

# **SOCIAL CAPITAL ASSESSMENT TOOL**

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**Prepared for the  
Conference on Social Capital and Poverty Reduction  
The World Bank  
Washington, D.C.  
June 22-24, 1999**

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## Introduction

As the concept of social capital has traveled beyond its seminal application among Italian regions, and as analysts have extended it to apply to other countries and regions, new and different measurement tools have emerged. Not all studies of social capital are empirically driven, and only some among them have developed and utilized any precise measurement tools. Though intending to measure the same concept, these tools differ substantially, however, from those that were developed by Putnam et al. (1993). Future researchers can either choose among the host of different measurement tools that exist today, or they can develop new ones to their own design, thereby adding to the variety that exists within this emerging sub-field.

Can some agreement not be reached about which are the best tools to apply? Will the measurement of social capital necessarily have to vary by region and country? Cannot some common method of measurement be developed that can be applied uniformly across different countries and regions of the world?

This paper addresses these questions and seeks to provide some answers based on the evidence that is available at this time.<sup>2</sup> Part I of this paper reviews the measurement literature, while Part II presents a set of tools that are being developed in response to a demand for a uniform methodology.

Analyzing the terms that make up the definition of social capital provides a strong indication for considering different empirical correlates in diverse social and cultural contexts. To some extent, therefore, the different measurement concepts that exist are justified on grounds of contextual diversity. Part I of this paper identifies the main issues at stake. Diverse and often opposite views have been taken on each issue as different analysts have defended their preferred measure. These theoretical and conceptual defenses provide strong support for devising locally and contextually relevant measures of social capital.

Though contextualizing the inquiry provides grounds for considering variation, however, it should not be tantamount to throwing the field open to uncountable numbers of unassociated measurement tools. The sum of categories that are useful to examine social capital will nevertheless remain fairly constant even as inquiry shifts from one context to another. In Part II of this paper we present a set of broad categories that we are finding useful for measuring social capital in contexts as diverse as Panama and central India. The precise selection of sub-categories varies for these two countries, but the overarching conception provides a unifying framework. We have developed this framework after studying different methodological approaches taken among different empirical studies of social capital. We invite other researchers to share their results and their measurement tools. We would also welcome the opportunity to have our emergent framework tested in other countries and by other researchers.

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<sup>2</sup> The authors would like to acknowledge the generous support of the Danish Government through the World Bank's Social Capital Initiative in the development of this paper.

## **Part I. Issues at Stake in Measuring Social Capital**

The most common definition of social capital regards it as “features of social organization, such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit” (Putnam 1995: 67). Two sets of empirical questions emerge immediately upon examining this definition:

1. What types of networks are associated most commonly with social trust and with norms that promote coordination and cooperation for mutual benefit? Do all networks need to be aggregated into a measure of social capital or only some specific types? Should the same network types be considered in all countries or will there be some variation across cultural contexts?
2. Can norms and trust be assessed directly? Can these be graded in terms of their effectiveness for facilitating mutually beneficial collective action? What set of instruments will enable a researcher to undertake these tasks of assessment and scaling across diverse cultural contexts?

Empirical studies of social capital differ among themselves in terms of the manner in which they have addressed these two issues. While some studies have assessed social capital solely in terms of network density, others have relied purely on a measure of trust. Yet other studies combine a measure of network density with some proxies for assessing the strength of the relevant norms.

Neither an exclusively networks-based nor an entirely norms-dependent measure suffices, however, for scaling social capital. Purely networks-based measures are too prone to the danger of including organizations such as the Ku Klux Klan and the Aryan Nation or their equivalents that exist in most other countries. Analysts who use such measures have distinguished among horizontally and vertically organized groups, heterogeneous vs. homogenous groups, etc. None of these analytical distinctions rules out the possibility that quite a few “wrong” or anti-social groups will find their way into the measure.

Unless one knows the activities, purposes and values that bind the members of any group, it is impossible to know in advance whether this group adds to or detracts from the sum of social capital. Of course, it is difficult to make any such prediction in advance of detailed empirical investigation. So some amount of gross categorization will have to exist, at least at the start of any study. The point being made here is that this selection of categories will need to be defended with reference to the norms that each category upholds.

Are horizontal organizations significantly more likely than vertical ones to promote cooperation and coordination for mutual benefit? Compared to organizations

where members are more alike, are those with a heterogeneous membership more likely to be associated with generalized social trust? Providing any firm answer to these questions is bedeviled by the existence within the literature of studies that support the opposite conclusions. We illustrate this opposition of views with respect to these two issues. Other sources of difference exist among investigators of social capital, as is illustrated by the selection of studies examined in Annex A.

### **Horizontal and vertical organizations**

In their seminal 1993 work, Putnam et al. regard horizontally organized networks to assist social capital, while vertical relationships were thought to inhibit its formation. “Intense horizontal interactions ... are an essential form of social capital... A vertical network, no matter how dense and no matter how important to its participants, cannot sustain social trust and cooperation” (Putnam et al. 1993:173-174). In his later works, Putnam suggests shortening the list further to include only certain types of horizontal networks. Compared to secondary groups where members have frequent face-to-face contact, tertiary and mailing-list organizations are far less able to generate social capital (Putnam 1996).

Later analysts of social capital have challenged Putnam’s preference for horizontal organizations. “It is not at all clear,” claims one analyst, “how in practice one determines whether an organization is vertically or horizontally organized. The Boy Scouts, for example, are a hierarchically organized group, yet they seem to be” favorably regarded by most social capital analysts. On the other hand, “militias and other nationalist organizations,” excluded in most accounts, “do not appear to be much more vertically or hierarchically organized than other types” that get added in to social capital. (Berman 1997a: 567).

Empirical investigations carried out in other countries indicate that horizontally shaped networks do not necessarily reveal the presence of higher social capital. Studying variations in economic growth for 29 countries over a three-year period, 1980-1982, Knack and Keefer (1997: 1284) conclude that while trust and civic cooperation are associated with stronger economic performance, associational activity is unrelated to trust. “Horizontal networks – as measured by membership in groups – are unrelated to trust and civic norms...Promoting horizontal associations through encouraging the formation of and by participating in groups may be counterproductive.”

Other investigations indicate that in addition to the shape of social networks (horizontal vs. vertical) other aspects such as the composition of the membership might also matter. Stolle and Rochon (1998: 47-62) show, for instance, that all horizontal voluntary associations are not alike with respect to social capital. Studying the effects of associational membership in three countries, Sweden, Germany and the United States, they conclude that associations that are more diverse, “whose members bridge major social categories” are “more effective in fostering generalized trust and community reciprocity.” “Homogenous associations are less likely to inculcate high levels of

generalized trust and reciprocity among their members.” A separate debate is waged, however, on this issue of homogeneous vs. heterogeneous organizations.

### **Heterogeneous vs. homogeneous organizations**

That the internal heterogeneity of groups matters both for social capital as well as for economic welfare has been independently verified by Narayan and Pritchett’s (1997) study of Tanzanian villages and also by Grootaert’s (1998) study of Indonesian villages. In each case, a household-level index of social capital – constructed by multiplying together numbers of associational memberships with internal heterogeneity of associations and their span of activities – was found to be positively and consistently related with household economic welfare. More heterogeneous associations are better in terms of social capital.

Another group of scholars derive the opposite conclusions, however, thereby confounding consensus on even this issue. Drawing on data gathered from five American cities, Portney and Berry (1998: 636, 642-43) conclude that compared to social, service, self-help and issue-based organizations, it is “participation in neighborhood associations [that] is more strongly associated with a high sense of community” and civic engagement. All else being the same, more homogenous neighborhoods are more likely to have more effective neighborhood associations. In a separate analysis related to understanding collective efficacy at the neighborhood level, Sampson et al. (1997) show that among different neighborhood associations the more effective ones are less highly stratified in terms of income and concentration of immigrants. Diversity and heterogeneity are counterproductive in this reckoning. Homogeneous associations do better by way of social capital.

What is a future researcher to make of these seemingly opposite views? Does each type of group matter for some contexts more than for others? This is, in fact, the conclusion which Stolle supports in her later work. “Groups with high diversity levels in homogenous cultures [such as Sweden’s or Germany’s] are much more trust producing...These relations look different in countries with more diverse populations...In the United States [with a more heterogeneous culture] homogenous groups generate more generalized trust, and not the ones that accommodate people from diverse backgrounds” (Stolle 1998: 28-29). Her work suggests that selecting an appropriate network measure for social capital will depend upon the country or culture that one is studying.

A number of other issues exist that are also related to selecting appropriate network types. Should one include only formally organized groups, as Putnam does, or should informal groups also be considered – especially since “the socialization role of creating ‘habits of the heart’ is more likely to be played...by informal groups” (Newton 1997: 582). Should only small face-to-face groups should be considered, or are large multi-regional and multi-national organizations also instrumental in promoting coordinating and cooperation for mutual benefit (Minkoff 1997, Oliver and Marwell 1988)? Are strong associational ties better than weak ones or vice versa?

These and other questions related to appropriate network types must be answered in terms of the norms that are associated with each network type. Where a particular network type is associated with norms of cooperation and social trust, at those times and in those situations it is useful and valid to aggregate such network into the measurement of social capital. The norms of social interaction that are associated with any particular network type are likely, however, to vary from one situation to another.

Sociologists generally agree that the shape of any network – horizontal or vertical, homogenous or heterogenous, formal or informal – does not by itself indicate much about the nature of human relationships within that network. Granovetter's (1985: 487-491) is an oft-quoted view: "Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy... While social relations may indeed often be a necessary condition for trust and trustworthiness, they are not sufficient to guarantee these and may even provide occasion and means for malfeasance and conflict on a scale larger than in their absence." What sorts of norms are related to which type of networks cannot be assumed *a priori* but must be investigated independently for each separate context.

What is social capital in one context can be *unsocial* capital in another. The Church that supports brotherhood and peace in one context becomes a forum for armed militancy in another. Unions that may promote coordination and cooperation with the state in a corporatist context can wage bitter confrontation in another context.

It is hardly surprising, therefore, that analysts studying social capital in different contexts have identified different network forms to be associated with social capital formation. What must be recognized, however, is that the form or forms privileged by each analyst are specific to a particular cultural domain and may have little or no value outside that domain. Horizontal vs. vertical may matter for social capital in Italy but not so much in rural north India. Heterogeneous organization may be more valuable in some countries but less so in others.

### **An argument for locally and contextually relevant measurement**

As Hechter (1987) has so trenchantly argued, group solidarity is difficult to verify with reference to norms alone. Equally, network forms also do not provide any reliable indicator of the forms of human interaction occurring within the group. Network types that support cooperation and coordination in one context may promote competition and conflict in another.

The shifting variations in the definition of social capital represent efforts to contextualize an abbreviated understanding of the concept that seeks to measure it in terms of network density alone. That this practice confuses rather than clarifies the concept is illustrated by the preceding discussion. That it is erroneous is demonstrated by

another group of studies with detailed ethnographic examinations carried out among members of particular groups.

Eastis' (1998) ethnographic examination of two otherwise similar choir groups concludes that "mere membership in one or another category of voluntary association is too crude a measure to capture empirically the complex experience of membership. Members of both choir groups could report very extensive participation yet still come away from the experience with a rather different mix of human, cultural, or social capital. Such variation owes much to the characteristics of the groups and the structure of relations between their members – not to participation per se nor to the types of groups per se."

Following his study of groups and associations in contemporary Russia, Rose (1998) concludes that trust is not associated with all types of networks, even those that are horizontally organized or which have a heterogeneous group of members. In the Russian context of institutional involution, some (but not all) informal networks are more closely associated with trust and trustworthy behavior. "Trust," conclude Jackman and Miller (1998: 59) after reviewing a range of empirical evidence, "is clearly not isomorphic with group membership." The context of group membership is as important, they submit, as its density or structural form.

The upshot of this discussion about concept specification and empirical referents can be stated briefly as follows. While social capital was defined and measured originally in terms that related entirely to density of horizontally-organized social networks, subsequent investigations have resulted in complicating any such straightforward measurement. What sorts of norms are associated with which types of networks cannot be assumed in advance but it must be verified independently for each separate social context.

If norms matter in addition to networks, as is strongly implied in the accounts reviewed above, if norms, in turn, are dependent on context, and if context varies by culture and country; then can any measure of social capital be found that is universally valid across countries and cultural contexts? We need to test whether the validity of grand theories spanning countries and continents versus the need to settle upon a middle level of analysis that focuses comparison on things that are comparable. To retain social capital as a useful concept, we need to empirically test whether social capital is a universally measurable phenomenon, or whether we have to restrain its usage and make comparisons only among social units that are culturally not too dissimilar.

While the *scale* of social capital may have to be constructed separately for each different context, *instruments* can be devised that will assist in the construction of such a scale among each of these different contexts. Critical to the construction of such instruments is the identification of broad analytical categories relating to the dimensions of social capital discussed above. These instruments need to be flexible in application but rigorous in analysis, ideally combining complementary methodologies that allow for

a wide range of assessment of networks and norms. Such is the goal of the Social Capital Assessment Tool.

## **Part II. A Tool for Measuring Social Capital**

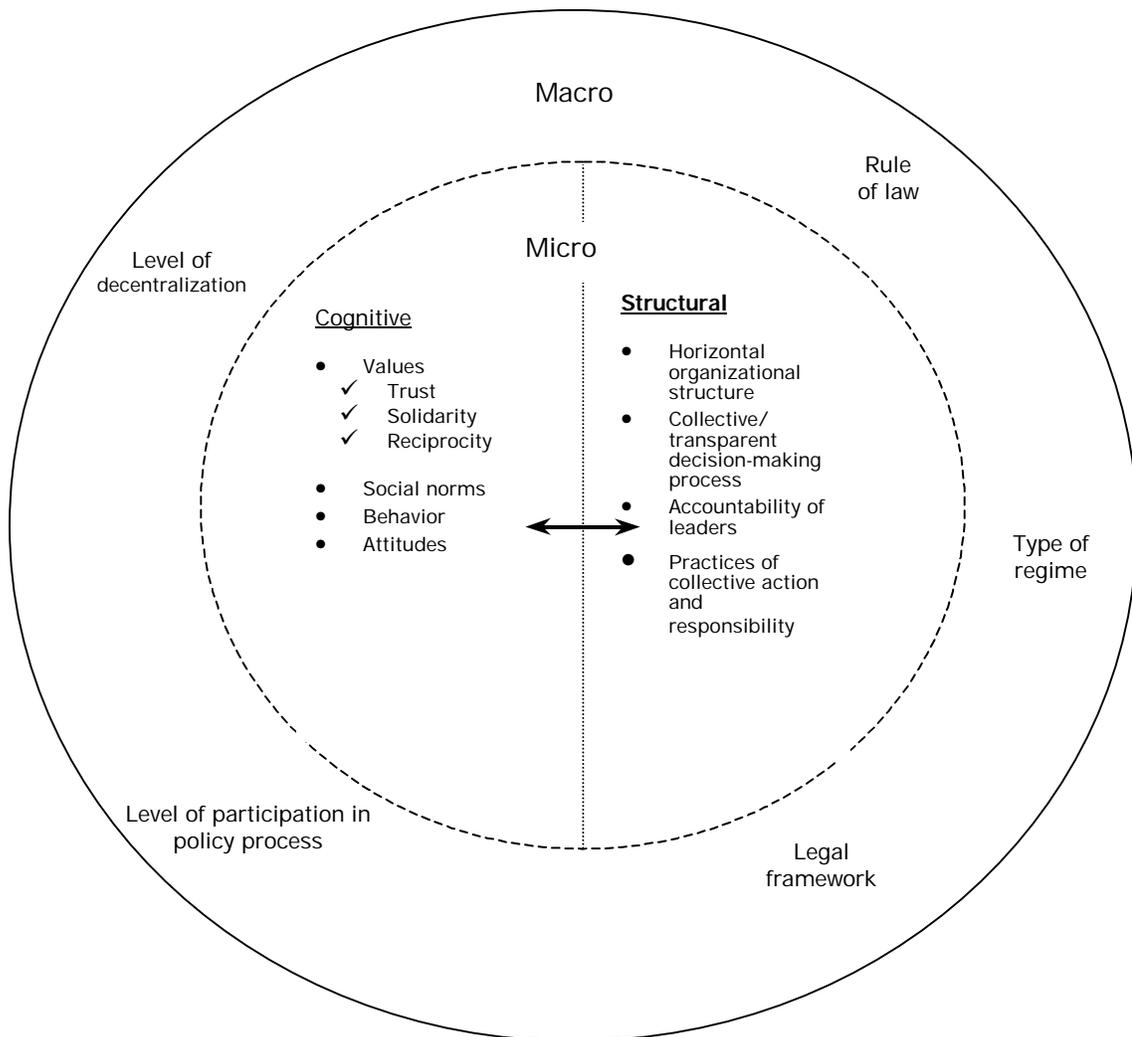
As a first step toward the development of a uniform measure of the myriad dimensions of social capital, herein is described the development of the Social Capital Assessment Tool (SCAT), a field tested set of indicators and methodologies that measure levels of cognitive and structural social capital in communities designated as beneficiaries of development projects. The SCAT draws on qualitative and quantitative data useful for determining baseline levels of social capital and monitoring progress over the course of project implementation, thereby permitting the analysis of the relationships between development indicators and social capital accumulation. Based on research instruments from 26 studies conducted in 15 countries worldwide, with scheduled pilot tests among urban, rural and indigenous populations in Latin America and rural populations in India, the SCAT has clear operational relevance for World Bank lending and non-lending activities.

Part II of this paper describes the structure, application, and preliminary analysis of the SCAT. Following a presentation of the conceptual framework and methodological rationale informing its design, an overview section briefly describes the SCAT components: 1) a *community profile* which integrates participatory qualitative methods with a community survey instrument to assess various dimensions of community-level social capital, including community assets identification, collective action, solidarity, conflict resolution, community governance and decision making, institutional networks, and organizational density; 2) a *household survey* which includes a 39-item battery on structural social capital and a 21-item battery on cognitive social capital, field tested as a stand-alone instrument or as one that can be incorporated into ongoing survey research; and 3) an *organizational profile* designed to delineate the relationships and networks that exist among formal and informal institutions, integrating semi-structured interview data with a scoring system for assessing organizational capacity and sustainability. The paper concludes with a brief discussion of preliminary findings from the SCAT Panama pilot test and recommendations for further research applications.

## Conceptual framework for the Social Capital Assessment Tool

Figure 1 presents the conceptual framework<sup>3</sup> for the Social Capital Assessment Tool (SCAT). Social capital is divided roughly into two levels: the macro and the micro. The macrolevel refers to the institutional context in which organizations operate (see Olson 1982, North 1990). This macrolevel includes formal relationships and structures, such as the rules of law, legal frameworks, the political regime, the level of decentralization and the level of participation in the policy formulation process (Bain and Hicks 1998).

Figure 1. Conceptual Framework: Levels and Types of Social Capital



<sup>3</sup> Adapted from Bain and Hicks, 1998.

The microlevel refers to the potential contribution that horizontal organizations and social networks make to development. Within the microlevel there are two types of social capital: cognitive and structural (Uphoff 1996). The less tangible side of social capital that refers to values, beliefs, attitudes, behavior and social norms is termed here *cognitive* social capital. These values include the trust, solidarity and reciprocity that are shared among members of a community and that create the conditions under which communities can work together for a common good. *Structural* social capital includes the composition and practices of local level institutions, both formal and informal, that serve as instruments of community development. Structural social capital is built through horizontal organizations and networks that have collective and transparent decision making processes, accountable leaders, and practices of collective action and mutual responsibility (Bain and Hicks 1998).

While important to understanding the role of social capital in development, the Social Capital Assessment Tool does not attempt to measure macrolevel indicators of social capital. Instead, the SCAT focuses on structural and cognitive social capital at the microlevel, and the ways that these types of social capital interact at the community, household, and institutional levels.

### **Rationale for integrating quantitative and qualitative methodologies**

Increasingly, social science research, including economic research, is employing both quantitative and qualitative methods<sup>4</sup> in the quest for research designs best suited for assessing complex issues and concepts, including that of social capital. Integration of complementary methodologies is a fruitful strategy for several reasons: to enhance confirmation or corroboration of varying methodologies via triangulation; to elaborate or develop analysis, providing richer detail; and to initiate new lines of thinking through attention to surprises or paradoxes (Rossman and Wilson 1984, 1991).

It is especially important to integrate complementary data collection techniques when trying to analyze a complex concept such as social capital. The growing body of literature on social capital has generated significant sources of survey instruments and data as researchers refine quantitative indicators for the different dimensions of social capital. Qualitative methods, including observation, participant observation, life histories, in-depth interviews, and focus group research, have long been used to elucidate values, perceptions, attitudes, and opinions of both individuals and groups of people, providing in-depth examination of relationships and behaviors. These “social representations” encompass the cognitive aspects of social capital and the types of trust networks that exist in communities; analysis of social representations, coupled with results from validated survey data in the form of scale items, provide a broader understanding of what

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<sup>4</sup> For lack of more precise terminology, “quantitative” methods here will refer to random sampling for survey research, structured individual interviews for data collection and the statistical analyses generated thereby, methods that maximize ‘representativity’ and ‘generalizability’ to the larger study population. “Qualitative” methods will refer to a wide range of data collection and analysis techniques whose non-random sampling criterion of ‘saturation of information’ allows for in-depth analysis of social phenomena.

individuals, households and communities regard as social capital. Similarly, qualitative methods are used in a variety of disciplines, including organizational management studies, evaluation research, and sociology, to assess the organizational dynamics of both formal and informal institutions, key aspects of structural social capital. Survey data generate a broad overview of the institutional framework that exists in a particular community; institutional mapping, focus groups and other qualitative techniques provide a more nuanced understanding of institutional characteristics such as accountability, collectivity and transparency.

The judicious use of histograms, pie charts, and line graphs add dynamic visual appeal to the presentation of quantitative findings. Similarly, in qualitative research, visual analysis by researchers, respondents or both provide dramatic documentation of causality links, patterns of behavior, mapping of community assets and so on. Venn diagrams, genograms, seasonality maps, and causal flow diagrams often illustrate on a single page complex interrelationships difficult to capture in pages of text. (Miles and Huberman 1994; Watts and Shrader 1998). Participatory qualitative methods have the added benefit of being produced by respondents with little or no intermediation of external researchers (Chambers 1997). Benefits accrue to the community research process beyond those of knowledge generation: research for project planning builds community understanding and buy-in for project implementation.

With its focus on economic growth, poverty reduction, and social inclusion as its three main development objectives, increasingly the World Bank is employing qualitative and participatory methods for non-lending services in addition to more traditional survey research. In Zambia, Participatory Rural Appraisals (PRAs) were primary sources for a review of policy reform in the agricultural sector. Farmers' clearly expressed their perceptions of the efficacy of agricultural infrastructure and services, including credit, input supply, agricultural marketing and extension through interviews, seasonality maps, causal flow diagrams and institutional diagrams (Francis et al. 1997). Participatory methods are encouraged as complements for quantitative economic data in poverty assessments (Robb 1998). A participatory poverty assessment in Tanzania looked at social capital and the magnitude of social capital's impact on household income, demonstrating the ways that social capital affects incomes through better public services, greater use of modern agricultural inputs, more community activity, and greater use of credit in agriculture (Narayan 1997).

Other World Bank studies make specific links between the role of social capital and development. A recent study in Panama (Pena and Lindo-Fuentes 1998), combining qualitative and quantitative methods, used a social capital index based on the level of community participation to test hypotheses regarding trends in growth modernization and social capital. The study found significantly higher levels of social capital in rural and indigenous communities when compared to urban areas. Furthermore, indigenous households were more likely to participate in community organizations than either their rural or urban counterparts. Communities with high levels of social capital were also twice as likely to receive assistance from NGOs and almost four times as likely to receive assistance from the government. Lower levels of social capital in urban areas may

reflect both a breakdown of traditional societies and higher levels of crime and violence. A study in Jamaica using Participatory Urban Appraisal (PUA) techniques found that violence in poor urban communities erodes two key assets vital for reducing poverty – labor and social capital (Moser and Holland 1997).<sup>5</sup>

Drawing on this research tradition, then, the SCAT incorporates qualitative and quantitative methods to create complementary measures of myriad dimensions of social capital.

## **Overview of the Social Capital Assessment Tool**

The Social Capital Assessment Tool seeks to operationalize emerging theories regarding the dimensions of social capital, creating validated indicators that can measure levels of social capital and its relationship to other development indicators in the areas of poverty alleviation, inequality reduction, and economic growth. The Social Capital Assessment Tool is designed to provide World Bank task managers with the most accessible and appropriate research tools to measure social capital for use in the design, implementation and evaluation of World Bank projects.

The units of analysis are both the household and the community, and variables of interest related to social capital that may be created and accessed by individuals, households and local level institutions. The SCAT assesses social capital at three levels, producing a community profile, a household survey, and an organizational profile, each described below. As noted earlier, the SCAT does not measure macrolevel variables at the national level. Nevertheless, relevant information is often available to task managers from existing sources, such as the CAS, policy notes or sector work. At the local level, macrolevel variables can be assessed through semi-structured interviews with key informants in sector institutions and desk review of document sources. While important, these macrolevel variables are not a major focus of the tool.

### **SCAT Community profile**

The objectives of the community profile are three-fold. The first is to familiarize the research team with community characteristics and issues relating to social capital for reference in later phases of data collection. Second, the group interviews establish a consensus definition of the “community” in which the research will take place. This definition will be used throughout the community profile exercise as well as for the interviews in household survey and to define the catchment areas of institutions for the organizational profile. Third, and most important, these highly participatory interviews generate a collection of community maps, diagrams, and field notes that serve as the primary source material for the assessment of levels of social capital in the community.

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<sup>5</sup> The results from the Social Capital Initiative studies, providing further insights into social capital and development outcomes, are not reviewed here.

The community profile produces a rapid assessment of social capital at the community level, useful for comparative analysis with household-level data.

The community profile is elicited through a series of group interviews conducted in the community during the initial days of fieldwork. Several participatory methods are used to develop the community profile, the primary one being group interviews, (either spontaneous or planned) with community members. In addition to the focus group format, the data collection includes a community asset mapping exercise followed by an institutional diagramming exercise. The primary data source material generated by these interviewing, mapping and diagramming exercises are:

- Community maps, indicating location of community assets and services
- Observational notes of group process and summary of issues discussed
- List of positive characteristics of community assets and services
- List of negative characteristics of community assets and services
- List of all formal and informal community institutions
- Case study of community efforts to access social capital
- Institutional diagrams (Venn) of relative impact and accessibility
- Institutional diagrams (web) of institutional network relationships and density

The instruments for the Social Capital Assessment Tool's community profile include a fieldtested interview guide for community interviews, included here as Annex B. The interview guide is divided into six parts that assess the several dimensions of social capital: a consensus definition of community and the identification of community assets; examples of collective action, solidarity, conflict resolution, and sustainability of efforts; aspects of community governance and decisionmaking; identification of community institutions; characterization of community-institutional relationship; and assessment of institutional networks and organizational density.

In addition, the SCAT project has identified a community questionnaire that may be a useful addendum for standardizing these qualitative community-level data. This community questionnaire is filled out subsequent to the community interviews and allows for recording of an inventory of basic community characteristics, an initial identification of community needs and assets, and the details from the "social capital case study." In all likelihood, data will not have been collected for all sectors included in the questionnaire unless specifically probed. Nevertheless, the questionnaire may provide an initial effort to quantify the findings from the community interviews, making them comparable across communities and over time. Social capital variables in the community questionnaire include number and types of local level organizations, whether the community is better or worse off than five years ago, whether the community has organized around a particular issue, and whether these organizational efforts were successful. It is important to note that while this questionnaire instrument has been piloted in over 500 Panamanian communities among urban, rural and indigenous

populations, it was not piloted as part of the Social Capital Assessment Tool project. Annex C presents only those questionnaire items related directly to social capital.<sup>6</sup>

### **SCAT Household survey**

The household survey is intended to generate quantifiable indicators for the structural and cognitive dimensions of social capital, measuring individual households' stocks of and access to social capital. The survey is designed to be representative at the level of area of interest – whether national, regional, or of a project catchment area<sup>7</sup> – and to facilitate analysis of the relationship between social capital and other development variables such as poverty, inequality, and growth. The survey may be conducted on its own, in conjunction with the SCAT community profile, or may be added to an on-going survey project.

The design of the household survey was based on a review of approximately 26 questionnaires from social capital research conducted in 15 countries in Asia, Africa, Central and Eastern Europe, and the Americas, as well as additional instruments from related studies. The items included in the household survey represent the indicators applicable to the widest array of communities and contexts. The questionnaire is designed for simplicity and ease of integration with ongoing survey research; there are few skips, the language is simplified and the coding instructions are straightforward. Ideally, the household survey is carried out among a randomly-sampled population in the community of interest, along with the qualitative fieldwork of the community profile. The household survey is most effective when it follows the completion of the community profile; however, household interviews may be conducted prior to community interviews, particularly in situations of limited time or resources.

The questionnaire, attached as Annex D, consists of five sections:

***Section 1. Community characteristics.*** This section identifies the selected household, registers time and date of interview to monitor fieldwork, and the names of interviewer and monitor. This section is fairly standard for all surveys.

***Section 2. Household characteristics.*** This section assesses household characteristics and roster of household members. These items are drawn from fieldtested LSMS questionnaires and may be substituted by other similar instruments. Experienced survey interviewers find no difficulty in applying these items. In field tests, interviewers found it helpful if these pages were photocopied in pink (or other contrasting color) as frequent reference to this information is made throughout the interview. The contrasting color allowed interviewers to easily locate the information.

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<sup>6</sup> For those researchers and task managers with a particular sectoral interest, such as water and sanitation, roads and transport, or health, the entire questionnaire is available from the authors.

<sup>7</sup> Note that although most surveys do sample randomly within each rural village or urban neighborhood, this does not guarantee that such a sample can be analyzed as a representation of the individual village or neighborhood in question.

**Section 3. Genogram.** This section involves the participatory development of a genogram or family tree which provides an at-a-glance assessment of institutional-household relationships and concepts of community-household access to social capital. Easily administered in 5 to 10 minutes, the genogram often detects household members that did not appear in survey roster, despite even the most skilled interviewers attempts to elicit complete information. It also allows for the collection of data not registered in questionnaire which can be subsequently coded or used comparitively with other qualitative data. In the SCAT, the genogram provides cross-reference data for community characteristics, household characteristics and structural social capital variables. It also provides a visual stimulus for respondent regarding other questions, and its participatory development creates rapport with respondents.

**Section 4. Structural social capital:** This section presents 39 items relating to various aspects of structural social capital including organizational density and characteristics, networks and mutual support organizations, exclusion, collective action, and conflict resolution. Measures household members affiliation with local level institutions, both formal and informal. One limitation, however, is that the survey does not allow for analysis of individual household members' affiliation with individual organizations; organizations are aggregated into sectoral interests.

**Section 5. Cognitive social capital:** This section presents 21 items relating to various aspects of cognitive social capital including solidarity, trust, reciprocity and cooperation. Focus on concrete examples, not abstract issues

### **SCAT Organizational Profile**

The organizational profile attempts to delineate the relationships and networks that exist among formal and informal local level institutions and to assess the organization's internal characteristics that may promote or hinder the building of social capital in a given community. Just as aggregate measures of household data serve as quantitative indicators of social capital, so multiple integrated sources of qualitative data provide an assessment of levels of structural social capital extant among key organizations that might participate in development projects. Although the organizational profile is not a conventional measure of social capital, it is included in the SCAT as a useful additional tool for project design, implementation and monitoring.

Through a series of semi-structured interviews with organizational leadership, membership and non-members, the organizational profile assesses the organizations' origins and development (in terms of historical and community context, longevity and sustainability), quality of membership (in terms of why people join, exclusivity and

inclusivity of the organization), institutional capacity (in terms of the quality of leadership, participation, organizational culture and organizational capacity) and institutional linkages (in terms of levels of collective actions, information exchange, and levels of efficacy among governmental and non-governmental agencies). The interviews are recorded as field notes; in addition, subsequent to the interviews those organizational characteristics amenable to quantification through a close-ended questionnaire to yield a comparable index across institutions. The organizational profile interview guides are attached as Annex E and the organizational questionnaire and scoresheet are attached as Annex F.

Between three and six organizations per community are profiled depending on the size of the community and complexity of the development project. The organizations to be interviewed are identified through the community profile and/or household survey as key local level institutions or as having the most impact or influence on community development. Individual interviews are conducted with up to three leaders per organization. Focus group interviews are carried out with members and non-members; depending on the size and diversity of the organization's membership, anywhere from one to four focus groups will be conducted. Of the non-members, effort should be made to conduct two focus groups, one for non-members who want to be members and one for non-members with no interest in becoming a member. When all the interviews for a particular organization are completed, the research team can code the organizational questionnaire together to maximize inter-rater reliability.

The qualitative information, coupled with the organizational questionnaire and scoresheet, can serve as benchmarks during project implementation to assess whether a particular partner organization or stakeholder has improved or worsened the characteristics associated with social capital accumulation. Because a level of uniformity and rigor in the data collection process has been introduced, organizational profiles can be conducted over time to yield a broad picture of the ways in which structural social capital operates in a given community.

### **Preliminary results are available from Panama pilot tests**

Plans for piloting the SCAT include field tests among urban, rural and indigenous communities in Panama and rural communities in India. The pilot tests will be used to further refine the SCAT and contribute to a forthcoming manual on the field applications and analysis of the Social Capital Assessment Tool. The Panama pilot test is completed and very preliminary results are available, based on data from the following sources:<sup>8</sup>

#### **Data Sources for the SCAT Panama Pilot Test**

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<sup>8</sup> To achieve the objectives of the pilot test, the household survey populations were not randomly sampled, but selected to maximize the diversity of household characteristics. Similarly, the community and organizational profiles were chosen for diversity criteria rather than on development criteria recommended in the SCAT Manual.

Type of community	Total number of communities	Total number of community interviews	Total number of household surveys	Total number of organizational profiles
Indigenous	5	9	121	6
Rural	6	14	136	7
Urban	3	11	105	5
<b>Total</b>	<b>14</b>	<b>34</b>	<b>362</b>	<b>18</b>

Levels of social capital appeared to be strongest among the rural communities studies, decreasing among indigenous communities, and were lowest within urban communities. This contrasts somewhat with the findings of Pena and Lindo-Fuentes (1998), who found levels based on their social capital index to be highest among indigenous populations, followed by rural populations and then urban populations. This may be explained by the fact that the SCAT pilot test included only one indigenous group, the Ngobe-Bulgé, who are arguably one of the most social excluded indigenous groups within the national territory. The other study included several indigenous Panamanian groups, many noted for their success resistance strategies and high levels of organization.

Gender analysis of the preliminary household data indicated that responses from women and men within the same community generally do not differ significantly from one another, corresponding to findings from other studies (Krishna and Uphoff, 1999). Furthermore, survey data disaggregated by sex of respondent (male/female) and by residence (urban, rural, indigenous) indicate that responses vary less between men and women from the same area than among same-sex residents from different areas. However, the qualitative data indicate that women and men access different types of social capital in different ways and tend to belong to different, perhaps complementary networks of social capital; the relationship between these findings requires further analysis.

Nevertheless, there appears to be a fairly high correlation of findings between the qualitative and quantitative findings. As expected, the qualitative findings provide more in-depth analysis of possible measures of social capital and their relationship to community development and intrahousehold dynamics. While the household survey data point the way to broad generalizations and clearly demonstrated associations, the qualitative data often elucidate possible explanations as to the complexities of these associations.

### **Next steps**

The SCAT project may be considered a strong beginning to creating a methodological tool for measuring social capital, rather than the last word in what continues to be a dynamic and evolving field of inquiry. Next steps involve refining the potential contribution of the SCAT to conceptual and operational issues regarding social capital. Future applications of the SCAT, in India and elsewhere, will help discern which SCAT variables and social capital issues are relevant for each particular context, country, and project. Further analysis of data will continue testing relationships between social

capital and other measures of poverty, inequality and social justice to elucidate the role played by social capital, both as a precondition for and a result of economic development.

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