

SOCIAL MAPPING AS A PARTICIPATORY RURAL APPRAISAL TOOL: AN ANALYSIS OF SOCIO-ECONOMIC STRATIFICATION AND RESOURCE DISTRIBUTION IN SHIROL VILLAGE

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ABSTRACT

The present study about social mapping, a Participatory Rural Appraisal (PRA) technique, was conducted in the Shirol village of Latur district in Maharashtra. Social mapping is an effective tool for visualizing village demographics, social structure and resource allocation. The study involved active participation from 12-15 key informants, local farmers and village elders. The mapping exercise identified 522 households across various socio-economic and caste strata within a total population of 2915. Findings illustrate distinct spatial clustering based on caste and income, variations in infrastructure accessibility, and specific patterns of livestock ownership among different farmer categories. Ultimately, the study demonstrates that social mapping provides critical baseline data required for equitable and targeted rural development planning.

Keywords: Participatory Rural Appraisal (PRA), Social Mapping, Socio-Economic Stratification, Rural Development, Resource Distribution, Settlement Patterns, Demographic Composition

INTRODUCTION

Understanding the demographic and socio-economic framework of rural communities is essential for effective development interventions. Social mapping is a widely recognized Participatory Rural Appraisal (PRA) method that allows both literate and non-literate individuals to collaboratively map their village's infrastructure, households and social structures. By utilizing collective knowledge, maps can represent complex socio-cultural information and serve as a focal point for community discussions, correcting inaccuracies through peer validation. This technique was applied to assess the socio-economic characteristics of Shirol village. This article primarily focuses on Shirol village, evaluating its settlement patterns, institutional presence, equity in resource access and overall social dynamics to establish a foundation for targeted rural development.

MATERIALS AND METHODS

Social map was employed as a PRA tool to assess the socio-economic characteristics of the Shirol village. The exercise was conducted on ground (open space) in a participatory manner by using materials

like rangoli/coloured powders/chalk, sticks/pebbles, chart paper, markers, sticky dots, masking tape, camera/phone and voice notes, which involved a focus group of 12-15 key informants (KIs), experienced farmers and village elders. It started with asking participants to draw the settlement layout from memory of streets/lanes/hamlets, *etc.* Further, the investigator/researcher helped them by asking to add every household as a symbol (e.g., small square/pebble). Marking of institutions like school(s), anganwadi, health sub-centre/ASHA, Panchayat office, shops, temple/mosque/Buddha vihar, community hall, water points, handpumps, sanitation points, transport nodes, market places, dairies/collection centres, *etc.* was done. Overlay of simple attributes with colour/stickers (e.g., pink = General/OBC households, blue = SC/ST household, red = school, orange = temple, *etc.*) was done. All these social structures were highlighted after having discussion with the participants. After the completion of this exercise, ground map was faithfully transferred to large chart paper. Photograph of both versions were taken and further maps were validated with the group.

RESULTS AND DISCUSSION

The social map of Shirol village (Fig. 1) was developed using of PRA techniques with the active participation of villagers from representing diverse socio-economic backgrounds, including women, small and marginal farmers, landless labourers and youth. The Shirol village is situated 14 km towards east of Udgir in Latur district of Maharashtra and comprises 522 households with a total population of 2915, including 1441 males and 1474 females, indicating a balanced sex ratio. The village showed social heterogeneity, with 83.08 percent of the population belonging to the General and OBC categories, while the Scheduled Caste (SC) population consists of 467 individuals (236 males and 231 females), representing 16.02 percent of the total population. The social map clearly reveals the spatial clustering of different caste groups within the village, which provides insights into settlement patterns and social organization. Residential pattern further illustrates that Other Backward Classes (OBC) and General categories mostly occupy the central part of the settlement having the numerical majority in the village, whereas, about 20 SC households were situated near the village entrance. Similar findings regarding housing pattern were reported by Kavita Sarnaik (2003). The housing arrangement within the village suggests a socio-cultural pattern, which may have implications for access to resources and services.

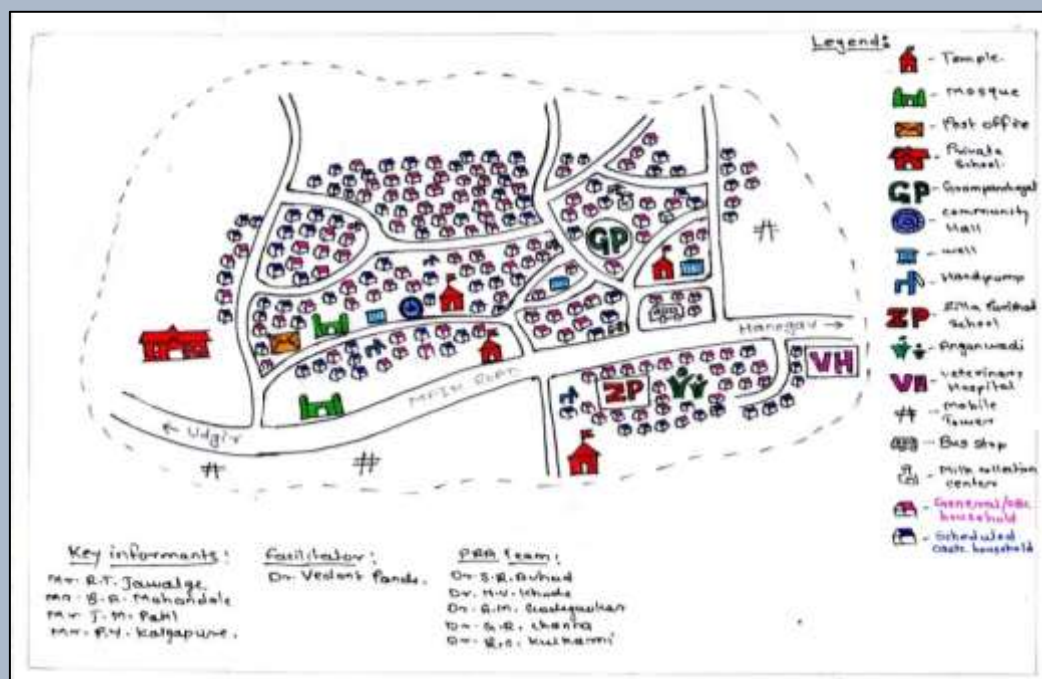


Fig. 1 Social map of Shirol village

The village has various religious and community institutions, including six Hindu temples, two mosques and a community centre (Buddha Vihar/Samaj Mandir), reflecting religious diversity and coexistence. Basic electrification has been achieved in the village. It also consists of five government installed community hand pumps and three government wells; however, the concentration of wells in OBC dominated parts highlights potential spatial disparities in resource distribution.

Active community-based organizations like Self Help Groups, Mahila Mandals and Bhajan Mandals were present in the village. They organised various activities and programs which contributed to the social cohesion and collective action. Educational infrastructure includes an Anganwadi centre and a Zilla Parishad Primary School which are located within same premises, while the Gram Panchayat office is centrally located towards the southern side of the village, facilitating administrative accessibility. The village also have one high school cum junior college. The general educational and health conditions of both men and women were observed to be satisfactory, which indicates stable social development status. Animal health cum vaccination camp and pregnant women health check-up & vaccination were frequently organized in the village. The annual festivals like Ganesh Utsav and Navratri were celebrated by all the communities, which reflect cultural integration. The commemorative events like Chhatrapati Shivaji Maharaj Jayanti and Dr. Babasaheb Ambedkar Jayanti were also celebrated by all the communities. These collective observances strengthen social solidarity and community identity among the villagers.

The trend of joint families was predominant in the village. In case of marriages, arranged marriage system was widely practiced by the villagers. Villagers usually gathered for 6-7 Gram Sabha meetings annually in Grampanchayat to resolve village related issues. For informing villagers about meetings, celebrations, events or programs 'Dawandi' was a commonly used mode.

Overall, the social map serves as an effective analytical tool for understanding demographic composition, settlement structure, institutional presence, and socio-cultural dynamics, thereby providing a foundation for participatory planning and targeted rural development interventions.

(a) Settlement pattern

The village is divided into two major hamlets: the northern hamlet and southern hamlet. Similar findings were found out by Sheelu *et al.* (1992). The northern hamlet is located above the main road dividing the village into two parts, which contains the majority of households (nearly 80%) and has more densely clustered dwellings.

(b) Infrastructure and social services

The social map identified the location of key facilities such as the anganwadi, primary school, high school cum junior college, gram panchayat office, bus stop, self help group, temples, mosques, post office, milk collection centre, samaj mandir/Buddha vihar (community centre) and veterinary hospital. Similar findings regarding socio-religious structures were reported by Bardhan and Biswas (1991), Mascarenhas and Kumar (1991) and Krishnamraju *et al.* (1992).

Drinking water filter plants (one near post office and another near Maruti temple), public borewells, hand pumps, and open wells were also mapped. Similar findings were found out by Kulkarni (1994). Internal roads in the central hamlet were pucca, whereas the peripheral roads extending toward agricultural fields were predominantly kachha. Similar findings were found out by Kalyani *et al.* (2010) Pucca roads connected the northern and eastern sides of the village to nearby small villages (Tandas); however, the road of Ramgad Tanda was kachha.

(c) Household distribution by socio-economic status

Higher-income and well-resourced households (large farmers, dairy entrepreneurs, traders, large land holders, government employees and shop owners) were mostly located in the central part of the village in scattered pattern with access to pucca houses and proximity to essential services.

Medium-income households (medium livestock owners, those able to hire tractors or farming equipment, and medium landholders) were distributed across both hamlets but were predominantly concentrated in the northern hamlet near the Gram Panchayat.

Lower-income households, including landless labourers and marginal farmers, were situated along the western and eastern outer peripheries of the village, residing in both pucca and kutchha houses.

(d) Caste and community composition

At the village entrance, nearly 50 Scheduled Caste (SC) households were residing, reflecting a clustered settlement pattern based on caste, which is a common characteristic of rural habitation. General and OBC communities dominated the central hamlet, while SC communities were primarily located in the peripheral hamlets.

(e) Livestock ownership pattern

Ownership of dairy animals was largely concentrated among medium and large farmers. Landless and marginal households primarily reared small ruminants (goats and sheep) with limited or no access to proper sheds. Approximately 50 households owned dairy animals. Most of the farmers reared Marathwadi buffalo and Deoni cattle. Around 25–30 families collectively maintained approximately 350 small ruminants, among which two families possessed the largest share (100–120 goats per family). Additionally, two families were exclusively engaged in sheep farming owing total 80 sheeps.

(f) Special households

Fifteen widow headed households were identified, of which seven belonged to the SC community, seven to the OBC community and one General community. Additionally, five households had persons with disabilities; among them, three belonged to the OBC community and one to SC. These households were dispersed across the village and were distinctly marked during the mapping process.

CONCLUSION

The social mapping of Shirol village successfully delineated the community's socio-economic stratification, settlement inequalities, and spatial distribution of resources. The exercise revealed that higher income and General/OBC households largely occupied the resource rich central areas of the village, while marginalized groups, including Scheduled Caste (SC) communities and landless labourers, were clustered closer to the village peripheries. Furthermore, livestock ownership patterns varied significantly by socio-economic status; dairy animals were concentrated among medium and large farmers, whereas marginal households primarily reared small ruminants. Overall, the social map generated through PRA proved to be a highly effective analytical tool, providing rich demographic and structural insights necessary for participatory planning and future rural development interventions.

ACKNOWLEDGEMENT

The authors express their sincere gratitude to Maharashtra Animal & Fishery Sciences University, Nagpur for providing the necessary facilities and support for conducting the research. The authors are thankful to all faculty members and colleagues whose guidance and cooperation contributed to the successful completion of this study.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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