

## Village Development System

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**Abstract** - The Village Development System (VDS) is a comprehensive approach to rural development. It includes economic empowerment, infrastructure development, and community involvement. It encourages governance, health, and education to support sustainable development. It provides interfaces that are easy to use for stakeholders, administrators, and members of the community. VDS provides platforms for community involvement encourage feedback and inclusive participation. It also provides venues for community involvement, governance assistance, and health initiatives. For those involved in rural development, VDS is an effective instrument. Information regarding cultural events, government services, temples, schools and colleges, economic growth, etc., is provided via the Village Development System. We facilitate more communication among the villagers. This software was created to link everyone in the village network. This technology will lessen the amount of human labour required for each task that villagers complete to obtain government services. This app will take the lead in improving services, such as providing details about the village's many assets. The Village Development System makes it simple for users to learn about all the Sarpanch/Gramsevak projects. We are offering villages an easy-to-understand link between government policies and themselves. For the benefit of the students who are part of the community and its future, this app will also provide information about schools and colleges. Gramsabha refers to the meetings that take place in villages, and we notify the residents about them in order to reduce the human labour required to personally assemble all the locals. The Village Development System's digital system can offer greater improvement and efficiency. By posting issues on this app, the feedback system ensures that troublesome issues can be addressed and resolved. Visitors will better comprehend the traditions we have been honouring since our ancestors if they are informed about cultural events. To assist villages, we offer modules such as meeting information, health, education, temples, programs, post-problems, post-schemes, economic growth, and the ability to send and read feedback. Villagers may save time and human effort by using this app's services. If a villager finds themselves in a difficult situation, they can use the Village

Development System to report the issue and receive suggestions for solutions.

**Key Words:** Village Development System (VDS), Admin (Gramsevak, Sarpanch)

### 1. LITERATURE SURVEY:

1. V. Nair, A. B. Nellippallil, J. K. Allen and F. Mistree, "Speculating a successful and relevant global development enterprise in the year 2035", 2019.

From the standpoint of a rural community, sustainable development must address how the residents make enough money to preserve their rural way of life. Sustainable development is typically described in terms of environmental factors.

In those cases where jobs are discussed in relation to sustainability, they are all too frequently viewed as permanent positions. But the fact of contemporary rural and urban living is that economic conditions shift quickly.

As a result, any debate about sustainable employment must take place in a dynamic environment where various job kinds vary in tandem with shifting economic conditions.

2. L. T. Gwaka, "Digital technologies and youth mobility in rural zimbabwe", *Electron. J. Inf. Syst. Developing Countries*, vol. 84, no. 3, May 2018.

In India majority of the population still lives in villages. A lot of work needs to be done in making the villages clean. There are different aspects of clean village such as: water supply, sanitation, indoor air quality, solid waste management and renewable energy etc. All these aspects have different alternatives with the associated merits demerits. In some aspects such as water supply, consider able work is done where as in some areas likes an it action lot of work is required to be done. We can learn lot of lessons based on success and failure in adopting different alternatives. Keeping in touch with technology clean village projects should integrate technology and digital design, which will make the village not only clean but also smart.

The paper discusses all these aspects with reference to Maharashtra.

### 3. Village-level solar power in Africa: Accelerating access to electricity services through a socio-technical design in Kenya 2014:

Village-level solar power supply represents a promising potential for access to electricity services. Increased knowledge is needed for the development of solutions that work for the user and are viable in the long run.

This article analyzes a solar power model developed and tested through action research in collaboration between a community in Kenya and a team of social scientists and technical experts.

The analysis includes the reasons for its socio-technical design, and the actual functioning of the model. There search shows that an energy center model can cover basic electricity needs in areas with dispersed settlement patterns, where mini-grid based system as well as conventional grid extension meet significant challenges.

## 2. EXISTING SYSTEM:

In the state of Maharashtra, the **Gram Panchayat App** was launched to digitalize the functioning of over 12,000 Gram Panchayats across the state. It provides the Panchayats with tools for monitoring government schemes, collecting data on various parameters, and improving transparency. Additionally, it supports local leaders in managing their responsibilities more efficiently and helps residents stay informed and participates in local governance.

### Challenges and Limitations:

- **Digital Literacy:** A significant challenge is the low levels of digital literacy in rural areas. For the app to be effective, rural residents must be trained in using smartphone and mobile applications.
- **Internet Access:** In some remote areas, internet connectivity might be limited, hindering the effective use of the app.
- **Maintenance and Updates:** Constant updates and maintenance of the app are necessary to ensure its smooth functioning and the security of data.
- **Language Barriers:** The app needs to be available in multiple regional languages to cater to the diverse population across rural areas.

## 3. PROPOSED SYSTEM:

The administrator of the suggested system offers eight different kinds of modules, including information on education, economic development, government schemes, sending acknowledgements, event information, hospital, meeting details, and temple information.

In every module, the administrator has the ability to post, update, and delete the data.

All posted information can be accessed by the user. Problems can be posted by the user. After it is resolved, the user can give ratings and provide feedback.

### 1. Education information module include :

- School name
- Schedule of school
- School events information
- Teacher contacts
- Students count

### 2. Economic development module include :

- Name of the project
- Name of the admin
- Contacts
- Name of the scheme
- Location

### 3. Government scheme module include :

- Name of the scheme
- Applicable to
- List of required documents
- We can unable to uploaded file(PDF)

### 4. Send acknowledgement module include :

- Send the acknowledgment
- View problems
- View feedback

### 5. Event information module include :

- Name of the event
- Description of events
- Schedule of event
- Upload the images

### 6. Hospital module include :

- Name of the hospital
- Name of the doctor
- Contact of doctor
- Hospital details
- Name of the scheme
- Scheme information

### 7. Meeting details module include :

- Name of the meeting
- Short description of meeting
- Schedule of the meeting

### 8. Temple information module include :

- Name of the temple
- Schedule of temple
- Temple events
- Contact

**4. BLOCK DIAGRAM:**

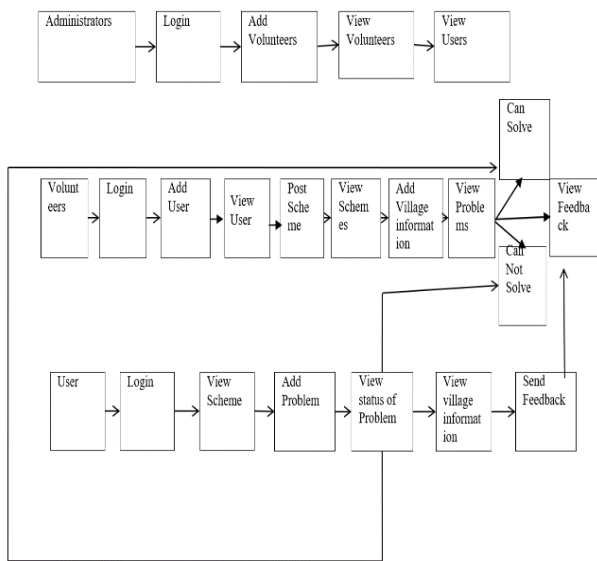


Fig 4.1 Block Diagram of VDS

**5. SYSTEM ARCHITECTURE:**

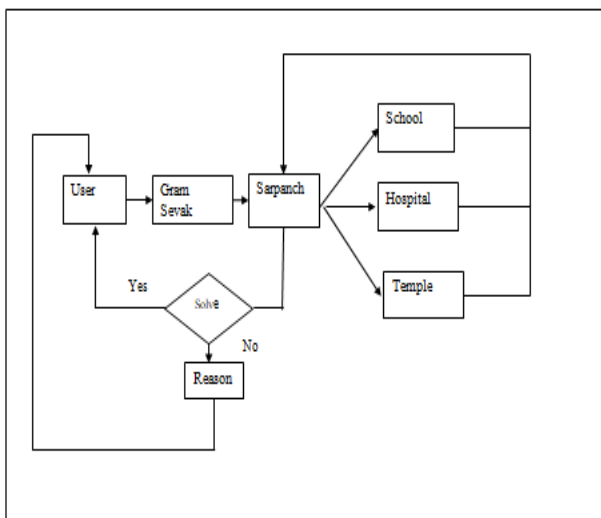


Fig 5.1 System Architecture of VDS

**6. OBJECTIVES:**

- 1. Enhance Governance:** Promote transparency, accountability, and efficiency in village-level governance.
- 2. Foster Economic Growth:** Support local entrepreneurship, skill development, and income-generating activities.
- 3. Improve Infrastructure:** Develop and maintain essential infrastructure, such as roads, sanitation, and electricity.

- 4. Empower Communities:** Encourage active participation in decision-making and foster a sense of ownership.
- 5. Promote Education and Health:** Enhance access to quality education and healthcare services.

**7. RESULT AND IMPLEMENTATION:**

We created the VDS (Village Development System) Android app, which is primarily focused on giving villagers a platform to learn about the various services offered in their villages, comprehend and utilize those services and facilities, such as health, education, social functions, and village-related meetings (Gramsabha). If you have any issues, villagers post them by using this platform, and the Sarpanch, the village government, can resolve them. In order to foster stronger relationships among the villagers and enable them to work together to develop the village, we have given them a platform to submit problems pertaining to society, facilities, and village-related matters.



Fig 7.1 This is the User Module which contains 8 sub modules named as Hospital, Education, Event, Meetings, Economic Development, Temple, Government, and Feedback Module in which the user can be able to see the information, images and schedule posted by the admin and can be able to send feedback to admin

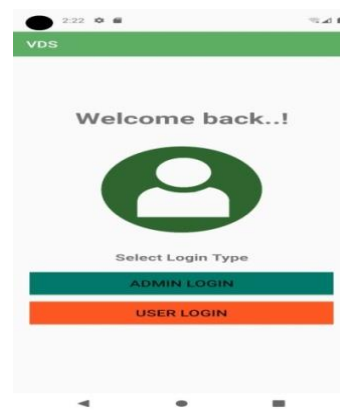


Fig 7.2 This is Login Page where admin and user can select their login type and when we click on admin login then we

redirect to Admins login page and same when we click on user login then we redirect to users login page and then they can be able to login also user can register itself.



Fig 7.3 This is the Admin Module which contains 8 sub modules named as Hospital, Education, Event, Meetings, Economic Development, Temple, Government, and Feedback Module in which the Admin can be able to post the information, images and schedule which is visible to user in users module and also to admin in admin's module can be able to send feedback to user. Also admin have ability to post ,delete and update the sended information.

### 8. CONCLUSIONS:

The Village Development System is an essential framework for promoting holistic growth and sustainability in rural areas. By focusing on infrastructure, education, healthcare, and economic opportunities, it aims to uplift villages and bridge the gap between urban and rural living conditions. An effective village development system addresses both basic and advanced needs of the community, fostering inclusive development that empowers residents.

Moreover, education plays a pivotal role in the system by increasing literacy levels, providing skill development. Healthcare initiatives are crucial for reducing infant mortality, diseases, and promoting overall well-being. Improved healthcare services result in a healthier and more productive workforce.

Economic growth in villages is also a critical component, and the system often includes initiatives for agricultural development, rural entrepreneurship, and the promotion of small and medium-sized enterprises. Village development systems encourage local resource utilization while preserving the environment.

Social empowerment is another key factor. Encouraging participation in decision-making processes ensures that villagers have a voice in matters affecting their lives, promoting social cohesion and unity.

The Village Development System offers a robust framework for addressing the multifaceted challenges faced by rural communities. By integrating modern technologies with participatory governance, the VDS can drive sustainable development and improve the quality of life in villages. Future enhancements, such as AI-powered analytics and IoT integration, can further optimize system performance and impact.

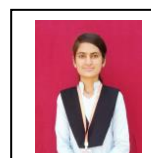
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