JALANIDHI:

An alternate service delivery model for sustainable rural water supply
Challenge on the ground

- Kerala is covered with hard frock formations with limited recharge options due to complex hydrogeological setup.

- As per the 2011 Census, about 62% of the population of Kerala depends on groundwater for the purpose of drinking alone.

- Kerala Water Authority (KWA) reported that during the year 2003, 48% of the total 45 lakh wells in the state dried up during the summer.

- 5 blocks over-exploited, 15 blocks in critical and 30 block in semi-critical state of groundwater availability. (CGWB)
90% of the open wells in Kerala are subjected to bacteriological contamination

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>Affected Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salinity</td>
<td>Palakkad</td>
</tr>
<tr>
<td>Fluoride</td>
<td>Palakkad</td>
</tr>
<tr>
<td>Iron</td>
<td>Alappuzha, Ernakulam, Idukki, Kannur, Kasaragod, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Thiruvananthapuram, Thrissur, Wayanad</td>
</tr>
<tr>
<td>Nitrate</td>
<td>Alappuzha, Idukki, Kollam, Kottayam, Kozhikode, Malappuram, Palakkad, Pathanamthitta, Thiruvananthapuram, Thrissur, Wayanad</td>
</tr>
</tbody>
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Centre for Water Resources Development and Management (CWRDM), Kozhikode
Jalanidhi concept

- Community built rural water supply and sanitation project financed by World Bank for sustainability of service delivery & investment.
- Mostly small water supply schemes benefitting 50-150 households.
- Implemented through community driven approach with the technical assistance & capacity enhancement from KRWSA - an SPV created for this purpose.
- Community form registered Society to implement the scheme and takes up joint ownership with GP.
- Run, operate and maintain by the society thereafter.
Project Philosophy

- Decentralized, demand-responsive approach in service delivery.

- Shift the role of the Government from service provider to facilitator by empowering community to build and manage water supply and sanitation schemes.

- Cost sharing: Beneficiary 10% + Grama panchayat 15% + GoK 75%

- Cost Recovery – 100% O&M cost borne by Beneficiary Groups (BG)

- Pro-Poor Approach – more than 51% beneficiaries come under BPL category
Project cycle – Onetime Investment

Funding
- Gok 75%
- GP 15%
- BG 10%

Implementation

Project Planning & Designing

BG formation

O&M
- BG 100%
JALANIDHI PROJECT - WSS

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencement Date</td>
<td>January 1, 1998</td>
</tr>
<tr>
<td>Area of Operations</td>
<td>14 Districts</td>
</tr>
<tr>
<td>Household Covered</td>
<td>4.52 Lakhs</td>
</tr>
<tr>
<td>Population Covered</td>
<td>22.26 Lakhs</td>
</tr>
<tr>
<td>Gram Panchayat Covered</td>
<td>227</td>
</tr>
</tbody>
</table>
Implementation Partners

KRWSA
GRAM PANCHAYAT
NGO's
BENEFICIARY SOCIETY
KWA
SANITATION MISSION
Institutional Arrangements for implementation

World Bank → GOI → Govt of Kerala → KRWSA GB & GC → KRWSA PMU → KRWSA RPMU

KWA (Multi GP) → Grama Panchayath → BG → GPST

KSM (sanitation)
Resolving water scarcity - multi-stakeholder solution attempts

Treated water through FHTC
In every villages
Distribution System

Surface Water Source → Intake Well → Water Treatment Facility → Storage tank → Functional HH Tap Connection
Tariff collection process

1. Records meter reading on Tablet
2. Spot billing & Payment
3. Payment at Central office NSJVS
4. Payment at CTC Cheeral
5. Online Payment
6. Payments entered online
7. SMS sent to Consumer
8. Online Tracking of Cash balance at each location
Impacts

- Users are the Managers and Users are the Owners.

- Alternate sustainable service delivery for the last 22 years.

- Optimum utilization of available resources-Rehabilitation of 407 KWA/GP schemes.

- Decentralized implementation to the grassroots level of beneficiaries.

- BGs with 10 HHs to 30000 HHs are getting benefitted.
Impacts

- Successfully demonstrated that communities, including the poorest and the vulnerable groups, can
  - Demand, plan, design and implement and manage water supply and sanitation schemes
  - Contribute to partial capital investment and bear total cost of operation and maintenance.
  - Mandatory representation of women in BG committees.

- No more burden on the Public Exchequer
  - 100% O&M cost are borne by the communities.
  - Communities, including the most vulnerable groups contributed substantially towards the capital cost in cash and labour.
5 steps towards sustainability

1. **Water source**
   - Able to meet peak summer demand and sustainable extraction

2. **Supply System**
   - Faultless operation, low maintenance and equitable distribution

3. **Quality water**
   - Consumer satisfied over visual quality and taste perceptions

4. **Financial fitness**
   - Able to meet true expenses through O&M collection

5. **Institutional setup**
   - Capable leadership with problem diagnosing and rectifying ability
IEC ACTIVITIES
BG FORMATION IN TRIBAL SETTLEMENTS
BG LEAD CONSTRUCTION ACTIVITIES
Delivering services affordable, reliable and satisfactory to the users

The Jalanidhi Challenge to make Community WSS Sustainable

Receiving the Water Charges at the Office of the WSS

Several hundreds of women function as Pump Operators and Scheme Managers
Thank you