Measuring Vulnerability through an Index of Health Indicators and Social Determinants

Experience from Swasth Panchayat Yojana of Chhattisgarh state in India

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Background

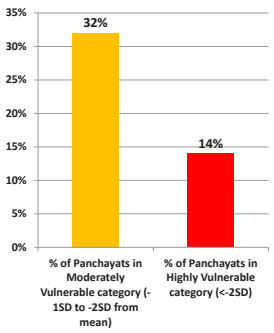
State of Chhattisgarh initiated the *Swasth Panchayat Yojana* (Healthy Village Program) in 2006. Panchayats are local elected village councils and the program aim was to involve them in health. The state has around 20 million rural population in 10000 Panchayats.

Methodology

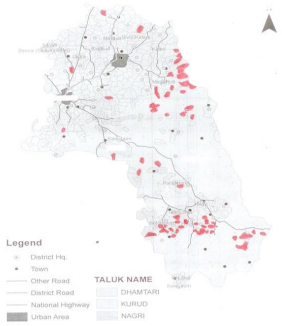
The Swasth Panchayat initiative was meant to act as a decentralized platform for local convergent action on health and social determinants of Health (SDH). This study analyses the initiative from implementer's perspective. The authors are practitioners who participated in the evolution of the initiative over a decade. A review of program reports was done.

Results

No. of Vulnerable Panchayats



Plot of Highly Vulnerable Panchayats in a Sub-district



Health and Human Development Index

The initial purpose was to measure relative performance of Panchayats on health. Data was collected through teams of local community volunteers mainly comprising of Community Health Workers (CHWs) and local elected representatives. Data was collected on 26 indicators, related to:

Health Status: Morbidity due to infectious diseases (Malaria, water-borne diseases), Mortality (Child, Maternal, TB, Fever related, water-borne diseases related), Nutrition (child under-nutrition), violence against women

Local Access to healthcare services: access to ante-natal care, child immunisation, treatment for malaria, availability of drugs

Social Determinants of Health: Access to food security programmes, social security, safe drinking water, schools

A composite Health and Human Development Index (HHDI) was created by adding the scores on 26 indicators.

Comparing Panchayats through HHDI measurement

HHDI allowed relative ranking of Panchayats and awards were given to the top ranking Panchayats in each sub-district. Inter-Panchayat comparisons were instructive as Panchayats located in remote locations and having predominantly tribal or other vulnerable population usually got very low scores. The scores therefore did not realistically reflect a Panchayat's performance in acting on health issues. The score was more a reflection of the severity of vulnerability and inequity faced by a Panchayat in comparison to others. The vulnerabilities were geographical in nature with remote areas showing higher vulnerabilities. Plotting the poor scoring (i.e more vulnerable) Panchayats on maps showed that often they were clustered-together geographically.

The exercise was able to cover

92% of Panchayats in the state. A limitation of the exercise was that it did not cover urban areas.

Comparing Habitations (Intra-Panchayat vulnerability)

Each Panchayat has an average of 7-8 habitations in it. For HHDI, data on indicators was collected for each habitation as a unit and put on the score-card. One of the strengths of the methodology was that it enabled comparison across habitations on indicators of health and SDH. It brought out the sharp inequalities that existed between habitations of the same Panchayat, in terms of their access to health, nutrition, drinking water and education services. Habitations with vulnerable communities often had lower access to services.

Using the vulnerability measurements for action

In terms of local action, village health committees led by CHWs were able to identify the vulnerable habitations within a Panchayat and then focus the collective action in addressing specific gaps in those habitations. It evolved into a more continuous community-monitoring of 26 indicators rather than being limited to an annual survey.

Community Health Workers (CHWs) played facilitation role in stewardship of State Health Resource Center, an autonomous technical body acting in collaboration with the state government. There were several iterations and revisions in the evolution of the process. More elements inter-woven into the process - Village monitoring registers, cause of death audits by communities, public hearings and dialogue with service providers and administrators.

Village Health Committees discuss action plan for vulnerable habitations

Public Hearing and Dialogue with Officials

Conclusion

Indicators of health and SDH that collect data with habitations as units and indices that allow comparisons between habitations can be a viable proxy approach to measure vulnerability in certain contexts. Involvement of community actors is useful in institutionalizing the process.