, beginning from the local body level and ending with the State plan created on the basis of local level plans. However, this process would have been very difficult without the services that Sulekha offers. The huge amount of information that Sulekha provides makes synchronisation of LG plans with District plans much easier. These plans then feed into the State plan itself. Thus by drawing linkages at vertical and horizontal levels, Sulekha facilitates greater synchronisation which strengthens the planning process.

Integration with other software applications is easier when ownership for all of them lies with the same developer. One of Sulekha's strengths lies in the fact that it works in sync with other applications developed by the IKM such as Saankhya, Sugama, Soochika and Sakarma. The ability to customise and integrate software is eased by the fact that all of these applications have been developed by the IKM. Therefore at one level proprietary hassles are removed and the domain knowledge and expertise of the developer eases the integration process.

Incentivising change through demonstrating effectiveness is a sound way to get stakeholders on board. Rather than focusing on abstract arguments and promises of an unseen future, Sulekha started small and focussed on giving evidence of its utility, greatly easing its acceptance amongst the stakeholders.

The Way Forward

The following additions are planned:

> ➢ The Total Plan Report book of the state is still manually prepared. The process of preparation of the book is to be digitised 2014 onwards.

- Sulekha is being integrated with the Treasury Department so that the bills which are paid through the treasury are updated online.

- Discussion is on with the Ministry of Panchayati Raj for integrating Sulekha with PlanPlus, a decentralised planning software. This integration is to be done through a mapping process.

- The VPN capacity is to be increased to 512 kbps with a dedicated line having a static IP. This would speed up the rate of data transfer and quicken procedures such as downloading reports.

- There are also plans for integrating UID data with Sulekha. This is to aid in the identification of beneficiaries and in monitoring of projects. Enhanced MIS report generation is to be added based on query based search facility

Research Methodology

The Sulekha Plan Monitoring System is an award winning project that provides an effective model for decentralised planning, something which is still in its nascent stages in the country. Given the scale and complexity of operations that Sulekha handles, its implementation is a valuable addition to the country's repertoire of governance knowledge and can act as a pioneer in the decentralisation e-governance domain.

In order to document the innovation, the OneWorld research team utilised both primary and secondary sources. The secondary sources consisted mainly of the Sulekha website, the Governance Knowledge Centre case study on Sulekha, the IKM's paper on Sulekha's implementation, and an e-Governance report by the Government of Kerala. This provided data on the objectives and functioning of the system. Gaps in the data were highlighted and primary research was conducted by interviewing various stakeholders. On the side of the implementing agency, the IKM's Executive Chairman and Director were interviewed. Also interviewed were the Technical Head and the Project Manager for Sulekha. Since Sulekha is a G2G project, the Kerala Minister for Urban Affairs was interviewed to understand the user experience of the software and how it capacitated the functionaries who used it.

Conclusion

Sulekha is an e-governance initiative that has provided the technological foundation to turn democratic ideals into reality. It is now an essential component of decentralised planning in Kerala and has significantly increased process efficiency and standardisation while allowing local governments to retain their agency and autonomy. It has also enhanced transparency and accountability by making available plan and project related data in a manner that is periodically updated and easily accessible. It has shown that e-governance projects can be successfully implemented if undertaken with a holistic and long-term vision and support of people's representatives. Sulekha's functioning is holistic as it works in sync with other local body software applications to provide end-to-end services across levels. The implementation strategy was long-term as despite the chaotic initial conditions in which it was implemented, the IKM had a long-term strategy through which it was envisioned as gradually evolving into the system it is today. With the planned enhancements to Sulekha being operationalised, the portal promises to be more user friendly and cater more comprehensively to a large variety of stakeholders. In short, through Sulekha, the plan monitoring software, Kerala has set an example for other Indian states for effectively monitoring the entire process of plan project formulation and implementation.

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15. Dr. Samsuddin, M. "IKM". Message to the author. 15 Feb. 2013. Email.

case fact sheet

Table 4: Demographic profile of Kerala and its comparison with national level data

Sources: Provisional Population Totals, Census of India 2011. Planning Commission of India. Kerala State Development Corporation for SCs and STs.

Parameter	Kerala	India
Total population	3, 33, 87, 677	1,210,193,422
Rural	17, 455, 506	623,724,248
Urban	15, 932, 171	586,469,174
Sex ratio	1071	940
Density of population	859	382
Literacy rate	93.91	74.04
Male	96.02	82.14
Female	91.98	65.46
Population living below poverty line	12	26.10
Scheduled Caste population	3.12 million	166.64 million
Scheduled Tribe population	0.36 million	84.33 million

I.   Sector/field to which the project belongs: e-Governance/Planning

II.   Stakeholders and beneficiaries:

i.   *Stakeholders* – Information Kerala Mission, Government of Kerala;

ii.   *Beneficiaries* –

      a. **Government of Kerala:** Local Self Government Department, Kerala State Planning Board, Decentralisation Co-ordination Committee, District Planning Offices, Rural LGs, Urban LGs, District Planning Committee, Working Groups, Kerala Institute of Local Administration, Resource Persons, State Performance Audit Officer

b. Citizens of Kerala

III.   Calendar of major events:

Event	Year
Launch of People's Plan Campaign	1996
Launch of IKM to computerise local bodies	1999
Launch of Sulekha Plan Monitoring System	2002
Coverage of entire Kerala under Sulekha	2008
Sulekha software made completely online	2012

Annexure I: Archival data available on sulekha

1. Project wise expenditure reporting – Status

2. Compensation Reports 2007-08

3. EMS Housing Survey

4. EMS Housing Scheme - Loan Details

5. Provisional figures for2011-12 plan

6. 11th Five Year Plan (2007-2012) Related Documents

7. Project forms, Guidelines June 2009

8. Manual of Sulekha Formulation Module – Ver. 1

9. TAG Guidelines

10. Errata of project guidelines (Correction in codes)

11. Project forms and instructions for 2nd Phase of Second Year 11th Plan Formulation (As a single Document)

12. Cover & Introduction for 2nd Phase of Second Year 11th Plan Formulation

13. Instructions for 2nd Phase of Second Year 11th Plan Formulation

14. Format for projects (other than spill over)

15. Spill Over Project Form for 2nd Phase of Second Year 11th Plan Formulation

16. Completion Report Form for 2nd Phase of Second Year 11th Plan Formulation

17. Documents 2007-2008

18. Technical Advisory Group Plan approval Process

19. Guidelines for Technical Advisory Group (Updated on 04/09/2007)

20. Hand book for the preparation of 11th plan forms (Updated on 04/09/2007)

21. Annexure for Hand book for the preparation of 11th plan forms

22. Micro sector Code comparison

23. Micro sector Code (Updated)

24. Project Proforma for LGs

25. Docket sheet ver 3.0

26. Project Evaluation Checklist

27. Shortfall and Compensation of 10th Plan

Annexure II: Document details recorded on sulekha

Development Status Report:

1. List of schemes taken up in the sector in earlier Five Year Plans by the Local Governments.

2. Key indicators of physical and financial achievements of the above schemes.

3. A comprehensive list of beneficiaries of the plan projects for earlier plans in the local government

4. A list of assets created during earlier plans.

5. List out major schemes implemented in the sector by Government or other agencies within the Local Government. area

6. The database relevant to the sector from all available secondary sources

7. A note on issues in the planning, implementation and monitoring aspects in the last ten years.

8. Preparation of development problem matrix for different wards or areas in the local government.

9. A note on key issues facing the sector, existing gaps, local potential for development in the sector, strategies for addressing the issues and achieving the potential for development.

10. Potential projects - for Plan and Maintenance Plan

Draft Five Year Plan:

1. Development scenario of the local government

2. Efforts during the past ten years

3. Success and failures

4. Physical and Financial achievements and outcomes in the Ninth and Tenth Plan

5. Strategic vision of the local government

6. Summary of possible projects sector wise within each sector giving the existing scenario, the intended scenario, size of the gap and the intended phases of filling up of the gaps with monitorable targets - separately for Plan and Maintenance plan.

7. Allocation of resources sub-sector-wise

8. Write up on Anti-poverty Sub Plan and Destitute Plan, Women Component Plan, Plan for Special Groups and Special Component Plan and Governance Plan only very brief summaries.

9. Maintenance Plan (summary only)

10. Write up on credit linkages.

11. Write up on integration.

12. Write up on monitoring arrangements intended.

The Anti-Poverty Sub Plan, Governance Plan, Maintenance Plan and wherever applicable, the Tribal Sub Plan should be separate documents with full details presented.

Development Seminar:

1. Photographs

2. Attendance Register showing details like house No., address, age, whether male or female, whether belonging to SC, whether belonging to ST, occupation etc.

3. Record of discussions of breakout groups

4. Recommendations of the Seminar

Documents submitted to the DPC for plan approval:

1. The documents relating to the Grama Sabha/Ward Sabha, Working Groups and Development Seminar

2. Two printed copies of the Development reports and two CDs.

3. Prescribed expenditure statements for the Five Year Plan 2002-07.

4. Eleventh Five-Year (2007-12) Plan Document.

5. Master Plan Document on Watershed development

6. Anti-Poverty Sub Plan

7. Tribal Sub Plan (wherever applicable)

8. Maintenance Plan

9. Governance Plan

10. Statistical Annexes

11. Details of own revenue included in the Plan

12. Resolutions of the Local Government approving the Plan Document Nos. 3 to 9 shall also be given in electronic form to be developed by IKM.

Annexure III: interview questionnaires

Executive Chairman and Director, Information Kerala Mission

Background

1. This project won the Gold Medal in National Award for e-Governance 2009-10 in the category of process re-engineering. Can you provide some details on what was re-engineered, why and how?

2. The People's Plan Campaign was begun in 1996 and the Sulekha software was operationalized in 2002. How was the planning process carried out in the interim of 6 years?

Stakeholders

1. Who are the main stakeholders in the back-end management of the Sulekha System?

2. What are the human resources involved in the management of the project?

Process Flow

3. Has the project management reporting tool been integrated with the local body accounting and financial management system?

4. The Sulekha website states that the software has 'workflow at different levels and locks after processing at next level' as a feature of the software. Can you clarify what this feature is?

Plan Formulation

Goal setting

5. Is the Vision and Development Report prepared through Sulekha?

    a. Can you provide sample Reports in English?

6. How does synchronization of local plans with state and national plans take place through Sulekha?

Plan finalization and submission for approval

7. The Sulekha website states that the software facilitates 'online data updation to the State Data Centre by the concerned local bodies in a phased manner'. What data is updated and what are the phases?

Plan vetting

8. How does Sulekha help the TAG in scrutinizing the Plan documents?

9. What is the timeline of the entire planning process?

Plan Monitoring and Evaluation

10. What are the inbuilt checks and validations which Sulekha uses to ensure that the plan process has gone through the relevant governmental guidelines?

11. Regarding project accounting, what all indicators of progress of a project are recorded and what is the frequency of accounting?

    a. What is the frequency with which project updates are uploaded onto Sulekha?

12. How does Sulekha monitor separate tracking of spill-over and multi-year projects and revision of projects?

Funding

13. What are the sources of funding for the Sulekha project?

14. What are the major heads of expenditure on a regular basis?

15. What is the average annual expenditure on Sulekha?

Awareness Generation

16. Apart from tying fund devolution to the usage of Sulekha, what other strategies were used to generate awareness about the system?

Training and Capacity Building

17. What steps were taken for capacity building amongst the stakeholders?

    a. Please provide details of the training provided: resource persons, exact content, methodology, duration, following up mechanisms.

18. What were the primary challenges faced during training and how were they overcome?

19. What was the level of acceptability of the new plan monitoring system among government officials?

    a. Owing to government officials' perceived resistance to use of technology in daily operations, did this pose an initial challenge to the programme?

    b. If yes, how was it overcome?

20. What were the infrastructural requirements for implementation of the programme at the level of urban local government bodies?

21. What were the costs incurred for the infrastructure?

22. Can the stakeholders use the software unaided across the state?

Technology

23. What is the current technology used in the management of Sulekha?

    a. What is the hardware, operating system (client and server), Development Tool, Web Server and Database Server used?

    b. Are there any other technical components in the system?

24. What is the system and network architecture of the Sulekha system?

25. What steps are taken for the safety and security of the data?

26. What are the disaster recovery modules for Sulekha?

27. For backups, are there any depositories or mirrors?

28. What is the current data transfer capability of the VPN?

29. Can you provide details about the MIS used by Sulekha?

30. When was the system of data transfer through CD courier replaced by a complete online system? Was it 2010 or 2011?

31. How long did it take to develop the Sulekha system and what was the manpower involved?

Impact

32. Has Sulekha facilitated better coordination amongst the Working Groups? If yes, how?

33. What has been the reduction in the time taken for the planning process after the introduction of Sulekha?

34. Has there been an increase in project efficiency?

    a. If yes, can you provide evidence to substantiate?

35. Is data available on the number of hits on the portal?

    a. If yes, can you provide time-series data for the same?

36. What other impact has Sulekha had on the planning process?

Challenges

37. Why is there not any data on physical achievements on the website?

    a. What are the challenges faced in tracking and recording physical targets and achievements?

38. During implementation, was/is there any resistance from officials?

    a. What were their fears and how is this being addressed?

b. What were the other challenges faced during the implementation of Sulekha?

39. What were the challenges faced in transitioning from the CD dispatch system of distributed databases to the current cloud-based system?

a. How was connectivity provided to all the local bodies?

40. What are the current challenges faced?

41. What are the strengths and weaknesses of Sulekha regarding its sustainability?

42. What were the major lessons learned from implementing this project?

Future Plans

43. Are there any plans for integrating UID data with Sulekha?

44. What are the remaining additions to the system that are to be made?

Questionnaire for the Minister of Urban Affairs, Government of Kerala
Software usage and capacity building

1. What is the frequency with which project data is updated onto the Sulekha software?

2. How is the validity of data on Sulekha ensured? In other words, how do you ensure that the data is authentic and true?

3. How would you evaluate the ease of use of the Sulekha software?

4. Was any training provided to you and your team in appropriate usage of Sulekha? If yes, please provide details of the training provided: resource persons, exact content, methodology, duration, following up mechanisms.

    i. What was the average learning curve for Sulekha users, that is, the amount of time taken to learn the use of software?

   ii. What were the primary challenges faced during training and how were they overcome?

  iii. What was the level of acceptability of the new plan monitoring system among government officials? Owing to government officials' perceived resistance to use of technology in daily operations, did this pose an initial challenge to the programme? If yes, how was it overcome?

5. What were the infrastructural requirements for implementation of the programme at the level of urban local government bodies?

    i. What were the costs incurred for the infrastructure?

Impact

6. What are the main ways in which the Sulekha Plan Monitoring System helps you in your work?

7. Has it improved coordination and cohesion in the planning process at the state level? If yes, how?

     i. How has Sulekha helped in handling inter-departmental or inter-ministerial issues?

    ii. How has Sulekha helped the Decentralisation Coordination Committee in dispute resolution?

    iii. Are there any other ways in which Sulekha has improved the process of urban planning?

8. How has Sulekha helped you when it comes to monitoring the implementation of projects?

     i. Has it affected project implementation efficiency?

    ii. Has it impacted the detection of discrepancies?

9. Has it brought any changes with regard to the selection of beneficiaries? How has it helped errors of inclusion and exclusion, that is, ensuring that the deserving beneficiaries are not left out and that undeserving beneficiaries are left out?

10. Have there been any other benefits accrued through the use of the software?

Challenges

11. According to our research, the software's potential for recording physical achievements are not utilised. What are the bottlenecks responsible for this?

12. What are its current limitations and do you have any suggestions for additions?

13. Are there any enhancements to the project that are in the planning phase?