

論文の内容の要旨

論文題目 Relation of Slum Dwellers' Social Capital and Their Gains
 from Community-Based Infrastructure Development :
 The Case of Water Supply in Manila, Philippines
(参加型インフラ開発がスラム住民にもたらす効果とソーシャルキャピタル
 に関する研究 : フィリピン首都マニラの上水事業を事例として)

氏 名 マトウシュ ペトウル

One third of the world's urban inhabitants live in slums (UN-Habitat, 2003b). In South-East Asia, Metro Manila has one of the largest slum populations. Over thirty percent of its housing stock is considered inadequate (Noda and Fukushima, 1991) The slum dwellers suffer from lack of access to basic services and lack of social capital (UN-Habitat, 2003a, b). There are wide disparities within the slums (Berner and Philips, 2005). However, the inequalities among this large part of the world population still have not received enough research attention.

To improve both material and social position of the urban poor, community-based participatory approaches have become widely recommended. (See Kidokoro, 2001 for overview of the policy evolution.) Community-based infrastructure development supposedly overcomes the sustainability problems which are common in slums. Moreover, these approaches have been linked to social capital creation (WB, Social Development Homepage). Social capital is also reportedly necessary for success of community-based projects (Isham and Kahkonen, 1999). However, majority of the studies that apply the concept of social capital in the field of poverty reduction, use the concept of social capital in its collective form, ignoring unequal distribution of social capital among individuals.

In Metro Manila, one private water provider has initiated 'community-based' supply systems (called 'bulk systems') in slum areas, which are supposedly beneficial to the poor (ADB, 2004) by providing a cheap service, and 'building their communities' by participation (Rivera, 2006). However, the internal distribution of cost and benefits within the communities is unknown.

To evaluate these systems, this study uses the concept of individual social capital defined as resources embedded in personal networks (Bourdieu, 1986, Lin, 2001). The overall objective of this dissertation is (1) to examine the relationship of individuals' social capital and development of community-based water supply and other infrastructure projects; and based on that (2) to derive tentative implications for water systems design in slum areas.

The primary data gathering for this study was carried out during two surveys. To gain background information about the community-based water supplies, a survey across 12 bulk systems in Metro Manila was carried out in February and March 2006. To explore internal community inequalities, an in-depth study of all adult members of one community (93 interviews) was carried out in November and December 2006. This community is on the outskirts of Metro Manila. The area was selected because it was relatively recently populated by migrants from various areas in the capital as well as rural areas, so it was plausible that creation of new relationships could be observed. Moreover, they have developed several infrastructure projects (including a road, footbridges, water and electricity supply) without external help. There, relations between various types of infrastructure and social capital can be compared.

Existing methods of social capital measurement for application in a slum were adapted. A new theory-based method of measurement of social capital created during participatory activities was developed and measures of instrumental and expressive social capital were proposed. The feasibility of administration of the measurement tool in a slum has been tested by an actual survey and the comprehensibility of the whole combined instrument has been verified by respondents' feedback and lessons for administration were learned. With minor adaptations, this tool can be used across the Philippine slum communities.

In the studied cases, the high-social capital individuals become bulk water supply leaders mainly because of their access to credit and information via personal networks. The leaders take the risk to invest in the systems, do all work during the implementation and operation of the systems, and eventually enjoy financial profits from selling water to the others. The low-social capital individuals, on the other hand, tend to be excluded from the systems because of lack of credit and information. They end up paying the highest prices for water sold in buckets.

The situation is different in the electricity supply because an electricity connection is cheap and easy to install, so it can be obtained by anyone without mobilization of social capital.

The evaluated community-based water supply systems did not induce wide-spread participation among the regular consumers and thus did not induce social capital creation. Community members truly participated only in those community projects which (1) required contributing their own direct labor to benefit from the project's stated ends and (2) did not provide commercial motivation for anyone to take single-handedly control over everything.

Based on the social capital findings and financial analysis, policy recommendations are proposed to increase the equity and sustainability of the community based water supply in slums and retain the sustainability of the systems as well. The main points are:

1. The provider consults the local people prior the project and hires some for monitoring
2. Free connections are offered to every household
3. Meters are placed on each connection outside of the community
4. The consumers are required to assist in the construction

The acceptability of this proposal shall be verified by consultation with the stakeholders.

In future, the relations between individual social capital and community-based projects should be explored in more detail for other types of infrastructure, and in other cultural setting as well.