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Social network analysis, social capital and their policy implications

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• Introduction

The quality of relationships among and between people is an important factor to consider when working to promote strong and resilient neighbourhoods or communities. The quality of these relationships is known as ‘social capital’. This paper describes how the relatively new participatory approach of social network analysis (SNA) can be used to understand social capital, and considers how strong social capital and social networks can influence policy at a local level.

• The importance of social capital

Social capital is an important concept, as it has the potential to improve neighbourhoods or communities and the lives of families. Considering the concept of capital leads to an understanding of inter-relationships and social networks within a community or neighbourhood. Social capital refers to the quality of relationships among and between people. Turnbough Lockwood (1996) said that:

Social capital adheres in the set of relationships among people -- and those relationships are productive to the extent that they are based on a common set of expectations, a shared set of values, and a sense of trust among people. Where social capital is weak, there are conflicting values and a significant lack of trust.

In addition to their social capital, communities can be categorised by four other types of capital (Butler Flora, 1997:)

- *Community financial capital:* money or instruments of credit for investment and speculation. It can be public or private.

Manufactured community capital: the physical infrastructure of a community. Financial capital is turned into manufactured capital by the public or private sector.

- *Human capital:* ‘Human capital includes individual capacity, training, human health, values and leadership.... Human capital includes non-formal skills associated with experience carrying out a particular task and indigenous knowledge about an area. Health status and commitment are other aspects of human capital important for communities’ (Butler Flora, 1997).
- *Environmental capital:* Environmental capital consists of air quality, water (including quantity and quality), soil, biodiversity and landscape.

Each of these forms of capital enhances each other. Therefore overemphasising the value of a single form of capital can reduce the levels of other forms of capital. Allowing one form of capital to dominate over another results in medium-term decline in community well-being, despite possible short-term gains.

agencies were mentioned.

• Strengthening social capital in Nepal

One of the authors (Marion Gibbon) has been involved in a participatory action research project as part of her doctorate. She has been working in ward number 3 of Dhankuta district, Eastern Nepal in conjunction with Durga Pokhrel of the Women's Empowerment Strengthening Team (WEST).

The research project started in January 1997 with a PRA training (Gibbon and Shrestha, 1997). Following the workshop, a local Dhankuta NGO carried out a needs assessment. One of the tools used during this process was social network analysis (see Box 1).

BOX 1

AN EXAMPLE OF SOCIAL NETWORK ANALYSIS

Social network analysis involves asking a group about the places they visit and why they visit them. During a group interaction, women (in Khalde village) mapped where they go to seek different forms of support: financial, social and health advice (see Figure 1). The diagrams that result from social network analysis appear complex at first. However, the discussion results in a very visual articulation of the networks within a community and allows everyone to be involved. Social network analysis is useful as it allows relationships to be understood more fully. Venn diagrams do not show so well whether a relationship is one-way or multi-dimensional, whereas social network analysis does.

The findings showed women were visiting each other for social support, the *Dhami Jankri* (local healer) for health advice and key households for financial support (Gibbon, 1998). The networks are all within the village and none of the women venture out of their village to seek advice from other sources. House 21 is that of the local *Dhami Jankri* whom all the women mentioned as their source of health advice. No linkages with any external

In January 1998 WEST carried out two three-day workshops in ward number 3. The aim of the workshops was to allow women to:

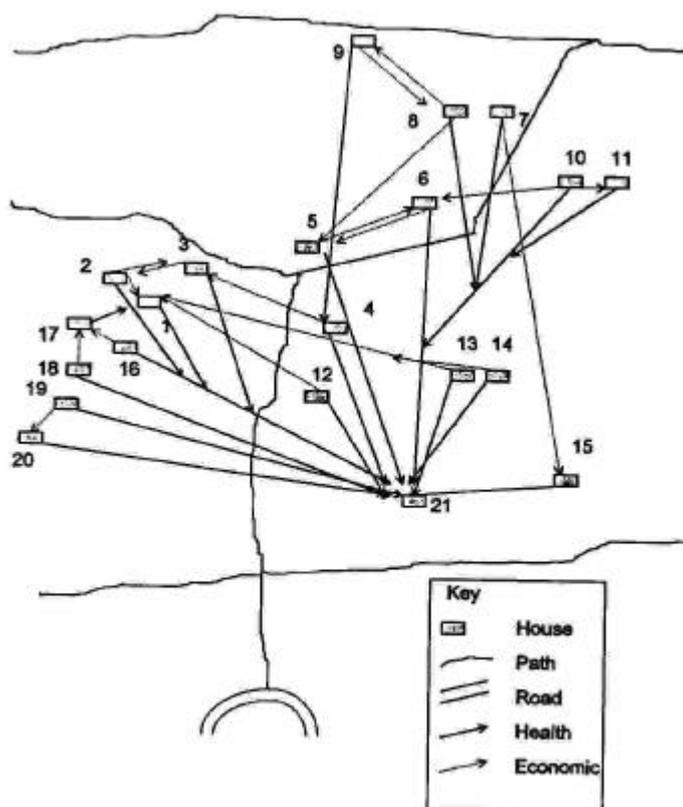
- define their own health needs;
- prioritise their health needs and consider the resources they had available to them through social network analysis; and,
- plan activities to solve their problems.

One of the workshops was carried out in Khalde hamlet and the other in Pangsing hamlet. They used an approach called the Health Analysis and Action Cycle (HAAC) that was first used in Sankhuwasabha district with women's groups (Gibbon and Cazottes, 1998). The HAAC is a cyclical process that allows the group to identify health-related concerns, prioritise those concerns, identify the causes and plan strategies to overcome their problems. Two women's community health groups were formed during the six days as a result of the health analysis cycle workshops.

These community health groups now meet on a monthly basis to discuss progress and plan new activities. These groups have been involved in a literacy programme, have started a latrine building programme and a community health education initiative. They have been very successful and now have completed building 19 latrines in their community; there were only four prior to WEST's involvement, and there were no women's groups. They have also initiated savings and credit schemes within their groups. Each group has decided how much each member should contribute on a monthly basis and the money is then banked and used according to group decisions. Interest from other women in the community resulted in a third women's health group being formed.

During September 1998, WEST were involved in a follow-up meeting with the three groups and decided to look at the social networks prevailing in the hamlets where they are working; Khalde, Pangsing and Tallo Pangsing (see Figure 2).

Figure 1: Map to show Khalde women's social networks (source: Gibbon 1998)



The Tallo Pangsing group was formed as a result of some of the members of this hamlet requesting support from WEST after they observed the work taking place in Pangsing. Figure 1 includes the Khalde group with only the *Dhami Jankri* being outside as she resides within a different hamlet.

The social networks within the community are now much more complex: linkages with external agencies as well as links with the ward chairman, the forest user group and different NGO committees are now indicated. The *Dhami Jankri* continues to be a focal point within the community (see Figure 2), although she is no longer the sole source for health related advice. The groups have strong links with each other, the ward chairman and WEST who sometimes acts as an intermediary with other organisations. The groups were able to get support from the Nepal United Kingdom Community Forestry Programme for their literacy initiative in the form of stationery. They have also sought advice from the Institute of Health Science and District Public Health Office about running a clinic in their community.

Through increased unity they have gained more influence over the policy process. Discussions with the ward chairman have led to the

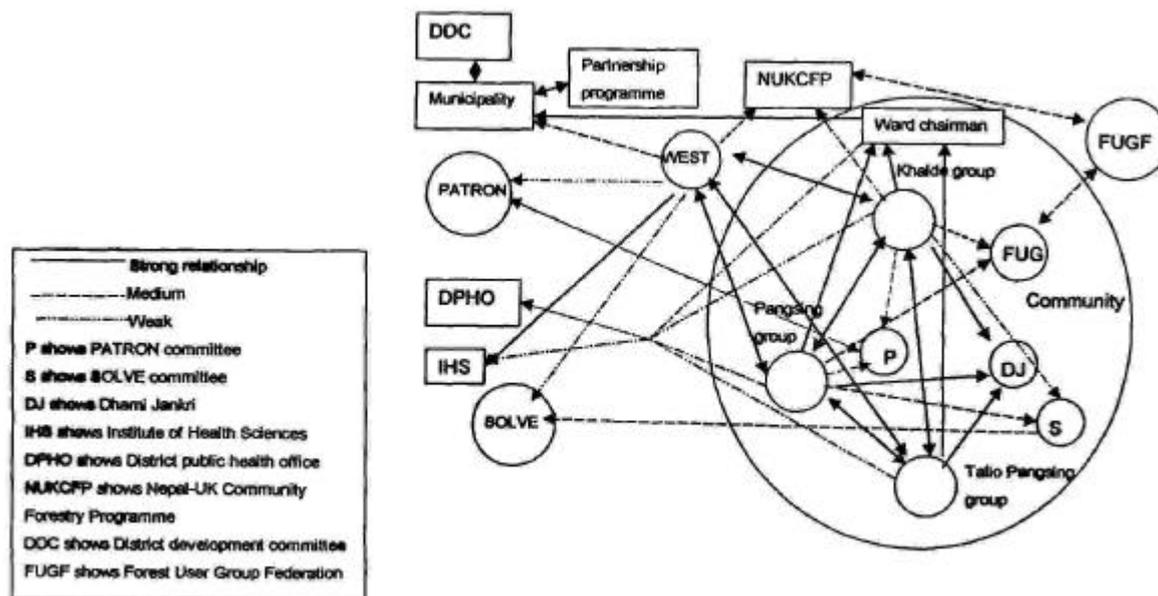
municipality giving cement for their latrine building programme. In next year's development budget, finance for six latrines has been incorporated for their community.

The following quotations are indicative of the changes that have occurred in ward 3:

"Before no-one ever heard us, now we get together and discuss our plans, talk to the ward chairman and our community is changing, we now have a voice" (community member, September 1998).

"Things have changed in our community, before we had no latrines and our environment was dirty, now we can cut our fodder close to our houses as people now use latrines" (community member, September 1998).

Figure 2. Social networks of the women empowerment strengthening team (WEST) women’s groups



Four of the five forms of capital have increased as a result of the approach:

- *Human capital:* The groups are now able to carry out community projects using resources from within and external to the community thereby increasing social and human capital.
- *Social capital:* The increases in networks within the community have increased the social capital of the community.
- *Environmental capital:* through the latrine building activity community members have mentioned improvements in their environment with a decrease in faeces along the paths, making fodder collection easier and more hygienic
- *Financial capital:* this has increased through the initiation of savings and credit groups.

The increased networks mean that there are more opportunities for the community. The group members are able to draw on more resources to benefit themselves and their community. The women have gained from their involvement in participatory

groups, however, they also mention that there are time constraints to greater involvement due

to their heavy workloads. A mutually reinforcing network has arisen that will hopefully be sustained once the research is completed.

In December the three women’s groups held a dissemination workshop in the council offices and invited other non-governmental organisations working in Dhankuta district. As a result of this workshop, the village development committee and the municipality have decided to use more participatory approaches in their work. The women have managed to influence the way the committees will work in the future and to consider policies that will include the needs of poor rural women and not only those articulated by more influential people. The district development committee has agreed to use a more participatory policy in its development programmes.

• **Conclusion**

Social network analysis is a potential tool for participatory monitoring and evaluation as it is able to show the relationships that develop between individuals, groups and organisations over time. As the number of networks increase there are more resources available to communities, which will hopefully lead to an improvement in the well being of rural

communities. It is necessary to decide on a timeframe for its use. This piece of research involved a social network analysis at the start and a further analysis after eighteen months. This time gap enabled several changes in the relationships and linkages to be seen: a shorter gap would not have allowed such changes to be so clearly seen.

concerned with women's health and empowerment.

Durga Pokhrel has worked for 17 years as a nutritionist for Save the Children Fund UK and is now involved with running a local NGO called Women's Empowerment Strengthening Team which works in Dhankuta district of eastern Nepal.

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NOTES

Marion Gibbon has been working in Nepal for four years, three of which have been for a doctoral degree with South Bank University, London. Her research is