Sustaining sanitation and hygiene behaviours

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Following an initiative by the Indian Union to decentralise powers to local government institutions, the State of Kerala initiated a massive programme of democratic decentralisation in 1996. As much as 40% of the State’s annual plan funds were directly transferred to the 1214 local self-government institutions (LSGIs) in the State. LSGIs were exhorted to formulate development plans within the overall development framework of the State. A mass mobilisation programme, known as the Peoples’ Planning Movement, was launched to prepare the State’s Ninth Five Year Plan from the grass roots level (1).

Prior to decentralisation and the Peoples’ Planning Movement, during the 1980’s and early 1990’s, Kerala had seen several initiatives try out local level models, in an attempt to overcome stagnation in the State’s economy (2,3). Local resource mapping, socio-economic surveys, development interventions with emphasis on replicable models and locale-specific considerations, appeared in Kerala’s development milieu.

Within this context Pilicode, a Grama Panchayat in the northern-most district of Kerala, initiated a project for “total sanitation”. Promoters of the Pilicode Total Sanitation Programme had experience of several other local-level initiatives, including pioneering work done in an adjacent district. However, a locally initiated project in total sanitation was first conceived by Pilicode Grama Panchayat. The experience of water supply and sanitation projects implemented in Kerala by the Socio-Economic Unit Foundation (SEUF), contributed to the evolution of such a scheme.

The two projects examined in this paper assume historical relevance in so far as Pilicode was initiated prior to the Peoples’ Planning Movement, while Alappad began well into the movement. Pilicode contributed to developing models during the movement, while Alappad was designed by drawing on lessons from Pilicode. The two projects, with their differences and commonalities in success and failure, offer lessons for formulating such projects elsewhere.

Pilicode is an economically challenged Grama Panchayat, spread over 26.77 sq.km, with 4,083 households and a population of 21,210 (1991 census). The vast majority of people are agricultural labourers, cigar workers or artisans. Before launching the project, the use of sanitary latrines was limited to a minority of the economically better off.

Alappad Grama Panchayat has a 17km coast line. Spread over 7.38 sq.km, it has a population of 24,567 living in 6,555 houses (1991 census). Over 70% of people belong to the fishing community. It is a water logged area with a network of canals and back waters.

Methodologies for the studies
The paper draws from a recent EU-funded study: Sustainability of changes in hygiene behaviour, conducted by SEUF in twelve Panchayats in Kerala. Alappad is one of these. The methodologies used in this study were household surveys, pocket voting, key informant interviews, house visits, observation, unstructured interviews and literature review. A total of seven key informants were interviewed in Alappad, including the present and then Grama Panchayat presidents. In Pilicode eight key informants were interviewed. House visits and focus group discussions were also carried out.

Results
Both projects have their own successes and failures. Pilicode achieved 100% latrine coverage, whereas Alappad fell short of the target by 29%. Data on physical achievements – number of latrines constructed – is readily available (4).

The Alappad project succeeded in ensuring better sustainability of hygiene behaviours. Pilicode however, while achieving a very high level of latrine use, has not achieved significant impact on sustained hygiene behaviours. A comparative result is provided in Table 1.

In both Grama Panchayats, extensive campaigns were used for demand creation and mass mobilisation. External factors, as well as peer pressure, contributed to converting the need for sanitation facilities into demand. Both Grama Panchayats had similar political leaderships. However, reasons for follow up, or the lack of follow up, should be analysed in the specific political and economic contexts.

Two expert agencies have been associated with the projects. Similarities in organisational frameworks and community structures are overshadowed by political compulsions and pressures for continuity. There are striking differences in the physical achievements – number of latrines constructed – in the two Grama Panchayats. Data on physical achievements is given in Table 1.

![Table 1. Comparison of achievements](image)

<table>
<thead>
<tr>
<th></th>
<th>Pilicode</th>
<th>Alappad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latrine coverage</td>
<td>100%</td>
<td>71%</td>
</tr>
<tr>
<td>Male hand washing</td>
<td>18%</td>
<td>64%</td>
</tr>
<tr>
<td>Female hand washing</td>
<td>26%</td>
<td>84%</td>
</tr>
</tbody>
</table>
dissimilarities in the content of the projects, with serious implications on the sustainability of hygiene behaviours.

**Discussion**

Critical components of the projects, and factors that contribute to their successes and failures, are discussed here in the context of four factors: project content, technology, political environment and community structures.

**Project content**

The Pilicode project focussed mainly on the provision of sanitation facilities – household latrines, community latrines and drainage. The project achieved the 100% target for provision of facilities (5). Although the project proposal contained concerns about water, hygiene and solid waste management, these were not incorporated in the project content.

In comparison, the Alappad project was comprehensive in content. In addition to provision of sanitation facilities, it included a programme for hygiene promotion, mainly focussing on women’s Self-Help Groups (SHGs) and school children.

These women’s Self Help Groups (SHGs), already in existence in Alappad prior to the commencement of the project, played a crucial role in all aspects of the project. The woman-mason’s training programme proved a breakthrough in employment creation as well as hygiene education, as trained masons also acted as health promoters. Typically the masons spent two to three days at a house constructing the latrine. Close interaction during this period led to positive behaviour changes by household members.

School sanitation was taken up as an important campaign and strategy. This was not only to ensure sanitation provision at the school, but to send the message of better hygiene behaviours to homes within the Grama Panchayat.

Crucial differences between the two projects is evident in the stated objectives of the projects.

<table>
<thead>
<tr>
<th>Alappad – Objectives</th>
<th>Pilicode – Objectives</th>
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</thead>
<tbody>
<tr>
<td>• To construct 3554 latrines for household sanitation</td>
<td>• To construct 2020 latrines for household sanitation</td>
</tr>
<tr>
<td>• To construct latrines and establish facilities for solid waste treatment in 19 institutions</td>
<td>• To construct 20 institutional latrines, ensuring 100% coverage</td>
</tr>
<tr>
<td>• To make available sanitation facilities in the primary health centres, ayurvedic and homoeo dispensaries, and one private hospital in the Grama Panchayat</td>
<td>• To establish solid waste and liquid waste management system in the Grama Panchayat to ensure environmental sanitation</td>
</tr>
<tr>
<td>• To implement total sanitation programmes in the ten schools in the Grama Panchayat</td>
<td>• To improve the quality of drinking water by constructing parapets for 874 wells</td>
</tr>
<tr>
<td>• To train skilled labour, especially women to implement the total sanitation programme</td>
<td>• To make safe drinking water available to 337 families who lack access to safe drinking water at present</td>
</tr>
<tr>
<td>• To improve the quality of life of the people in the region by building awareness regarding health and sanitation</td>
<td>• To make Alappad a ‘total sanitation village’</td>
</tr>
</tbody>
</table>

**Technology choice**

The promoters of both projects considered twin-pit latrines to be the most appropriate technology, due to cost effectiveness and durability. However in Pilicode, a lack of understanding of the comparative advantages of technologies led many beneficiaries to opt for single deep-pit latrines (with a water seal closet). It was also noticed that the safe distance between wells (Pilicode depends on wells for its water) and latrine pits was not often maintained. Well-pit distance is not an important concern in Alappad, as the Grama Panchayat depends mainly on a piped water supply for drinking. Since it is water-logged area, for purposes including latrine cleaning and hand washing, people use surface water. Most of the latrines constructed in Alappad were twin-pit.

**Political environment**

Pilicode Grama Panchayat had political continuity in so far as the same political party has maintained power since the project. Alappad had a different experience, with the opposition winning the election after the project. Failure of the woman mason’s programme is thought to have contributed to the defeat of the ruling coalition in Alappad. The president of the Grama Panchayat, who initiated the programme and worked as the leading force behind its implementation, lost the elections mainly on the basis of an opposition campaign focussing on failures of the programme. The new ruling front did not want to continue with it.

In Pilicode, in spite of political continuity, there has not been any notable follow-up programme. Latrine use is still widespread, but the Grama Panchayat falls well behind Alappad in terms of sustained hygiene behaviours. The
then president of the Grama Panchayat attributed this to the lack of a comprehensive follow-up action plan. The present office bearers remember the project with admiration, but no effort is made to initiate a follow-up programme.

**Community structures**

The two projects had similar community structures, with neighbourhood groups, ward level committees and a Grama Panchayat level committee. Alappad project had additional Health Promotion Teams, School Health Clubs and a School Sanitation Committee, reflecting the comprehensive nature of the project. Five sub-committees were formed in each school (personal hygiene, urinals and latrines – proper use and maintenance, classroom cleanliness, drinking water hygiene and school environmental hygiene), functioning under the School Health Club.

The presence of 126 Women’s Self Help Groups in Alappad and their active role in neighbourhood groups played a crucial role in behaviour change. Women mason groups (100 women) was a unique feature of Alappad. Fifty days of social and technical training was given to these masons, empowering them to act both as masons and household-level hygiene promoters.

Pilicode project was supported by Kerala Sastra Sahitya Parishad (KSSP), a leading Peoples’ Science Movement with extensive grass roots level activities in the State. Technical inputs and training were provided by the Integrated Rural Technology Centre. In Alappad, Socio-Economic Unit Foundation (SEUF) acted as the expert agency. SEUF had to withdraw from the project when the Grama Panchayat discontinued the contract due to a lack of funds. This has contributed to the failure of the project to reach 100% sanitation coverage.

**Key findings**

The Alappad project failed to ensure sufficient participation of men in the hygiene promotion programmes. This contributes to lower use of latrines and poor hand washing habits by men as compared to women. In Pilicode however, while men actively participated in the projects, hygiene promotion was not an area of concern. Follow-up programmes became necessary to encourage sustained hygiene behaviours.

The service of an expert agency in Pilicode was available throughout the project. However, in Alappad the expert agency had to withdraw from the project, as it experienced financial difficulties.

In both projects, a campaign based on issues other than health contributed to demand generation. The result of the EU-funded study *Sustainability of changes in hygiene behaviour* shows that people consider non-health issues more important in deciding to go for a latrine (6).

The community cohesion initially developed was a key factor behind the achieved level of success. The EU study shows that where cohesion was inadequate, it resulted in a low level of latrine coverage, use, and hygiene behaviours. Where there was good cohesion, more voluntary workers were available and this resulted in effective community structures being actively involved in hygiene interventions. The study showed that the quality, range and intensity of hygiene intervention, organised by different community groups, influences the sustainability of hygiene behaviour. The duration and length of intervention however has no direct bearing.

The Pilicode Grama Panchayat has made it mandatory for any new house to have a latrine, in order to get the house number from the Panchayat. Without this number, the household cannot approach the government or agencies for supply of public services, including electricity or water. A house number is compulsory for such purposes. This step ensures that every newly built house has a latrine.

**Lessons for future initiatives**

- Awareness raising to encourage community cohesion, is a prerequisite to the success of such projects. This can be achieved through motivating and sensitising local political leadership. In the initial stages, an expert agency can help accelerate this process.
- It is important that both software and hardware aspects are given appropriate emphasis.
- Since women are prime beneficiaries of any sanitation programme, the new initiatives in Kerala such as the Women’s Self Help Groups should be utilised as an effective means and medium for sanitation & hygiene promotion. The voluntary community structures being used for sanitation and hygiene promotion are Health Promotion Teams, Ward Sanitation Committees and Neighbourhood groups (committee of 20-50 neighbouring households). The Women’s Self Help Group is a registered voluntary group for empowerment of women and income generation, comprising all adult women from neighbouring houses. The Government of Kerala initiated this programme though their poverty eradication mission *Kudumbashree*. Each group has a volunteer specifically assigned to health issues.
- A specially empowered local group is necessary to ensure follow-up programmes and sustainability.
- Separate hygiene promotion strategies for men and women are essential to improve hygiene behaviours.

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**Table 3. Demand indicators**

<table>
<thead>
<tr>
<th>Reasons for having a latrine</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in disease, reduction in environmental pollution</td>
<td>36.7%</td>
</tr>
<tr>
<td>Privacy and safety</td>
<td>29.2%</td>
</tr>
<tr>
<td>Need not to wait until dark (convenience)</td>
<td>77.5%</td>
</tr>
<tr>
<td>Prestige</td>
<td>12.5%</td>
</tr>
<tr>
<td>Open defecation is not a good habit</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: ‘Sustainability of changes in hygiene behaviour’, EU
Interpersonal communication is an effective medium and must be incorporated in all sanitation hygiene promotion programmes for better impact.

Social marketing of sanitation and hygiene promotion should incorporate non-health aspects.

The presence of an experienced expert agency contributes to the success of sanitation and hygiene promotion. However, a clear withdrawal strategy must be planned at the beginning of the project itself.

School sanitation and school health clubs should be considered as a strategy for sanitation and hygiene promotion. Child-to-child and child-to-home approaches can result in enduring impacts, as shown by the Alappad experience.

The lack of follow-up programmes and issues in sustainability of hygiene behaviours clearly show the need for a paradigm shift in sanitation and hygiene projects. The present approach based on implementation of specific projects has several limitations in this regard. There is a need to adopt a ‘programme approach’ as against the existing ‘project approach’ to ensure sustained action and behavioural changes.

Conclusions
The Pilicode and Alappad projects indicate that political commitment and leadership are pre-requisite for mobilising and allocating sufficient resources for up-scaling sanitation and hygiene promotion. Local government capacity is crucial in this aspect, but often weak. Participation of expert agencies remains necessary for some time to come.

Making facilities available alone does not lead to better hygiene behaviours; instead a hygiene perspective plan is necessary to achieve sustainability of hygiene behaviour changes. Addressing these issues are instrumental in moving towards the Millennium Development Goals.

References
(1) Sajith Sukumaran, *An Experiment in Kerala*, Humanscape, November 2001
(4) Dr K Vijayakumar, Dr Joy Elamon and VN Jithendran (ed.), *Total Sanitation and Health*, State Planning Board and Kerala State Total Sanitation Mission, January 2000

Footnotes
1 Grama Panchayats are rural Local Self-Government Institutions (‘Grama’ means ‘rural’ and ‘Panchayat’ is a Local Self-Government Institution). They form the lowest layer of a three-tier Panchayat system. Kerala’s Grama Panchayats are fairly large institutions with extensive infrastructure and substantial resources, acting as nerve-centres of local level development.

2 Percentage figures for Alappad hand washing are from the results of the EU study *Sustainability of Hygiene Behaviour*. Data is mainly from household-level pocket voting. Percentage figures for Pilicode are based on the response of beneficiaries, selected at random, to questions asked during house visits. Figures given for Pilicode may not be as reliable as those of Alappad. However, observations by the study team in Pilicode are consistent with beneficiary responses.