

SHORT REPORT

Social mapping: a participatory tool to target vulnerable groups for prevention of malaria transmission

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Visual representation of the residential area showing locations of housing settlements and social infrastructures like roads, schools, health centers, worshipping places, etc, is referred to as a social map [1, 2]. It is one of the participatory learning and action tools which are most commonly used with the aim of empowering people and addressing equity issues through community development projects.

Through effective facilitation by a researcher-cum-facilitator, social mapping provides researchers with information about the physical characteristics of the community, the socioeconomic conditions and the perceptions of participants towards their community. The maps are drawn by a group of villagers either on the ground using chalk or on a large sheet of paper. The final map is then recorded by the research team to use in subsequent discussions. Although social mapping is not an uncommon technique used in participatory research, its use by Myanmar researchers is quite limited.

In one Myanmar research, social mapping was applied to identify households possessing tube wells and sanitary pit latrines [3]. There was only one house having a tube well and a sanitary pit latrine. There was one house having a tube well, and two houses having sanitary pit latrines. The primary school had no latrine and no safe water supply. There were one sanitary pit latrine and one tube well at the monas-

tery. This social map was kept at the monastery and used as a motivational tool by indicating in social maps drawn in later years showing how the latrine and tube well situations improved in the village following a development project implemented by an NGO. In this study, social mapping was used as a monitoring tool and at the same time a motivational tool for the villagers.

Another Myanmar study used social map to identify social groups in a village [4]. The social grouping (there were three) was based on the job categories categorized by the villagers. Then, local people were requested to select participants for Focus Group Discussion (FGD) from households that fall into lower social group identified in the map. Researchers made sure that the participants were chosen from all the different corners of the village.

In another Myanmar research, social mapping was used in identifying loopholes in geographical accessibility of Red Cross Volunteers in providing health education relating to three major diseases (HIV/AIDS, malaria and TB) [5]. Following identification, discussions were made among local stakeholders as regards further improvement of the services being provided by the volunteers.

In our case study on targeting vulnerable groups for prevention of malaria transmission, we first selected In-Thar village in PyinOoLwin Township where there is no malaria transmission. However, according

to data of a local health center, there are malaria cases coming from the village. In the west about 2 miles from the village, there exists a forest where malaria transmission takes place among villagers who stayed overnight there. After visiting the village, we performed informal group discussion with representatives of local people, involving both men and women, on identification of social groups basing on different job categories.

Three social groups were categorized by local people: lower, middle and higher. The main job of the villagers was related to flower gardening, particularly gladiolus (*thit-sar* flower) and aster (*may-myo* flower). Those who owned larger acres of gardens (5 acres and above) belong to higher social group. Some of these families own resident-cum-shops and some own buying centers of flowers. Families in lower social group own no garden and most of their family members work as daily wage earners at the flower gardens owned by other social groups. Some of the villagers went to the forest nearby staying there overnight and engaging in nurturing gladiolus plantations, making charcoal or cutting bamboo. They stayed at temporary huts during these night halts.

Then, the participants were requested to draw a social map of their village. On completion of the social map, the participants were requested to indicate households where families of lower social group resided encircling them with a red soft pen. Out of a total of 75 households, 11 belonged to lower social group, 55 belonged to middle social group and 9 belonged to higher social group. Then the participants were told to give cross (X) markings on households where family members engaged in going to forests and staying there overnight.

The final social map (Fig. 1) shows households to be targeted reduction of malaria risks. The social map indicates that majority

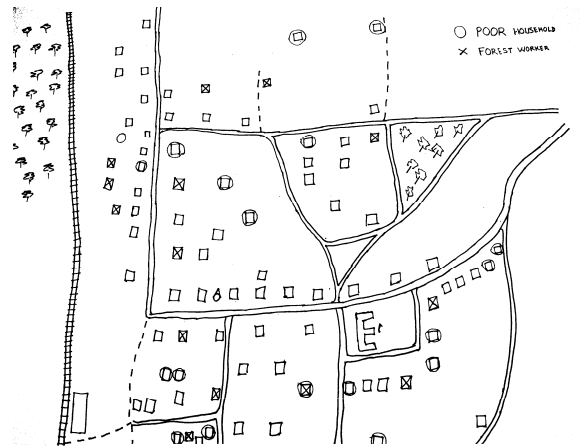


Fig. 1. Social map showing households with risks of acquiring malaria

Note: Households circled belong to families from lower social group. Households with cross (X) marks belong to families that go and work in the forest and stay there overnight.

of the families of middle social group and to a lesser extent of those from lower social group were engaged in activities which necessitated them to stay overnight in the forests. Those from middle social group, owning less acre of fertile land for nurturing gladiolus, had to depend on the nearby forest for this purpose after clearing some trees. Families from this group were involved in making charcoals in the forest. Some of them owned bullock carts and cows to carry bamboos after cutting in the forest and were thus involved in bamboo cutting on a large scale. Few of the family members from lower social group might work as wage earners in these economic activities in the forest but all might not stay overnights.

The participants were then asked to identify factors that made their villagers suffer from malaria. Whatever they answered was noted. Then, the way they could acquire malaria was explained emphasizing on mosquito bite that could take place during night times when they

slept without any protection. Next, the participants were asked to indicate in the social map the households whose members were vulnerable to malaria transmission in the forests. The participants were explained that these were the households for distributing insecticide treated bed nets for preventing malaria transmission in the forest.

This is a preliminary report of social mapping component of the pre-test made for a case study, using participatory learning and action (PLA) approaches, to be conducted on a larger scale by Department of Medical Research (Upper Myanmar).

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REFERENCES

1. Rietbergen - McCracken J & Narayan, D. Participatory tools and techniques. The International Bank for Reconstruction and Development/The World Bank, Washington DC 20433, USA. [Cited 22 November 2008]. Available from: URL: <http://books.google.com/books?hl=en&lr=&id=N97N6eiI SYEC&oi=fnd&R=ppD &dg=%22Rietbergen.McCracken22+%22Participati on+and+Social+Assessment+Tools+and+Techni ques%22+&ots=UyJsN64aQs&sig=6Gpxz>.
2. Shah MK, Kambou SD, Monahan B eds. Embracing participation in development: worldwide experience from CARE's Reproductive Health Programmes with a step-by-step field guide to participatory tools and techniques, Atlanta, GA: CARE, 1999.
3. Than Tun Sein, Ko Ko Zaw, Ohnmar & Tin Ko Kyi . Livelihoods of rural poor: a case study at *Kazun-chaung* village in *Ah-Phyauk* Area. Yangon: Department of Medical Research (Lower Myanmar), 2000.
4. Nilar Tin, Than Tun Sein, Kyu Kyu Than, Kywe Kywe Thein & Mar Mar Aung. Gender roles in rural communities in Myanmar. Yangon: Department of Health, 2004.
5. Ohnmar. Evaluation of community based development programme among mine workers in Mogoke, Tahbeikkyin and Singu townships in Myanmar. Yangon: Myanmar Red Cross Society, 2006.