

*Social Capital Initiative
Working Paper No. 2*

**THE INITIATIVE ON DEFINING,
MONITORING AND MEASURING
SOCIAL CAPITAL**

TEXT OF PROPOSALS APPROVED FOR FUNDING

The World Bank
Social Development Family
Environmentally and Socially
Sustainable Development Network
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FOREWORD

There is growing empirical evidence that social capital contributes significantly to sustainable development. Sustainability is to leave future generations as many, or more, opportunities as we ourselves have had. Growing opportunity requires an expanding stock of capital. The traditional composition of natural capital, physical or produced capital, and human capital needs to be broadened to include social capital. Social capital refers to the internal social and cultural coherence of society, the norms and values that govern interactions among people and the institutions in which they are embedded. Social capital is the glue that holds societies together and without which there can be no economic growth or human well-being. Without social capital, society at large will collapse, and today's world presents some very sad examples of this.

The challenge of development agencies such as the World Bank is to operationalize the concept of social capital and to demonstrate how and how much it affects development outcomes. Ways need to be found to create an environment supportive of the emergence of social capital as well as to invest in it directly. These are the objectives of the Social Capital Initiative (SCI). With the help of a generous grant of the Government of Denmark, the Initiative has funded a set of twelve projects which will help define and measure social capital in better ways, and lead to improved monitoring of the stock, evolution and impact of social capital. The SCI seeks to provide empirical evidence from more than a dozen countries, as a basis to design better development interventions which can both safeguard existing social capital and promote the creation of new social capital.

This working paper series reports on the progress of the SCI. It hopes to contribute to the international debate on the role of social capital as an element of sustainable development.

Ismail Serageldin
Vice President
Environmentally and Socially Sustainable Development

IN MEMORY

MANCUR OLSON, JR.
(1932 - 1998)

Mancur Olson, Jr. was widely considered as one of the main architects of the conceptual framework that gave rise to the concept of social capital. In “The Logic of Collective Action”, he helped identify the mechanisms of social interaction by individuals or groups which affect the provision of public goods. In “The Rise and Decline of Nations” he described how the focus that interest groups and trade associations place on the individual welfare of their members can translate in a powerful resistance to economic growth and higher collective welfare. This insight provided a challenging addition to a growing literature that mainly focused on welfare-enhancing forms of social capital.

In 1996, Dr. Olson’s participation in the World Bank’s Social Capital Satellite Group of the Social Development Task Force contributed to the design and support of the Social Capital Initiative, under which the material for the present publication was produced and collected. His active involvement as a member of the Steering Committee helped ensure that high levels of conceptual rigor be at the forefront of the selection and implementation of the twelve studies which will advance the research and policy portfolio of the Initiative. Accordingly, this first publication stemming from the World Bank’s work on the Social Capital Initiative is respectfully dedicated to Dr. Olson’s memory.

THE INITIATIVE ON DEFINING, MONITORING AND MEASURING SOCIAL CAPITAL

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THE INITIATIVE ON DEFINING, MONITORING AND MEASURING SOCIAL CAPITAL

INTRODUCTION

A growing body of evidence indicates that the size and density of social networks and institutions, and the nature of interpersonal interactions, significantly affect the efficiency and sustainability of development programs. Yet the exact channels through which this “social capital” impacts developmental outcomes have only begun to be explored, and the lessons to be drawn from these observations for program design and implementation remain to be formulated. To help advance the theoretical understanding and the practical relevance of this concept, the Government of Denmark has provided the World Bank with resources of about US \$1.0 million to support operations which promote and strengthen social capital, and to develop indicators and methodologies to learn from this experience.

The Social Capital Initiative (SCI) received over 40 project proposals, of which a Steering Committee selected 12 projects for funding. Their implementation is well underway. The present document places the SCI within the larger framework of the current research on social capital, and offers a description of the goals, expected contributions, and status of the project. It then presents the full text of each of the 12 approved proposals.

WHAT IS SOCIAL CAPITAL?

The social capital of a society includes the institutions, the relationships, the attitudes and values that govern interactions among people and contribute to economic and social development. Social capital, however, is not simply the sum of the institutions which underpin society, it is also the glue that holds them together. It includes the shared values and rules for social conduct expressed in personal relationships, trust, and a common sense of “civic” responsibility, that makes society more than a collection of individuals. Without a degree of common identification with forms of governance, cultural norms, and social rules, it is difficult to imagine a functioning society.

The scope of the concept of social capital varies considerably in the literature. The most narrow concept of social capital is associated with Putnam (Putnam 1993; Putnam and others 1993) who views it as a set of “horizontal associations” between people: social capital consists of social networks (“networks of civic engagement”) and associated norms that have an effect on the productivity of the community. Two empirical presumptions underlie this concept: first, that networks and norms are empirically associated; and second, that they have important economic consequences. While originally this concept of social capital was limited to associations having positive effects on development, recently it has been relaxed to include groups that may have undesirable outcomes as well, such as associations with rent-seeking behavior. The key feature of social capital in this definition is that it facilitates coordination and cooperation for the mutual benefit of the members of the association (Putnam 1993).

A second and broader concept of social capital was put forth by Coleman (1988) who defines social capital as “a variety of different entities, with two elements in common: they all consist of some aspect of social structure, and they facilitate certain actions of actors — whether personal or corporate actors — within the structure” (p. 598). This definition expands the concept to include vertical as well as horizontal associations, and also the behavior within and among other entities such as firms.¹ Vertical associations are characterized by hierarchical relationships and an unequal power distribution among members. This wider range of associations covers a wider range of objectives — positive as well as negative. Coleman is explicit about this: “A given form of social capital that is valuable in facilitating certain actions may be useless or even harmful for others” (p. 598). In fact, this view of social capital captures social structure at large, as well as the ensemble of norms governing interpersonal behavior.

A third and most encompassing view of social capital includes the social and political environment that shapes social structure and enables norms to develop. In addition to the largely informal, and often local, horizontal and hierarchical relationships of the first two concepts, this view also includes the most formalized institutional relationships and structures, such as government, the political regime, the rule of law, the

¹ This concept of social capital is related to the treatment of firms and other hierarchical organizations in institutional economics, where the purpose of the organization is seen as to minimize transaction costs (Williamson 1985, 1993).

court system, and civil and political liberties. This focus on institutions draws on North (1990) and Olson (1982), who have argued that such institutions have an important effect on the rate and pattern of economic development.

These three concepts of social capital should not be seen as alternatives, but rather as different manifestations of the social capital present in a society. Horizontal and hierarchical associations and macro-institutions can and should co-exist in order to maximize the impact of social capital on economic and social outcomes. For example, macro-institutions can provide an enabling environment for local associations to develop and flourish, and in turn local associations can sustain the regional and national institutions and add a measure of stability to them. This kind of complementarity will enhance the contribution of social capital to development (Serageldin and Grootaert, 1997).

Social capital must ultimately be seen in the context of the contribution it makes to sustainable development. Sustainable development has been defined as a process whereby future generations receive as much or more capital per capita as the current generation has available (Serageldin 1996a, 1996b). Traditionally, this has included natural capital, physical or produced capital, and human capital as the wealth of nations on which economic development and growth are based. It is now recognized that these three types of capital determine only partially the process of economic growth because they overlook the way in which the economic actors interact and organize themselves to generate growth and development. The missing link is social capital (Grootaert, 1997). At this broad level of conceptualization there is little disagreement about the relevance of social capital. There is, however, no consensus about which aspects of interaction and organization merit the label of social capital, nor in fact about the validity of the term *capital* to describe this. Least progress has been made in measuring social capital and in determining empirically its contribution to economic growth and development.

The Social Capital Initiative aims to improve our understanding of this contribution and suggest ways through which the donor community can invest in social capital and create an enabling environment in which social capital can be strengthened. To do this successfully requires an interdisciplinary approach which attempts at bridging some of the current different disciplinary perspectives on social capital. Political scientists, sociologists, and anthropologists tend to approach the concept of social capital through analysis of norms, networks, and organizations. Economists, on the other hand, tend to approach the concept through analysis of contracts and institutions, and their impacts on the incentives for rational actors to engage in investments and transactions. At the microeconomic level, social capital primarily improves the functioning of markets. At the macroeconomic level, institutions, legal frameworks, and the government's role in the organization of production affect performance. Each of these views has merits and the challenge is to take advantage of the complementarities of the different approaches.

As a starting point, we note the following common features across the different concepts of social capital and the different disciplinary perspectives:

- (i) All link the economic, social, and political spheres, and assume that social relationships influence how markets and states operate, and in turn are influenced by those markets and states.
- (ii) All focus on relationships and the ways in which reliable, stable relationships among actors can enhance the effectiveness and efficiency of both collective and individual action.
- (iii) All imply that social capital can be strengthened, and that this is a process that requires resources.
- (iv) All imply that social relationships and institutions have public good characteristics. Because the benefits of such goods cannot easily be appropriated privately, most rational actors underinvest in maintaining them. Hence, there is a case for public support to social relationships and institutions.

THE WORLD BANK AND THE SOCIAL CAPITAL INITIATIVE

The notion that social capital, however broadly defined, has an important role to play in development assistance has already gained ground in parts of the World Bank. As a result, a number of studies have been undertaken to measure social capital in selected countries and to show its impact on development outcomes (see Box). A key objective of the Social Capital Initiative is to promote further work along these lines and to strengthen the methodological and empirical underpinnings for measuring social capital.

Box: Ongoing Work in the World Bank's Environmentally and Socially Sustainable Network

A study of 750 households from 45 villages in Tanzania suggests that social capital makes a significant contribution to household welfare. Social capital was measured by membership in groups and networks and by levels of trust. Multivariate regression analysis established that village-level social capital was a key contributor to household welfare even after taking into account the size of household, schooling, household assets, market access and agroecological zone. In some cases, the effect of village-level social capital outweighed that of market access or schooling. Household-level social capital appeared to be less significant than village-level social capital.

A comparative study is underway to collect data for a profile of local institutions in 20 countries. The study collects data on the institutions of the state, market and civil society which function at the local level in the provision of various services (health, education, agricultural extension, water supply, forestry). In three countries (Indonesia, Bolivia, Burkina Faso) this profile will be supplemented with data at the household level. Specifically, the extent of household participation in different local organizations, and the way in which they contribute to household well-being will be explored. The availability of measures of economic and social outcomes, both at the village and household level, will make it possible to test empirically hypotheses regarding the impact of social capital on poverty, access to health, education and credit, and effectiveness of public programs and projects.

A number of Bank projects have had positive impact on social capital, usually through the promotion of participatory approaches towards project design and implementation, and through community based development. For example, the Bank is supporting micro-credit initiatives which rely on social solidarity and community norms of trust. Agricultural and environmental projects have contributed to strengthening non-formal and civil society institutions such as water users' associations, joint forest management groups and indigenous federations. However, to date, there has not been any systematic effort to assess the impact of investments in social capital in these interventions. The SCI intends, among other goals, to help filling this gap.

As a part of the World Bank's movement toward the implementation of a new development paradigm which integrates social, cultural, institutional and economic factors, the Bank is keen to better incorporate social capital considerations into its project lending

and policy advice. The Bank's Social Development Task Force identified five possible levels of action which the Bank could undertake:

- (i) use current and new tools to understand more thoroughly the nature of existing institutions in client countries and their roles in social and economic development. Doing so should help ensure that Bank programs avoid weakening existing, positive social capital (as they have sometimes done in the past), and identify areas where institutional (social capital) strengthening is needed;
- (ii) where possible, work with existing social capital, especially peoples' associations and organizations, for the design and delivery of projects. This has the potential to (a) improve beneficiary targeting, (b) reduce project costs, (c) enhance sustainability, and (d) strengthen civil society through strengthening these organizations;
- (iii) facilitate enabling environments that foster the strengthening of social capital in a country. The World Bank is especially well placed for such a role. This might include fostering greater interaction between civil society and government, enhanced civil liberties, enhanced mechanisms for government transparency, and stronger contracts and economic institutions;
- (iv) invest directly in social capital. This may be done through training and capacity building of local organizations or through direct financial support; and
- (v) conduct further research on the distributive and growth implications of strengthening social capital, and on strategies for working with civil society organizations.

The Social Capital Initiative hopes to contribute to all five of the above objectives. The Initiative has a triple goal: 1) it aims to assess the impact of initiatives to strengthen social capital on project effectiveness; 2) it also hopes to demonstrate that outside assistance can help in the process of social capital formation; and 3) it will contribute to the development of indicators for monitoring social capital and methodologies for measuring its impact on development.

To achieve this multiple goal, the SCI team (located in the Social Development Family of the Environmentally and Socially Sustainable Development Network at the World Bank) solicited project proposals from task managers within the Bank. Forty proposals were received and reviewed by a Steering Committee, of which 12 were selected for funding on the basis of their perceived ability to test two central hypotheses:

- (1) The presence of social capital improves the effectiveness of development projects; and

- (2) Through select donor-supported interventions, it is possible to stimulate the accumulation of social capital.

These hypotheses are purposefully broadly formulated so as to make possible a wide array of interventions and monitoring methodologies. In addition, since one of the goals of the project is to encourage different approaches to the measurement and monitoring of social capital, innovativeness in methodology was a prime consideration for support, as was the ability to obtain results within a 2-year time horizon.

The 12 selected studies examine the social role and behavior of micro- as well as macro-institutions, and involve different classes of actors: farmer associations, urban service user groups, ethnic communities, educational associations, firms, and formal institutions. A special focus has been placed on economies in transition, and on nations that have been ravaged by war or civil strife.

All projects were selected on the basis of their perceived ability to contribute, directly or indirectly, to the effective test of the two hypotheses presented above. In addition, two projects (in Mexico (#1) and in the coal mining regions of the Indian state of Orissa (#3)) are expected to contribute directly to the development and strengthening of local social capital in the context of larger Bank-supported projects.

The projects offer a wide geographic coverage: four projects are focused on Asia, three relate to Africa, two each for Latin America and FSU/Central Asia, and one will be conducted in parallel in Africa and Asia. They cover a broad range of developmental issues, such as:

- ⇒ *Local level alternatives to the inadequate provision of goods and services.* Six projects (#1, #2, #5, #9, #10, #11) directly address the channels through which local groups can identify and develop schemes that compensate for the insufficient availability of — public or private — goods and services, such as credit, agricultural extension, water and sanitation, and education.
- ⇒ *The reconstruction or revitalization of social capital after conflicts or political transition.* Projects #4, #6, #7, and #8 will examine the process through which social capital can be damaged by ethnic disturbances or civil disintegration, and suggest ways through which it can be rebuilt when violence or political change has subsided. They will also suggest ways for external organizations to contribute to this regenerative process.
- ⇒ *The mobilization of social capital for the development of new income-generating activities.* When traditional production schemes and market access are being eroded by structural or political changes, local communities can develop new internal and external alliances to identify and implement new productive schemes. The role of social capital in the success of this process is the main focus of projects #1 and #3.

- ⇒ *The development or reinforcement of the role of trust in work-related relationships.* Trust is an overarching element of most definitions of welfare-enhancing social capital. Projects #3 and #12 are designed to test whether trust can act as a leverage for technical and organizational skills in the employer-employee, or extension worker-farmer, relationship.
- ⇒ *Local adjustments to increased decentralization of government functions.* Project #1 will study the design and implementation by local communities of mechanisms of consultation and collective action which increase their role in the decision making process of decentralized government entities. This component of the SCI will illuminate how final stakeholders can benefit from increased opportunities for participation in decision making when budget and planning decisions are delegated by the central government to regional authorities.

Another major focus of the study, in keeping with the second of the above hypotheses, is the impact — positive or negative — of external assistance efforts on the development and sustainability of local social capital. Several studies, to different degrees, address this issue, but it is at the center of the investigations of projects #2, #3, #5, and #11. Interest in environmental and gender issues are also important features of several projects (#1, #2, #3, #11).

Other aspects of social capital will be left relatively unexplored by the Initiative, such as the potential role of social capital in improving performance in the public sector, and issues related to welfare-decreasing forms of social capital (of which organized crime is an extreme example).

The proposed analytical methods cover a wide range of qualitative and quantitative approaches. These include quantitative methods in formal research designs with use of control groups, econometric analyses calling on instrumental variables and principal component approaches, as well as case studies, qualitative and inductive methods. The variety of approaches was a priority in the project selection process and should help determine the relative aptitude of different approaches at apprehending the nature and determinants of social capital.

The SCI is expected to further the understanding of several conceptual and functional aspects of social capital. The following section explores these expected contributions in more detail.

EXPECTED CONTRIBUTIONS FROM THE SOCIAL CAPITAL INITIATIVE

The Social Capital Initiative aims to contribute to both the conceptual understanding of social capital and its measurement. Although there is a significant and rapidly growing literature on social capital and its impact (for reviews, see Grootaert 1997, and Woolcock 1997), it has not yet provided an integrated and generally accepted conceptual and analytical framework. The lack of conceptual clarity stands in the way of the measurement of social capital, and the variety of existing definitions makes it inherently difficult to propose a list of indicators. Instead, indicators will have to evolve as the conceptual definition and, more important, the operational definition of social capital are developed.

A conceptual framework is more developed for the narrower definitions of social capital (micro-institutional in focus) than for the broader macro-oriented definitions. It is therefore likely that a suitable set of indicators for social capital can more readily be defined to capture horizontal and hierarchical local associations. Indeed, there is growing empirical evidence that local associations and networks have a positive impact on local development and the well-being of households, and play a key role in environmental management (see references in Grootaert 1997 and Woolcock 1997). Particularly the experience with water user associations has been documented in the context of water supply and irrigation projects. Well-functioning associations reduce maintenance costs and contribute to sustainability beyond the original project time-horizon.

While the existing evidence is strong enough to leave little doubt about the key role of social capital, it is still weak in quantifying its impact and in documenting its role relative to other inputs. Likewise, case studies in other sectors are needed. The SCI will add to the empirical evidence at the micro-institutional level in several sectors. Project #10 investigates the role of the coproduction framework (collaboration between local governments and communities) in the supply of water and sanitation services in Indonesia. Project #2 will measure the role of social capital at the neighborhood level in successfully organizing solid waste disposal in the poor areas of Dhaka, Bangladesh. Both projects will use formal control groups to identify and measure the contribution of social capital to service delivery. Project #12 will assess the role of trust in the successful provision of agricultural extension services in Mali. In the environmental area, project #9 will look at the role of community-level collective action in the management of watersheds in Rajasthan, India. Here too, communities where collective action was successful will be formally contrasted with those where this was not the case.

An important policy question is whether local associations can be strengthened by outside assistance from donors and NGOs. Project #11 will address this question for women's self-help groups and for parent-teacher associations in Kenya, where the impact of funding provided by an international NGO on the functioning and effectiveness of these groups will be measured. A similar objective underlies project #5, which will focus on *campesino* organizations in the indigenous areas of three Andean countries. By tracing the history of such organizations, the project hopes to identify the factors, forms of interventions, and assistance that have fostered their growth and effectiveness.

The role of donors and their ability to invest directly in social capital building is central to the two projects (#1, #3) which are part of larger donor-funded interventions. A World Bank-supported project is helping the Government of Mexico to decentralize some of its budget and planning functions to state and local governments. In project #1, the link between this decentralization and the presence of social capital is addressed. The specific focus is on two programs to promote agricultural development, where an attempt will be made to measure whether existing social capital at the village-level helps the decentralization process, and whether, in turn, this process strengthens further local associations. In India, the World Bank is supporting a large project to rehabilitate the coal mining sector. In project #3, this effort will be enhanced by specific interventions in selected mine-sites to build trust between the stakeholders (the miners, their communities, NGOs, local government, and the mine owner, Coal India Limited). Through comparison with similar mine sites where the social capital building intervention did not take place, its contribution to conflict-resolution and to the successful creation of alternative income sources will be measured.

The projects discussed so far look at local associations as key actors in the construction of social capital. As mentioned earlier, other actors play a role as well. In project #6, the focus is on firms in Mongolia and Russia. Given the weakness of the legal framework in these countries, the question arises as to how these firms organize alternative forms of contract enforcement. The project will attempt to measure the role in this process of informal networks to which the managers of these firms belong.

At the macro-level, additional institutions become part of social capital, such as legal, judicial and political systems, which are traditionally identified and measured at the national level. The mode of analysis becomes primarily cross-country comparisons. In that respect, project #8 looks at the relation between ethnic groups and political institutions. Although ethnic identity helps members of the same ethnic group work together for common goals, the presence of multiple ethnic groups within a country may not always be beneficial for the effectiveness of its political institutions. This project will examine this issue empirically in the context of Africa, using a cross-country data base on politics, economic growth, and political violence.

To capture the full scope of social capital, measurement has to occur and indicators need to be developed not only at the micro and macro-levels separately, but also in such a way that measures the interaction and complementarity between them. The studies on social capital in post-communist and post-war societies (#4, #6, and #7) explicitly link macro events to outcomes at the local level, and attempt to identify the response of local associations and other forms of micro-level social capital. Those projects will contribute to a better understanding of selected aspects of the macro-micro interaction.

Taken together, the 12 studies that constitute the Social Capital Initiative are expected to add significantly to the empirical evidence on the role of social capital. In addition, the studies will make advances in the basic issue of measuring social capital and developing its operational indicators. Since the studies rely on very different research

methodologies, they will shed light on the suitability of each methodology and on ways to combine quantitative and qualitative analytical methods in order to exploit their complementarities. Most importantly, the lessons from the studies will help the World Bank, and hopefully other donors as well, to better integrate social capital considerations in the design of development projects and policies.

STATUS OF PROJECT IMPLEMENTATION

The selection process of the projects which are receiving funding from the SCI took place between December 1996 and April 1997. As of this date, project implementation is well under way. All project Task Managers have secured budget access, and are hiring the international and local consultant staff needed for project implementation. Preparatory activities for most projects involve addressing various data collection issues such as the design of samples and questionnaires, identification of control groups, and the definition of relevant indicators of social capital. The SCI Core Team, comprised of economists and other social scientists, has met with all Task Managers to discuss the progress of each project, the expected obstacles and mechanisms to address them, and the next steps of the research program.

Two types of methodological concerns are appearing from these meetings: The first issue relates to the definition and operational feasibility of indicators apt at capturing the different dimensions of social capital used in each project. To different degrees, all 12 projects are facing the need to develop indicators and, in the case of some econometric analyses, instrumental variables that adequately capture the essence of social capital, and give careful attention to the issues of aggregation, scoring, and weighing of component indexes.

The second methodological issue concerns the selection of the control methodologies best adapted to the specific practical situations and requirements of each project. In order to point to causalities between social capital and development outcomes, researchers have to isolate carefully the role of social capital in these outcomes from the impact of all other factors. Several projects are confronting conceptual and practical difficulties in their search for control groups in their sample. One important issue is the frequent correlation between social capital measures and income.

Continuous interaction between Task Managers and the SCI Core Team and, as much as possible, among the Task Managers themselves, will help ensure that conceptual and methodological issues are resolved early. In addition, the core team is organizing various measures of support for the Task Managers such as building a library of key reference material related to social capital, and an electronic forum for discussing project-related issues. A senior Danish consultant has also been recruited to serve as a resource person to the Task Managers. This interaction and information exchange system will hopefully contribute to a high level of synergy, and enhance the quality of the results.

At the end of the project, it is expected that the existing set of operational definitions of social capital will have undergone a series of empirical validation exercises, and at the same time that new proxies for social capital will have been developed and tested. More importantly, the research project will help identify the conditions under which social capital affects project implementation, and indicate how external intervention can best be designed to integrate and make maximum use of the leverage offered by existing networks of social capital. The results from the project, in addition to providing researchers and practitioners with new insights on the role of social networks in the

dynamics of the development process, will contribute to increasing both the participatory and sustainable aspects of future World Bank projects.

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SOCIAL CAPITAL INITIATIVE - PROJECT 1

Fostering Social Capital through Federal Decentralization

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Background

The Mexico Government is currently implementing the decentralization of federal programming and budgeting functions to state and municipal levels. At the same time a multiparty balance of political power is emerging. The Southern States are historically the most underdeveloped part of Mexico and include significant areas that were historically dominated by “big man” politics, in which local power structures are controlled by a small number of dominant families. One of the risks of decentralization for the southern states is that traditional power structures could intensify, rather than opening the door to wider participation of individuals and communities, particularly in remote rural areas. The Mexican Government (GOM) has made a firm commitment to channel resources to the southern states to balance development within the country. Several innovative programs are being implemented by the current Administration (1994-1999), which are designed to devolve decision making over the allocation of federal resources for social and economic development to local levels. These programs are piloting new models to foster positive linkages between community and productive based organizations and state and local governments.

There are two initiatives being undertaken by the GOM to foster rural development through improved productive activities. One, PRODERS, is a technical assistance program, to build the capacity of the local communities to analyze their needs and capture available resources from various sources (credit, grants, technology transfer programs). The second, ALIANZA PARA EL CAMPO, channels financial resources for productive activities through state governments. The GOM is appraising a program in several States with the Bank to help channel these resources to the poorest communities through participatory mechanisms involving local organizations and local government.

Study Objectives

The general objective of this study is to identify best practices and measures for strengthening social capital in the context of rural decentralization programs. The specific objectives of the proposal are to test the hypothesis of whether the kinds of technical assistance being tested through the two new programs increase social capital and thereby enhance the value of financial resources channeled through those programs to productive activities.

Study Design

The Project would be an applied research initiative developed and implemented jointly with the GOM. A steering group would be formed, coordinated by the Secretary of Finance, with members of relevant sector Ministries, and representatives of the concerned State governments. Representatives of community based organizations would be consulted by the steering group as peer reviewers, with interim findings to be presented in periodic meetings. The members of the steering group would then become conduits for the implementation of the findings within their respective sectors.

Case Studies to be Evaluated

The proposed work program would include study of two cases of social capital development, comparing the experiences across the southern states in which they are being applied. For each of the two cases included in this proposal, four micro regions would be selected for evaluation. They would belong to at least two different States.

The program would systematically evaluate the two new innovative GOM programs in the rural development sector:

1. The first program to be evaluated is PRODERS (Program of Integrated Rural Development), a program of the Environment and Natural Resources Secretary, (SEMARNAP). PRODERS represents the scaling up of a long standing NGO program, PAIR, which was managed by current officials of SEMARNAP when they worked in the NGO sector during earlier administrations. The program is starting to be implemented in remote areas of several micro regions of different States of Mexico.
2. The second program is: Rural Development in Marginal Areas, within ALIANZA PARA EL CAMPO (Alliance for the countryside), a program of the Agriculture Secretariat, (SAGAR). ALIANZA is a decentralized program which was launched in June 1996. It provides the overall framework for the implementation of a number of development programs aiming at promoting investment in the agriculture sector as well as increasing productivity. Each state has to agree with the Federal level on the programs that are most relevant to the specific conditions and priorities of that state. A yearly agreement is

signed between SAGAR and the States for the use of the funds. The program is funded through cost sharing arrangements between the federal level, the state and the producers. Funds are made available for this program through a state level, privately run Fideicomiso. A new program, called Rural Development in Marginal Areas (RDMA) is being discussed with the GOM. Its propose is to introduce a new methodological approach within the ALIANZA program. This RDMA program would specifically foster regional links with producer organizations to help target poorest areas.

Mechanisms Through Which Social Capital Will Be Built

The two case studies are quite different regarding mechanisms through which social capital is being built. PRODERS is an innovative methodology for social capital strengthening in ecologically threatened areas with no specific funding mechanism attached to it, RDMA is an innovative methodology being introduced for marginal areas within the ALIANZA funding mechanism.

PRODERS. In the case of PRODERS, the objective is strengthening the capacity of rural producers to undertake planning for sustainable development and to channel their development goals to projects that can be financed through available programs. PRODERS staff play a technical assistance and broker role, helping to establish linkages between community associations/organizations and government programs and state and local government. PRODERS uses a participatory methodology to help identify problems and develop demand-driven action plans. It is also concerned with participatory monitoring and evaluation through capacity building of the concerned rural population.

ALIANZA. The building up of social capital as such is not embedded in the ALIANZA program. ALIANZA focuses on creating access to funds for individuals or groups in the rural sector without regard to the civil organizations or affiliations of those individuals or to the strengthening of collective activity. The RDMA component aims to foster the outreach capacity of the ALIANZA program and conversely build capacity at the local level to facilitate project preparation and access to funds. One objective of the GOM is to strengthen the targeting mechanisms of ALIANZA through the introduction of this specific component in pilot areas of four States. Drawing upon a preliminary assessment of the existing social capital in selected micro regions, the program would channel resources from ALIANZA to groups of indigenous communities through a regional committee including producer organization and local governments. Together this would strengthen organizational links with the rural populations and improve the targeting of the program.

One advantage of studying those two programs together is that we may be able to apply the methodology developed of PRODERS in the context of the RDMA component of ALIANZA. PRODERS may prove to have very strong points which RDMA could use. Alternatively, the opportunities for linking to and building on local organizations may be quite different to serve the objectives of the ALIANZA. Whichever is the case, this study

will provide the opportunity to compare two innovative programs which are currently trying to foster rural productive activities in different state and regional contexts.

Monitoring Methodology

Definition of Social Capital

The definition of the social capital to be studied will have to be completed after the first phase of the study. In principle, the social capital is defined for this study as the formal and informal linkages of rural inhabitants through local organizations in rural areas. Such groups are usually, though not exclusively focused around productive activities. Linkages are defined as all social networks and the interaction between groups as well as of groups with local and state authorities.

Phases of the Study

There will be three phases in the proposed work program. The methodology will be the same for both programs.

First phase. The nature of organizational structures and linkages in the selected sub-regions will be studied to provide a road map for the analysis in the individual case studies. This will build on a preliminary analysis of civil society in Mexico currently being carried out. This study will draw heavily upon existing information and upon interviews with representatives of the different types of stakeholder associations in these sites. The typology developed in the preliminary analysis will be used to categorize the types of organizations in the study area. A detailed TOR for the two cases studies will be developed as one product of this phase in consultation with the GOM steering group.

Second phase. The case studies will be carried out by Mexican consultants with field visits spaced over a twelve month period. The first visit to each of the areas where the case studies are located would serve as a baseline, and the second visits will provide comparative data to evaluate changes over time in social capital. Techniques will include key informants interviews, participatory rapid appraisal, and Delphi interviews with different types of social organizations/leaders/government and elected officials. Each field visit is compiled to involve 10-15 days for study site. Data collected on programs participants will be revised to develop a sampling frame for interviewing.

Third phase. During the third phase, reports will be prepared on the cases, discussion of the findings will be held with representatives of the respective civil societies and government and workshop will be organized to discuss policy implications.

Choice of Micro Regions

For PRODERS, micro regions are identified by the existing program according to ecological importance, presence of poor marginal population, proximity to conservation

areas, and includes a set of number of sites.

For the RDMA component of ALIANZA, micro regions will be chosen among the pilot regions contemplated by the GOM for the implementation of the program. The study will define a microregion as a socially coherent geographic area within one of the States. Since the Southern States have a high proportion of indigenous population, particularly in rural areas, choice of the micro regions will be guided and coordinated with the first results of the study of Indigenous profile that will be started in Spring 1997. Micro regions will not cross the boundaries between states, since the ALIANZA program is linked to the policy of each single state government. Given the population of each of the States, a microregion within a State should represent approximately 10% of its population, that is 300,000 persons. The project will study four microregions, located in at least two different states.

Control Group

For PRODERS, the control group will be identified as a micro region similar to those included in PRODERS, but where the program is not being carried out.

For ALIANZA, the control group will be a micro region in one of the States where the cultural mix is similar to that of the other micro regions but where the RDMA component would not be introduced.

No specific financing	<u>No Support</u>	<u>Technical Assistance</u>
ALIANZA financing	Control Group for PRODERS	PRODERS
	ALIANZA para el Campo	Rural Development for Marginal Areas

Indicators

Indicators to be measured include:

1. Participatory measures (what individuals agree constitute useful roles of organizational structures and linkages among them);
2. Changes in membership of existing organizations (range, fluidity, age, gender);
3. Broadening the roles of existing organizations;
4. Increased capacity of members to form new organizations or horizontal and vertical linkages;
5. Nature of formal and informal links with other organizations (information, pooling of resources, etc.);
6. Increased autonomy or link with local government and the state;
7. Increased knowledge of government programs and participation mechanisms gained through information exchange with organizations;
8. Increased access to resources resulting from membership in organizations; and,
9. Increased decision making power by members without prior leadership roles.

SOCIAL CAPITAL INITIATIVE - PROJECT 2

Community Action for Solid Waste Management: Self Help in Dhaka, Bangladesh

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Overall Project Description

This study seeks to identify characteristics of communities that are able to organize themselves to undertake tasks for the common good. We conjecture that social capital is a critical determinant of such collective action. In this project we will attempt to measure social capital and assess the role it has played in the specific context of inducing community action for solid waste management in Dhaka, Bangladesh. The study as well as the data collected on social capital indicators and proxies will have broader interest in two ways: 1) they will aid the effort to define and develop accurate measures of social capital; 2) as an addition to the set of country case studies available, the study will add to our understanding of the role of social capital in development in general.

The context for this project is the fact that households in some neighborhoods of Dhaka, Bangladesh have organized themselves to arrange for private collection of trash. Among these neighborhoods are Shanti Bagh, Madhu Bagh, Siddheshwari, and Bara Magbazaar, to name only a few. The garbage collection system in Dhaka involves municipal pickup from large dumpsters placed in central areas, with municipal workers responsible for collecting trash from smaller dumpsters located in alleys and side streets and transporting it to the main dumpsters. However, the municipal employees are unreliable and frequently do not turn up. In response, some communities have hired private contractors to perform the service of local trash collection. Since other, apparently similar, neighborhoods have not managed to successfully organize an alternative to the municipal service, a natural question is why some communities or neighborhoods display such initiative while others do not.

The *community* aspect is vitally important for trash collection since it involves positive externalities leading to limited incentives for individual action. Also, trash collection is an activity in which individual action does not have much impact, so collective action is warranted. Why are some communities better able to organize themselves for the collective good than others? Does such joint action depend on particular circumstances, or characteristics of the community and is community activism

linked to an ability to take responsibility for oneself? If this is indeed the case, policy makers should take account of it when targeting scarce resources.

Hypotheses

We hypothesize that the ability to organize depends critically on the cohesiveness of the community in question, which is a function of customary and traditional interactions and institutions, a common heritage, values, ethnic or religious background, etc. — the civic bonds identified by Putnam in his study of Italian institutions.² In other words, we conjecture that “social capital” is the distinguishing mark of successful community activism, where we explicitly equate “social capital” with community cohesiveness. This study will collect data on some widely accepted indicators of social capital and will also attempt to rigorously measure the importance of social capital as a determinant of collective action in the particular case of garbage removal in Dhaka.

Discussion of Methodology

The methodology we propose is as follows:

1. Survey of communities/neighborhoods
2. Econometric analysis of primary data so collected

Survey

We propose to sample a total of 60 neighborhoods in Dhaka, 30 in which there is an ongoing effort to collectively arrange for garbage removal, and 30 in which there is no such effort. The latter will serve as the control group.³ The two sets of neighborhoods will be randomly selected from the neighborhoods in Dhaka, stratified on the basis of whether or not they have made collective arrangements for garbage removal.⁴

Having identified these neighborhoods, we will randomly choose 10 households in each to interview. From these structured interviews we will obtain information on community characteristics, the motivation for organizing garbage cleanup, and average household characteristics (e.g. average education level, average duration of residence in neighborhood, and average income, extrapolating from the households interviewed). It should be noted that we do not make a distinction between “neighborhood” and

² Putnam, R. (1996), “Making Democracy Work: Civic Traditions in Modern Italy”.

³ It is possible that in some of these an attempt to organize clean-up was made but failed. Since we cannot a priori identify these areas, however, we will restrict our analysis to the issue of whether a successful arrangement for trash removal exists or not.

⁴ We are aware that we may need to undertake further stratification before sampling, but will make a final decision on this after preliminary examination of the distribution of neighborhoods with own arrangements for garbage removal in Dhaka.

“community”, using the terms interchangeably. An outline of the information sought through the survey questionnaire is attached.

Analysis

To gauge the importance of social capital in community action, we will estimate the following binary probit equation: $P_i = f(\text{social capital, other characteristics of community/neighborhood})$, where P_i is the probability of the i th neighborhood having organized its own arrangement for garbage pickup. To account for the endogeneity of social capital, arising from its correlation with characteristics like average income, we will perform two-stage instrumental variables (simultaneous equation) estimation. We propose to use the following set of instrumental variables for social capital: neighborhood age, average length of tenure in the neighborhood, and the degree of homogeneity within the neighborhood (which will be measured by the proportion of residents who originally come from the same village or area outside Dhaka and by whether the majority of residents are owners or renters).⁵ This set of variables appears to satisfy the required exogeneity criteria while being highly correlated with social capital. The variables we will use to construct our measure of social capital include the number and type of community associations, as well as their size and frequency of meeting, the proportion of neighborhood population actively involved in these associations, and the perceived importance of group participation in the neighborhood.

In addition, we plan to use other neighborhood characteristics in the analysis like average income, average education, neighborhood size, and whether the neighborhood is majority professional/salaried or consists of business/self-employed people.

Comments

For our analysis it is critical that we clearly define a neighborhood. Since neighborhoods are amorphous entities, this is likely to be quite difficult. We propose to ask a few individuals from each general area to define the bounds of their neighborhood. Once neighborhood bounds have been established, we will sample households from within the area.⁶

Policy Implications

The expected contributions of this study are as follows: a) it will provide detailed information on community based delivery mechanisms as one out of the menu of possible service delivery options to be considered by the SWM study; b) it will indicate the feasibility of privatizing garbage collection, especially as a small business, which might

⁵ The degree of homogeneity proxies the commonality of values and priorities in the neighborhood.

⁶ Our preliminary inquiries indicate that neighborhoods will probably be delineated by physical barriers or discontinuities (alleys or streets, parks, walls, pockets of commercial activity, etc.) so that we may have a consensus on defining them.

need seed capital, and c) it will provide a “how to” guide for enhancing community involvement and ownership of local development projects — whether through providing financing for government agencies or NGOs to help communities organize, or by providing modest financial assistance for this purpose directly to the communities themselves.

In more general terms, if the ability of a community to organize is an important determinant of “self help”, policy makers and governments can clearly gain by strengthening it. At the municipal level, the government can enlist voluntary neighborhood associations such as those involved in garbage removal to assist in delivering other services. This would not only enhance community ownership of, and participation in, civic activity, but would also increase economic efficiency by reducing the financial and organizational burden of the municipal corporation. Using the existing arrangement for garbage pick up, for instance, would promote the privatization of garbage collection to an extent.

In fact, *if the existence of community organization in a particular area is conducive to the generation of further community activism in other spheres*, fostering neighborhood and community associations could engender other social endeavors like neighborhood watches, adult literacy campaigns, etc., all of which have positive externalities. We would then argue for the active promotion of such organizations. This would probably require a program of carefully designed economic incentives and technical assistance to strengthen existing associations, and encouragement of attempts to organize in neighborhoods which currently lack such organizations.⁷ Another possibility would be to provide appropriate, targeted economic incentives, such as a refund or credit on the relevant municipal taxes to households in neighborhoods which undertake to arrange for alternate providers of municipal services.

⁷ For instance, in Khulna (Bangladesh) donors have funded both NGOs and government agencies to help organize community groups to decide for themselves upon their priorities for Solid Waste Management and choose the mechanism for service delivery that best meets their needs.

Appendix

Data from Survey Questionnaire

Community data

- Number of households in the neighborhood
- Age of neighborhood
- Proportion of tenants and landlords
- Proportion of residents hailing from the same original village or area outside Dhaka
- Previous history of organization/ activism and for what
- Whether majority professional or service
- Types and number of organizations present in the neighborhood (e.g. sporting clubs, social/religious organizations, women's groups, neighborhood watch etc.)
- Size (membership) of these associations
- Frequency of meeting
- Whether a physical structure like a community center can be identified with the neighborhood
- Whether common playing fields (e.g. badminton courts) exist

Household data

- Income level of household
- Education of household head
- Length of time in neighborhood
- Membership in community groups or associations
- Frequency of participation in associational activity
- Perceived importance of group participation
- Size of household
- Whether rent or own
- Property value
- Whether migrated from a different part of the country, and, if so, which part
- Amount paid per month for trash service
- Views on neighborhood trash collection

For background, we will try to get qualitative information from a subset of households on the following:

- The date when the community decided to organize itself.
- What the proximate motivation was.
- If an association had previously existed but no longer does, why it no longer exists.
- If an attempt to organize was made in the past, why it failed.
- Characteristics of **initiator** relative to the rest of community — education, income, sex, age, length of residence in neighborhood, etc.

SOCIAL CAPITAL INITIATIVE - PROJECT 3

Social Capital Development Pilot Implementation Study in Conjunction with the Coal Sector Environment and Social Mitigation Project

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Overall Project Description

Background

Across the coal mining areas in India, social capital, which facilitates coordination and cooperation of the efforts of individuals and groups within a community to improve their quality of life, is relatively scarce. For the most part, production activities of Coal India Limited (CIL) have taken hold in remote areas where commercial reserves were most readily available. The social and environmental costs of developing reserves has grown considerably in the last decades, as CIL finds it increasingly difficult to acquire land to expand its operations. The development of open cast mines in particular, albeit relatively inexpensive, has demanded substantial amounts of land. In addition to environmental impacts and land use changes, by ending the relative isolation of mining areas while creating an influx of newcomers, coal production has transformed the social fabric of these communities. Consequently, a breakdown of social ties and a weakening of local organizational capacity have occurred. Overall, social capital in the mining areas has been affected by a combination of factors, such as community resentment due to (i) the social and cultural changes initiated by mine development, and (ii) the reluctance of CIL to assume full responsibility for provision of services such as health care and basic education to surrounding communities, which state governments feel is what it should do; and friction within the community as a result of (iii) the substantive gap between the miners' income (who make about ten times the minimum wage and have job security) and what people make in other jobs, and (iv) the differential impacts of CIL's development projects, which tend to create invidious comparisons between those who are entitled and those who receive little or nothing.

CIL is changing the design of its new mines, has adopted a resettlement and rehabilitation (R&R) policy, and has intensified its community development program to make sure that all the communities living near the mines share the benefits from the project. Implementation of the new R&R and community development policies, however,

will be a difficult process for CIL and the people involved. There are few completely successful models that can guide the corporation and its subsidiaries in their local rehabilitation and community development programs. Simultaneously, the notion of consulting project affected people (PAPs), target communities at large, local state authorities, and NGOs on social and environmental issues is entirely new to CIL. Moreover, previous interface between the key stakeholders in the mining areas – due partially to issues of power, equity and access to resources – has not always developed under cooperative terms. CIL’s latest orientation to curb new employment and stop the practice of providing jobs as entitlements has further diminished levels of trust and hindered the possibilities for collaboration in local development efforts. The issue of alternative sources of income, and options for rehabilitating the people whose livelihood are going to be impacted by the expansion of mining operations, is looming large in CIL, hence the need for developing new strategies for income generating activities that can become an integral part of a concerted effort to maintain and improve a community’s quality of life.

Rationale

Due to (i) the lack of previous work on social capital development in the mining areas, (ii) the complex social dynamics that prevail there, and (iii) the need to develop monitoring strategies and establish indicators to assess the impact of social capital interventions among this type of communities, it is of paramount importance to engage in the proposed Social Capital Development Pilot Implementation Study. It is through coordination and cooperation that local communities in the mining areas can create, revitalize and keep the assets, institutions and services which may improve their quality of life, while maintaining traditional ways of living and strengthening social ties. It is also through cooperation and coordination that those community members searching for new forms of employment are most likely to succeed. The proposed study would simultaneously provide an opportunity to improve knowledge on the ways social capital may contribute to the sustainability of community development. Because of its scope and focus, it would be confined to local and regional networks and organizations.

Objectives

The main goal of the proposed study is to assist the major stakeholders of the CIL related projects – including the PAPs and the rest of community members in the mining areas, CBOs, NGOs, local governments and corporate representatives – in building social capital as a means of ensuring that the agreed upon R&R and community development programs are socially, economically and environmentally sustainable. Given the important role that stable sources of income have in ensuring sustainability, the social capital intervention would also support the employment rehabilitation of PAPs and the search for alternative income sources of other community members. Through increased collaboration and solid partnerships, these type of efforts would be brought into a more cohesive community development framework, thus giving way to thriving local markets where existing and new economic activities can complement each other. Furthermore, the study would be designed

as a learning exercise that would contribute to advancing knowledge and gaining experience on the relationship between social capital and sustainable community development. These objectives imply the need to carry out a social capital intervention that can overcome existing constraints and maximize opportunities regarding the willingness of communities and corporate and government authorities to come together and participate in the efforts to maintain and improve the quality of life in the mining areas.

Scope

The proposed study would be implemented in a period of two years in a representative mining area. Another site, with similar conditions but where no social capital development strategies would take place during the intervening period, would be selected for research design purposes. The universe from which the study's sample would be derived is comprised by 24 which are scattered across 11 coal fields in five states, and are managed by several subsidiaries. After a cluster analysis, the Talcher and Ib coal fields – located in the state of Orissa and managed by the subsidiary Mahanadi Coalfields Ltd. (MCL) – were identified as the most suited areas for the study's implementation.

Context

Many different social groups live in the mining areas. Apart from one mine, Jhingurdah in the Singrauli region, all the tribal project affected people are farmers on fixed plots, settled in mixed villages among caste Hindus and scheduled caste Hindus. According to preliminary surveys, the total population of the selected mining areas is about 186,000 persons. Not all people occupying or using land required by the expansion of mine operations are landowners. Many of them are tenant farmers, sharecroppers, squatters and agricultural laborers, who have not traditionally been entitled to R&R assistance. In addition to landowners, the definition of project affected people (PAPs) includes now all those whose livelihood would be affected by land acquisition, especially the landless. The total of PAPs has been estimated at 16,300, of which more than 9,000 are adults over 18 and thus entitled to rehabilitation assistance. About 82% of the latter would need self employment assistance, as employment in the mines or through contractors can only provide a limited number of new jobs.

Reviews of environmental and social aspects were undertaken for the 25 mines, and Environmental Action Plans (EAPs), Rehabilitation Action Plans (RAPs), and Indigenous People Development Plans (IPDPs) – based on CIL's revised community development policy – were prepared through surveys and focused group sessions in local communities. Rehabilitation and resettlement schemes will only be necessary in 14 mines, but communities in all the selected mines are supposed to benefit from the implementation of the IPDPs. Preliminary surveys indicate that few PAPs would choose to acquire new land after displacement. Given that CIL has had to reduce its offers of employment in exchange for land, its revised policy for R&R emphasizes assistance to PAPs in developing sustainable opportunities for self employment. Most PAPs are farmers or agricultural laborers requiring close followup assistance and community support to move

into new nonfarm income-generating activities successfully. Furthermore, to ensure that the infrastructure facilities to be provided through the IPDPs will be maintained, it is necessary to build up the commitment and the organizational capacity of the affected communities as CIL will only assist with initial operational costs during a two-year transitional period. Operation and maintenance (O&M) will become each community's responsibility, with support from the state and local governments. As previous experience indicates, the provision of basic infrastructure facilities to communities without their direct involvement in the planning, implementation and operation, has resulted in the underutilization of these facilities, the breakdown of services, and a lack of commitment coupled with a feeling of apathy and dependency.

Implementation Needs

Effective implementation of the pilot study demands sensitivity to: (i) existing social capital represented in formal and informal organizations, as well as social networks; (ii) the social capital needs of the most vulnerable groups such as tribal populations, women and children; and (iii) the conditions and mechanisms required to facilitate and improve the interactions between civil society, government institutions and corporate entities. Respectively, it will be necessary to engage existing organizations and community groups from the beginning of the proposed pilot implementation in order to maximize the use of existing social capital, while fostering and supporting community organization and integration, and facilitating stakeholders' interaction. At the same time, monitoring mechanisms will have to be established to assess the impact and effects of the pilot implementation of the social capital development strategy.

Description of the Social Capital Component

Objectives

Social capital at the community level facilitates coordination and cooperation that benefits all those endeavoring to work together. It is as much an input to the community development process as it is its output. In the case of the mining areas, due to factors such as modernization and immigration, social capital in the target communities has decreased, resulting in low organizational capacity and high levels of conflict and mistrust. At the same time, local institutions such as village councils – often used as avenues to interact with governmental and corporate authorities – have not so far been very effective in advancing community interests. Complex social dynamics prevail in the mining areas, and along with some resentment toward CIL, there has developed a relationship of dependence. People perceive the mine manager, especially in remote areas, as a government representative, and have come to expect from CIL provision of basic infrastructure and services, and of a stable source of income. CIL and its subsidiaries have made an effort to maintain a close relationship with the communities surrounding the coal mines. However, although CIL established an extensive program to assist these communities, it was not well articulated. Ideally, communities should come forward and express their willingness to contribute to the community development projects to be

provided through the IPDPs in kind or cash, and organize themselves to maintain them. Moreover, PAPs in need of employment rehabilitation not only need support from CIL but also from the communities and local institutions where they live. Their success, on the other hand, would bring both economic stability to their respective household and overall prosperity to their area.

All of the above makes it necessary to address the social capital needs of people living in the mining areas through a specific intervention that

1. promotes cooperation and augmentation of self-reliance among target communities by giving them the confidence and resources to take greater control of their own livelihoods;
2. increases community support and commitment to local development activities, including, *inter alia*, employment rehabilitation, alternative employment generation, and O&M activities;
3. engenders an enabling environment — characterized by its transparency, simplicity and consistency — to foster growth and effectiveness of CBOs, NGOs and other local institutions; and,
4. maximizes the interaction between governmental, corporate and community representatives, which may lead to the establishment of solid partnerships for community development.

Conceptualization

Community Development and R&R strategies have to be developed together in order to be successful in bringing up the living standards of mining areas. The RAPs will benefit the PAPs while the IPDPs cover all those living in the mine's area of influence. However, the necessary link that exists between them was left largely unaddressed. PAPs are part of the community, and need collaboration from all their members as well as coordination among themselves in order to succeed in their new employment rehabilitation activities. Simultaneously, all key stakeholders need to come together and endeavor to create the adequate conditions for identifying and implementing all the fundamental activities required to make local development sustainable. The proposed social capital intervention would have to establish adequate mechanisms to set in motion long-term processes and enduring partnerships which can ensure that living conditions will be maintained (and hopefully improved). Effective horizontal and vertical links must be established in order to connect and re-connect the various interests at play in the mining areas. The issue at hand is not to force all the specific interests of community members and their organizations into one developmental blue-print, but rather to help identify commonalities, understand differences, recognize responsibilities, and raise awareness of entitlements. Respectively, any of the mechanisms envisaged for the proposed social capital intervention must

facilitate the achievement of a parallel convergence of the needs of all community members.

Link with Overall Project

The social capital development component of the proposed study would help gain much needed experience and knowledge regarding the implementing and monitoring mechanisms to identify, carry out and assess optimum ways to promote community integration, cooperation and commitment, and clarify entitlements and responsibilities among key stakeholders of the rehabilitation. The success of these projects — and of their community development and rehabilitation programs — depends heavily on the existence of these elements.

Subcomponents

The social capital component of the proposed study comprises: (i) community involvement; (ii) social organization and local capacity building; and (iii) consensus building and conflict resolution. Each of these subcomponents are addressed in various forms through the implementation scheme presented in the following section.

Mechanisms for Social Capital Development

Implementation

The implementation plan for the social capital component of the proposed study would include the following interrelated and at times overlapping stages: (i) preparatory work; (ii) pilot application; (iii) monitoring; and (iv) evaluation. This plan, however, should be considered as a guideline, since it should be flexible enough to respond to the felt needs of the communities themselves, and to accommodate the possible changes that may be necessary as revealed by monitoring activities. *Preparatory work* would comprise three stages: site selection, social assessment of selected mines, and preliminary engagement of formal and informal community organizations and groups, CIL representatives, along with local and regional government authorities. Two mining areas, each including several villages, are needed for the study: the *implementation site*, where the social capital intervention would be carried out; and the *control site*, where no intervention would be taking place at the time of the study.

For the selection of the two sites needed for the study, a cluster analysis was undertaken. First, a set comprised of 14 mines⁸ requiring both RAPs and IPDPs was selected. Second, these 14 mines were screened according to the state and region where they are located, and the subsidiary and coal field to which they belong. The factors influencing the selection of the regional cluster were geography, regulatory environment,

⁸ The sub-universe would actually be 13, since one mine – Jhingurdah in Singrauli – has unique social characteristics which makes it a very exceptional case.

political and economic context, share of total target population (as defined by the IPDPs), and ratio of PAPs vis-à-vis total population in the area of influence of the mines. Accordingly, two cluster of mines located in the state of Orissa, which are managed by the Mahanadi Coalfields Ltd. (MCL), were identified as the ones that best fulfill the methodological requirements of the proposed study. These clusters correspond to the Talcher and Ib coal fields, which are the areas where most of the PAPs (about 73%) live. Each of the clusters includes three mines (each with a different number of villages) and an estimated total population of 19,497, which translates in a representative sample of 10% of the project's total target. These mines are Ananta, Bharatpur, and Jagannath (subset no.1) and Samaleswari, Belpahar and Lakhanpur (subset no.2). Final criteria for individual site selection would be developed as part of the preparatory phase of the study on the basis of available baseline information and interviews with CIL and MCL representatives. To ensure comparability, and to be able to assess the full impact of the social capital intervention, the two mines must have similar environmental, social and administrative characteristics regarding, inter alia, geographical conditions, age of the mine, history of interface between corporate, government and local community players, levels of social capital development, and social composition.

As part of the preparatory work, and drawing from existing information, social assessments of the two selected sites would be completed through field work. This type of assessment is necessary to identify key actors and their interests, understand the social organization in place, and establish a clear socioeconomic and cultural profile of the mining areas. Complementary (i.e., exogenous) variables, such as state regulations and policy changes, etc., external to the intervention but that may somehow influence its outcomes, should be identified at this stage. This involves the preparation of a research document on the regional and state social, political, and economic context influencing the conditions of the selected sites. Preparatory work would then be completed by engaging the various groups and communities of the area, as well as CIL and state and local authorities in drafting the *preliminary implementation plan* of the proposed study. This would entail meeting with CIL professionals related to the mines under study, and visiting the villages of PAPs and resettlement areas and the settlements entitled to IPDPs, in order to disseminate information on the pilot application, and engage its population in the social capital exercise as early as possible. Assistance to build up local organizational capacity would be provided at this stage when necessary, in order to establish a *working social network for sustainable community development*. This network would help bring under a single umbrella the various community groups to facilitate coordination and cooperation, and increase their negotiating capacity.

The pilot application of the social capital component would require putting in place effective mechanisms to accomplish the project's objectives mentioned above. This stage of the process would be open to stakeholders' input, especially the one provided by community representatives, including PAPs and the most vulnerable groups. Therefore, a fundamental step to move from the preparatory work into the implementation stage will be *the start up workshop*, which will bring together all concerned individuals representing the various voices of the communities living in the implementation site, along with CIL and

local and state government authorities, and NGOs and other professionals involved in the preparation of the RAPs and IPDPs. This workshop would be designed as an intensive exercise lasting 6 days, and having as a concrete task the production of a preliminary *Manual of Cooperation to build ongoing Partnerships* to be used as a guide for the social capital intervention strategy. While the notion of engaging workshop participants in the preparation of specific outputs has been widely used, the production of a manual of this type in the context of social capital interventions is relatively new.

The startup workshop activities would include: (i) learning about "the other" to increase trust and confidence, which would be accomplished through informal individual exchanges, joint field excursions to the affected settlements, guided roundtables to identify key issues on how to work together to improve the area's quality of life through community development and the opening of new economic opportunities, and writing recommendations on "best" ways to establish solid partnerships among key stakeholders to be included in the Manual; (ii) an exercise on collaboration, to be developed by organizing participants into mixed (and representative) groups to review and comment on the existing RAPs and IPDPs, in order to produce a set of recommendations on their planning, content, and implementation, which would also be included in the Manual; and (iii) an exercise on clarification of entitlements and responsibilities, to be carried out by all participants in order to review suggested mechanisms for the social capital intervention and strategies for building solid partnerships. The implementation plan would also be finalized during this exercise. Immediately after the workshop, a draft version of the Manual would be put together. Several focused group sessions would be organized, particularly for the weakest members of the affected communities, to ensure that their needs and interests are reflected in both the Manual and the implementation plan.

Mechanisms

Most importantly, the startup workshop and focused group sessions would help sketch out and set in motion a *Sustainable Community Development Forum*, envisaged as the central coordination / implementation (and by extension, monitoring) mechanism for the social capital component of the proposed study. This forum would be comprised of mixed teams of representative NGOs, CBOs, CIL professionals, local and state authorities, and other stakeholders, and assisted by a local consultant (acting as a facilitator and participant observer). It would meet at least once a month – or when an urgent matter dictates it – and should provide an enabling environment where trust and collaboration may grow. The conditions for creating such enabling environment would have been sketched out during the startup workshop and focused group sessions, and incorporated into the Manual for Cooperation. The forum would also have an itinerant character and an open agenda, meeting at different locations across the various settlements included in the implementation area. The meeting would be open to the public, which would be allowed to express its concerns at a specific time to avoid distractions and interminable discussions. Accordingly, the specific tasks of the Forum would be: (i) to help satisfy community felt needs regarding local development issues in a coordinated fashion through the working social network; (ii) to bring together, also with the support of the working

social network, the efforts of any local and regional group or association aimed at community development, such as infrastructure improvement, operation and maintenance of service facilities (community centers, schools, wells, etc.); and (iii) help identify and establish income generating alternatives not only for the PAPs but the community in general. The two latter imply the additional task of (iv) contributing to the creation of an *incubator type* of environment where experiments on community management of infrastructural assets and services, and new self employment alternatives (individually or collectively organized) can survive and prosper.

Any changes suggested or decisions taken by the Forum with respect to initial objectives, planning activities, etc., would be disseminated through the *working social network for sustainable community development*. The network is also expected to help motivate people to commit to future O&M activities required for infrastructure facilities to facilitate the identification and establishment of employment alternatives, and operate as a conduit to obtain feedback on the agreements reached between the stakeholders, and on the ongoing modifications to the Manual itself. This network, whose organization would be promoted through the Forum, would invite the existing community groups and associations, and those which would emerge during the social capital intervention, to come under one roof and act as catalysts of community development efforts. At the end of the social capital intervention, all kinds of local and regional collective efforts would be linked through the network, in close coordination with the Forum, in order to promote the wide range of issues demanding attention from CIL, regional and local authorities, and the mining communities at large.

Expected Outcomes

The roots and branches of the Forum and the working social network should deepen and expand throughout the duration of the proposed pilot implementation study, helping to engender a solid foundation and a fair representation of the target communities that can provide a good departure point for social mitigation interventions. The Manual, on the other hand, could become, once the pilot application ends, a basic document to register and structure in the long run vertical and horizontal partnerships in the implementation area. In general, the pilot intervention would contribute to increase social capital levels in the area, by building up local organizational capacity, bringing people to work together, and facilitating interface between key development actors who currently face invisible barriers erected by years of mistrust and lack of communication. Furthermore, more self-reliant communities would be able to enter into long-lasting collaborative working relationships that could ensure the social and economic sustainability of the efforts to maintain and improve quality of life in the mining areas.

Concretely, the combined existence of the Forum and the network would: (i) facilitate efforts to create cooperatives and other types of associations (for either management of community assets or income generation); (ii) help coordinate the work of NGOs providing business assistance and training for microenterprises and other nonfarm economic alternatives, and those facilitating access to credit; (iii) ensure that the

employment needs of the most vulnerable groups are paid sufficient attention; (iv) help minimize redundancy of new employment alternatives by putting existing and emerging income-generating activities within a comprehensive framework; and (v) ensure that environmental and sustainability issues are incorporated into community development alternatives.

Monitoring Methodology

Methodology

Considering that social capital can be an input and an output to community development, monitoring and evaluation need to be central to implementation activities. Correspondingly, the main methodological objectives of the proposed study would involve (i) measuring the process through which social capital is developed, and (ii) evaluating the impact of the strategies deployed through a pilot social capital intervention. The *monitoring plan* presented below has been established to accomplish the first objective. Two caveats, however, must be acknowledged: first, since this plan is parallel to the implementation plan, adjustments might be necessary as the latter changes to suit community needs better. Second, since the process assessment itself is intended as a learning exercise for all stakeholders, a significant portion of it must allow for self-monitoring on the part of those involved in the process. It must also be noted that monitoring activities would be undertaken on both the implementation and the control sites.

In addition to the startup workshop previously described, two workshops for monitoring and evaluation, lasting two days each, are planned: (i) *the midterm workshop*, to be held after the first year of the pilot implementation, which would not only serve as a mechanism for process review, but also for assessment of activities; and (ii) *the evaluation workshop*, to be held at the end of the second year of pilot implementation, which would help identify lessons learned while providing stakeholders with the opportunity to assess their own role in the process, the social capital intervention itself, and to define future steps for maintaining the partnerships established through the intervention. These workshops, coordinated by the Forum, would bring together participants of the first workshop, along with those involved throughout the pilot implementation, including the members of the Forum themselves, and a representative sample of members of the working social network.

The Monitoring Plan

The monitoring plan in the implementation site encompasses activities which would allow to measure the following indicators: (i) levels of participation and interaction throughout the implementation phase; (ii) stakeholders' evolving priorities, and perception and acceptance of entitlements and responsibilities; and (iii) levels of trust and degree of empathy, which are key factors that may contribute to or hinder the interface between the

different stakeholders. Accordingly, the activities and outcomes of the monitoring plan would be:

1. *Measurement of existing levels of social capital.* To establish the impact of the social capital intervention, these levels must be measured as accurately as possible. Preliminary work would provide basic information, which would be corroborated during the startup workshop, the focused group sessions, interviews with community members, and a survey of a representative sample of households. Additionally, the stakeholder analysis (see item (b) below) would provide other indicators and the necessary information to complete this activity.
2. *Stakeholder analysis.* Preliminary work and social assessments of the sites would provide the basis for this type of analysis, which is essential to understand existing levels of social capital and factors hindering its growth, such as conflict, mistrust and community fragmentation, as well as to grasp the general social dynamics of the area. Preparation of the stakeholder analysis would involve: (i) the registering and development of profiles of existing and new NGOs, CBOs, and other formal and informal groups, as well as relevant government line departments, technical agencies, local government authorities (e.g., Panchayati Raj, etc.), and CIL representatives; (ii) following up those who become involved in the implementation of the social capital intervention by category (e.g., women's group, tribal, for income generation; for access to credit, etc.); and (iii) the assessment of the degree of representativeness of those participating groups and institutions that presumably have a grass root base. The stakeholder analysis would be completed by bringing together existing baseline information and qualitative data gathered through field work and interviews. The Forum and the social network would also provide support for this task.
3. *Measurement of existing levels of trust and degrees of empathy.* The three scheduled workshops would also allow to measure levels of trust and degree of empathy through a questionnaire, which would be administered to those who take part in all of them. Although these instruments would attempt to measure the same variables, they would be designed differently as to avoid the respondent biases that usually arise when the questions become familiar to the interviewees. These questionnaires would be given at the beginning of each workshop, and the information provided would subsequently be compiled and statistically analyzed.
4. *Measurement of levels of participation.* This activity would be executed on three related fronts: (i) a periodic content analysis of the minutes from the Forum's meetings, which would allow to assess levels of participation among its members regarding the setting-up of priorities vis-à-vis the social capital intervention in particular, and community development in general; (ii) a survey

of the agendas (which by design would be open) for these meetings, which would give a qualitative measurement of which issues are given more relevance and by whom; and (iii) analysis of a log of activities to be provided by a representative sample of NGOs, CBOs, and other informal community groups.

5. *Report on monitoring procedures and outcomes.* All the outcomes from the above activities would be put together in a report where a final assessment of the adequacy of development process of social capital would be prepared. Simultaneously, an evaluation of the effectiveness of the monitoring procedures themselves would also be included in the report. This document would be finalized before the evaluation workshop, as it would be used as an instrument to guide discussions among participants.

Evaluation of the Impact of the Social Capital Intervention

Drawing from the monitoring report, the evaluation phase would involve an assessment of the effectiveness of the social capital component, and the extent to which its objectives were achieved. The stakeholders would be incorporated into this stage, which to a great extent constitutes an opportunity to engage them in further dialogue. At the same time, the impact assessment would have to be completed in relation to the selected control site. These various elements provide the impact evaluation with a three-layered developmental structure: (i) an internal evaluation of the intervention by its protagonists; (ii) an external evaluation; and (iii) a comparative evaluation vis-à-vis the control site. This, of course, cannot be considered as a *final* evaluation, since social capital development is always an ongoing process.

The internal evaluation. The internal evaluation would be executed during the final workshop, to be scheduled toward the end of the second year of pilot implementation. The second day of this workshop would be dedicated to evaluate the social capital intervention from a stakeholders' perspective. A questionnaire would be administered, and through group discussions and a plenary session the effectiveness of the intervention would be judged by workshop participants. Moreover, workshop participants would be asked to suggest indicators for further evaluation of the social capital component, which would be used, when feasible, during the external evaluation.

The external evaluation. The external evaluation would encompass field work, and the use of the monitoring report. Considering the objectives of the social capital, the basic criteria for impact evaluation would include: (i) extent of the engagement of representative sections of the target communities, especially the most vulnerable groups; (ii) increases in social capital; (iii) strength of the established partnerships, and (iv) relative success of development efforts promoted through the social capital intervention. These criteria implies the following indicators:

1. *Establishment of the difference (positive or negative) between the initial levels of social capital and the existing levels at the moment of evaluation.* These

levels would be measured through an specific quantitative indicator such as the total number of new associations and local groups that have appeared in the implementation area, along with a qualitative analysis of their stated objectives and reason for their formation in order to ensure that they are, for the most part, an outcome of the social capital intervention. However, mere numerical increases would not provide a measure of the quality of the social capital created. For this, specific attributes of the new formal and informal groups and associations surveyed would need to be recorded and analyzed. The indicators to be used in this case would include: (i) the extent and composition of membership; (ii) the degree of heterogeneity (i.e. gender, ethnic and income variations); and (iii) range of services provided and activities undertaken. Additionally, (iv) the efficiency of these new associations and groups in managing available resources, and (v) the effectiveness in accomplishing their stated objectives would be assessed through interviews of a sample of their members.

2. *Establishment of the degree of enhancement of stakeholders interface.* This would be accomplished by: interviewing members of the Forum during the evaluation workshop; observations in this respect registered by the facilitator of the forum's meetings; and an analysis of the difference between the initial and final levels of trust and empathy gathered during the monitoring phase. Simultaneously, this activity would allow to measure the effectiveness of the forum in solving internal conflicts and dealing with community members.
3. *Levels of community development awareness and commitment to its sustainability.* This indicator would be measured by administering a survey among a representative sample of members of the working social network.
4. *Levels of success of community development efforts.* These levels would be measured through the identification of: (i) the number of facilities and/or social services under community management or control; (ii) the number of facilities and/or social services under the management of community and regional and local government partnerships; (iii) total number of people involved in the above activities; (iv) amount of funds channeled through local and regional groups engaged in cooperatives for income generation, to facilitate access to credit, or to manage and maintain community physical assets; and (v) a survey of a representative sample of PAPs who may have started their employment rehabilitation efforts, to register and analyze their new sources of income, the stability and regularity of that income, knowledge of local and regional marketing opportunities, and income levels.

To develop *the comparative evaluation*, a control site would be selected for monitoring during the study's time frame. The main objective of this monitoring exercise is to develop baseline and comparative information to assess the full impact of the social intervention, while controlling for variables (of an economic, political, organizational or

social nature) that may have affected its outcome. It is expected that the levels of social capital would increase in the implementation site, while in the control site it would stay at the initial levels or decrease as mistrust and conflict grow. Accordingly, *the monitoring plan for the control site* would include: a stakeholder analysis, and three measurements – *via* household surveys, and interviews with NGO representatives, regional and local authorities, and CIL and MCL staff – of (i) the levels of social capital; (ii) levels of trust and empathy and the perception of responsibilities and entitlements; and (iii) the stakeholders’ willingness to interact with each other. To ensure that the information gathered is compatible with the one collected for the implementation site, monitoring activities at the control site would be carried out using similar research instruments (i.e., compatible questionnaire design and content, similar set of basic questions for the interviews, etc.). The surveys needed to gather the required information would be administered to a representative sample of the population living in the villages included in the established area of influence of the mine.

Social intervention evaluation and research document. A social intervention evaluation and research document would be produced, incorporating the results and cross referencing cross tabulating information from the three evaluation mechanisms described above as necessary. This document would be presented to the members of the Forum, and then disseminated through the working social network in a more accessible language in order to obtain community feedback.

SOCIAL CAPITAL INITIATIVE - PROJECT 4

The Depletion and Restoration of Social Capital in War-Torn Societies: Rwanda and Cambodia

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Overall Project Description

The stock of social capital is often depleted in the aftermath of violent conflict resulting from internal civil strife. While the underlying causes of conflict are varied, ranging from such structural factors as population density and the competition for scarce resources, to the level and distribution of wealth and opportunity, and the structure and ethnic makeup of societies, its universal outcome is the weakening of the social fabric. This weakening of social capital manifests itself in diminished levels of trust, the thinning of the density of civic associations and networks, and the undermining of traditional processes of exchange, cooperation, and participation. The depletion of social capital resulting from prolonged civil strife in turn impacts negatively on the human condition, both materially (economically) and spiritually (social-psychologically). A clear example of such relationships between depleted social capital and diminished quality of life can be found in Rwanda and Cambodia.

Of the many war-torn countries which could have been chosen for this study, Rwanda and Cambodia represent the worst cases of direct assaults on humanity through genocide, leaving a legacy of death and social upheaval. In Rwanda, communities were torn apart as people of different tribal affiliations who once made a community became bitter enemies. In Cambodia, political ideology led to an assault on the very traditions and institutions of the culture and society. In both countries, acts of mass genocide are documented along with the destruction of institutions, customs, and trust. Today, in both societies, social capital is gradually being restored under improving conditions of reduced violence and oppression.

In war-torn societies, efforts to foster communal relations, including trade, information exchanges, and dialogue can play an important role in defusing communal tensions, breaking down long-standing social barriers, and fostering tolerance and understanding. The building of social networks of trust not only contributes to social and economic reconstruction, but can also help prevent recurring outbreaks of violent conflict in the future. The general aim of this study is to better understand and measure: (a) the prior existence and depletion of the stock of social capital; and (b) the process of restoration and accumulation of social capital in these war-torn societies.

Main Objectives

- (1) examine the processes of depletion and restoration (accumulation, stock and flow) of social capital during war and its aftermath;
- (2) develop indicators and measures of social capital in war-torn societies; and,
- (3) identify ways in which donors can, in the first instance, prevent violent conflict through accumulated social capital, and in the second instance where violent conflict has erupted, facilitate the restoration of social capital.

Description of Social Capital Component

Key Activities

- (1) Review of the literature on social capital (historically and present) in Rwanda and Cambodia;
- (2) Develop and apply a methodology to measure social capital (accumulation and depletion, stock and flow) and its impact on social and economic development in select communities; and
- (3) Identify viable ways to build social capital and support conditions of peace as a basis for sustainable development.

The research would develop indicators which could be utilized to assess the social capital content and impact within ongoing and future project interventions. Once the initial research is completed, the results should indicate what kinds of social capital are being relied upon and can be facilitated or built to help meet socioeconomic development objectives. For example, some traditional credit associations may just be starting, others may be more developed, future projects could support such initiatives in different communities. It would be important to bridge the social capital associated with financial intermediation and microenterprise project planning.

At the national level, it would be important to review the peace building initiatives the government is undertaking, if those initiatives are working, and why or why not. This program of research could help develop a set of peace and conflict measures for monitoring and analyzing key political, social and economic indicators impacting on societal social capital stocks and flows. Such indicators might include: military expenditures, power-sharing formulae, human rights conditions, ethnic strife, population movements, social and economic disparities, the functioning and access to basic services, freedom and diversity of the press, and external influences such as support to extremist groups.

Discussion of Methodology

Key Measures and Indicators of Social Capital

The key measures and indicators of social capital are: (a) the density and nature of organizations (particularly horizontal associations) and networks as measures of *social cohesion*; and (b) the propensity for cooperation and exchange (material, labor, ritualistic, and informational) as a measure of *trust*. Social cohesion and trust would serve as the independent variables under investigation, while social and economic indicators, e.g., levels of violence, rent seeking behavior, market functioning, services, inputs, changes in personal asset holdings (cattle, land, durables) would serve as the dependent variables.

On the relationship between social capital and economic activity, it might be useful to measure the changing transaction costs and economies of scale (as proxies for productivity) given relative changes in levels of trust, organizational capacity and density, and the propensity for labor exchange at the village level.

At the household level of well-being, an entitlements analysis may illuminate the mechanisms through which conflict influences social capital and the human condition. One would assess how levels of conflict impact changes in (a) market entitlements (income secured by direct production or wage labor) enabling consumption; (b) public entitlements (services such as education, health, food rations normally associated with government responsibilities); and (c) civic entitlements (assistance provided by non-governmental organizations to supplement market and public entitlements).

Hypotheses

The main research effort would focus on the two-way hypotheses of how social capital was affected by conflict and how the levels and nature of social capital affected conflict. A *three-pronged strategy* would be pursued to this end: (a) a literature review, (b) analysis of existing quantitative data, where available, and (c) qualitative interviews using focal groups and key informants. Throughout the research, whether the literature review or the community discussions, special efforts would be made to discover the role of women in rebuilding social capital. Women, generally, tend to be reconciliatory agents and may be playing a larger role than is obvious. The literature may also indicate what kinds of social capital were depleted by the war.

Literature Review

The literature review would give the background of the societies before the war. The history of social capital, for example civic organizations and sociocultural traditions in a country appears to be indicative of the past state and future potential a country has to rebuild it. Each of the countries in this study has a long history of traditions which strengthen social capital and are being used to rebuild the country.

In Cambodia, Buddhist monks are playing their traditional role as peace makers by serving as community level dispute mediators over land and water rights; in Rwanda there obviously were strong ethnic identities, and strong church affiliations which seem to be starting to play a role in reconciliation. The catholic church has utilized the traditional Rwandan ceremonies for mourning, called Kwirabura (“to make oneself black”), and Kwera (“becoming white”) as culturally appropriate for Rwandans who were traumatized and displaced during the genocide. The Anglican church has organized prayer, dance, drama and choir groups by age and sex groupings, i.e., children, young women, young men and adults, to talk, act and sing songs of healing and reconciliation. Further ethnographic research in the literature would broaden our understanding of who the traditional peacemakers, institutions and processes for social capital accumulation, and targets of rebuilding social capital may be in different societies.

Quantitative Data

Quantitative data on the level of economic activity prior to conflict is likely to be nonexistent as many records were destroyed during the war even where such data had been gathered at the household or community level. However, where quantitative data on economic productivity are available from earlier preconflict, household and community social and agro-economic surveys, they would be utilized to examine effects of social capital depletion on economic activity. Where such data are not available, new data may be collected among older members of returning communities (key informants) to reconstruct the status and nature of the preconflict household economy and to establish postconflict levels and types of economic organization and activities in response to changing levels/types of social capital restoration after the war.

To establish a preconflict social capital baseline, *survey or retroactive data collection* at the community level would be identified for (a) war-affected communities which have been significantly reconstituted by returning community members and (b) control communities which have remained intact throughout the war in each country.

Data would be collected in five communities (three war-affected and two control) in each country. *Sampling* for retroactive data collection of the communities, as well as households and key informants within these communities, would be made along the criteria of degree/level of community reconstitution, ethnic mix, mode of subsistence, and income level. About 10-15 households would be surveyed in each community to establish levels and types of economic activity. Key informants would be interviewed in each community to both reconstruct levels and nature of social capital prior to the conflict and after the conflict.

In Cambodia, it should be relatively easy to identify communities which have been reconstituted as data shows from a recent study by Elizabeth Uphoff Kato on the experience of returning refugees after the war that most choose to return to their home communities where they have access to land, remnants of social networks, and religious cum familial burial sites. Control communities are readily available, particularly in the mountainous regions of the Northeast which were relatively isolated and least affected by the war.

In Rwanda, communities have been reconstituted by direction, particularly for Hutu, whereby the returning refugees from Zaire and Tanzania were guided back to their home communes for registration and reoccupation of their original households. On the other hand, while many Tutsi who survived the war are still living in mixed communities of prewar origin, there is increasing movement out of these communities for fear of being killed as witnesses to the genocide. Those Tutsi living near the border with Uganda tended to be least affected by the war, particularly in the Northeast as they were cattle herders moving relatively at ease back and forth across the border with Uganda. However, as it may be more difficult to locate intact, unaffected communities as controls in Rwanda, the research would likely choose control communities similar in ethnic mix and mode of subsistence in neighboring countries such as Uganda, Tanzania, Burundi, and or Zaire.

Data Analysis

The data analysis would be primarily qualitative, seeking to establish changing levels and nature of social capital and attendant patterns of livelihood and ability to cope with risk (coping strategies). Although the research would try to establish levels of economic activity before and after the conflict, the analysis would not, as a priority, endeavor to draw quantitative, causal links between social capital and productivity per se prior and after conflict.

Community mapping exercise. Community mapping of formal and informal organizations — associations, roles and processes would be undertaken in each of three war-affected and two control communities for each country in order to ascertain the basic elements of social capital currently in place. The framework for collecting and organizing these data would be along the basic structural lines of social, cultural, economic, political, and religious institutions. This mapping of organizational life would include such things as economic patterns of exchange (labor), rituals of life transition, traditional means of dispute resolution, and other such instrumentalities of *social cohesion*. The study of *trust* is an essential construction in any definition of social capital. Measuring levels of trust is admittedly difficult.

The degree to which persons engage in contractual relations (formal and informal) can be considered a proxy for their level of trust within civic society. The exchange of services, labor, information, and ritualistic association should serve as an empirical proxy for trust. The traditional ethnographic methods of focal group and key informant interviews and participant observation methods would be utilized by field researchers to collect this data. As women, particularly single female heads of household are among the

most vulnerable war-affected populations, they would be targeted in the sampling of key informants and focal groups.

Relations Between the Civil Society and the State

A special examination of the *relationship of the civil society to the state* political, judicial, and security institutions would be necessary to assess the stock or accumulation and depletion of civic social capital vis-à-vis the State. As this latter form of trust and transparency are critical in rebuilding war-torn societies, it would be used as an indicator of the restoration of social capital in a broader, societal sense. If the rule of law and a well functioning judicial system are key institutional elements underpinning contractual relationships and associational behavior, then it would be useful to get some measure of at least the perception of the functioning of these institutions. This would be done through survey and key informants interviews in the select communities.

Without adequate opportunities to participate in national civil society, the political process and labor markets, social capital can be eroded as manifested in the reduction in social cohesion, weakening of traditional authority structures, loss of cultural identity, and the uprooting and marginalization of certain communities. Special attention would be paid toward the transparency of government institutions, both perceived and actual. Particular concern in some of the war torn countries is the fact that the governments were involved the organs of the war, the inevitable consequence was the alienation of some communities from their government. Reestablishing this trust would clearly be important. The study would look at special efforts by the government to build their relationship with the people. Support could be given to these efforts if they are viable.

SOCIAL CAPITAL INITIATIVE - PROJECT 5

Induced Social Capital Formation in the Andes

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Questions to be Addressed

The proposed research will focus on a single theme:⁹ How can external assistance strengthen the capacity of second level *campesino* associations in the indigenous areas of the Andean countries? Putting it another way: How can the supply of social capital be augmented (rather than diminished) by development actors that channel resources and services for rural livelihood enhancement for the benefit of Andean peasantry, a specially deprived population group?

This research breaks new ground in that it expands the focus from community based primary groups (which have received the most scholarly attention) to multicomunal membership support organizations (MSOs). It also advances the conceptual and operational understanding of social capital by identifying organizational capacity as an important structural form of social capital, embedded in MSOs.

The Methodological Annex deals with themes (measurement/evaluation, contextual factors, and the Hirschman/spillover) which assume subsidiary roles in answering the main question.

Why the Questions Addressed Are Important

While the early work on social capital explains the accumulation (or absence) of associative social networks by long-term historical and cultural processes, there is some recent evidence that at least some forms of social capital can be influenced by external policies and programs in the medium run (“external” in this context means outside of the social groups concerned.) In the Andes, it is clear that external actors, such as churches, NGOs, labor unions and in some cases governments have had a significant influence on the formation and consolidation of this type of social capital within a period of 10-15 years.

⁹ The final research design has been reduced in scope compared to the Methodological Annex, preserved in pp. 37-52.

Further interventions and investments, especially within rural development programs, can affect its accumulation and strength in positive or negative ways.

Multicommunal associations and federations have arisen among Andean indigenous groups in recent years and have assumed increasing importance in two dimensions: (a) assuming the role of intermediaries in the management of local resources and in channeling of services by conveying economies of scale, professionalization and by superior access to information, and communication; (b) assuming roles of indigenous representation and “voice” at various administrative levels, especially as claimants for ethnic identity, indigenous rights and political participation. However, the potentially most important developmental effects are in organized campesino participation in regional governments (municipal and provincial councils) in connection with decentralization policies.

How the Study Will Respond to the Questions

The study design is based on the examination of “cases” where strong, consolidated and effective MSOs have been built. The research will trace the history of these organizations and their relationships with other actors and thus — through comparative analysis — be able to identify key factors, key forms of intervention and strategies that have helped foster “capacity accumulation”. It will be important to draw lessons from cases where these organizations have been able to develop effective relationships with state and/or market actors.

Case study techniques will include the use of key informant interviews, timelines and critical events analysis; analysis of organizational dynamics through internal records and focus group discussions. Case studies will be supplemented by a survey of the local capacity building practices in a number of promotional agencies, including NGOs. This will focus on recovering the lessons that these support agents have learnt in the course of their own experience, and their current approaches to capacity building. Special emphasis would be placed on promotional and support practices that can be widely replicated beyond the pilot phase, with shorter time frames and lower transaction costs.

A research “case” will encompass two dimensions: (a) a relatively homogenous micro area, generally clustered around a small urban center. Such areas will be selected where a number of interesting second level campesino associations have arisen, and where there has been significant rural development experience; (b) within the micro area a pair of specific MSOs will be chosen, one *a priori* qualified as relatively effective and with high capacity and a comparator organization, qualified as relatively less effective and of low capacity. To the extent possible, both organizations will have been subject to similar contextual factors and will have had similar resource endowments. The main variable is the nature of outside assistance. To plan realistically, we propose that the research encompass three microregions (one each in Ecuador, Bolivia, and Peru) and thus a total of six in-depth organizational studies.

The sequence of research tasks will follow the following phases:

1. Selection of micro regions with the maximum learning potential;
2. Institutional mapping in the region, with the evolutionary history of peasant organizations and of other developmental actors. Stakeholder consultations;
3. Prioritize MSOs and selection of organizations for in-depth study;
4. Gathering of historical and current information on the chosen cases;
5. Establishment of specific capacity and performance indicators;
6. Disgregation of external agency inputs and strategies;
7. Participatory application of field research instruments (semistructured interviews, focus groups, questionnaires, etc.);
8. Comparative analysis — baseline vs. actual status;
9. High performance organizations vs. low performance ones; and,
10. Formulation of lessons, conclusions.

The basis for assessing organizational capacity will be the list of indicators discussed in the Methodological Annex.

With respect to the agency strategies, the quality, mix, consistency and phasing of investments are believed to be key variables in social capital building. Thus, a key factor in determining the impact of these investments may be the degree to which external agencies create synergy between the hardware components of intervention (material and capital investments) and the software components (training and socioorganizational support). Direct and indirect forms of development assistance will be studied.

Deliverable Outputs

The study will:

1. lead to a better conceptual understanding of what constitutes organizational capacity and of the processes that lead to an accumulation of this type of social capital in MSO organization in the Andes;
2. indicate practical ways in which development agencies can have a positive effect on the creation and sustainability of social capital in second level rural indigenous membership organizations; and,
3. identify strategies, mixes and sequences of investments, human and institutional strengthening activities that are likely to be capacity enhancing in Andean rural development.

Methodological Annex

Overall Design

This study will be implemented in three Andean countries (Ecuador, Peru and Bolivia). We propose focusing the field investigation on second tier campesino federations as institutional forms of social capital of growing importance and or operational concern to donors. We designate such federations as Membership Support Organizations (MSOs). In Spanish, the customary term is *Organizaciones de segundo grado* (OSGs).

The proposal encompasses two themes:

1. Measurement and Evaluation of Organizational Capacity (OC) as a form of social capital (SC) in MSOs.
2. Disaggregating and identifying the factors that are associated with the accumulation of organizational capacity in MSOs. The second theme, in turn, has three subthemes:
 - a) Identification of best practices of external actors for investing in OC of MSOs.
 - b) Identification of contextual factors which influence the viability, spread and sustainability of MSOs.
 - c) Appraising the spillover effect of prior associative experience which may have originated in organizational forms distinct from the current ones (Hirschman Effect).

Conceptual Framework

The conceptual framework and parts of the methodology are based on the work of the Cornell University Rural Development Program, the research of Development Alternatives, Inc. and the Workshop in Political Theory and Analysis at Indiana University.¹⁰

¹⁰ Development Alternatives, Inc. *Private Voluntary Organizations and Institutional Development*, Washington, DC: DAI 1985. Milton Esman and Norman Uphoff, *Local Organizations: Intermediaries in Rural Development*. Ithaca, NY: Cornell Univ., Press 1984. Norman Uphoff *Local Organizational Capacity: What is it? How to Measure it?*. Paper prepared for the World Bank Workshop on Indicators to Measure Participation, Demand-Oriented and Local Organizational Capacity for Community-Driven Projects. Washington, DC January 1997. Elinor Ostrom, *Crafting Irrigation Institutions: Social Capital and Development*, Burlington, Vt.: Associates in Rural Development, 1990.

The analytical model, in its simplest form, posits a relationship between a set of independent variables – Explanatory Factors – and a set of dependent variables, Institutional Effectiveness.



In this framework, Institutional Effectiveness has two dimensions: organizational capacity and development outcomes.

Organizational capacity. Organizational capacity (OC), in turn, is disaggregated into two components, “internal capacity,” which includes such traits as resource management, leadership and conflict resolution; and “external capacity” which involves such traits as coalition building representation and resource mobilization. Organizational capacity is conceived as a stock whose value changes over time.

Development outcomes. Development outcomes (DO) refers to the output side of institutional effectiveness and is measured in terms of service benefits, their distribution and sustainability.

The explanatory variables are made up of three sets: one set is defined as strategy variables of external support agents. These are factors over which such agents have a measure of control. The second set encompasses environmental factors over which the assisting agents have little or no control; and, the third involves the preintervention accumulation of associative capacity attributable to prior experience. It is further posited that Development Outcomes are influenced directly by some contextual factors (such as weather or price changes) that are not included in the factors that impact on capacity.

Research Design and Case Selection

The research design will consist of in-depth work on three to four MSO cases per country. Sectoral coverage will focus on Common Property Resource Management and Commodity Marketing (mainly for the domestic urban market). Case selection will be based on the following criteria: (i) at least 6 years of operation; (ii) substantial inputs from external sources; (iii) *a priori* evidence that the MSO has been relatively successful in its main area of service and that it has good reciprocal relations with its constituent base organizations; and (iv) availability of historic records.

A twin control case will be selected with similar sectoral and contextual characteristics, but with a relatively unsuccessful performance level and problematic relation with its bases. This design will permit three types of comparisons: (i) between the actual level and composition of OC and the baseline of the same case; (ii) between the

primary case and its comparator; and (iii) between cases in three different country environments.

On the basis of preliminary work in Ecuador, we are confident that the database for disaggregating and measuring organizational capacity in this type of association is feasible and that the historical records can help to illuminate the dynamics of the relationship between investment strategies and OC.



It appears that demonstrating these relationships will be clearest in the cases dealing with single-function organizations, such as water-users' associations. In these systems, there is a very tight coupling between assistance, behavioral norms and outcomes.

Propositions and Questions

General Propositions

- 1) Higher level (multi or supracommunal) membership support organizations (MSOs) have evolved among Andean indigenous people to constitute a significant aspect of social capital as a complement of community-based indigenous organizations (CBOs).
- 2) The most important attribute of this type of social capital, embedded in MSOs, is organizational capacity. This is a structural, rather than cognitive, form of social capital.¹¹
- 3) While the emergence of certain forms of MSOs and their networks of CBOs is a relatively recent phenomenon, their origins go back to historic internal and external processes. External actors have had a significant influence on the formation and consolidation of this type of social capital and further interventions and investments can affect its accumulation in a positive or negative way.

¹¹ Organizational capacity is a structural form of social capital being manifested through *roles* of various sorts. Roles become norms and thus pattern expectations and performance in ways that make more productive and predictable any activity which requires more than individual effort. *Cognitive* forms of social capital, on the other hand, are accumulated and expressed in attitudes, values and beliefs. They dispose people to cooperate. Uphoff 1997, *op. cit.*

- 4) Effective social capital is a mixture of formal organizations and informal networks linking those organizations and their members to state, market and civil society actors.

Research Questions and Specific Propositions

Measurement of OC. The goal is to develop and field test variables and indicators of Institutional Effectiveness (OC and DO). The main question is how the status of social capital can be measured/evaluated (over time) in such a way as to guide investment and managerial decisions, and allow use in regular project monitoring and self-evaluating processes in a cost effective way?¹²

- It is expected that intensive case studies will reveal the main dimensions in which organizational capacity is manifested and will permit the construction of benchmarks for ascertaining changes over time.
- It is also expected that the initially numerous set of possible indicators can eventually be reduced/distilled to a few more manageable key measures that are both significant and practicable. We will also look for likely joint effects among the variables.

Best practices of support agents. The goal is to assist in the process of external enhancement of the supply of social capital. What strategies by outside actors are able to foster the emergence and strengthening of social capital in MSOs?

- The quality, mix, consistency and phasing of inputs are believed to be key variables in social capital building. Thus, a key factor in determining the impact of these investments may be the degree to which external agencies create synergy between the hardware components of intervention (material and capital investments) and the software components (training and socioorganizational support).¹³
- The sequence of successful interventions seems to favor building on small wins in situations of strong common interest.¹⁴ However, the desirable sequence

¹² A further objective is to perform the groundwork for future more quantitative research. By having identified process and outcome variables and having dealt with some of the measurement problems, this work can facilitate application by panel data, lags, multivariate analysis and other techniques.

¹³ “By moving back and forth between designing new construction and crafting institutional arrangements, a high degree of complementarity between physical capital in terms of technological investments and social capital in terms of effective rule-ordered working relationships is more likely to develop.” Wai Fung Lam “Improving the Performance of Small-Scale Irrigation Systems: The Effects of Technological Investments and Governance Structure on Irrigation Performance in Nepal.” *World Development*, 24/8 pp. 1301-15. 1996.

¹⁴ Karl Weick, “Small Wins” in *The Social Psychology of Organizations*, NY: Random House, 1979.

advocated by Uphoff: efficiency/equity/empowerment¹⁵ in which economic incentives, are the lead factor does not always appear to hold – often social and cultural cooperation have provided the initial impetus for social capital formation.

Contextual factors. What significant contextual/environmental factors condition the emergence and accumulation of Social Capital in MSOs? Asking this allows us to consider what elements of national policy and of the local context need to be taken into account in crafting investment strategies?

- It is expected that investments are more likely to be successful in contexts where the legal and financial systems are favorable to MSO type civil associations and also, where the political system is relatively open and the upper tiers of peasant unions are relatively independent of political parties.
- At the micro (community) scale, effective social capital is likely to emerge in areas where rural differentiation and conflict (e.g., over land) are less acute, where the local government has institutionalized mechanisms through which it can engage in consultation with local indigenous groups, where product and input markets are relatively open, and where there exist intermediary organizations and actors (such as NGOs or the Church) with whom indigenous peoples can build alliances.

Spillover/mutation effect. What role do previous organizational experiences (positive and negative) play in the accumulation of OC in MSOs? How can current interventions take advantage and build upon such “sunk costs”?

What lasting and spillover effects can be expected from successful OC investments beyond the duration of “projects”?

- Previous investments in organizational capacity building are likely to have had a positive influence on subsequent organizational forms, especially in leadership quality and member experiences with associative action.¹⁶ However, some investments in failed organizational forms (especially collective property regimes as in Peru of the ‘70s) can discourage subsequent organizational efforts.

¹⁵ Norman Uphoff, *Local Organizational Capacity: What is it? How to measure it?* op. cit., 1997.

¹⁶ Albert Hirschman “The Principle of Conservation and Mutation of Social Energy,” in *Getting Ahead Collectively*. NY: Pergamon Press, 1984. Morrow and Hull report a case from Peru, where a USAID-sponsored forestry cooperative failed largely because of the lack of prior organizational experience, even in fields unrelated to natural resource management. “Donor-Initiated Common Pool Resource Institutions: The Case of the Yanasha Forestry Cooperative. *World Development*, 24/10, 1641-57, 1996.

- Investments in organizational capacity may have a significant spillover effect, perhaps even in the evolution from traditional to modern forms of organization.

Organizational Capacity Variables/Indicators

External capacity variables are those which connect the MSO to state, market and civil society actors. Internal capacity variables are those that enable the MSO to provide services to its constituent CBOs and families.

External Capacity Variables

Demand analysis and articulation.

- Ability to analyze policies and issues that affect the organization and its members
- Demand articulation and prioritization (from the bases and in-house)

Representation and claim making.

- Effective representation of member interests
- Claim making and ability to negotiate with authorities (municipal, regional)

Linkages and negotiations.

- Ability to foster horizontal linkages with other organizations (alliance and support building; making common cause with other OSGs)
- Ability to foster vertical linkages with higher level organizations and interest groups
- Ability to negotiate with external support institutions

Internal Capacity Variables

Participation and trust.

- Degree of member participation (changes in active membership, attendance at meetings, elections, participation in decision making)
- Maintaining member loyalty, trust, support, and contributions (a sort of social contract with member (CBOs)

Leadership.

- Leadership pool
- Accountability of leadership (transparency of the decision making process)
- Technical and managerial competence of leadership (“knowledge skills” of group leaders, members)

Management and finances.

- Internal management capacity (sharing of responsibilities, ability to supervise staff and contractors)
- Effectiveness of financial management including transparency
- Communication and interpersonal relations

Resource mobilization.

- Resource mobilization from members and relative financial autonomy, for example “mingas” (communal labor contributions), or cost sharing
- Attracting and capturing donor resources, negotiating acceptable conditions and contributions

Problem solving and conflict resolution.

- Conflict resolution and problem solving (within the organization and between the organization and bases)
- Degree of strategic planning (ability to visualize long term goals, maintain autonomy and resist cooptation — “*reflexion critica*” in Spanish)

Application

Under these general categories, specific indicators will be developed relevant to the type of organizations chosen for intensive study. While some indicators can be quantified, most will have to be recorded in such a way that they can be scored relative to a previous position or base line.¹⁷

Information Sources

1. Semi-structured interview guides with relatively open-ended questions
2. Scorable indicators applied in focus groups (Uphoff/Cornell method). Example:

¹⁷ The variables and categories of indicators were selected on the basis of considerable literature and experience. In the early '80s Local Institutional Capacity indicators were developed and tested by Esman and Uphoff, 1984, *op. cit.* and by Development Alternatives, Inc., 1985, *op. cit.*. More recently, capacity indicators were used to measure OC in both service NGOs and MSOs by Thomas Carroll. *Intermediary NGOs*, West Hartford, Kumanian Press, 1992, by Uphoff 1997, *op. cit.* by the Aga Khan Rural Support Programme — World Bank, *Second Evaluation of the AKRSP*, 1996 and by the Inter-American Foundation, (Marion Ritchie Vance, “Social Capital, Sustainability and Working Democracy”, *Grassroots Development*, 20/1, 1996, pp. 3-9. DAI had 3 variables and 34 indicators, Uphoff had 4 variables with 66 indicators and Carroll employed 6 variables with 38 indicators. The most elaborate was the AKRSP method which tested 220 variables grouped into 5 categories, in arriving at an “Institutional Maturity Index”. For the IAF, organizational capability was only one of six dimensions of “results”, as the consequences of the IAF’s grants, using 6 variables and 22 indicators.

- There is only one person who can assume the leadership of our organization
- There are 2-3 persons capable of assuming leadership positions
- There is a large number of members capable of assuming leadership positions

Responses will be assigned a numerical value

1. Critical events analysis (can be applied in groups or individually — Montgomery/Harvard method). Example:

List as many specific instances (events) which you can recall in which your organization was successful in resolving internal conflicts (or has successfully negotiated with municipal authorities to solve problems important to your members). List also as many instances you can recall in which your organization failed to resolve conflicts in a satisfactory way (or failed to negotiate the solution of important problems). List as many events as you can recall and briefly explain each.

Responses to these questions will be classified, coded and analyzed.

2. The historic evolution and baselines will be analyzed with the help of timelines designed by focus groups.

It may be necessary to assign differential weight to some of the indicators, based on the relative importance of factors. In general, participatory techniques will be used. Use will also be made of the information bases and methodologies applied by national NGOs associated with the Inter-American Foundation in each of the three countries, and by the current research on social capital by staff members of the University of Iowa under a USAID consortium.

Some of the indicators have a built-in rating system. Other indicators will be scored on either a four or five point scale.¹⁸

Individual indicators will serve as inputs into the aggregated score of variables. Based on preliminary results of our first pilot case in the Cayambe region of Ecuador, after six years of assistance, internal capacity has reached a relatively high level, especially for Participation and Management but external capacity lagged behind.

¹⁸ Uphoff (1977 *op. cit.*) used the following scale:

0	=	nil or undesirable
1	=	low, some progress, much room for improvement
2	=	medium/good, substantive progress
3	=	excellent, near top of potential, little room for improvement

Development Outcome Variables

General Categories

- Resource Access
- Livelihood Enhancement
- Benefit Distribution/Spread
- Sustainability

Specific Sectoral Categories

(Illustrated by a case of WUA and another in marketing)

Outcomes of Water Users' Associations	Outcomes of Commodity Marketing Associations
<ul style="list-style-type: none"> • Construction of tertiary structures • Equity between distribution to head-enders and tail-enders • Maintenance of the system and cost recovery • Control of free riding rent seeking and corruption (effective sanctions for violators) • Relative autonomy and independence from external support • Productivity increases due to regularized irrigation 	<ul style="list-style-type: none"> • Value added due to: <ul style="list-style-type: none"> - bulking, storage, transport - processing • Finding market niches, special demand • Supply of credit for inputs and for advances prior to sales • Market-induced technology improvements • Relative disengagement from external support

Sources: While statistically valid information on changes in household income are seldom available, data on a variety of performance indicators (usually intermediate outcomes) exist in project documents, feasibility studies, evaluations and monitoring reports of assistance agencies. Baselines or initial positions will be reconstructed from these records. This information is often reported by project, and if an organization has several projects it will have to be aggregated. The study team will spot check this material and obtain cross checks via interviews.

Disaggregation of Investments and Promotional Strategies by External Support Agencies

Goals

- To disaggregate external assistance and the mix of inputs
- To look at phasing and timing of investments and interventions

- To determine the synergy between “hardware” and “software”, and their link to social capital

Components

- *Hardware:* Material Capital
 - a) infrastructure
 - b) equipment
 - c) buildings

Financial Capital

 - a) grants
 - b) credit
- *Software:* Technological Inputs
 - a) formal training (short- and long-term)
 - b) advisory services
 - c) demonstrations

Socioorganizational and Managerial

 - a) formal training (short- and long-term)
 - b) advisory services
 - c) demonstrations

Types of Assistance

Grants/gifts (degree of cost sharing)

Loans:

- “seed money”/capitalization
- assistance that came as “projects” or part of “programs” (duration, amount)

Data Sources

“Hardware” and “software” inputs will be ascertained through semistructured interviews with both MSO and NGO representatives, as well as through NGO project plans and evaluations. The quality and type of software inputs will be available through interviews, though the exact quantity and timing of such inputs may be more difficult to obtain. Simple field visits (which occur almost daily in the case of IEDECA — an Ecuadorian MSO working in the Cayambe area) often present opportunities for informal training and education. Such events, though important, are not recorded in any formal manner.

The quality and effectiveness of these inputs will be evaluated through the use of semistructured interviews with representatives from NGOs, MSOs and base groups, as well as focus group exercises (described above). Where available, evaluation of inputs can

be supplemented by external reviews or reports by individual researchers, NGOs or state agencies working in the area.

Contextual Factors

There is little systematic literature on the influence of contextual factors on peasant organizations. Empirical evidence points to macro factors such as legal, financial and tax policies that are generally unfavorable and to the presence or absence of national support programs for peasant based rural development. The degree of decentralization, especially at the municipal level is also important. Previous studies have also emphasized the degree of political cooptation and corruption of campesino leaders by political parties as crucial destabilizing factor.¹⁹

At the microlevel the local agrarian history is a dominant force, especially the prevalence of peasantry within haciendas versus free communities and their respective struggles over land. Another factor is the level of conflict between local urban elites and campesinos; and yet another is the degree of social conflict among peasant groups arising from land claims, political or religious rivalry. Several researchers have pointed out the crucial importance of sociocultural norms which explain why leaders in some contexts seek personal mobility working through the collective, while in others they seek it apart from groups or even at the expense of groups.²⁰

Environmental context will be ascertained through a review of the relevant literature for each case (including development reports obtained from state agencies and NGOs working in the region), as well as internal documents and reports written by NGOs and OSGs in question. This information will be supplemented by informal and key informant interviews with individual researchers and state and NGO representative familiar with each area. Additionally, focus group exercises (particularly the construction of timelines) will be useful in elucidating contextual factors (such as significant local or regional events) which have influenced the evolution of the organization.

¹⁹ The DAI study identified the following environmental variables: (i) political-bureaucratic systems and norms; (ii) socio-cultural systems and norms; (iii) resource endowments and constraints; (iv) government policy; (v) previous development history of the indigenous organizations and of their constituent communities.

²⁰ Henry Landsberger and Cynthia Hewett "Ten Sources of Weakness and Cleavage in Latin American Peasant Movements" in Stavenhagen, Rodolfo (ed). *Agrarian Problems and Peasant Movements in Latin America*. New York Anchor Books, 1970, pp. 559-583; Paula Sylva Charvet, *La Organizacion Rural en el Ecuador*, Quito CEPP-Abya Yala, 1991.

Tracing the Hirschman Effect

To better understand the so-called “Hirschman Effect,” the study will trace the origin and trajectory of leaders and promoters and their accumulated experience with previous community development programs. Of particular interest in this regard are norms, motivations and participatory skills developed through these experiences.

The study will look for instances in which existing organizations have been influenced by previous organizational experiences not necessarily of the same type.

It will also look into how experiences in traditional organizations (comunidad, cabildo) have proven useful (or not) in the creation of modern organizations (e.g., cooperatives)

Especially relevant will be instances in which the motivation for the original organizing was very strong and the initial positive experience formed the basis for subsequent collective action, for example, land reform, earthquake relief, bilingual education.

Sources of Information

- Oral histories of early participants
- Interviews with leaders and promoters
- Focus groups
- Historical records, including minutes of board meetings

Example. In the South of Ecuador among the Saraguro Indians, the first nonfamily extracommunal organization was a “Saraguro Folklore Troupe”, organized with the help of the Andean Mission. The Troupe performed in the principal cities as well as abroad to huge acclaim. This represented a successful form of social capital, which has had a decisive influence on subsequent formal economic association.

It is necessary to point out that the intensive nature of the proposed case studies will permit the research team to capture dynamic elements of each situation which are only imperfectly reflected in the variables listed in the preceding sections, especially as each organization changes and evolves over time. This is why tracing the organizational history of each case is an important complement to the indicators that are designed to measure capacity at any given time period.

Ecuador Pilot Phase

Some work is already underway in Ecuador on a very modest scale using the personal resources of the two principle researchers, and building on their previous involvement in that country.

Two contrasting microregions have been selected for institutional mapping, as well as historical and network analysis. One is in the Central Highlands, in the Guamote area of Andean Mission, and was subsequently affected by the Integrated Rural Development program of the late 1970s and early 1980s, and by Church-related NGOs. The other region is in the Northern Highlands, in the Cayambe area, a rapidly commercializing zone, but with a turbulent agrarian history which gave rise to the many campesino federations currently active there. In each of these microregions, an MSO has been chosen for pilot studies (see chart on pilot study design).

This pilot effort on an initial set of areas/organizations will permit the testing of the proposed research methodologies and instruments, to make the necessary revisions and adjustments for application in other countries and cases. Making the necessary methodological adjustments will allow us to reduce what will initially will be a very large number of indicators to those that have proven practical and significant (*c.f.* Putnam).

A Note on Comparative Analysis

As stated earlier in this Annex, the research design makes it possible to use three explicit kinds of comparisons as a means to learn about social capital accumulation:

1. Actual vs. “base” level of OC
2. Relatively high performance vs. lower performance MSOs in similar sectors and microenvironments
3. Comparing cases across three countries (macroenvironments)

1. Analysis of the base line will be relatively straightforward in cases where the external agents (NGOs and state entities) had been the main forces in the formation of the MSO through specific recent programs/projects. In such cases the base line for OC accumulation would be zero, although prior experience of key individuals in other contexts will be taken into account.

In older organizations, base lines will be established at the point when the ongoing or recently concluded assistance programs have started, so some level of prior OC accumulation has already taken place.

Formally, this kind of analysis may be represented by the following matrix:

Sectoral OC Accumulation	Other Associative Experience			
	Relatively High		Relatively Low	
Prior Sectoral Experience	+	+	+	-
No Prior Sectoral Experience	-	+	-	-

The most interesting situations will be those that fall in the North East and South West quadrants of the matrix, in which different combination of positive and negative factors are represented.

2. The rationale for the twin cases is, of course, how high and low MSO performance is reflected in the OC and DO indicators and what may account for the difference. We will be particularly interested in how differences in assistance strategies are associated with performance and how desirable investment strategies may work with or around contextual factors that either facilitate or hinder OC accumulation. Formally, this kind of analysis may be represented by the following matrix:

External Assistance Strategies	Microcontext			
	Relatively Favorable		Relatively Unfavorable	
Participatory, Synergetic Devolutionary More Conventional Assistance Strategies	+	+	+	-
	-	+	-	-

Again, the more interesting situations are likely to be the ones with mixed symbols; for example, how high quality strategies might overcome the influence of a rather negative microenvironment.

To illustrate this type of analysis, the Cayambe pilot case in Ecuador vis-à-vis its comparator indicates that the relative success of the IEDECA-assisted MSO can be attributed to (a) a strong integration/synchronization between engineering and social promotion components (cross-training and teamwork), and (b) avoidance of the common error of dual training programs. In the low performance case, community leaders were instructed in organization, administration, accounting or project formulation (usually in the city or abroad) while for community members, only production related short courses are offered, conducted in the countryside. This duality accentuates the separation between intellectual/bureaucratic work and manual/technical labor and reinforces status differentiation.

3. Turning now to the country comparisons, as described in the original proposal, the three study countries display very different macroenvironments. These might be analyzed as (a) the presence or absence of policy obstacles, such as difficulties to obtain legal recognition or registration, unfavorable tax and credit conditions, onerous government supervision, harassment for political affiliation, etc., and (b) the presence or absence of positive support policies and programs, which might offer new opportunities and resources to MSOs.

In the latter domain, one of the most interesting issues is the potential influence of the new Bolivian legislation on the cases in that country. In general, campesino organization in Bolivia has had an older trajectory and more legitimacy than elsewhere in the Andes. But the Ley de Participacion Popular now gives unprecedented recognition to self-governing indigenous organizations and through municipal decentralization expands their opportunities to local power and money.

In contrast to Bolivia, the current macrocontext in Peru can be qualified as quite unfavorable. There, peasant organizations which attained considerable importance during the land reforms of the '70s have declined precipitously because of the collapse of the collective land ownership model and subsequently as a result of the Shining Path (sendero luminoso) guerilla activity, during which the communities were caught between the rebels and the army. A large number of peasant leaders were killed and NGOs working in rural areas were also targeted. But perhaps, the most interesting issue in Peru will be the performance of a rather depoliticized form of peasant organization that is now emerging in the wake of the disintegration of the traditional political parties to which the rural and labor federations were tied. It is possible that this situation, even in the absence of favorable current policies, can have a positive effect on focusing the MSOs work on concrete development tasks.

In Ecuador, the macrosituation appears to be in between the others. In some respects, macro policies have turned unfavorable compared to those of the regimes in the late '70s and early '80s where most of the early organizational capital was formed in connection with the land reform and the integrated rural development programs, heavily supported by the international community. But, in other respects, the current strength of the ethnic federations is unique in Andean region.

One way to visualize the country comparisons is through the interplay of the macro and micro factors.

Microcontext	Macrocontext			
	Relatively Favorable		Relatively Unfavorable	
Favorable	+	+	+	-
Unfavorable	-	+	-	-

In terms of the previous discussion, the NE quadrant may contain a Peruvian case, while the SW quadrant may be an appropriate focus for a Bolivian case.

**Illustration of Study Design
Ecuador Pilot Phase**

MACROSCALE (COUNTRY)	MESOSCALE (REGION)	MICROSCALE (ORGANIZATIONS)
<p><u>Ecuador</u></p> <ul style="list-style-type: none"> • Least intensive agrarian reforms among the three countries • Unsupportive legislation for campesino organizations • Lack of central state institutions for indigenous program • Very recent indigenous entry into municipal and national politics • Emergence of strong ethnic federations and legislative representation • Strong NGO presence in indigenous areas, especially by Church inspired civic activists • Low valuation of indigenous cultural heritage 	<p>Municipio/Canton: <u>Guamote</u></p> <ul style="list-style-type: none"> • Relatively isolated, traditional area • Until 1970s was dominated by haciendas • Weak market linkages • Dense history of community development and previous rural development by state agencies (DRI) and NGOs <p>Municipio/Canton: <u>Cayambe</u></p> <ul style="list-style-type: none"> • Relatively well connected, modernizing area with export agricultural investments • History of early agrarian struggles and land occupations • Much documented organizing efforts and NGO activity • Zone of current Bank financed PRONADER project 	<p><u>In Guamote region:</u></p> <ul style="list-style-type: none"> • UOCIG (Union de Organizaciones de Comunidades Indigenas de Guamote) • Second level campesino federation with 13 community level membership organizations • In existence for 10 years <p><u>In Cayambe region:</u></p> <ul style="list-style-type: none"> • Junta de Aguas Protog Zona Cangahua • Second level water user's association with 11 base communities • Assisted by capacity building NGO IEDECA (Instituto de Ecologia y Desarrollo de las Comunidades Andinas) using participatory techniques • In existence about 6 years • Part of Bank assisted PRONADER project

SOCIAL CAPITAL INITIATIVE - PROJECT 6

Social Capital in Transition

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Introduction

The transformation of formerly socialist economies into market economies is one of the most important economic and social transformations to take place in this century. The cornerstone of this transformation is the creation of a class of entrepreneurs who are willing to use markets and market institutions to support their transactions. These entrepreneurs must guide their firms through a process of restructuring, a process in which relationships formed under socialism must change to meet the demands of the market. The ability of entrepreneurs to effect such changes, we shall argue, is inextricably linked to the level of social capital at work in the economy.

Social capital consists of shared values and rules for social conduct, which enables a society to solve problems of collective action and to find cooperative solutions to difficult social and economic problems. Little is known about the creation of social capital, although it is believed to require habituation to the moral norms of society and is thought to be transmitted by cultural mechanisms such as religion, tradition, or historical habit.

In the present context, we are interested in two distinct and somewhat complementary aspects of social capital, rule obedience and social trust. Rule obedience measures the tendency of people to comply with society's formal rules and use its formal institutions, while social trust refers to expectations of honest and cooperative behavior on the part of others in the community, expectations that arise based on commonly shared norms. The most useful kind of trust is often not the ability to work under formal authority, but the capacity to form new associations and to cooperate within the terms of reference they establish. Hence, rule obedience can be usefully thought of as the willingness of individuals to accept institutions created from the top down, while trust can be thought of as contributing to the capacity of individuals to create institutions from the bottom up. In the context of transition, then, social capital can work to solve problems inherent in restructuring by facilitating the process of institution building, both from above and from below.

In this project, we propose to study the development of new institutions that work to solve a key problem that arises in the course of restructuring, the problem of contract

enforcement. This problem arises because changes in traditional product lines and traditional methods of organizing production typically require firms to change the structure of their relationships with other firms. Trading relationships formed during the socialist period often reflect priorities and considerations that are no longer relevant and, hence, are presently inefficient and must be changed. But, such restructuring consists of a shift from personal to impersonal relations, a shift which requires a fundamental change in the way agreements between firms are negotiated, structured, and secured.²¹

In most market economies, the legal system is presumed to provide firms with a reasonably effective method of dispute resolution in the event contracts between firms break down. Unfortunately, legal institutions in economies in transition cannot be assumed to fulfill this function. Legal reform was not the priority of the first nonsocialist governments. In most economies in transition, new legal institutions are being built out of the ashes of socialist institutions, institutions with no history of protecting the economic rights of firms. Moreover, in many economies in transition, the state's ability to enforce the decisions of its judicial institutions has weakened, as a direct consequence of the decentralization of political and economic authority.

In the absence of a well functioning legal system, there is a question of whether firms in transition economies will be able to identify mechanisms to support transactions based on impersonal relations. The answer to this question seems to depend, at least in part, on the nature of social capital at work in the economy. In market economies, there are many social and economic institutions, outside the legal system, that help to foster the development of new economic relations and to aid in dispute resolution, institutions whose origins and functioning can only partly be explained within the construct of strict economic rationality.

In the economic sphere, we observe many different kinds of networks of firms, including networks of suppliers and customers linked by crossownership, interlocking directorates, common affiliation with financial institutions, or common membership in business associations. Despite having formal structures that give rise to important economic incentives, these networks cannot be fully understood in isolation from the underlying social environment in which they are embedded. These economic networks are nearly always complemented by networks that arise in political and social spheres, networks based on political affiliation, on family, ethnic, and religious ties, and on personal contacts that develop in clubs and through social activities. Noneconomic networks facilitate activity within economic networks by helping to create common values and

²¹ Historically, agreements between firms in transition economies were subject to a great deal of inertia, for two reasons. First, firms were highly specialized in production, so that firms had few alternative partners, at least in the very near term. Second, plans were based on achievements in past years, to reduce the likelihood of unanticipated bottlenecks and other failures. Both of these features worked to create a climate of 'repeated contracts', in which firms could expect to work together year after year. In such a climate, firms had the incentive to resolve problems through cooperation. When negotiated solutions failed, firms turned to the planning bureaucracy and to the auspices of the Communist Party to resolve disputes, institutions which are now largely defunct.

expectations of social conduct. Economic networks are able to coordinate economic activity best when their members have common expectations of honest and cooperative behavior on the part of others in the network, expectations that arise as a result of commonly shared norms.

Unfortunately, ‘common knowledge’, a critical aspect of social capital, potentially deteriorates during the process of transition. Transition, naturally, is a time of sweeping institutional change. The depth of institutional change in these countries suggests that individual behavior will be less predictable, particularly in societies whose coherence is based on political and economic, rather than social factors. Hence, we expect a great deal of variation in the quality of social capital in economies in transition, depending on the nature of social institutions. Generally, we anticipate that more ‘traditional’ societies might be better situated than more ‘modern’ societies to draw on their stock of social capital to resolve problems of contracting in a transition environment.

In this project, we propose to identify the types of institutions that are evolving to solve problems of contract enforcement in one country in transition, Mongolia. Mongolia is a fitting subject for research on social capital because it is in many respects a traditional society, in which social arrangements can be expected to play an important economic role. But, it is also a country that is aggressively pursuing economic reform (Korsun and Murrell, 1995a, 1994), one where firms are clearly searching for ways to facilitate transactions with new firms. Hence, we anticipate the possibility that Mongolian firms might have discovered innovative ways to use social capital to solve problems of contract enforcement.

We will base our analysis on a survey of 250 firms in the three largest cities in Mongolia — Ulaan Baatar, Darhan, and Erdenet — as well as in surrounding towns and villages, for contrast. In each enterprise, we will interview at least three senior managers, to learn about the social and economic institutions they are using to solve problems of contract enforcement, and about the role of social capital in the formation and functioning of these institutions. This survey will benefit from the existence of two prior surveys of these same firms, surveys which were conducted in 1993 and 1996. Although these surveys did not focus on the subject of contract enforcement, they collected detailed information on the restructuring of these enterprises, information that can be used in the present context.

Information and insights from this study will provide insights into ways to improve the institutional environment to support commercial relations in Mongolia. Mongolia’s characteristics are similar to those of many of the smaller, poorer reforming countries, providing a strong foundation upon which to draw policy lessons that are relevant beyond Mongolia’s borders.

We anticipate some of our most pertinent insights to come out of a comparison of the experiences of Mongolian and Russian firms. Presently, we are engaged in a study of contract enforcement in Russia. Although Mongolia and Russia share certain institutional

traits because of a common socialist past, Russia lacks a social structure that would suggest that networks, other than those based on historic business relations, play a pivotal economic role. In fact, analysis of preliminary data from the Russian survey confirms this intuition. The absence of a civil society in the past, when lives were centered on enterprise and Party organized activities, appears to be exerting a toll: we observed no evidence of institutions that would facilitate new market relationships, other than the mafia (Hendley, Ickes, Murrell, Ryterman, 1996).²²

This proposal continues with a brief review of the relevant literature on social capital, in which we identify hypotheses concerning the effect of different types of social capital on the ability and willingness of firms to restructure.

Social Capital and Contract Enforcement

The literature on social capital is extensive,²³ although relatively few articles address the importance of social capital in contract enforcement during transition. In this section, we briefly summarize the relevant literature, and its implications for this project.

Rule Obedience

Following Clague (1993:395), we define rule obedience as the tendency of people in a society to follow society's customs and rules.²⁴ Individuals who are rule obedient gain satisfaction from complying with society's rules and customs. They experience guilt from not complying with compulsory laws, and are ashamed if they disobey a law, and if their behavior is made public and punished. Such individuals comply with laws, not only because of the pecuniary costs associated with punishment, but also because of the psychological costs they associate with illegal or antisocial behavior.

An important aspect of rule obedience is that internalization of a rule can change behavior. Internalization refers to a process of socialization through which rules and behavior patterns come to be maintained even in the absence of external rewards or punishments (Jones, 1984:89-90; Coleman, 1990:245, 293; Platteau, 1994b:766). As a result, internalized rules are followed even when violation would be undetected, and therefore unsanctioned (Elster, 1989a:131; 1989b:104; Platteau, 1994b:766). Further, such individuals often feel anger if other actors disobey the rules and are willing to punish defectors, if the cost they will bear is low (Axelrod, 1986:1102; Elster, 1989a, 1989b).

²² This is not to say that social capital plays no role in institutional innovation in Russia. In fact, we observed many firms engaging in complex multilateral barter transactions that clearly depend on social trust in order to work. However, their primary purpose is tax avoidance, a behavior that is likely to arise when the level of rule obedience in society is low.

²³ See, for example, Coleman (1988), Putnam (1993), Rose (1992, 1995).

²⁴ See also Cooter (1996), Weber (1921), Opp (1979), Axelrod (1986), and Platteau (1994b).

In the present context, rule obedience tends to increase the willingness of managers to use laws and legal institutions to structure and secure agreements. Moreover, rule obedience might also support the process of legal reform: managers with a proclivity for using formal institutions to solve problems might be more amenable to using newly reformed institutions than managers who are suspicious of formal institutions. This feature suggests that the process of reform is greatly aided by this aspect of social capital.

Remarkably little systematic empirical work has been conducted measuring the effect of rule obedience on the use of law. One exception is Ryterman and Weber (1996), who examine the effect of rule obedience on the use of legal institutions by Russian managers. Although Russia is generally characterized by low levels of rule obedience, they find, at the margin, that managers who are more rule obedient tend to use laws and legal institutions more than do other managers.

As noted by Clague, rule obedience does not necessarily lead to greater efficiency, because it does not imply anything about the content of rules. When the rules are inefficient, rule obedience can lead to very inefficient patterns of behavior. However, when legal institutions are poorly functioning, as they generally are in economies in transition, rule obedience potentially performs a very important social function: it might discourage managers from turning to the mafia to solve problems of contract enforcement. Instead, such managers might seek alternative, more socially acceptable and welfare improving solutions.

Social Trust

Following Fukuyama (1995:26), we define social trust as the expectation of regular, honest, and cooperative behavior on the part of members of a community, expectations that arise from commonly shared norms. This concept of trust has three important aspects. First, it must be validated; otherwise a person's stock of trust will quickly depreciate (Dasgupta, 1988:51). This feature suggests that social trust might be difficult to maintain in times of deep institutional change, during which behavior often becomes less predictable.

Second, mutual trust can only exist if members of society can signal their trustworthiness to others. (Frank, 1988). This feature suggests that trust is most likely to exist in societies in which modalities exist for individuals to communicate their intentions and expectations, especially in times of deep institutional change.

Finally, trust is often self-fulfilling. As expressed by Gambetta (1988:234), "Deep distrust is difficult to invalidate through experience, for either it prevents people from engaging in the appropriate kind of social experiment or, worse, it leads to behavior which bolsters the validity of distrust itself...Once it has set in it soon becomes impossible to know if it was ever in fact, justified..." As in the case of rule 'disobedience', deep distrust can work to undermine reform, by discouraging individuals from using newly reformed institutions.

The most useful kind of social capital is often not the ability to work under the authority of a traditional community or group, but the capacity to form new associations and to cooperate within the terms of reference they establish. In the present context, trust helps managers to forge relationships that can work to solve difficult economic problems, problems such as the enforcement of contracts in an economy without well functioning legal institutions.

The precise form of social trust that is prevalent in a society is important to the type of outcome it can generate. Social trust can be embodied in the smallest and most basic social group, the family, as well as much larger groups, such as national, religious, or broad economic groups. The larger and more encompassing the social group, the greater the number of potential opportunities for its members to form economically valuable relationships, for example, relationships that could support restructuring, leading to a change in the mix or quality of goods produced by firms. When membership in a group is highly limited, so is the number of potential interactions. Such is the case of networks of firms in Russia, networks which are largely based on historic business relationships. The nature of membership in such networks limits the extent to which it is able to foster restructuring and the development of new economic relationships.

Naturally, the formation and functioning of many economic, political, and social groups can be at least partly explained in terms of a voluntary contract made between individuals based on their self interest. By this account, trust is not necessary for cooperation: self interest, together with legal mechanisms like contracts, can compensate for the absence of trust. But while contracts and self interest are important sources of association, the most effective organizations will probably be based on communities of shared ethical values. These communities do not require extensive contract and legal regulation of their relations because prior moral consensus gives members of the group a basis for mutual trust.

Social Capital in Transition

Social capital is predicated upon 'common knowledge' among members of society. When members of society share the belief that institutions and individuals are generally trustworthy, this knowledge works to coordinate behavior in ways that other institutions, such as the legal system, might not. The turbulence of transition poses a special threat to the stock of social capital. The depth of institutional change during transition suggests that individual behavior will become less predictable, potentially causing the stock of 'common knowledge' in society to deteriorate.

Generally, we anticipate the degree of deterioration in social capital to vary across countries, depending on the permanence of social mechanisms that foster cooperation. First, we might expect traditional societies to experience less deterioration in social capital than modern societies. Rural communities often have strong traditions that facilitate cooperation, traditions that do not rely on the presence of formal institutions in order to

work. This feature is important, given that many formal institutions are presently in the process of being reformed and cannot fulfill either their historic or intended functions. Second, smaller countries might experience less deterioration in social capital than larger countries. In smaller countries, political and economic elites are well known by members of society, independent of their formal positions. In such societies, it is easier to identify the set of critical personages that are needed to achieve consensus to solve important problems.

Social Capital in Mongolia

In 1921, Mongolia became the first country to follow Russia's turn to Communism. In the years that followed, the Soviet model of an economy driven by a centrally planned industrial base was slowly grafted onto a nomadic, pastoral society so thoroughly that Mongolia was often viewed as the Soviet Union's sixteenth republic. The Soviet influence was pervasive, lasting some seventy years until the Mongolian government, responding to public protests, held its first free elections, in the summer of 1990. Although the ruling communist party (MPRP) remained in power, it formed a coalition government that included substantial representation from opposition parties with strong reformist agendas. The pretransition economic and political history of Mongolia is similar to that of many of the poorer ex-Soviet republics, so that from this perspective the lessons learned from Mongolia will be applicable to a significant number of reforming countries.

Since these first elections, the government has made progress, if hesitatingly, in pursuing a fairly standard package of reforms growing out of consultations with the World Bank and IMF. (Korsun and Murrell, 1995a, 1994). Privatization was pursued particularly aggressively. Price liberalization, however, took effect in fits and starts over an eighteen month period. Failure to achieve other reforms led to a suspension of a standby credit arrangement in late 1992. Since the resumption of the standby agreement, the government has been more consistent in its approach to reforms. Macroeconomic indicators, such as the rate of inflation, are demonstrating evidence of successful reforms. Although aggregate output fell 20 percent from 1991 to mid 1994, this decline has been reversed. Output rose 3 percent in 1994, and a remarkable 6.5 percent in 1995.

In comparison with most of the other poor, reforming economies, Mongolia's performance is surprisingly good. There is a evidence of substantial economic activity in Mongolia, including significant intersectoral reallocation, a bustling construction sector, and significant new entry, even by international joint ventures. Yet, recently, the *International Country Risk Guide* identified Mongolia as a country that performed very poorly according to its rule-of-law index, at a level equal to Serbia and below that of Romania, China, and Albania. If this rating is at all informative, how can one explain the willingness of investors to risk their capital under such circumstances?

First, despite this rating, law seems to have a powerful image in society, stemming from the time of Chinghis Khan, who first systematized traditional nomadic code into written law. This feature, as well as the low level of crime in Mongolia, suggests that any

insufficiencies in the rule of law are unlikely to arise primarily because of a lack of rule obedience on the part of members of society. Hence, it might be the case that investors, both domestic and foreign, find Mongolian firms and workers to be relatively trustworthy partners, despite large inadequacies in the structure of the legal system.

A second possibility is that firms in Mongolia have identified institutions, outside the formal legal system, that are able to facilitate the processes of entry and restructuring. Mongolia is a small, ethnically homogeneous society, precisely the type of society in which social trust is likely to be high. In Mongolia, members of the political and economic elites are few in number and well known to each other. This aspect increases the transparency of Mongolian society, simplifying the process of bargaining to achieve consensus on important economic matters. This feature helps to preserve common social norms and simplifies the process of institution building.

The ability of different groups in Mongolian society to achieve broad social consensus is also reflected at a formal level, in the policymaking process. The major political parties are coalitions of very diverse interests, but their performance, both within and outside government, suggests that Mongolian society has a capacity to reach a working consensus on important political and economic issues. While the process of reaching a consensus means that policy formulation is not swift, the process of implementation can be simplified. Moreover, with personal relationships easily crossing party lines, any government is able to preserve elements of public trust that might otherwise be eroded by more destructive political competition in the process of transition.

Many other aspects of Mongolian society suggest as well that it is a society that is endowed with the capacity to reach consensus. In Mongolia, extended family relationships play important economic roles. A large proportion of people over 30 were born in small rural towns or in the countryside, and continue to have strong ties with these 'traditional' communities. This is an important feature of Mongolian society, because traditional communities often have strong cooperative traditions. An important example of such cooperation is in the allocation of grazing pastures to herders. Despite the absence of formal property rights, both presently and in the past, herders have been able to achieve consensus regarding their *de facto* rights, rights that tend not to be disputed and which seem to work rather effectively to solve problems of common property.

Analytical Methods

In this section, we describe the methodology we will use to identify the types of institutions that are evolving to solve problems of contract enforcement in Mongolia, and the role of social capital in the origin and functioning of these institutions.

Descriptive Statistics

As background to the analytical work, the project will begin with the construction of statistics describing the firm's use of institutions to solve problems of contract enforcement. This description will focus on several distinct elements of enterprise activity. First, we will present statistics which summarize the importance of different types of problems firms encounter in their relationships with other enterprises, both in existing relationships and in their attempts to find new trading partners. Second, we will describe the set of institutions that firms are using (and not using) to structure these relationships and to secure agreements. As part of this analysis, we will measure the extent to which firms are using laws to structure agreements, based on tests of their understanding of basic provisions of relevant laws. This is an innovative new methodology, which is based on the observation that managers in firms that routinely use law to structure agreements will have better understanding of basic provisions of important laws than managers in other firms (Hendley, Ickes, Ryterman, and Murrell, 1997). In addition, we will measure the extent to which firms are using legal instruments to secure agreements, such as collateral, letters of credit, and penalty agreements, and courts to adjudicate serious disputes.

Perhaps even more importantly, we will measure the firm's use of institutions, other than the legal system. Managers will be asked about their use of the government bureaucracy and private institutions to mediate disputes. Also, they will be asked about the ways in which they participate or use various types of networks to find new customers and to resolve disputes with existing customers. As part of this work, we will consider networks that cut across all aspects of economic, political, and social life. We will consider economic networks, such as those created by cross ownership, interlocking directorates, affiliations with a common bank, and membership in common business associations. We will also consider political networks, such as those that might arise because of a common political affiliation, in the present or in the past. Finally, we will consider a broad range of social networks, including networks based on family, ethnicity, nationality, religion²⁵, education, recreation, and gender. By asking about a broad range of potential networks, we hope to increase the likelihood we will uncover important, but not yet well known institutions.

Finally, we will ask managers to describe their attitudes toward various institutions and toward individuals, so that we can measure their contribution to the stock of social capital²⁶ at work in the economy. Included are questions about the manager's attitudes

²⁵ We note, however, that Mongolia does not tend to be a religious society.

²⁶ Primarily rule obedience and trust.

toward authority, toward participation in a broad range of formal and informal institutions, and toward friends, colleagues, and strangers. As part of this analysis, we will take care to make the questions comparable to other surveys,²⁷ so that the stock and composition of social capital in Mongolia can be compared to those in other countries.

Comparative Analysis

In order to get a clear understanding of the role of social capital in institutional development, it is important that data for Mongolia be compared to data for other countries. Fortunately, we are presently in the process of conducting a comparable survey of approximately 400 Russian firms. Although differences in the organization and cultural setting of firms in the two countries require the survey instruments to be slightly different, a significant proportion of the questions will be directly comparable.

Mongolia was often referred to as the ‘sixteen republic’ of the former Soviet Union and thus shares important institutional legacies with Russia. Despite these commonalities, Mongolia is less developed than Russia, with a greater concentration of industry in the processing of agricultural goods. Although we cannot completely control for differences in the levels of development, we have attempted to include a significant number of firms in the Russian survey that are located in some of the poorer provincial cities, towns, and villages²⁸ and which are involved in agricultural processing. The sample frame of the Russian survey includes firms in cities, towns, and villages from six regions, including Altay and Voronezh, two agricultural regions. In addition, the sample includes firms in four industries,²⁹ with a significant concentration of firms in the processing of agricultural goods.

Econometric Analysis

The analytic element of the research will begin with a study of the factors that influence the use of different institutions — such as the legal system, the state bureaucracy, and private organizations — to solve problems of contract enforcement. We anticipate variation in the stock of social capital within the firm, and will test how differences in this stock influence decisions to use the different institutions to mediate disputes. The model we will estimate will take the following general form:

$$U_{ij} = X_{ij} \alpha_j + K_{ij} \beta_j + \epsilon_{ij} \quad (1)$$

where U_{ij} is the use of institution j by firm i , X_{ij} is the vector of economic characteristics of firm i that influence its use of institution j , K_{ij} is the vector of variables measuring the

²⁷ For example, the World Value Survey and our own survey of Russian managers.

²⁸ The regions are: Altay, Moscow, Novosibirsk, Saratov, Sverdlovsk, and Voronezh. The ratio of the average wage to the subsistence wage in 1995 in four of the regions is below the national average of 1.68. These are: Altay Krai (1.5), Novosibirsk (1.2), Saratov (1.4), and Sverdlovsk (1.5). Moscow (4.6) and Voronezh (1.8) are above the national average.

²⁹ Processing of agricultural goods, electronics, industrial machine building, and chemicals.

different aspects of social capital of firm i that influence its use of institution j , α_j and β_j are vectors of parameters, and ϵ_{ij} is the error term. In general, these equations can be estimated using ordinary least squares. In cases where the dependent variable is qualitative, we will use standard techniques for estimating models with limited dependent variables.³⁰

Social capital, contained in the vector K_{ij} , will be measured using two different types of variables. The first type includes measures of the firm's participation in different types of economic, political, and social networks, which we describe above. We will carefully distinguish between contacts that arise because of past affiliations and contacts that have been cultivated more recently, the latter being more susceptible to problems of endogeneity (see below). Using techniques, such as principal components, we will construct indexes of participation in different subsets of networks, in the event that participation in the different subsets is highly correlated.³¹

The second type of measure consists of the manager's evaluation of his or her attitudes toward institutions and individuals, which we describe above. For many of these questions, we will use questions that have been used and tested in other socioeconomic surveys. For example, we will ask managers to provide their assessment of institutions such as the parliament, the police, and free speech, as measures of their attitudes toward authority and their tendency to trust in formal institutions. Also, we will ask managers to evaluate their willingness to trust their friends, colleagues, strangers, and foreigners, as measures of their tendency to trust individuals.

The remainder of the analytical work will focus on explaining how the performance of the firm is influenced by the institutions it chooses to use to structure and enforce its agreements. In this work, we will use two different types of measures of performance. The first measure is the degree to which the firm is able to establish relations with new firms, a critical aspect of restructuring during transition. The second measure is the degree to which the firm is satisfied with the performance of its current trading partners. This second measure will be based on detailed information we will obtain on specific transactions recently conducted by firms. In this case, the general model is:

$$P_i = Z_i \gamma + U_i \delta + v_i \quad (2)$$

where P_i is the measure of the performance of firm i , Z_i is the vector of economic characteristics of firms i that influence its performance, U_i is the vector of variables

³⁰ It is plausible that some of the right-hand variables might be endogenous, for example, ownership or stock of social capital. In this case, we will use the appropriate econometric technique for simultaneous equations problems. See the sub-section describing econometric problems below.

³¹ Otherwise, we would face problems of multicollinearity.

measuring the firm's use of different institutions, γ and δ are vectors of parameters, and v_i is the error term. Again, this equation can be estimated using standard procedures.

Econometric Problems

The primary econometric problem we anticipate concerns the endogeneity of K_{ij} , our measures of social capital. For example, it might be true that the social capital of the firm is influenced by, among other factors, its use of different institutions. In this case, the model might be:

$$K_{im} = Y_{im} \theta_m + U_{im} \lambda_m + \mu_{im} \quad (3)$$

where K_{im} is the measure of social capital of type m of firm i , Y_{im} is the vector of economic factors that influence the level of social capital of type m in firm i , θ_m and λ_m are the vector of parameters, and μ_{im} is the error term. Assuming that the relevant conditions for identification are satisfied, the system of equations in (1) and (3) can be estimated with standard simultaneous equations techniques, such as two-stage least squares.³² Given our intention to collect data on a large number of exogenous firm and managerial characteristics, we do not anticipate that identification of this equation system will be problematic. Moreover, given the longitudinal nature of the study, the availability of lagged variables will aid in the process of identification.

Survey Methods

Respondents

As part of our survey, we will interview at least three senior managers of each firm,³³ for three reasons. First, the information we wish to collect covers a broad range of subject areas. To ensure that the information we collect is reliable, we direct our questions to the particular manager who is most likely to have pertinent knowledge.

Second, response rates to questions that are posed early in an interview are often higher than those for questions posed late in an interview. By dividing our questions among several different managers, we ensure that each interview is fairly short, increasing the probability of high rates of response for all questions.

Finally, many of our questions are subjective, asking managers to evaluate the performance of institutions or to provide measures of their contribution to the stock of social capital. In cases where we wish to explain the variation in one subjective variable

³² Equation (2) might also be included in this system, if there is reason to believe its error terms are correlated with those in (1) and (3).

³³ In Russia, we are interviewing four senior managers: the general director, the commercial director, the director of supply, and the legal director. We will try to apply this same policy to Mongolia, with suitable adaptation to the structure of Mongolian firms.

using other subjective variables, there is a danger that we might obtain spurious correlations, if a single respondent were to answer all such questions in each firm. This reporting bias will arise if respondents differ in the ‘intensity’ of their responses; in such a case, two otherwise identical respondents might provide different answers to the same question, simply because one respondent is more exuberant and tends to provide more ‘extreme’ responses. By distributing questions soliciting subjective responses to different managers, the impact of this reporting bias on the regression analysis can be eliminated.³⁴

Sampling Issues

For the following discussion only, divide enterprises into two categories, Ulaanbaatar (UB) firms and rural firms. For the UB sample, there is no sample design, as such, because the universe of firms is small enough and the logistical issues manageable enough that all firms can be surveyed. There is confidence that this is an effective strategy, because of the nearly perfect response rates in the 1993 and 1996 surveys. This means that, for the UB sample, the total number of firms to be surveyed will be determined by the number of large enterprises privatized in Ulaanbaatar one month before survey administration.

For rural firms, the study will be limited to the eight aimags (provinces) with the greatest number of large privatized enterprises, leading to a sample of approximately 100 rural enterprises. This sampling strategy for rural firms is suboptimal, but it is a fair compromise between obtaining systematic information on rural firms and the reality (including cost and accessibility) of conducting survey research in remote portions of Mongolia. Rural enterprises are important to include, because we anticipate significant differences in the institutions that rural enterprises use to solve problems of exchange.

Survey Instrument Design and Administration

The design of the survey instrument will be guided by three elements: previous experience with the administration of a similar instrument in Russia, previous experience surveying the same firms in Mongolia, and insights based on research to be provided by Mongolian lawyers and other specialists on the subject of contract enforcement.

Standard survey design and translation practices will be followed. After the survey instruments are created in English and translated into Mongolian, the Mongolian version will be reverse-translated by a second translator. Researchers drawn primarily from the Institute of Economics of the Academy of Sciences will be selected to administer the survey, who will be subjected to intensive training. (In all likelihood, the project will use the researchers who have been used in the previous survey efforts.) The survey will be piloted with a subsample of firms by teams that will include at least one of the survey designers. Revisions will be made to refine the instruments and the Mongolian researchers

³⁴ In addition, we are currently developing a maximum likelihood procedure that will correct this problem, in cases where both the dependent and independent variables must be provided by the same manager.

will be subjected to further training based on the lessons learned from the pilot. There was a nearly perfect response rate on the earlier surveys; we see no reason why this should not be the case in the present survey.

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SOCIAL CAPITAL INITIATIVE - PROJECT 7

Measuring Social Capital in a Post-Communist Society

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The idea of social capital is not new: social cooperation in some manner or other is an universal feature of all societies, ancient or modern. But social cooperation takes many forms, some positive and some negative in terms of their governance for markets and states. It is a positive source of social security through formal social insurance institutions or informal mutual aid societies. It is negative when it is used to evade taxation or exchange bribes for favors in public or private sector organizations. Social capital and human capital are positively related when parents help their children prepare for examinations. However, there is a trade off between social networks and individual advancement when a strong social network effectively prevents girls from getting education and employment.

The transformation of Central and Eastern Europe and the former Soviet Union has made evident, for better and for worse, the importance of social capital. It has provided informal means of social protection in the face of market failure. Through nomenclature privatization it has caused government failure by enriching those with networks allowing the transfer of public assets to private hands at submarket prices. The hesitant response of individuals to market incentives to entrepreneurship illustrates the absence of social capital as a cause of “social failure”.

The object of the project is to develop and apply innovative survey measures of social capital appropriate in an ex-command economy. It will thus advance understanding beyond the theoretical debate and add fresh and conceptually relevant evidence to the restricted pool of data and anecdotes currently circulated on the subject. The survey questionnaire will be fielded in a nationally representative sample survey covering major domains of everyday life in Russia today. The data can then be subject to multivariate statistical analysis to determine under what circumstances and to what extent the informal and formal social capital networks in historically planned societies continue to influence the welfare and health of Russians today. This will test competing hypotheses about social capital supporting, complementing or obstructing welfare measures of formal institutions of state and market.

The subject matter has been the focus of the two most recent World Development Reports, From Plan to Market (World Bank, 1996), and The State in a Changing World (1997). The results will be relevant to the design and delivery of a variety of public policies, with particular regard to issues of humanizing bureaucracy, rent seeking, avoiding the disruption of valued unofficial informal networks and adjusting boundaries between service provision by state, market, not-for-profit institutions and informal networks of civil society.

The project will build on Richard Rose's ongoing Program of sample surveys of mass response to transformation in 15 countries of the ex-Soviet Union and Central and Eastern Europe (details at: WWW.strath.ac.uk/Departments/CSPP/). The first New Russia Barometer (NRB) survey was conducted in January, 1992; the social capital research will be in the seventh NRB survey at the beginning of 1998. For a further discussion of the Program see e.g. Rose, 1993; 1995.

What Is Social Capital?

A Multiplicity of Definitions

Differences in the definition of social capital reflect the disciplinary background of those using the term, and particular problems at hand (for a useful review, see Edwards and Foley, 1997). Robert Putnam, the scholar most responsible for current interest, developed the term when seeking to understand the sources of cooperation that make democracy work. He defines it as 'features of social life — networks, norms and trust — that facilitate cooperation and coordination for mutual benefit' (Putnam, 1997: 31). The emphasis on behavioral networks is common to many definitions. The inclusion of social psychological norms and attitudes is not, and has led to confusion. In some instances, measures of trust or cooperative norms are treated as sufficient to indicate social capital; this is most evident in studies that see social capital as a cultural phenomenon. It is logically possible to argue that norms and attitudes of trust cause networks to form and/or are a consequence of behavior, since individual trust (or distrust) must be learned through some kind of social process.

While survey-derived measures of trust are often used as the sole proxy indicator of social capital, this is inappropriate in post-Communist countries. First of all, the approach often assumes that institutions ought to be trusted, and distrust is a pathological form of behavior. As an empirical fact, Soviet-style institutions gave many reasons for distrust. Secondly, the approach is static rather than dynamic; it is more appropriate to think of individuals initially being uninformed or skeptical about social, political and economic institutions, and then learning trust or distrust in the light of their experiences (cf. Mishler and Rose, 1997). Thirdly, mutual cooperation and trust by an in group, Max Weber's 'inside morals' (Binnenmoral) may be used unscrupulously to exploit others by invoking 'outsider morals' (Aussenmoral). Finally, to focus on explaining trust provides no evidence about what trust produces, or even whether trust is a consequence rather than a cause of an efficient, rule of law democratic market economy.

In modeling the dialectical relation between individuals and institutions, James S. Coleman (1990: 302) defined social capital in functional terms, an aspect of social relations that is:

...productive, making possible the achievement of certain ends that would not be attainable in its absence. Unlike other forms of capital, social capital inheres in the structure of relation between persons and among persons. It is lodged neither in individuals nor in physical implements of production.

Coleman emphasized that the value of social capital depended on context; social relations positive in one context (family bonds) might be of no use or even negative in other contexts (hindering a child from a deprived family going to an university).

Consistent with the idea that capital is a productive resource and the World Bank's concern with different forms of capital (World Bank, 1997: especially chapter 6), the definition used here is: Informal networks and formal organizations, and their interaction, that produce goods and services. Concentrating on productive activities fundamentally differentiates the definition used here with the social psychological concern with producing "trust" or "norms". Strictly speaking, such attitudes can only be predispositions to action, including cooperative action; they should not be confused with the activity, that is, cooperation in a network or interaction with or within a formal organization. The goods and services produced may or may not be monetized; the value of home grown food, measured in calories, is as high as that of food purchased in the market — and its actual value may be greater in welfare terms if the alternate for a poor person is doing without food or destitution.

Distinguishing Informal Networks from Formal Organizations

Particularly in developing or transformational societies, a clear distinction is necessary between face-to-face informal social networks and organized, impersonal rulebound organizations. For Tocqueville, often cited as a pioneer in stressing social cooperation, the distinction was not necessary, or when he wrote about the United States in the 1930s more than 90 percent of Americans lived in rural settings or villages. Tocqueville's associations were almost always local, voluntaristic and face-to-face. The distinction between informal and formal ties is paralleled in Shils and Janowitz's classic study of "why men fight". They echo Edmund Burke in concluding that soldiers fight for their little platoon rather than for a bureaucratic military organization or abstract ideals.

Informal networks. In a nontotalitarian society, and even more in an imperfectly totalitarian society, informal social networks produce goods and services without official recognition or formal status, for example, villagers who cooperate at harvest time or urban dwellers who help each other repair homes or cars. Even if networks have a formal institutional identity, such as a choir society or a rural cooperative, social relationships tend to be horizontal, egalitarian and face-to-face. Individuals in the informal networks are known to each other and a reputation for cooperation and helpfulness more important than

any cash remuneration. Most exchanges of services are, in fact, “incalculable”, being based on a diffuse sense of affection or obligation within a family, extended family or friendship network.

Informal social networks can provide cash too, not only in Grameen banks in rural India but also in industrialized post-Communist countries. The New Russia Barometer surveys consistently find that half or more of those who have been unemployed have not received any benefits payments from the state. When this happens, informal social networks can be a major source of social security (Table 1). Two-thirds of Russians say that they have a friend who would loan them as much as a week’s wages if their household was short of money. Among the remaining third, many live in places where their friends too are short of money. Unlike a state social security system, a friend loans money without any paper work, and the money is available immediately. More than two-thirds know someone who would help if they were ill; home care for persons ill enough to stay away from work is also a major service in the health care systems of OECD societies.

Table 1: Social Capital For Social Protection

	Friends Will Help	
	Loan Money (%)	If I Am Ill (%)
Definitely yes	32	51
Probably	34	23
Unlikely	18	11
Definitely not	9	9
Difficult to answer	7	6

(First question asked whether a friend would loan as much as a week’s wages if your household was very short of money.)

Source: Centre for the Study of Public Policy, university of Strathclyde, New Russia Barometer IV (1995), a nationwide representative sample of 1,943 persons; fieldwork by VCIOM.

Formal organizations. These are rule-bound, bureaucratic, hierarchically coordinated, legally registered and require cash to produce goods and services, whether obtained from the market, from taxes or other sources. A formal organization can have individuals as its members, for example, a professional association of doctors, or its members can be organizations, for example, an association of hospitals. Many organizations consist of vertically integrated sets of organizational units. For example, individuals belong to a union branch where they have informal ties with fellow members; branches are linked with district and regional organizations with full-time officials; and the national organization has a central headquarters distant from individual branches; and the national headquarters belongs to a congress of trade unions claiming many millions of “members”. However, the links between actual individuals and organization of organizations are intermediated many times. Such a distancing phenomenon can also be found in the relation between managers and individual shareholders, the nominal owners of profitmaking enterprises — and

contrasts strongly with the network of relations in a family owned company or relations between a group of producers or traders sharing diffuse ethnic or other ties (cf. Granovetter, 1985).

Formal organizations are a necessary part of Weberian modern society, for a modern industrial or post-industrial society requires impersonal bureaucratic organizations that can predictably, honestly and efficiently collect taxes, produce such goods as automobiles and services such as university education and maintain the order and laws that are necessary for rational calculations. By contrast, informal social networks tend to produce small scale goods and services; they are the core institutions of premodern societies, or of the “backward” or interstitial parts of modernizing and modern societies.

The contrast between informal social networks and formal organizations is set out in Table 2. Inevitably, there are borderline cases: a bowling club is an informal group, because it is face-to-face, even if part of a local league. However, a National Bowling Congress is an impersonal organization. Formal links between local and national organizations do not alter the fact that they are different. People can help people, and government can help people — but government is not a person but an organization.

Table 2: Social Network Capital and Organizational Capacity Compared

<u>Social Network Capital</u>	<u>Organizational Capital</u>
Face-to-face primary relations	Impersonal, secondary
Informal	Rule bound
Individuals, households as members	Members may be other organizations
Members few	Numerous members
Horizontal equality	Vertical hierarchies, inequalities
Alegal; legal recognition unnecessary	Legal
Diffuse commitment of individuals	Role-specific commitment
No full-time officials	Full-time officials
Small scale resources	Resources: finance, land, equipment
Produces simple goods and services, e.g., potatoes, painting room	Produces complex as well as simple goods and services
Exchange normally without money	Money required for exchanges

Source: Derived from Rose (1996), 246

Putnam’s (1993: 87) idea of a civic community combines the horizontal ties of informal networks and vertical links with formal organizations in a “bottom up” model of democracy at work. Individuals voluntarily participate in public affairs through a variety of social institutions free of state control, many of which are nonpolitical in purpose, such as choral societies and sports clubs. Putnam argues that people accustomed to cooperate have the psychological predisposition, social skills, and interpersonal networks to

represent their views to government. Whereas political participation occurs within conventional political institutions, social capital refers to ‘our relations with one another’ and ‘connections with the life of their communities, not merely with politics’. Fukuyama’s (1995) study of forms of enterprise organization in Europe, the United States and Asia uses crosscultural differences in norms of cooperation or trust as a central factor explaining differences between large scale impersonal enterprises (e.g. Japan) and “family” enterprises (e.g. overseas Chinese).

By contrast, the literature on corporatist cooperation between government, enterprise associations and trade union organizations emphasizes horizontal ties between leaders of formal organizations. The corporatist model is a “top down” model of elite bargaining, of collective action for collective interests. Individuals are mobilized as followers, often involuntarily required to join an organization as a condition of operating a business or practicing a trade. Schmitter (1995: 310) goes so far as to argue, ‘Organizations are becoming citizens alongside, if not in the place of, individual’s.

An uncivil society, in which the state does not govern by the rule of law and seeks control of major social institutions encourages individuals to cooperate in ‘uncivic’ networks. People minimize contact with the formal institutions of the state and, if brought into contact, seek to “debureaucratize” their relations, relying instead on personal contacts or even bribes to achieve what they want. In sociological terms, incivisme does not involve isolation; it encourages the creation of informal social networks that can use social capital against the state. As the Russian proverb puts it, ‘A hundred friends are worth more than a hundred rubles’. A Bulgarian saying is even pithier, ‘Without friends you are dead’.

The reaction against totalitarian attempts to mobilize citizens creates an hourglass society (Rose, 1995a). The narrow midpoint of the hour glass represents the insulation of individuals from influence by an exploitative and repressive state. There is rich social life at the base, consisting of strong informal networks based on trust between friends, relatives and other face-to-face groups. Networks can extend to friends of friends too. The state can tolerate such networks as long as activities are confined to looking after small scale individual concerns and do not concern affairs of state. Attempts to mobilize networks for an overt and public challenge to the regime could be treated as a crime against the state.

In Soviet times the obstacles to creating institutions independent of the state were so strong that subjects could be described as negatively atomized (Shlapentokh, 1989). The institutions on which they relied were informal units that depended on diffuse face-to-face ties that lacked legal recognition. Atomization was intensified by the geographical scale and massive population of the Soviet Union. Insofar as people were compelled to deal with the state, they sought to exploit it (cf. Wedel, 1992). Individuals and officials often allocated goods and services through friendship networks or in return for cash payments under the table rather than according to bureaucratic rules. There was massive debureaucratization due to “bottom up” and “top down” pressures to exploit the state’s resources to ends very different from its formal goals.

The result was a ‘stressful’ rather than a modern society. In a nonmarket command economy, managers produced output by ignoring lawful bureaucratic procedures (Kornai, 1992). The procedures for allocating goods and services in a command economy were often opaque and sometimes unlawful, inhibiting rational cause and effect calculations necessary for efficiency. While goods and services were produced, the inefficiencies and uncertainties involved in do so also created stress (Rose, 1996: 244ff).

In an hourglass society there is a “missing middle”, for institutions of civil society cannot operate independently of the state and local units of state administration can deliver repression or extract goods and services rather than provide them. The shock of transformation has been great for market and state institutions at both the top and the bottom of society. To cope with shocks, Russians have continued to rely on informal face-to-face networks. When the New Russia Barometer asks people about their resource for dealing with problems, only seven percent refer to formal organizations, whether state or trade unions, churches or charities. When problems arise, more than half rely on informal social capital networks; those without social capital rely on their own efforts.

Measuring Social Capital

The literature of social capital is blossoming with debate about such fundamental issues as whether social capital is increasing or decreasing (cf. Putnam, 1997; Ladd, 1996). In data-rich OECD countries, the evidence cited is normally that collected for other purposes. Not only is this fragmentary but also it is biased in favor of formal organizations and social psychological attitudes and against behavioral evidence. However, the evidential value and meaning of measures, such as organizational membership figures, can be challenged (see e.g. Fukuyama, 1997: 127-131).

A unique feature of the proposed study is the design of a special purpose questionnaire to measure the social capital of individuals, and to do so in Russia, where both informal and formal networks are significant and interact — but outcomes are problematic. Given the very large amount of anecdotal evidence, a representative national survey is necessary in order to introduce a sense of proportion into the discussion of what people do. For example, the new Russia Barometer shows that twice as many Russians rely on combining resources from nonmonetized as well as monetized networks as rely on earnings from formal and informal money economies.

Survey research can also provide a valuable complement to data collected from the producers of goods and services, whether ministries, local government agencies or nominally market institutions. In an OECD economy it is recognized that the outputs of formal organizations (e.g. patients treated by a doctor or number of pupils in tertiary education) are only inputs to outcomes such as individual health or learning. The potential for “slippage” between Russian statistics about state and market activity and what individual Russians actually consume is particularly great. Since individuals are the ultimate consumers of many goods and services produced by formal organizations, it is appropriate to use a survey to collect evidence about the experience of individuals in

dealing with formal organizations of state and market. This shows, for example, that enterprise data about the output of welfare services values such services much more highly than do the intended beneficiaries, employees of a firm (cf. Rose, 1996a).

Testing Variability in Social Capital Between Domains of Social Life

In defining social capital, Coleman was careful to note that its use, form and significance, positive or negative, could vary from one contextual domain to another. He avoided the reductionist assumption that all forms of association in a society could be reduced to a single measure, let alone a single unit of account for which there was already quantified data. If one wanted to use a single measure as a proxy, it would be necessary to validate it by empirically determining its correlation with a host of discreet measures.

The selection of domains in this project has followed three criteria: a majority of households are likely to be affected; there should be links with formal organizations, including those delivering public policies; and they should involve basic goods and services, such as health or housing, rather than such leisure activities as singing in a choir or bowling. Eight domains producing goods and services through informal and/or formal means are intended to be covered: food; housing and home repair; employment; shopping; saving and borrowing for needs now and in old age; health care; information media, e.g. word of mouth and/or print; and government. Because many households have no member currently in school, education is excluded. Similarly, churches are not included because the proportion of regular church attendees is lower still. Membership in formal civic associations, of particular concern in Putnam's social psychological model, is here conceived as an instrumental byproduct or facilitating cause in the production of goods and services. It is an open empirical question how important such institutions are. A recent NRB survey found that only one in five Russians reported an involvement with a voluntary association, and a 1991 Soviet era survey found only a few percent so involved.

Covering a range of basic goods and services is appropriate in a pioneering survey, in order to identify the extent of variation in the use of social capital between domains. Since there are time constraints on the amount of questions that can be asked, the breadth of coverage inevitably limits how much detailed data is collected about any one domain. The logic of investigation is that intensive studies of one domain should come after one has identified which domains are most important to Russians and to public policy. Otherwise, there is a risk of premature closure by excluding important domains or seeking very detailed information about activities in which most people are not involved.

Individuals can be expected to combine informal networks and formal organizations within each domain. For example, people may raise potatoes and cucumbers at their dacha but buy packaged and canned foods at a shop, and fruit from a trader in the second economy. Analytically, a critical issue is the character of the relationship between individuals and formal organizations. On the one hand, they are asymmetric, for while individuals want to be treated as individuals, formal organizations are bureaucratic, dealing impersonally with those who make claims. In a modern society, people can expect formal

organizations to provide goods and services predictably and efficiently if they have an entitlement to a public service or the money to pay for products of market organizations. The survey will investigate under what circumstances and to what extent this is empirically true in Russia today.

In each domain, individuals will be asked to report strategies for getting things done, through formal and informal networks, whether bureaucratic or “antimodern”. Three major sets of possibilities have been identified: *i) Modern*: the system works predictably: if you are entitled or pay the market price, you will get the request. *ii) Personalistic*: Organizations are not impersonal bureaucracies. To get anything you need to push and persist or use informal contacts through friends or friends of friends. *iii) Antimodern*: Organizations are not lawbound bureaucracies. If you want something you have to make illegal payments or break or simply ignore the rules, since this is how formal organizations really operate.

From the experience of trying modern, personalistic and antimodern strategies, individuals learn what usually works in a particular domain. In turn, this creates predispositions toward using a particular strategy in future, on the expectation that it is likely to succeed. It also creates a predisposition to turn to one type of formal organization, whether state or market, rather than another — or to rely on informal networks and avoid formal organizations insofar as possible. The median respondent in a Russian survey today will have had about a quarter century of learning how the old system worked before the introduction of choice in the market and in the political system. Relying on state institutions to provide welfare and health care efficiently and predictably is one among several alternative expectations that may be formed. Alternatively, individuals can seek to personalize or debureaucratize their encounters with formal organizations by making face-to-face demands for sympathy and friendship or, if they have the money (which most Russians often do not) substitute the market for state as a source of supply, or invest money in antimodern strategies that exploit formal organizations, often in informal cooperation with officials who treat their bureaucratic offices as prebends producing illegal revenue.

From the “bottom up” perspective of individuals and households, the objective of using informal and formal networks is to secure welfare. Arguments for using money as a proxy for welfare in OECD economies do not necessarily apply in a society in transformation from a nonmarket economy, with unofficial as well as official money economies. Attempts to impute money values to “priceless” activities such as caring for ill members of a family misconstrues the logic of social cooperation. Moreover, attempts to impute money values for nonwaged time spent in productive activities emphasize that defensible valuations of time use can lead to radically different results (see Murgatroyd and Neuberger, 1997).

Reducing welfare to an income measure, whatever its bureaucratic attractions, is bound to obscure the processes by which individuals and households secure their welfare — outside and against formal organizations as well as by working through or even

exploiting them. Health is an outstanding example of a condition that has an intrinsic value, and mortality statistics are direct measures of health independent of money.

Previous research in Russia has validated the significance of two types of general welfare measures (Rose and McAllister, 1996). The first is positive, getting by, the ability to sustain oneself indefinitely without borrowing money or spending savings. The second is negative, the frequency of doing without basic goods, such as foods, clothing, heat and electricity, indicators of destitution (Rose, 1995b). As for health, most studies rely on analysis of aggregate epidemiological data of mortality to characterize whole societies. Collecting survey data from individuals will make it possible to address the question: Why are some Russians healthier than others? Is it simply because of age or income and/or gender, or does access to informal social capital also make a difference? Preliminary work with the medical School of University College, London (Bobak et al., 1997), indicates that social capital does have a net positive effect on health. In addition, in each domain the block of questions will include one or more measures of the specific benefits that individuals obtained, whether through relying on formal entitlements or by other means.

Implications for Individuals and Institutions

The project is designed to give empirical answers to the question: Under what circumstances and to what extent do informal social capital networks affect the delivery of goods and services by formal organizations? If formal organizations function perfectly, then informal social capital should be of little consequence. But informal social capital should be important in “nontransparent” societies in which the institutional infrastructure assumed in the neoclassical economic paradigm does not exist or, even if it appears to exist, does not operate as the paradigm assumes. In principle, the introduction of the market economy in Russia offers an alternative — but this assumes that there are no problems on the supply side in obtaining goods and services.

The relationship between formal organizations and informal social networks is contingent. Putnam argues that formal and informal institutions positively interact to produce good government and, by analogy, good institutions for a market economy. But there are also good reasons to hypothesize that informal capital is complementary to resources obtained from formal organizations, ameliorating difficulties that individuals have in using them to secure their welfare. Informal networks provide substitute resources when people run short of money or face bureaucratic obstacles. A third hypothesis is that reliance on nonmonetized social capital is a mark of “backwardness”, isolation or even desperation by people who lack money in an emerging market economy. A fourth hypothesis is that informal networks can be “antimodern”, being a cause of imperfections, such as corruption or favoritism, in a modern polity and economy.

There is ample empirical evidence that Russians do not respond uniformly — whether positively or negatively — to top down reforms of institutions and policies introduced by national governments. Some make use of them, others may still rely on personalistic or “antimodern” strategies and a third group may not engage with new

institutions. Since formal organizations are integral to modern societies, the most general hypothesis is that individuals who use them most as they are designed to be used are most likely to be found in more “modern” sectors of society, e.g. to be more educated, urban, have higher earnings, and so forth. Reciprocally, those who rely on informal networks group may not engage with new institutions. Since formal organizations are integral to modern societies, the most general hypothesis is that individuals who use them most as they are designed to be used are more likely to be found in more “modern” sectors of society, e.g. to be more educated, urban, have higher earnings, and so forth. Reciprocally, those who rely on informal networks are likely to be less modern or more traditional, for example, less educated, older, living in rural areas, etc. But research on behavior in Soviet times concluded that more modern, educated Russians preferred “unbureaucratic, personalizing” strategies because they felt best able to work the system by hook or by crook through informal networks (DiFranceisco and Gitelman, 1984: 611f).

To determine what influences different strategies for coping with formal organizations, the survey will collect a wide range of data about individual characteristics, such as age, education, gender, union membership, employment characteristics, social status, etc. Given the primary importance of households in informal networks, the survey will also collect data about the number of people living there, how many are working, children or retired person, and also common resources, such as a car or hard currency consumer goods. At the third level of the neighborhood or city, there will be evidence about town size, region, local labor market conditions, etc. Multivariate statistical analysis can then be used to account for alternative strategies in the use of social capital.

Examining social capital in different domains of everyday life will determine whether strategies for the use of informal social networks tend to be determined by characteristics of goods and services or of individuals, such as education or gender. For example, it is greater for house repair than for health care, or does it vary more by an individual’s education or living in a rural area of a metropolis.

The decision to focus on three types of strategies — modern, personalistic and antimodern — follows from earlier research by Rose (1993), which found that Russians (and people in other post-Communist societies) were much more likely to rely on personalistic strategies and informal networks that were illegal rather than on corruption and other forms of illegal uncivil activities. This may also be a form of compensatory equalization, for while income inevitably varies between individuals and households, friendship networks may be similarly strong, or even above average in strength in lower income households. Allowance for intermediate categories between following and breaking bureaucratic rules of formal organizations, for example, persistent pushing by claimants or seeking help from personal contacts — will provide a more accurate and nuanced characterization of the production of goods and services. An explicit concern with formal organizations will avoid the distorting perspective of research focused exclusively on activities outside the law, or ethnographic and anecdotal reports.

By asking the intended beneficiaries of bureaucratic formal organizations to report on their experiences, the research will raise issues important for public administration at the point at which it affects the largest number of people. Insofar as red tape, petty rules and regulations cause confusion, frustration and long delays, implies the need to “humanize” bureaucratic procedures to make the delivery of services simpler for the end beneficiary. Insofar as there is substantial evidence of officials collecting “tips” or bribes to expedite the delivery of services, this will call for measures to reduce opportunities for rent seeking through a “bonfire” of controls. Evidence of corruption at the service delivery level can prompt increased attention to the need for incentives for civil servants to be honest, such as higher salary, and sanctions for abusing office, such as suspension or dismissal.

Where informal, and especially nonmonetized social networks appear important, such evidence can be taken into account in evaluating existing policies and designing new policies to ensure that they do not disrupt traditional and alegal safety nets, such as a household growing some of its food. In housing policy, there are possibilities of making use of informal networks to encourage investment of labor in enhancing the value of preventing the deterioration of a large stock of physical capital.

Insofar as there is evidence that Russians can and do make cash payments for nominally “free” public services, this can be interpreted in two different ways. On the one hand, it may be cited as a reason for legalizing payments by imposing charges for state services in a country where government’s fiscal capacity is extremely weak. Alternatively, it may point toward making more use of market organizations and fee-for-service not-for-profit organizations to provide goods and services that the state does not currently deliver according to its own rules. A third alternative is to encourage the competitive provision of services by a mixture of organizations, thus giving citizens some choice between paying over the table or under the table.

An optimistic version of social capital theory would predict that cooperation between Russians could lead to the creation of formal organizations in civil society to provide what informal groups cannot, for example, hospital care or private pension. But given the legacy of conditions in an hour glass society, informal social networks may be found to be “state exploiting”, that is, used to break or bend rules and thus inhibit the growth of modern rule-of-law organizations in any form.

Insofar as path dependency remains a major influence on behavior, then the difficulties facing reformers in the Russian Federation today can be explained as the consequences of being caught in a low-level equilibrium trap, a legacy of the hourglass society. As long as strategies of individuals seeking to cope amidst the turbulence of transformation reflect the past, they will put brakes on economic growth (cf. Rose, 1993). When growth occurs, it is likely to be ‘at high cost, often with long lags, and not without question marks’ (Winiecki, 1997).

Changes in social structure offer the prospect of gradually moving away from the pathologies of the past. Insofar as analysis shows that positive reliance on formal organizations rises with income — and particularly that market institutions are evaluated more positively than state monopoly services — this implies many difficulties will be eroded as fruits of (slow) economic growth trickle down. But insofar as higher income is correlated with a greater tendency to bend or break the rules, this implies that economic growth will encourage the development of pathological forms of social capital, as implied in Hedlund and Sundstrom's (1996) question: Does Palermo represent the future for Moscow? Insofar as more education encourages greater support for formal organizations, an increasingly educated population should lead to improvements in governance, the market and civil society. But if the evidence shows that more educated people “get smart”, and are readier to bend or break rules to get what they want, this implies continued dissociation between everyday life in Russia and life in a normal modern society.

Summary and Steps in Research

The implementation of the study will consist of five steps.

- 1.** Review uses of the term social capital and their empirical references, ranging from the strength of face-of-face ties with family, friends and neighbours; involvement in informal and formal local institutions; contacts with national governmental and nongovernmental organizations; and social psychological attitudes of trust.

The conceptual work will lead to the design of a special purpose social capital questionnaire with multiple items measuring different dimensions and forms of social capital. It should also incorporate measures of welfare and health that may be produced with social capital, including food, health care, employment, etc.

- 2.** Carry out a representative nationwide Russian sample survey to collect original data about informal and formal forms of social capital. VTs IOM, the oldest and most experienced Russian survey research institute, can provide a nationally representative sample survey with 2000+ respondents and do so promptly with full documentation of questions asked, verification of interviews, and sample report.

- 3.** The data will then be used to test the extent to which different activities and attitudes said to constitute social capital, e.g. cooperation in nonmonetized productive activities, trusting or distrustful attitudes toward others, membership in formal organizations, etc., are in fact statistically related.

The results of technical analysis have substantive importance given Putnam's assumption that social capital is unitary and makes democracy work, as against the Sovietologist assumption that people have used informal social capital to replace or protect themselves from deficiencies of uncivil formal organizations.

(Putnam assumption) If individuals are high in use of social networks, they are also positive about impersonal public organizations.

vs.

(Uncivil society model) If individuals are high in use of social networks they are less dependent on impersonal public organizations.

4. One should not assume that "everybody" has the same amount of social capital; the evidence is likely to show substantial variation around the national mean. Given robust multi-indicator measures, the project can test statistically why some individuals in a society have more (or different types of) social capital than other people. The leading hypotheses are:

If individuals are in more modern sectors (e.g. educated, urban, employed), they are likely to have more formal organizational capital.

vs.

If individuals are in more traditional sectors (e.g. rural, churchgoing, low in education) they are likely to have more informal social networks.

Gender may also be an important cause of differences in social capital.

If the measures of social capital are linear, then standard OLS regression statistics will be used. If the results indicate nonlinear relations, then logit or discriminant function analysis may be used as appropriate.

5. The survey data will then be used to test under what circumstances or to what extent informal and/or formal social capital increase nonmonetized indicators of "welfare" and health. Survey data is important to answer questions that mortality statistics cannot answer because they are aggregate data.

(Null hypothesis) An individual's social capital has no significant relation to her or his welfare or health.

vs.

(Positive hypothesis) An individual's social capital increases her or his welfare or health, net of all other economic, demographic and other influences.

How much or how little difference social capital makes for welfare and health is an open empirical question. Multivariate statistical analysis offers the appropriate way to test its influence. Regression analysis will include standard nonsocial capital measures conventionally assumed to affect welfare and health, such as income, education, age, gender, employment, being outside the labor force, etc.

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SOCIAL CAPITAL INITIATIVE - PROJECT 8

Ethnic Fragmentation, Political Institutions and Social Capital in Africa

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Introduction

Collective ethnic identities can have great social value. Ethnic groups can defend their members property rights, help members mobilize to build local public works, promote human capital to secure investments in education for their members, and help overcome obstacles to collective action. In these and other ways, ethnic identity can help to build trust and social capital between persons in a given ethnic group. However, they can also undermine social capital in society as a whole. Although ethnic identity helps members of the same ethnic group work together for common goals, the goals they work towards might not be beneficial for society. Instead of encouraging public good production that benefits everybody, groups might instead find themselves battling each other for scarce resources. Instead of promoting investment in public goods (as Robert Putnam envisages in *Making Democracy Work: Civic Traditions in Modern Italy*), polarized groups might find themselves battling for scarce resources (as Mancur Olson suggests in *The Rise and Decline of Nations*). In this way, ethnic groups might actually reduce a country's social capital by undermining trust between groups and reducing the effectiveness of political institutions.

Knack and Keefer (1996) show that ethnic fragmentation is negatively correlated with how much persons in a given country trust each other and how civic-minded they are. They argue that these measures reflect the level of social capital in a country, as it is conventionally defined. If this is the case, this might explain why ethnic fragmentation in Africa appears correlated with slow growth and poor policies (Easterly and Levine (1996)).

This project will study how ethnic fragmentation in Africa affects political institutions, the potential for political violence and economic outcomes. The research will examine the circumstances in which ethnic diversity does and does not lead to violence, the impact of ethnicity on political conflict, and whether ethnic conflict promotes resistance to political reform. Understanding the interaction between political institutions and ethnic fragmentation will help governments (and donors) design local public goods

projects while minimizing the potential for regional ethnic conflict. Further, based upon these findings the project will examine how political institutions can be reformed to secure the benefits of ethnic social capital while diffusing the costs.

Data on Political Change and Political Violence in Africa

The project will utilize a unique data source collected for research on interactions between politics and economic growth in Africa. (Ferree, Singh and Bates (1996)). The data provide detailed information on the degree of political competitiveness in Sub-Saharan African countries for various years between 1975 and 1995. The time series component of the data allows us to study changes over time, as well as differences between countries. The data provides information on the executive and legislative branches of government by asking questions about the degree of political competition.

For the executive branch the questions are:

1. Did the country have a government at the end of the year, and did some individual or group function as the executive?
2. Was the chief executive elected to that position?
3. Did more than one candidate run in the election for the position of chief executive?
4. Were multiple parties legally permitted to contest these elections for the position of chief executive?
5. Did candidates representing more than one party contest these elections for the position of chief executive?

For the legislative branch the questions are:

1. Was there a representative assembly?
2. At the end of the year, were any of the seats filled by elections?
3. Did multiple candidates compete for the seats?
4. Were multiple parties permitted to compete for seat in the legislature?
5. Did candidates representing more than one party contest these elections for seats in the legislature?

These questions are designed so that they “nest” almost perfectly. If the answer to an earlier question is “no”, then the answer to subsequent questions should also be “no”. For example, if none of the seats in the legislature were filled by election (question 2), then multiple candidates did not compete for the seats (question 3). This means that the questions yield Guttman scales for the executive and legislature that are coded into six categories. For example, countries with no legislature fall in category one (for the legislature). Countries with a legislature where no seats were filled by election fall in category two. Countries with some seats filled by election, but where multiple candidates did not compete for the seats fall in category 3 and so on. A similar process is used for the executive.

These scales offer a significant improvement over other political indices such as the Freedom House, or Gastil, indices. In particular, because the indices only cover the single dimension of either legislative or executive competition, the meaning of a “3” or a “4” is clear. In contrast, the Freedom House data are less clear since rankings require experts to aggregate information over many different dimensions (e.g. freedom of the press or likelihood of arrest without probable cause).

For this project it will be necessary to collect and code additional data, including data on political violence. Rather than simply using dummy variables for the presence of political violence, it is important to codify on the extent and type of violence. A small coup where only a few, or no, people die is very different from a civil war where hundreds of thousands may be killed or made homeless. This improved set of political violence data will be useful for researchers investigating the effects of political violence on other economic outcomes who until now have relied upon simple dummy variables for revolutions and coups.

To collect data on the form and magnitude of political violence, Professor Bates will redeploy the research team that collected the data on institutions. The team will use the collection of Widner Library at Harvard University, whose span and organization they have already mastered. They will employ such sources as:

U.S. Committee for Refugees: The number of refugees and displaced persons provides a proxy for the extent of political violence.

U.S. Department of State; Amnesty International; Human Rights Watch. These sources offer data on the degree of political violence, i.e. violence by the government itself.

Banks (1994), as updated by Barro and Lee (1994), Bienen and Van de Walle (1997) and Deaton and Miller (1994): Data on coups, assassinations, riots and rebellions, drawn from these sources, will provide measures of the frequency of political conflict.

Africa Digest, Africa Contemporary Record, Africa Confidential Record, Africa South of the Sahara, United States Disarmament Agency: Data from these sources will provide measures of 1) the scope of violence: its regional spread, its duration, and the number of casualties; and 2) the level of resources devoted to warfare; the kinds of weapons and military technology employed in fighting.

To evaluate its questionnaire and to estimate time requirements the team mounted a pilot study. This experience indicated that it will take between 6 and 8 weeks to collect the data for 46 countries for the period 1970 through 1995. The remainder of the time will be devoted to data cleaning, entry, and analysis.

Ethnic Fragmentation, Political Institutions and Social Capital

Much of the creative energy in African society is embedded in ethnic groups. They help economic and political entrepreneurs to solve collective action problems, to form public goods, and to invest in the formation of human capital. But these groups can also impose political costs. Recent events in Central Africa vividly illustrate how ethnic fragmentation can lead to ethnic conflict. However, even when ethnic conflict does not lead to violent confrontation, research suggests that it may lead to an inefficient allocation of resources. Alesina, Baqir and Easterly (1996) finds that ethnically fragmented cities in the United States have lower investment in public goods such as education, roads and libraries, and higher public employment. They suggest public employment may be due to patronage. This is consistent with the assertion that ethnic competition causes groups to divert resources from public goods to private goods only benefiting that single group. Recent research on Africa has found that ethnic fragmentation reduces growth rates and that it is correlated with poor policy choices. Ethnically fragmented countries have slower growth, lower levels of schooling, more assassinations, less financial depth, higher deficits, and fewer telephones per person. (Easterly and Levine (1996)). These differences could be due to differing degrees of political violence and political reform.

In this study, we wish to explore how ethnic diversity affects the nature and stability of political institutions in Africa. This will allow us to study, in detail, one way fragmentation might affect policy and growth. Using the data on political violence, the project will study the impact of ethnic fragmentation on political conflict. This will allow us to examine circumstances under which fragmentation does and does not lead to violence. The time series aspect of the panel will mean that we are be able to study whether fragmentation promotes resistance to political and social change. If ethnically fragmented countries resist political competition, due to concerns about instability and violence, then it will promote resistance to political reform. Together, this will help us to examine the impact of instability and democratization on growth and public policies in Africa.

Policy Implications

The research will explore the hypothesis that a society's political institutions shape the impact of its endowment of social capital. Within a society, ethnic groups not only provide means of solving collective action problems and providing public goods, they also constitute political constituencies. They are organized by leaders, who in turn respond to the political incentives created by the institutions that structure the competition for power.

Viewed from this perspective, it is possible, that:

1. The introduction of PR list systems of political competition will reduce violence by guaranteeing the leaders of ethnic minorities access to power. It may freeze the size and distribution of ethnic groups, as leaders will seek to defend their electoral base.

2. The introduction of a distributive vote requirement might lead political leaders to reduce ethnic conflicts, as they seek to secure the required proportion of votes from multiple ethnic constituencies.

Variation in the way political institutions structure competition between political leaders, across nations and time, may thus lead to variation in the way in which they mobilize ethnic groups politically.

Understanding how political institutions can be used to prevent ethnic conflict will improve donor understanding of ethnic conflict and allow donors involved in institutional reform to design projects which will decrease the potential for violence. Given increased donor emphasis on democratization, this research appears timely. Further, understanding how ethnic diversity interacts with existing political institutions will help donors design projects which are primarily local, rather than national, in scope (such as projects on education or urban infrastructure) to minimize regional ethnic conflict.

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SOCIAL CAPITAL INITIATIVE - PROJECT 9

Giving Empirical and Operational Content to Social Capital: Explaining Development Outcomes in Rajasthan Watersheds

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The concept of "social capital" has received impressively rapid acceptance within the community of development professionals, but it remains an elusive construct. Various definitions have been offered, but none of these can be validated in their own terms, any more than physical or financial capital could have been defined over 200 years ago as a matter of finding the best or right wording. Empirical work guided by theory is needed.

There are a number of core concepts associated with the construct of "social capital" that are worth exploring — civic culture, propensity for cooperation, collective action, mutual benefit, reduced transaction costs, solidarity, positive-sum outcomes. However, for purposes of supporting and accelerating economic and social development, progress needs to be made in operational, not just semantic terms.

We propose to tackle the questions presented below in a systematic, inductive manner. The work will be informed by the best conceptualizations that we can find or formulate and that can be employed in the field. Since there is no clear agreement on what social capital *is*, we wish to proceed inductively, starting to build up a body of conceptual and empirical knowledge that will, through consensus established over time, provide a foundation for theory and practice that can mesh with our understanding of other kinds of capital as they have been validated over many decades. The three focus of proposed research are:

1. Do factors that have been identified with social capital help to explain desired development outcomes in empirical terms? Does what is understood as social capital have demonstrable correlates that can be reasonably inferred to be results of those factors? With appropriate methods, can it be established whether, or to what extent, there are real-world consequences of what is thought to represent social capital?

2. How do various factors associated with social capital affect desired outcomes, i.e., what are the major components or elements of social capital? The subject of social capital is greatly in need of systematic analysis, through careful disaggregation.
3. What purposeful initiatives can contribute to the build up of more social capital? How can social capital be created by planned interventions? Although there is much support for increasing social capital, there is little empirical basis for designing programs to achieve this objective.

We propose examining these questions and relationships by analyzing existing data and by collecting additional data through studies and surveys in villages in the Indian state of Rajasthan. There, a World Bank funded program has since 1991 introduced soil conservation and watershed conservation practices that supplement a larger and more dispersed program of soil conservation and watershed management being implemented by the Government of India.

The Rajasthan Watershed Conservation Project was able to mobilize extensive local participation through User Committees at village level, as discussed below. Because the World Bank and GOI expected rapid scaling up, the rate of work was expanded to 100,000 hectares per year, ten times the rate previously achieved by government programs. Implementation was supported by interdisciplinary (and interdepartmental) teams of officials and technicians who worked closely and cooperatively with villagers in this innovative effort (see Krishna, 1997).

Not all watersheds and not all communities participated equally, or equally effectively, in the program, but overall there were some remarkable transformations in the local agricultural economies and in bureaucratic practices. There is a strong *prima facie* case: (a) that there was social capital to be drawn upon in the implementation of this program, and (b) that social capital would have been built up during this process of participatory development. This case offers fruitful opportunity to assess the operation, components and promotion of social capital.

Concepts Pertaining to Social Capital

Much theorizing in social science has assumed that persons seek to maximize their own well-being (welfare, utility) by employing their respective resources as individuals entering into market transactions. Factor markets to earn income and product markets to acquire goods and services are seen as functioning essentially in *competitive* modes of operation. Such an understanding of interpersonal relations has produced many insights into the workings and development of economies, but limitations become evident when we consider social capital.

This concept highlights various elements of social organization that contribute to the functioning of society by facilitating coordinated action, i.e., *cooperative* modes of

operation. The latter do not replace or displace the former, but apart from producing some direct benefits they are generally required to achieve the fullest benefits from competition, since this outside of a context of cooperation produces various inefficiencies and failures.

So far there has been little systematic conceptualization of social capital. This term needs to be analyzed in ways that can build consensus on: (a) what are the constituent elements or components of this phenomenon, and (b) what are the relationships that exist among them. So far, discussions of social capital have been more descriptive than analytical. They have offered mostly *examples* of social capital, e.g., obligations, expectations and trustworthiness of structures, information channels, and norms accompanied by effective sanctions (Coleman 1988), or trust, norms and networks (Putnam et al. 1993). They have not delineated in an inclusive way what the term encompasses. Our proposed research will not simply assert certain terms and definitions. Rather we want to identify and extract meaningful components and relationships from real world development experience.

"Subordinate conceptualization" is what such an exercise is called. It is essential for theoretical as well as practical progress. Where would the study and management of natural resources as a form of capital be today if the distinction and relationship between *renewable* and *nonrenewable* resources had not been introduced conceptually and developed empirically? Or how well would we understand physical capital without the distinction made between *fixed* and *working* capital? These distinctions are not just "examples," but rather are put forward as terms analytically rigorous and theoretically important.

An Analytical Approach to Social Capital

We start by proposing two distinguishable but clearly interrelated categories of social capital: (a) *structural*, and (b) *cognitive*. The first, broadly speaking, is associated with social organization of various kinds and always with **roles**, while the second is based in the realm of ideas, including **norms, values, attitudes and beliefs**. The social structural and cognitive realms are linked in practice and theory by the behavioral phenomena known as **expectations**.

(a) *Roles* create expectations on the part of role incumbents and those with whom role incumbents interact, while

(b) *Norms, values, attitudes and beliefs* create expectations about how people *should* act and about how they *will* act, e.g. whether cooperative or not.

Although the first domain is more visible and external and the second is more invisible and internal, both concurrently affect the **behavior** of persons, both individually and in smaller or larger groups. Roles within various social structures as well as norms and values, expressed in associated attitudes and beliefs, are we think the **mechanisms** by

which social capital is built up and accumulated. Roles, social structures, norms, values, attitudes and beliefs once they are shared within a population can have energizing and reinforcing effects, though they can also diminish.³⁵

The following table attempts to pull together in a systematic way some of the key concepts that have been associated with social capital in the literature:

<u>Categories</u>	<u>Structural</u>	<u>Cognitive</u>
Basic Features and Manifestations	Roles Interpersonal Relationships Networks	Norms Values Attitudes Beliefs
Domains	Social Organization	Civic Culture
Concrete Expressions	Horizontal Linkages Vertical Linkages	Trust Solidarity
Common Aspects	Expectations, leading to Cooperative Behavior that produces Mutual Benefits	

These two categories of social capital are, as stated already, interactive, as each contributes to the other. Both operate on behavior we think through the mechanism of *expectations*. They are conditioned by experience and reinforcement in terms of interpersonal relationships, values, attitudes, etc.

Putnam (1993) makes no distinction between structural and cognitive elements when he suggests that trust, norms and networks are elements of social organization that improve the efficiency of society by facilitating coordinated actions. Persons can enter into cooperative relationships strictly to improve the efficiency of their own resources, we would say, or they can enter into such relationships because they desire benefits for others as well as themselves, i.e., in addition to or even instead of themselves. The latter is the most extreme manifestation of social capital, not common but possible. Persons can appreciate an enterprise for its own sake as embodying higher order values, and they can do so because they would like others, not only themselves, to receive benefits. However, most transactions are more self-oriented than other-oriented, according to most social science analyses.

³⁵ We think there may be a useful analogy with batteries which can store electrical current. Once charged up, they yield a continuing stream of power, though they can also be run down if not re-charged. Roles once established and ideas once accepted could work much like this, being maintained perhaps indefinitely as long as some minimum required re-charge is provided.

These different possibilities lie along a *continuum* that suggests some qualitative changes in social capital, with quantitative implications to be investigated empirically. Presumably there is, by definition, always as least some minimum of social capital in any collection of persons that can be considered a society. But let us assume that there is some level of minimal association so atomistic and elementary that it represents no social capital.³⁶

	<u>No Social Capital</u>	<u>Minimum Social Capital</u>	<u>Increased Social Capital</u>	<u>Maximum Social Capital</u>
	No interest in others' welfare	Commitment mostly to own welfare	Commitment to common enterprises	Commitment to others' welfare
	Independent self-interest maximization as motive	Cooperation to the extent that it serves one's own advantage	Cooperation to a greater extent if it is efficacious	Cooperation with limited regard to one's own advantage
Values	Self-aggrandizement	Efficiency	Effectiveness	Altruism
Issues	Selfishness - how can this be kept from being socially destructive?	Transaction costs - how can these be reduced to increase respective benefits	Assurance - how can cooperation, i.e., pooling of resources, succeed and be sustained?	Self-sacrifice - how far should this be taken? (e.g., patriotism, religious zealotry)
Strategy	Autonomy	Tactical cooperation	Strategic cooperation	Merger or submergence of individual interests
Mutual Benefits	Not relevant	Instrumental	Institutionalized	Transcendent
Options	(Hirschman, 1970)	Exit, if dissatisfied	Voice, try to improve terms	Loyalty, acceptance
Game Theory	Zero-sum, choices can become negative-sum in their results if competition is unlimited	Zero-sum, exchanges intended to maximize own interests can have positive-sum results	Positive-sum, aim is to maximize own and others' interests to mutual advantage	Positive-sum, aim is to maximize common interests with own interest less important
Utility Functions	Independent (weight given only to own utilities)	Independent (own utilities advanced through cooperation)	Positively interdependent (weight given to other's utilities)	Positively interdependent (little weight assigned to own utilities compared to others')

³⁶ An anthropological description of a society with virtually no social capital is offered by Turnbull (1972), which is a sharp contrast with another society previously described in similar detail (Turnbull 1961).

The left-hand and right-hand columns are of less interest to us because they are rather extreme situations, although they "frame" the research and policy problem by anchoring the two ends of a continuum. The middle two columns are of practical interest and importance.³⁷

Social capital is required in the second column but even more in the third. There are some a priori reasons for thinking that the third will be a more productive and robust situation of cooperation and collective action, where outcomes are multiply valued and appreciated. But it may also be more difficult to establish and may be subject to its own sources of weakness.

As this is a continuum, all situations described are matters of degree rather than just of kind. One could hypothesize that to the extent some values and elements associated with the fourth column are present in the third situation, it will be more durable, for example. This is not a purely imagined proposition since some of the elements of so-called "traditional" communities are associated with these more normatively interdependent and intense kinds of relationships.

In our research we will try to identify and measure the frequency and extent of norms and roles that are associated with all four columns, to see whether this analytical formulation has some relevance in the real world. Nonparametric statistical analysis, e.g. Guttman scaling, can be used to assess whether the values, attitudes and relationships associated with these four types of situation are in some sense cumulative or are independent manifestations.

An important hypothesis to test is whether development outcomes, as measured by indicators such as adoption of cooperative soil conservation measures, increased school attendance, and public health improvements, are greater with the social capital represented by third column compared to that for the second column. Is a degree of solidarity important for the more effective functioning of different development programs?

Social Capital as a Form of Infrastructure

A complementary theoretical perspective on the subject of social capital is to consider it as a kind of *infrastructure* that increases the efficiency and benefits of economic and other transactions. Three basic functions of infrastructure have been identified previously as:

1. Making exchange easier and less costly,
2. Making exchanges more reliable and predictable, and
3. Making converting or transforming resources easier by increasing their accumulation (Ilchman and Uphoff, 1997).

³⁷ This continuum has been presented with somewhat different terminology in Chapter 12 of Uphoff (1996).

These somewhat abstract functions are represented concretely in an economy in terms of:

1. *transportation* infrastructure, facilitating the movement of resources, goods and services,
2. *communication* infrastructure, providing information about the prices,
3. availability, productivity, demand, etc. for resources, goods and services; and, *power* infrastructure, aggregating capacity to convert inputs into outputs.

In terms of social capital, one can see how *networks and social organizations* that support both wider and more intense interactions and exchanges among persons can contribute to all three of these functions, but especially to function (a). The creation of a sense of *obligation and loyalty* would make interactions and exchanges more predictable and reliable (function b), as would mechanisms for assurance and social sanctions. The existence of *trust and solidarity* would also support these outcomes, facilitating the aggregation of larger amounts of resources so as to make achieving more ambitious undertakings possible (function c). Indeed, trust may be the equivalent for social enterprises of what electric power generators are for economic enterprise. This is to suggest that exploring analogies with physical infrastructure may shed light upon the functions of social capital in terms of what its various forms can contribute to increased and sustainable productivity.

The Social Psychology of Social Capital

What is not clear from this discussion is *how* the roles and norms which represent social capital — fixed social assets that yield an income stream of cooperative behavior — come into existence or are maintained. This gets us into social-psychological areas that are seldom frequented by development specialists. The discipline of social psychology is perhaps the most underrepresented in development studies. As suggested above, we think that the concepts elaborated here can clarify the dynamics of social capital creation and accumulation, as well as disinvestment.

Contrary to the suggestion of Coleman (1988) that social capital is "embodied in relations among persons" (page S118), we would propose that it is *instilled and installed in human minds*, though it is manifested in relationships among persons. Both roles and norms are psychological constructions, though roles are projected into observable reality by persons occupying them and interacting with them. Persons in roles conform to others' and their own expectations about such roles. Others' behavior is affected when they interact with persons in recognized and accepted roles.

We do not have, and are not proposing, a full-fledged social-psychological theory of the dynamics that contribute to the creation of social capital, but we have some thoughts on this subject. Certainly the development of individual *identity* is important, both in terms of the individual's self-identity and of his/her identification with multiple groups (e.g., religious, nationality, locality, occupation). People are more willing to

commit themselves to cooperative endeavors to the extent that they attach some value to other persons' well-being.

If people do not identify with other persons, there is less incentive, only self-serving motives, behind cooperative behavior. *Self-esteem* and *self-confidence* are also results of social-psychological processes that contribute to characteristics such as *trust* and willingness to *invest for the future*, which cooperative ventures require. The understanding and acceptance of roles, much like norms, involves an experiential element with which learning is a requisite, i.e., rationalized evaluations are needed to justify a particular role or norm.

One of the areas which we hope to get a better understanding of, though it cannot be proven without different and more extensive research, is how the relationship between the individual and the broader community affects the accumulation and use of social capital. Individual perceptions and cognitions are influenced by others' perceptions and cognitions. Learning, while it is consolidated in individual mental processes, is a profoundly social phenomenon, with concepts and evaluations determined in large part through interaction with others, testing and validating one's own responses and interpretations against those of others.³⁸ We expect to consider this dialectical relationship as it is observed in the field, to see what knowledge can be gained in this direction.

Older vs. Newer Forms of Social Capital

Another area of interest where we hope to come up with some instructive conclusions concerns the relationship between *preexisting* roles/institutions/networks/norms/attitudes/beliefs, on one hand, and newly introduced or promoted ones. The Soil Conservation and Watershed Development Department worked in the Rajasthan program with mostly new social entities (user committees), but there were also some existing forms of social organization in the area. The extent to which the latter contributed to the former should be considered.³⁹

We will want to see and assess the extent to which *current* social capital depends on *prior* social capital. (We won't call it "primordial" though there could be some element of this.) Putnam (1993) suggests that current manifestations of social capital in Italy are the consequence of behaviors, precedents and cultural values built up over many centuries.

³⁸ This is what Habermas (1984) was addressing in his discussion of communicative action and rationality.

³⁹ The experience of Uphoff in introducing water user associations in Sri Lanka (Uphoff 1996) indicated that although there were hardly any existing social organizations to build on in Gal Oya, there were latent norms of cooperative behavior which could be mobilized. With regard to improving irrigation operation and maintenance, the informal institution of *shramadana*, legitimating voluntary group contributions of labor to serve some public purpose, could be activated by young organizers even though this practice had been virtually absent (dormant) for the previous 30 years. The institution of *shramadana* (an institution that is not an organization, as defined by Uphoff 1986) exists also in Rajasthan.

We are uncertain about how long a time period should be considered, but we know that antecedents for social capital deserve explicit and systematic attention. One factor which probably affects outcomes is the extent of *legitimacy* which is attributed to institutions and role (also norms and values) both preexisting and new. This should be investigated.

Value Orientations in Social Capital

It is clear from most accounts that *values* are an important aspect of social capital. We, however, consider them as one form of cognitive social capital, and not the only form even if possible the most important one. Assessing this is an empirical question. One hypothesis we propose is that the *content* of values is important. Specifically, we think that democratic and egalitarian values, in the sense of assuring procedural opportunities for individual participation and having *ex ante* opportunities for developing one's potential to the fullest, are important for social capital. The reason would be that such a normative orientation underscores the value of individuals and of their potential to contribute to the well-being of others as well as to themselves.

Even where social organization is fairly hierarchical, a belief in the worth of all individuals — and some assurance of opportunity to learn, grow and experiment — could contribute to overall social productivity in ways that are associated with having greater social capital. Relationships of trust and cooperation seem also more likely to take root and persist where persons are not subordinated in undemocratic political relationships and in inequalitarian economic and social relationships. This is anticipated to be a matter more of degree than kind, however. This is something that can be examined empirically, whether there are some substantive values that weigh more heavily in the process of social capital formation and give this more effectiveness in development processes. Possibly these might be accelerators of social capital formation rather than initiators.

Social Contract and Other Issues Related to Social Capital

The four-column model presented above suggests some connection between the analysis of social capital and the "social contract" approach to political theory. Hobbes' analysis of the dangers and disutilities of a state of nature, which he saw as "a war of all against all" (the left-hand column situation), has provided rationale for subordinating individual welfare to larger common enterprises, such as could justify the right-hand column. However, Hobbes' version of the social contract, like that of John Locke, tends to favor the second column rather than the third. Jean-Jacques Rousseau's theory of the "general will," justifying a kind of all for one and one for all philosophy, justifies the fourth column.

Some important issues concern the extent to which social capital is a purely instrumental creation, intended to serve the respective personal needs of individuals, rather than something that is more permanent and transcendent because other's needs and interests are also involved and deserve to be satisfied. Social capital can certainly exist in a second-column mode, but whether this is as lasting and productive as third-column roles

and norms is an empirical question. We expect our research to contribute (in a small way) to long standing issues of normative and positive political theory such as those noted here.

The role of *leadership*, long a major concern in political theory and in practice, is also important here, though we do not consider all manifestations of leadership as social capital. *Roles* and *norms* that create consistent *opportunities for leadership* to be manifested and that encourage *support of leadership* are surely forms of social capital, but not the leadership itself, according to our analysis. That comes and goes in a way that capital does not. We do want to study the contributions of leadership to the creation and utilization of social capital.

One can see how leaders create consistent and (often optimistic) expectations, how they appeal to people's more cooperative dispositions, how they provide plans for long-term payoff and benefit distribution, and how they fuse individual identities with some common identity, to give some examples of how leadership would fit into the analytical framework being formulated here.

Certain kinds of cognitive products, in the form of *obligations* and *commitments*, deserve particular attention. These have been considered by Frank (1992) in terms of how they make market exchanges more sustainable and productive. One can understand how these would be encouraged, invested in, and solidified by social, political and economic interactions. We suspect that these ideas are some of the more important forms of social capital in the cognitive realm. They can be linked to roles and social networks so that they are part of the structural realm as well. The dialectic between cognitive and structural forms of social capital will be a concern in the proposed research, seeking to establish in how far — and how — these two kinds of human activity, one more visible and the other less so, can contribute to productive cooperative activity over time.

Many other issues and aspects of social capital could be explored. Our intention is to proceed very empirically but from a coherent theoretical/conceptual basis. This will be modified and improved in the course of interacting with field data and experience. For this reason, the remainder of the proposal concentrates on the field situation and the research efforts we wish to undertake there. Some further conceptualizations that build upon and elaborate the above discussion are presented in an annex.

The Watershed Program's Tasks and Responsible Agency

The Rajasthan Watershed Development Program was commenced in 1991. The program was managed by a newly established multidisciplinary government department, the Department of Watershed Development and Soil Conservation (WDSC). The department was set up to undertake large new programs of integrated watershed development that could tackle widespread and chronic insecurities in the availability of food, fodder and firewood in the state. The deterioration of forest and vegetative cover as well as agricultural production and domestic water supply gave much cause for alarm.

Livelihood insecurity in Rajasthan is nothing new. It has been a constant feature of that state's landscape, which is mostly ranging from semiarid to arid, but decline in water supplies and soil fertility has become even more pronounced in recent years. Only 13% of Rajasthan's area has access to irrigation. Mean annual rainfall increases from 250 mm in the most arid part of the state (in the west), through 500 mm in the semiarid central part, to about 1000 mm in the semiarid southeast. Rainfall follows a unimodal distribution pattern with 90% of precipitation occurring between July and September.

Agriculture is the major occupation of almost 80% of the population, with animal husbandry playing a critical role in protecting against the uncertainties inherent in rainfed crop production. The pressure of increasing population (2.5% per annum, implying a doubling of population every 28 years) places great strain on natural resources. The cattle population has been increasing even faster, leading to intense pressure on grazing lands. Animal units per 100 hectares have increased from 39 in 1951 to 105 in 1988. Diminishing production from common and forest lands has led to a temporal decline in the availability of fodder and fuelwood. Combined with wide annual variations in rainfall around the meager average, the result is frequent drought characterized by food, fodder and water shortages and temporary outmigration of human and cattle populations, creating a permanent situation of severe strain on food, fodder and energy resources.

The department has its headquarters at Jaipur, the state's capital. Its full-time staff, numbering over 2,000 persons, are deployed at various locations throughout the state. They manage program activities in over 250 watersheds, all together covering almost half a million hectares. The staff are deployed in teams, called *units*, which consist of eight to ten persons. Half of the unit members come on secondment from other departments in order to have broad disciplinary strength. Units are collectively in charge of between four to eight watersheds, each with an area 1,000 to 2,000 hectares, located within specified territorial jurisdictions. Almost the entire state, apart from the few subdistricts where irrigated land is the norm, is divided up into areas served by specific WDSC units.

Given the large and dispersed area they have to attend to, full-time staff are spread rather thinly on the ground. They are complemented by paraprofessionals, village persons selected and trained by the department, and by *user committees* (UCs). UCs are made up of between four and seven persons who have been elected by the residents of a village. Full-time staff, paraprofessionals and user committees are jointly or respectively responsible for the different components of integrated watershed development. Four major categories of tasks have been undertaken based on the nature of land ownership and on the principal actors responsible.

1. Private Arable Land Development and Conservation
 - Conservation measures: soil and moisture conservation
 - Production measures: new cropping methods, new crops
(Primary responsibility: department staff, individual farmers)
2. Drainage Line Activities
 - Water conservation activities

- Bank stabilization activities
(Primary responsibility: department staff)
3. Common Lands Development and Conservation⁴⁰
 - Soil and water conservation activities
 - Planting of pasture and trees
 - Protection of common lands
 - Fodder harvesting and distribution
(Primary responsibility: user committees)
 4. Household Income Raising Schemes: e.g., weaving, poultry, village crafts
(Primary responsibility: households, department staff)

User committees in each watershed have primary responsibility for program activities related to common lands. The initial objective behind assisting the establishment of these committees was to provide village communities with a forum for discussing problems related to common lands as well as a management committee for resolving these problems, filling a gap evident in most villages. Common lands are the principal source of fodder and fuelwood in all dryland areas where the work of watershed development has been taken up, yet few if any villages are known to have established formal arrangements for common land management.

The work that is performed by user committees therefore fills an important gap and targets an important community need. UCs of some areas have taken additional tasks upon themselves (for example, contracting to do drainage line treatment), but UCs in *all* areas are exclusively responsible for work on common lands.

The main tasks and responsibilities of the agencies associated with program implementation can be summarized as follows:

⁴⁰ "Common lands" are formally recorded as being owned either by some government department, usually the Revenue Department, or by the village panchayat, a unit of formal local governance. In practice, however, these lands have been "open access" rather than "common property" as distinguished in the literature on common property resources (Jodha 1992). Neither the Revenue Department nor village panchayats have had the resources or the will to monitor entry and use. Users committees thus have moved into a kind of institutional vacuum.

Tasks and Responsibilities for Watershed Activities

<u>Task</u>	<u>Primary Agency</u>	<u>Supported by</u>	<u>Occasionally Involved</u>
Arable Land Development (ALD)	Individual farmers	Department Staff	User Committees
Drainage Line Treatment (DLT)	Department Staff	--	User Committees
Common Land Development (CLD)	User Committees	Department Staff	--
Income-Generating Schemes (IGS)	Individuals	Department Staff	--

Funds are available from the WDSC department in ample quantities. A yearly allocation is made to each unit on the basis of five-year watershed development plans that have been discussed and approved at the start of the program. The department — and the agencies providing funds to the program — want to maintain a high pace of implementation, so units are typically given ample funds in advance.

User committees and individual farmers have to contribute 10 percent of funds for each type of activity, excluding drainage line treatment which is a high-cost activity and which is entirely funded by the department. The fact that funds are relative easily availability from the department has had some bearing on how program activities get implemented, as noted below.

Unit staff have been under constant pressure to accelerate field implementation. While it is relatively easy for them to implement drainage line treatment (technical staff survey the area, design the structures, and construct them with the help of hired labor), developing common lands is more difficult, and it involves staff and villagers in a longer process. The entire village, or some sizable proportion of residents, must first agree to set apart tracts of common lands for conservation and development work. This requires common agreement that they will not let their animals graze on these lands for the time it takes until vegetative fencing has been installed and becomes tall enough and thick enough to prevent entry (normally six to eight months).

Villagers must also elect a user committee which will manage development activities on these tracts. This committee, in association with department staff, must draw up a plan of development and present it for approval to an assembly of villagers. Once approval is obtained, the user committee sets about collecting the local share of costs (10 percent) which can be paid

by individual members either in cash or in the form of labor. The user committee must devise a method for allocating these costs among residents.⁴¹

The committee has also to develop a strategy for protecting the grass sown on these lands and a formula for sharing the harvest (the first grass crop can be harvested just three to five months after sowing). Villagers acting directly and through their user committees are thus more actively involved in the program component dealing with common lands than they are, for instance, with drainage line treatment. They are also involved with planning and implementing program activities on their privately held lands, but this is individual rather than a collective involvement.⁴²

Villages can thus be categorized on the basis of the proportions of program expenditure that were accounted for by the various activities as well as according to the sequence in which activities were taken up in any given watershed. According to program guidelines, ALD, CLD and DLT are each to be provided with about 30 percent of total funds in each watershed (abbreviations used here are from Table 1 above). At the end of the program period (five to seven years from the start), we would expect to find actual expenditure figures approximately in equal proportion. However, proportions at the end of the first two to three years will be indicative of how willing and able communities are to engage in collective action for common benefits. The table below indicates three "pure" patterns.

Patterns of Development

<u>Proportion of Expenditure</u>	<u>Sequence of Activities</u>	<u>Pattern of Development</u>
CLD highest	CLD came first	Community-led development
ALD highest	ALD came first	Individual farmer-led development
DLT highest	DLT came first	Department-led development

Apart from these pure patterns, several mixed patterns are also possible, for instance, where CLD forms the highest proportion of expenditure but DLT was first in the sequence, etc. If more of a village's funds were expended on DLT, and if it was the starting point for the village program, this indicates less social capital (whatever that may be), whereas if the larger

⁴¹ The Department has not prescribed any standard pattern or even a menu of patterns for cost or benefit sharing. An open-ended exploratory approach was adopted, allowing different sharing methods to be developed by villages.

⁴² Income-generating schemes do not constitute an equally important category. Attention to and expenditures on these schemes lags far behind developments in the other three components.

proportion of expenditure was on CLD and this was the mode of program initiation, this indicates a higher degree of social capital. Expenditure and emphasis on ALD ranks in between.

CLD requires more social capital than the threshold to qualify for the second column in our analysis above. But it does not require as much as efforts that could qualify under the third column, because there are very definite and abundant individual payoffs from CLD. Fodder yields on common lands through project efforts were increased as much as tenfold within the first year (Krishna 1997: 262), so there were very clear benefits from entering into a cooperative mode of operation. None of the project activities required very high levels of social capital, though we anticipate that some of the other development activities of villages display attributes of social capital.

Activities which produce "public goods" in the more formal sense of having indivisible benefits will be documented in the village studies that look for "spillover" development efforts. We will look for initiatives like reactivation of representative bodies (agricultural cooperatives, panchayats, etc.), instances of collective advocacy (delegations to meet higher officials on behalf of whole community), and electoral behavior (presence of and support for nonparty candidates). Collective action to improve facilities like schools and community water supply will also be seen, at least provisionally, as representing presence of greater social capital. If they are not associated with any of the hypothesized attributes of social capital, this will support the null hypothesis.

Methodology for Study

Phase I: Exploratory Analysis

The quantity and quality of common land development provides a locus for examining the presence and influence of social capital factors. What factors or characteristics make villagers of one community more disposed and able to engage in collective action than their counterparts in other communities? An analysis of factors responsible for differences among villages in the index of common land development will help us deal with the whether and what questions that are discussed in the annex, along with an analytical framework that will guide data gathering and survey formulation. In the first phase, this question will be examined intensively in a set of ten to twelve villages selected after stratification according to the dependent variable.

We will want also to make assessments of the *quality* of common land development, to see what factors might account for the *degree* of social capital that would explain more effective collective action regarding the common lands (controlling for factors like soil or rainfall that would make fodder development more productive and thus more attractive simply in self-interest terms). Assessments of quality will also enable us to distinguish among communities having capacities to be effective in collective action even if they undertook it later than others or to a lesser degree.

Sample selection will be made according to a stratified design. An examination of expenditure data for the 100 or so villages where the program was started in 1991 will provide

an objective indication of collective action in these villages. Villages will be placed in categories ranging from the highest to the lowest in terms of how community-led their development has been. In addition to the three pure categories described by Table 2, an additional five to six categories will be constructed to reflect gradations in the level of community involvement.

This classification of communities with regard to undertaking collective action in contrast to individual or state-led action will give us a first measure of the *dependent variable*, which is to be explained by a variety of factors, some proposed to be related to social capital and others not (so that we do not attribute all variation in the dependent variable simply to social capital). This first, admittedly rough measure will be modified and refined using techniques described below.

For Phase I, a sample of 10 to 12 villages will be selected, i.e., three or four villages grouped in three clusters of communities. In each cluster, there will be at least one village each representing the high, medium or low categories so as to reflect the full range for the dependent variable. The advantages of a cluster-based approach for Phase I are that this will reduce the influence of other (nonsocial capital) factors and will reduce logistic difficulties so that more time can be spent in studying village circumstances.

Evaluating the dependent variable will be done using an index of Common Land Development (CLD). This will be constructed in Phase I to reflect how well any village has been able to deal with the collective problems of developing its common lands. For a number of reasons this is more useful than an index based upon overall program performance, including all four of the program's components. The pressure for speedy implementation that is felt by the staff of all units has resulted in relatively large expenditures being made in nearly all watersheds. It will not be easy therefore to distinguish between performance levels by simply looking at overall developments in each watershed. As we have already seen, each program activity requires activation of a different set of actors. The effectiveness of collective action is most clearly judged by looking at common land development rather than at aggregate program performance, a point to which we return later.

The extent of pastures developed or the number of trees planted on common lands is just one indicator of how far a village has gone in dealing with its common lands. Equally important and revealing are the methods it has devised for protecting trees and pastures from animals and humans, what kinds of cost- and benefit-sharing formulae have been instituted, and how long and how adequately have these arrangements worked. Clearly, these criteria are nested. Only if a sufficient area is planted will there be any need to arrange for watching and protecting, and only when such protection is organized and effective will there be any produce to share out. Until there is some produce to share, formulae for sharing are unnecessary. The pattern follows a consistent sequence:

User Committee => Planting => Protection => Produce Sharing => Incentives for Further Planting

Villages at any stage in this sequence must have gone through previous stages. It should be easy to construct an index of Common Land Development. Villages that have developed large tracts of common lands and which have also instituted working methods of cost and benefit sharing will be assigned a higher rank on the index than other villages that have

worked upon equally large areas but which have yet to develop arrangements for protection or for produce sharing, given that each village started out at the same time, in 1991.

Villages will be studied intensively to ascertain the range and effectiveness of their practices. They will be assigned a rank on a five-point index. The methodology for rank assignment developed in the first phase of the study will be used more extensively in the second phase, when a larger number of villages will be studied with the help of Field Investigators trained during Phase I.

Constructing a set of explanatory variables will be done to test a number of different explanations for why some villages do better on the CLD Index than others. Variables will be constructed to consider the some alternative (or complementary) explanations. Note that these variables have been selected in order to consider the broadest possible range of explanations. Each of these variables will be correlated against the CLD index to ascertain how well the hypothesized cause relates to the independent variable. We will also have measures of structural and cognitive characteristics presumed to reflect the existence of social capital. Whether they are better predictors of CLD status represents a first-cut analysis of the focus of our study.

Relative need. Though all villages in the sample face quite severe shortages of fodder, some among them might be more affected by scarcity than others. An explanation of institutional development based on a rational-actor premise would predict that more effective UCs will develop in those villages where relative need is greatest. Relative need for fodder in any village can be measured in terms of its land-to-animal-units ratio. The higher this figure for any village, the lower is the village's need for CLD relative to other villages.⁴³ The land-animal ratio is the first independent variable. Pre-project data will be used for measuring animal units.

Quality of department staff. Since the program was initiated by a government department and since the bulk of funds still come from the department, it can be reasoned that high and low levels of development have as much to do with the technical caliber and motivation of department staff assigned to any watershed. Though it is difficult to devise any single acceptable measure for this variable, this proposition can nevertheless be tested. Since staff of each unit are collectively responsible for a group of watersheds, an explanation based on differences in staff quality would imply that all the watersheds assigned to "higher quality" staff should exhibit higher performance levels than those watersheds superintended by "lower quality" staff. Differences among entire units should therefore count for more than differences between individual watersheds. This is a testable proposition.

Prior experience with government programs It could be argued that villages that have had prior exposure to government programs are in a better position to take advantage of any new program. Being aware of government's processes and procedural requirements, they gain a

⁴³ It is difficult to construct a similar index for relative scarcity of firewood, since trees invariably serve multiple purposes, being required as much for firewood provision as for the fodder value of their leaves and pods.

head start over new initiates. We will construct an index to measure any village's experience with government development programs.

Structural factors (village level). A number of alternative constructions are possible about how village characteristics influence village level development.

1. Modernization A village level variant of the modernity thesis would have one suppose that villages which are more "modern" than others are quicker to seize upon opportunities for development. We can test for modernity by looking alternatively at commercialization, technology indicators, and social indicators.
 - (a) Commercialization will be measured simply in terms of distance to nearest market town. It is expected that the closer a village is situated to a market, the greater are the commercial influences on the village.⁴⁴ This variable will be measured as the number of hours it takes to travel to the nearest center having a daily (or at least a weekly) market using the most convenient means available.
 - (b) A proxy for the level of technical advancement will be constructed by enumerating the numbers of tractors and mechanical threshers in the village as a ratio to the number of bullock-drawn ploughs.
 - (c) An index of social development will be constructed based on information readily available on electrification (yes/no), reliable drinking water (yes/no), education (schools/school-age population), health (immunization coverage).
2. Stratification The greater the level of social equality, it may be believed, the better the chances for collective action. To test this proposition, we will look at levels of inequality in land ownership. Since caste is assumed to be an important aspect of social stratification in India, the caste distribution of land ownership will also be examined in addition to size distribution. Another dimension for cleavage among villagers — factions based on party groupings — will also be examined. Another factor to be considered is the social position of women. We cannot say now how many aspects of stratification we can analyze, given limits on time and data, but this will be represented in our analysis.
3. Record of Prior Association Remembered models from the past may help people organize more quickly and effectively in the present (Hirschman 1984).⁴⁵ How often and in what context have the people in a village come together to address common problems? What types of formal and informal organizations exist or have existed in the village? An index of organizational history will be constructed.

⁴⁴ This is the kind of supposition that guides development programs based on a "growth center" approach.

⁴⁵ This refers to Hirschman's law of the conservation and mutation of social energy.

4. Linkages — Horizontal and Vertical How well are the formal and informal networks organized at the village level linked to other agencies and associations outside the village? Do more networked villages have better performing user committees than less networked ones? This is an important question.
5. Factors Specific to User Committees

(a) Nature of Members and Leaders: Who are the office bearers of UCs? What class of persons are these? Are they all men or have some women also been selected? Are they relatively young people or have mostly old or traditional leaders been reproduced? How, if at all, do the social origins of UC leadership affect program performance? (A related, though second order, question concerns why some villages have preferred a particular pattern of leadership; this would be harder to answer at this stage of inquiry.)

(b) Rules Adopted by the User Committees: Committees in different villages have developed their own rules to deal with issues related to membership, apportionment of harvest, schedule of meetings, rotation of leadership, etc. The department did not at any stage indicate any preferred or suggested rules, so rules have evolved separately within each user committee.

Ostrom (1990) suggests that the nature of *rules* often makes the difference between success and failure in management of common property resources. We will analyze the rules (formal and informal, fixed and evolving) that have emerged in each village included in our sample. We anticipate finding rules in different villages falling into three or four broad patterns. How, if at all, does the pattern of rules relate to the effectiveness of CLD? It will be interesting to consider the dynamic interrelationship between rules and results. Have rules largely preceded results, or has the development and strengthening of rules come after encouraging results were achieved? We expect to find both sequences in operation.

Cognitive factors (village and household level).

1. Group and individual interviews with UC office holders and other village residents will be conducted to elicit information about interpersonal attitudes. Do people believe in the efficacy of self-help? Do they trust each other enough to want to collaborate in joint endeavors? An important part of this exercise will be the construction of sociograms that reveal patterns of interaction and the centrality of various villagers within social networks. How dense is the network of mutual interchange? How often and how much do different categories of people interact and transact with one another in various kinds of exchange? This methodology can take into account greetings, feasts and other

ceremonies, gifts, labor provision or exchange, loans of money, agricultural implements, etc.

2. The above discussion of cognitive attributes assumes a static framework, considering village characteristics to be relatively constant over time. But shifts in cognitive orientations over time, especially as they relate to watershed development and conservation, can also contribute to an explanation of behavior. Have villagers' evaluations of watershed development changed in a manner that permits selfish considerations to be transcended by group-oriented behavior? We recognize that cognitive shifts may themselves be the product of other factors — good results, effective leadership, etc. — but it is useful at this stage of the inquiry to recognize and record any perceptible cognitive shifts, deferring analysis of the phenomenon to Stage II of the analysis.

Data analysis. Each of the independent variables will be examined to see how well it correlates with the dependent variable. Additionally, correlations among the different independent variables will be analyzed.⁴⁶ To the extent it is found that village level structural or cognitive factors correlate well with the dependent variable, one can provisionally say that these factors contribute to social capital. One cannot, however, propose a conclusive association between social capital and development because the analysis has only ascertained whether certain village characteristics are positively or negatively related with a particular development outcome. We are still constructing an understanding of social capital based on measurable variables, though we anticipate having evidence that helps answer the question "whether" social capital explains at least some part of development performance since we will be controlling for other factors.

The next step lies in understanding if and how the factors identified empirically reasonably fall under a conception of **social capital**. Answering the "what?" question is largely a matter of interpretation. We are setting up the analysis so that we consider a number of related factors that could put any understanding of social capital in context. If the data implicate "Record of Prior Association" or "Linkages" as closely associated with development performance, the contribution of social capital would appear relatively straightforward, though historical origins or superior associational attributes would remain to be explained. Similarly if social indicators or cognitive factors have a strong correlation with the dependent variable, we will consider how to explain village level differences in these variables. Why are people in some villages more trusting than those in other villages? How might structural and cognitive features be related?

Questions of this sort lead into an examination of the "how?" issues of social capital. Only when we understand better what social capital consists of and what its effects are can we begin to know how a development agency can attempt to influence causal variables. Some indications of the relevant relationships should become available already during the first phase

⁴⁶ Analysis of data gathered will be complemented by group analysis, getting together the team of field investigators and discussing with them the results obtained through the first level of analysis.

of analysis. In order to test provisional conclusions against a wider sample, and to explore the "how?" questions, Phase II will extend the study to a larger number of villages, in addition to conducting a second round of investigation within the first set of 10-12 villages.

Phase II: Validating Observed Causes and Tracing Origins

This phase will be designed to gain more assurance for answers to the "what?" and "whether?" questions and to gain an understanding about the "how?" issues. While Phase I will consist of an intensive study of a small number of villages (10 to 12), asking a wide range of questions, some exploratory, Phase II will be designed to be more extensive and convergent. Factors and relationships identified in Phase I will be reexamined within a larger group of villages. Plausible explanations identified in Phase I will be tested within a larger data set. In addition to the correlation analysis used for Phase I, regression analysis will be also be employed to gain understanding of the interaction effects among alternative explanatory factors.⁴⁷

Field investigators trained during Phase I will be sent out to the selected villages with a questionnaire developed after analyzing Phase I results. This questionnaire will be constructed so as to acquire data that, among other things, can (a) elaborate our measure for the dependent variable, the CLD index, and also record observations on other collective development accomplishments that go beyond CLD, which will give us further outcomes against which to analyze variables thought to represent factors of social capital; and (b) measure a variety of independent variables identified from Phase I. Whereas the CLD index used during Phase I will help us identify candidate social capital factors, these will be tested against a wider array of development outcomes in Phase II. Our sense is that, instead of a single cause, a variety of social capital and nonsocial capital factors will be implicated as possible explanations of superior development performance.

An analysis of the "how?" question (i.e., *how* development agencies can induce social capital formation) will require undertaking a sociohistorical inquiry into the origins of social capital factors. This can be done only preliminarily given the time and resources available, but Phase II will seek to identify historical indicators and antecedents for levels of social capital in the present. We would not look at the entire set of 40 villages, but would conduct a more intensive analysis of the Phase I villages, following this up with a critical examination of the observed relationships in some Phase II villages. A more exact design for this part of the Phase II study will follow after analyzing the data obtained in Phase I. Some brief comments can, however, be made at this stage.

This part of the analysis is prompted by a desire to understand the role that a development agency could have in enhancing social capital in the short run. This makes it

⁴⁷ We are deliberately downplaying the use we might make of regression analysis. The analytical and statistical assumptions required to be fulfilled by the data might not, perhaps, be achieved with data of this sort. Employing a large number of independent variables might leave the analysis open to challenge on grounds of multicollinearity; using only a few variables might incur the criticism of heteroskedasticity. We leave the question of analytical methods open at this stage, preferring to consider it after conducting preliminary statistical analysis of the data.

important to examine how the structural and/or cognitive factors associated with social capital have changed in the recent and not-so-recent past. Change may have been more rapid in some villages, and more coincident with ongoing development programs. In particular, the growth of watershed development activity in a village could be seen as quite directly associated with these kinds of changes in social capital attributes.

Either spontaneously or through deliberate acts of leadership, social capital may have been built up in certain villages which accounts for their superior development performance. On the other hand, causal factors related to social capital, as Putnam et al. (1993) suppose, might be very slow to change. In the latter case, we would expect to see similar disparities over time among villages in terms of their cooperative activities for development purposes. To the extent that social capital is a long-term factor accounting for some part of development performance, villages with historically high levels of social capital formation would perform better than others for which long-term data indicate lower levels of social capital.

Long-term data are expected to be available for some villages in the state, though hardly for all, including information on features of social structure such as land ownership, residence patterns, descriptions of economic activity. To the extent that such archival records are available, we want to examine the question of continuity vs. change. It is an open question whether these records will support a conclusion of continuity or whether induced change from outside (mostly government activity) will emerge as a more plausible explanation. Reconstruction of a time series of trends, to the extent that data permit, will enable us to examine the pace of change. Obtaining and assessing oral histories will complement the search for archival records.

Determining causes (i.e., the "how?" question) becomes easier if contemporaneous and induced changes are implicated by this analysis rather than long-term and historical causes. Patterns of structural innovation in villages as well as the timing of key innovations will be studied for the correlations they might have with critical features of alternative explanations, sketched above. Even where historical continuity is indicated by the data, the potential for inducing change cannot entirely be ruled out, however.

Variations in patterns of change as observed among the different villages might suggest that a strategy of induced change has succeeded in villages for which high levels of development performance cannot be explained by historic social capital. Analysis of time-trends both before and during program implementation are therefore an important component of this phase of study.

It is hard to imagine that our dependent variables, respectively, participatory rural development in Phase I and social capital in Phase II, will submit to simple monocausal explanations. Multiple contributions to causation are likely to be identified. The assumption that multiple explanatory variables will have independent additive effects has to be tempered by the realization that when one is dealing with complex social phenomena, there is a high likelihood that multiple causes may combine not additively but conjuncturally, as shown in the analyses of Theda Skojpol for example. Conjunctural causation is hard to deal with without combining qualitative along with quantitative methods (Ragin 1986).

When there are very many variables under consideration, with a limited number of cases, it is not possible — but also not theoretically sensible — to run all independent variables (which as noted above are not really independent) against the dependent variables at one time. There is likely to be too much autocorrelation to make such analysis valid. Since we are conducting Phase I of the research in a heuristic mode, we will seek through correlation matrixes to identify those relationships that have the strongest statistical support. Variables, or conjunctural combinations, that receive such support at the end of Phase I will be tested within the larger sample employed for Phase II, using a combination of qualitative and quantitative techniques to analyze the data.

Annex: An Operational Analysis of Social Capital

There is growing agreement that social capital constitutes a fourth category of inputs into productive processes, overlooked perhaps because its importance is less evident at the level of the firm. This focus has preoccupied economists who made microeconomics the centerpiece of their discipline. Development economics has come to realize that this may be a necessary but is not a sufficient theoretical framework for dealing with issues of productivity at higher, i.e., societal, levels. Three sets of leading questions arise:

1. The **whether question**: Does social capital (SK) **contribute significantly** to development performance and outcomes?

Elaborated operationally, to what extent does SK make a measurable difference in development? Yes/no answers are less useful than disaggregated assessments of the **degree** of contribution attributable to SK.

Methodologically, this requires comparing the contribution of SK to that of **other factors in development**, with clear dependent variable measures of performance and outcomes.

2. The **what question**: What are the **major components** of SK?

Elaborated operationally, how do they relate, possibly differentially, to various developmental performances and outcomes? This question requires rigorous conceptualization and disaggregation.

Methodologically, this requires comparing **different aspects/dimensions/components** of SK with regard to dependent variable measures of performance/outcomes. One and 2 must be explored concurrently because there is no agreement yet on what constitutes SK, so we need to be establishing empirically what it is we try to decide whether (or to what extent) SK is important.

3. **The how question:** How can outside agencies, governmental or non-governmental, **promote the formation** of SK?

Elaborated operationally, using an understanding of SK in a disaggregated way, and of what are the impacts on development of its various components, how can agencies **invest in SK** as a means for promoting development objectives?

Methodologically, this exploration lends itself less readily to qualifiable measurement and validation, though an effort will be made in this direction. Qualitative assessments are likely at this stage of examination to give the most guidance.

We need to formulate appropriate and rigorous analytical categories for understanding what social capital is, categories which contain within them explanations of **why** SK makes the contribution it does to productive processes. This is what the following analysis attempts.

A Construct of Social Capital

Social capital in our view has two interrelated forms, i.e., sources, manifestations. These are (1) structural and (2) cognitive. These should be analyzed in a disaggregated way.

Structural Forms of Social Capital

All forms of interpersonal relationships that can be observed as cooperative behavior or collective action contributing to desirable developmental outcomes. The principal focuses of analytical and practical concern are:

Organization. This arises from the creation, recognition and acceptance of *roles*, which pattern social behavior and interaction by creating certain *expectations* on the part of role incumbents and those who interact with role incumbents. Since expectations are shaped by attitudes, norms, values and benefits, roles and thus organization are linked with cognitive forms of social capital.

Organization can be either (a) formal or (b) informal, or some combination of both. Informal organization exists only in the consciousness of persons, where expectations, attitudes, norms, values and beliefs are created and maintained. Formal organization has some legislated or written basis for roles and associated behaviors and relationships.

There are four basic functions of organization which can be observed as a matter of degree. They can be performed either formally or informally, or by some combination of formal and informal relationships.

- (i) Decision-Making, Including Planning and Evaluation
- (ii) Resource Mobilization and Management
- (iii) Communication and Coordination
- (iv) Conflict Management⁴⁸

Linkages/Networks. These represent *extra-organizational* relationships, either vertical or horizontal, similar to the *intra-organization* relations above.

- (1) Vertical relationships are persisting interactions that create cooperative behavior/collective action between individuals and organizations at *different* levels, such as between patrons and clients in clientelistic social systems, or between primary cooperative societies at the village level and federations at subdistrict, district, regional and national levels.
- (2) Horizontal relationships are persisting interactions creating cooperative behavior/collective action between individuals and organizations at *the same* level of social organization, such as exchanges of technical knowledge among farmer groups or a coordinating council among local

⁴⁸ These functions have been identified and analyzed with reference to irrigation management (Uphoff 1986a), but they represent the four “pattern variables” that Talcott Parsons ascribed as essential functions for the existence of any and all social systems: goal attainment, adaptation, integration, and pattern maintenance.

government, local cooperatives, local service organizations and local businesses.

Cognitive Forms of Social Capital

All forms of *ideas* that predispose toward, and support them in, cooperative behavior or collective action. The principal focuses of analytical and practical concern are:

Instrumental ideas: Knowledge and skills. These create an *effective* culture, with shared confidence in the methods and feasibility of cooperative/collective undertakings. These are reinforced through efficiency and efficacy in the performance of such undertakings.

Normative ideas: Values/Norms/Attitudes/Beliefs. These create an affective culture, with feelings of trust and solidarity which encourage cooperative/collective undertakings. These are reinforced through ideas about legitimacy, altruism, duty, and ethical behavior.

The contrasts and parallels between these two forms are the following:

Instrumental Cognition

Shared technical, organizational and operational *knowledge* that makes cooperative behavior collective action *effective*, over and above what could be achieved through individual action.

Answers questions of how to work together?

Traditions, inertia and habit (Weber) create common expectations role repertoires that lead to synchronization and cooperation.

Expectations that others *will* cooperate create pressures to cooperate from outside one's self. Reinforcement from the benefits of cooperation and collective action for one's self.

Normative Cognition

Shared *thinking* about positive-sum relations and mutual benefits that makes cooperative behavior and collective action *attractive*, over and above its instrumental/individual value.

Answers questions of why work together.

Trust, solidarity and related values, norms, attitudes and beliefs create presumptions that people should and will work together.

Expectations about why one *should* cooperate create pressures to cooperate from inside one's self. Reinforcement through self-respect and satisfaction from others' benefit in addition to one's own.

Levels at Which Social Capital Can Be Found and Studied

The elements of SK can be observed and studied along a continuum, ranging from the individual to the society. These qualities and relationships are "nested" in that the features of higher levels are manifested at or have an impact on lower ones, and there is also some influence in the other direction (i.e., upward as well as downward, though the latter is more potent).

- A. Societal Levels
1. Supra-local characteristics of the **society** in which the locality functions; national institutions/organizations/networks [structural factors] and national traditions and culture [cognitive factors].
 2. Supra-local characteristics of the **region** within which the locality functions; regional institutions [structural factors] or traditions and culture (really sub-culture) [cognitive factors].
- B. Local Levels⁴⁹
1. Characteristics of the **community/group/locality** that are emergent properties, observed and measured directly rather than as characteristic of the persons encompassed by the community/group/locality, e.g., public services and infrastructure, local organizations/institutions/networks, traditions and beliefs. [these are “local” factors].⁵⁰
 2. Characteristics of the **persons** encompassed by the community/group/locality considered as a quality of the community/group/locality. These are aggregate factors, which can be either structural or cognitive.
- C. Individual Levels
1. Norms, values, attitudes and beliefs of **persons** within locality (or group or locality) considered as a quality of people involved, i.e., cognitive factors.

This analysis according to levels is important. It accounts for why individuals’ relationships with others, i.e., structural factors, are not assessed at the individual level (C). They have to be assessed under B.1 or B.2, since not just the individual is involved but rather collectivities or groups of individuals.

To the extent that one is trying to assess and evaluate SK at higher levels, e.g., the national or regional, factors under A are more important. When studying differences in performance at the project or program level which are attributable to SK, such higher level

⁴⁹ In previous work we have identified three “local” levels, which are characterized as involving face-to-face relations and having potential for collective action: the group level, where people come together because of some common interest or shared identity — occupation, ethnicity, gender, age, recreation, etc.; the community or village level, defined by common area of residence; and the locality level, involving a set of communities that have economic and social interaction such that there are acquaintances and blood relationships connecting them (Uphoff 1986). Below the local levels are the individual and the household; above them are subdistrict, district, regional and national levels which are political and administrative more than social.

⁵⁰ This designation risks some confusion but no better one can be suggested which denotes features of the community/group/locality that are more than (or different from) the qualities of the people who compose them, covered under the heading of aggregate factors.

factors are not very important because they have presumably a fairly equal effect on all communities/groups/localities within the project or program area. One has to find more localized differences to explain variation in performance. Since there is usually at least *some* SK in any community or society, what is most interesting and relevant is the variations; having more of what kinds of SK makes how much and what kind of differences in performance? For communities or societies even to exist, they must have some modicum of SK.

Social Capital at the Household Level

There is a question whether the household level should be considered as having or being social capital. It certainly is a *source* of SK, a veritable “seedbed” for attitudes, values, norms and beliefs that dispose people toward cooperative and collective action, as well as a “school” for interpersonal skills and motivations that make such action effective. In the construct of SK proposed here, household structural/relational and cognitive/normative features are not included in SK, however.

Within any community or locality, there is considerable variation between and among households around the world with regard to how well households dispose and prepare their members for cooperation. Thus, SK at this level cannot explain very much of the variation observed in collective action and development performance. Where there are demonstrable differences between whole sets of households in communities, localities or countries, these are more clearly attributable to the structural and cognitive dynamics observable at levels above the household than to the households themselves as units of influence and analysis.

Measuring Social Capital

Given these nested relationships, one has to be careful about influences between levels when planning research and carrying out analysis. Variations in performance (the dependent variables, Dvs) can only be attributed to variations in causal or explanatory factors (independent variables, Ivs) at the same or lower level. Unless it can be shown that the effects of higher level factors, structural or cognitive, had an uneven influence on communities, groups or localities at lower levels, factors measured at a higher level do not help us understand what is happening at low ones.

Cognitive SK can be accumulated at the individual level, affecting structural SK at local levels. Structural and cognitive SK at local levels can affect performance at those levels. Aggregate factors — individual characteristics ascribed to communities, groups or localities — are often easier to measure than characteristics of the communities, groups or localities themselves. It is methodologically valid to consider aggregate factors given the nature of social capital, but that they are individual characteristics should be kept in mind.

One of the things to be determined by this and other studies is the temporal dimension of SK. It is axiomatic that causes must precede effects in time, though much social science analysis looks at causes and effects measured concurrently, inferring that the presence of a presumed cause implies prior influence that contributes to the hypothesized effect.

For the study being proposed, we will have data from three periods, the first being very long and crudely delimited, but nevertheless clearly antecedent to the project being studied. We will consider structural data (no cognitive data are available) for communities and localities in the “distant” past. This covers decades up to a century before the start of the project, drawing on records from colonial and early post-independence times.⁵¹ These we consider *historical* data. They will not be available for all of the communities/localities under study, but for as many as possible we will resurrect and consider long-term differences in what could be considered SK. This is done partly because one of the current leading theoretical-empirical works on SK (Putnam 1993) proposed that SK is created and sustained over very long time periods.

Because some baseline studies were done before the project started or at least 80 communities, possibly more, we expect to have *some pre-project* data that can be sifted to match up where feasible with *current* data on Ivs and Dvs. Pre-project data will include aggregate data, though probably not on cognitive factors in SK. Current data can include a great range of data by kinds and levels. We do not know that all of the following will be possible to gather and consider, but analytically we are thinking in terms of these factors:

Structural Factors

Organizations

Number and kind of organizations

More local organizations, regardless of functioning (Uphoff and Esman 1974)

Greater variety: public, private, collective action (Uphoff and Esman 1974)

Formal vis-a-vis informal organizations (cf. functions)

Qualitative measures of performance

Evaluations of performance (satisfaction of members?)

Objective evaluations of performance (by officials?)

Historical analysis of formation and performance

⁵¹ The data are mostly for communities and localities. Some census reports may give individual data which can be aggregated to one or more local levels. There was no interest in attitudes, values, norms and beliefs which would give information on cognitive SK.

Functions - roles and mechanisms, how effective? (Uphoff 1986)

- Decision-making
- Resource mobilization/management
- Communication/coordination
- Conflict management/dispute resolution

Membership - inclusive/exclusive? including women? youth? disadvantage groups?

Linkages/Networks

Horizontal - functions among/between organizations as same level (Esman and Uphoff (1984; Putnam et al. 1993)

Vertical - functions among/between organizations at different levels (Uphoff and Esman 1974; Esman and Uphoff 1984)

Social - sociogram of social relations within village; who relates to whom? (Uphoff 1979)

Cognitive Factors

Instrumental

Measures of knowledge, skills and traditions for organizational functioning, e.g., bookkeeping, minutes, running meetings

Knowledge/history of successful cooperative/collective action previously Sense of urgency/crisis for dealing with problems beyond scope of individual action (cognitive factor, not sure this is SK however)

Traditions for cooperative/collective action, e.g., shramadana, dispute resolution

Normative

Measures of dispositions for cooperative/collective action, e.g., trust in others, solidarity with others, possibility and benefits of positive-sum action (rejection of “limited good” idea), willingness of support others’ initiative?

Measures of egalitarian values, e.g., beliefs that all persons should have equal opportunities to develop their inherent capacities

Other Factors

Leadership - how to measure? attribute of individuals or is it a function? (is leadership endogenous or exogenous to social capital?) traditions or leadership - inherited or selected? mechanisms of accountability? orientation of leadership - authoritarian/hierarchical or egalitarian/participatory style of leadership - consultative, public-serving, change-oriented, etc.

Bureaucratic support/encouragement - how to measure? found in individuals or institutions?

Religious factors - special kind of structural factor, role and influence of priest or lay organization (may be treated under Structural Factors above); might consider religions beliefs separately or under cognitive Factors

Educational factors - educational levels, literacy - could come under Cognitive Factors (instrumental), though we need to deal with this as aspect of SK, not simply as “human capital”; schools can be considered as Structural factor

Political factors - partisanship as divisive force; ideology as potentially energizing and mobilizing force if egalitarian and participatory

Resource distribution - more or less equitable distribution of land ownership (distribution can work in either direction, as found in Uphoff 1979)

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SOCIAL CAPITAL INITIATIVE - PROJECT 10

Identifying the Determinants of Performance of Community Based Water and Sanitation Services

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Over one billion people — most of the world’s poor — do not have affordable access to clean water and sanitation (W&S) facilities. This increases sickness and morbidity, decreases available time and resources for productive activity, and thereby reduces well being. Since these services have certain technological and economic characteristics that lead to underprovision in markets and through collective action, they are often viewed as a government responsibility. However, public delivery has often been inadequate because of lack of knowledge of users’ preferences, fiscal failures, and shirking and corruption by civil servants.

In response, donors have developed a new approach to the provision of such infrastructure services. This new approach relies on coproduction, defined as “a process through which inputs from individuals who are not in the same organization are transformed into goods and services” (Ostrom 1996). Coproduction in this context refers to a joint effort of community members and public officials to design and implement water and sanitation services. Under coproduction, members of both groups contribute inputs into the production process: community members devote time to the design, operation, and maintenance of parts of the system; and civil servants oversee inputs provided by the government, including technical skills and public funds.

Recent assistance programs have supported demand-driven services that rely on coproduction by community members and local government agencies (in some cases in cooperation with NGOs). The goal of these new services is to improve the delivery of water and sanitation by developing systems that better respond to user’s preferences, reduce fiscal constraints, and increase transparency and accountability among users and government civil servants. As documented in recent case studies (Watson 1995; Watson and Jagannathan 1995; Sara, Gross, and van den Berg 1995), the critical determinants for service performance are price and funding mechanisms, ‘rules of the game’ within the service, and social capital within the surrounding communities.

Nevertheless, important questions about the determinants of performance of coproduced services remain unanswered by case studies. What is the role of relative prices of W&S services and wages of public officials in determining performance? Which are the most important service level institutions? What is the role of community level institutions — encompassing preexisting social capital such as community norms, local organizations, and local governance arrangements — in determining the performance of the service? Which are the most important community level institutions? Is preexisting social capital a necessary condition for the effective design and implementation of service level rules? The answers to these and other related questions are likely to have important implications for the design, implementation, and evaluation of projects for the improvement of the delivery of community based W&S services.

Based on recent experience in analyzing the performance of water and sanitation services worldwide, this research study focuses on the performance of community based water and sanitation services in Indonesia. Specifically, it includes a methodology to empirically test the performance of community based water and sanitation services with data from ongoing coproduced W&S services in Indonesia.

Social Capital Component

A critical determinant of performance of coproduced water and sanitation services is existing social capital within communities, including shared values and rules for social conduct. By design, these services rely on inputs of time and resources from community members (Garn 1995). In communities where the level of overall civic activity is high, peoples' associations and organizations encourage individuals to provide the optimal amounts of time and make shirking and corruption by civil servants more difficult. In Indonesia, preliminary evidence from ongoing project evaluations is that the quality of leadership in the communities is a critical determinant of service performance.

In the process of mobilizing community members to contribute to the coproduction of water and sanitation services, local associations and organizations use community meetings, direct interventions, and contributions by local civic leaders to build social capital. These ongoing personal relations among users, members of water and sanitation association members, and community leaders have, in many cases, contributed to increased civic responsibility for the delivery of improved services — and to the mobilization of community members in the provision of other services (Ostrom 1996). In Indonesia, these mechanisms may be a critical determinant of overall service performance: experience under two previous NGO funded projects “seemed to indicate that the most significant aspects of water user group formation was development of confidence among group members and the ability to work together in new ways (not those exclusively related to traditional social solidarity)” (Smith 1994).

Discussion of Methodology

The proposed research methodology is comprised of three parts: (a) survey design; (b) data collection; and (c) quantitative, econometric, and case study analysis.

Survey Design

Surveys will be designed to gather data on the performance of W&S services, the supply of inputs to coproduction, prices and wages associated with service provision, service level institutions, and community level institutions. Following the successful experience of the Katz and Sara study in Indonesia, these will include household, water committee, and technical surveys.

The survey questions will be chiefly based on the recently developed model of coproduction of W&S services (Isham and Kähkönen 1996). We will also be guided by surveys used in a related study on the determinants of water projects (Isham, Narayan, and Pritchett 1995), a study on social capital and household income (Narayan and Pritchett 1997) and the aforementioned study on demand responsiveness and sustainability (Katz and Sara 1997).

The survey questions will be drafted during the second phase of the research study. Below is a partial and preliminary list of the type of data that we propose to collect through household, water committee, and technical surveys. While this list is not definitive, it does indicate the type of data that is appropriate for testing the model of coproduction.

Service Performance (Q)

- Overall service effectiveness
- Percentage of W&S system in working condition
- Percentage of target population using service

Non-Institutional Inputs (X)

- Amount of public investment
- Amount of community investment
- Availability of spare parts

- Amount of time per bureaucrat/NGO staff
- Monthly salary of bureaucrat/NGO staff
- Level of training and experience of bureaucrat/NGO staff

- Size of community
- Number of people using service
- Average education level in community

Good and Factor Prices (P)

Level of user fee
Price of alternative service
Estimate of reservation wage

Service-Level Institutional Inputs (K₁)

Level of community involvement in service selection and design
Level of community involvement in management decisions
Level of community involvement in operations and maintenance
Existence and frequency of water and sanitation association meetings
Existence and effectiveness of monitoring mechanisms
Existence and effectiveness of sanctioning mechanisms
Existence and effectiveness of mechanisms for conflict resolution
Existence and effectiveness of decision making mechanisms

Community-Level Institutional Inputs (K₂)

Existence of local organizations
Overall effectiveness of local organizations
Effectiveness of community-level decision making mechanisms
Quality of local governance arrangements
Responsiveness of local leaders
Norms of cooperative behavior
Norms of reciprocal behavior

Data Collection

The above data will be collected from interviews with households and the water committees and from technical evaluations of service performance in each community. In Indonesia, the researchers will be able to collaborate with RWSG field staff and local consultants that have developed an impressive expertise under the ongoing study in gathering and analyzing these kind of data.

Data will be collected from four sources: the household (via face-to-face surveying); the water committee (via focus group interview); a technical evaluation of the water system; and project documents. For the household surveys, a two-stage cluster sample will be employed. In stage one, a sample of 45 communities with coproduced W&S services will be selected at random. In stage two, a random, nonstratified sample of 15 households within each community will be selected for collection of household data.

Basic Quantitative, Econometric, and Case Study Analysis

This data collection will provide a wealth of unique data on the institutional determinants of coproduced W&S services. How will these data be analyzed?

The researchers will begin by creating and presenting a set of summary tables about the data. These will include summary statistics about the data across villages, cross-tabulations of selected variables (for example, a 2 X 2 table of high and low project outcomes with high and low levels of effectiveness of local organizations), and partial correlations of selected variables.

The data will also be analyzed econometrically in order to provide causal evidence on the relative importance of four types of inputs for service performance. Following Isham and Kähkönen (1996), the main econometric equation that will be estimated is:

$$(1) Q_i = \beta_0 + X_i\beta_1 + P_i\beta_2 + K_{1i}\beta_3 + K_{2i}\beta_4 + \varepsilon_i,$$

where (based on the list above) Q_i is a measure of the performance of the coproduced service in community i , X_i is a vector of noninstitutional inputs into the service of community i , P_i is a vector of good and factor prices for the service of community i , K_{1i} is a vector of service-level institutional inputs, K_{2i} is a vector of community-level institutional inputs, and the β 's are vectors of parameters.⁵²

While these basic quantitative and econometric results may reveal a positive association between selected inputs — including service and community-level institutions — and service performance, this would not guarantee a causal relationship. Omitted variable bias may be introduced, since it is possible that service performance and selected inputs may be jointly determined by another unmeasured attribute. This may be particularly true in the case of service performance and community-level institutions, including social capital. In addition, simultaneity bias may be introduced, since service performance may affect some of the inputs. For example, services that initially show promise may attract more time and energy of the key stakeholders, which might in turn yield better service-level institutions.

Following the methodology successfully used in Isham, Narayan, and Pritchett (1995), three approaches will be used to resolve these potential problems of omitted variable bias and simultaneity bias and thereby explore the causality from selected inputs to service performance.

The first approach will use instrumental variable estimation of this main econometric equation. This requires variables that affect selected inputs but that neither affect service performance directly, nor are affected by it. For example, this will require the data collection of variables that affect social capital but do not have an independent affect on performance. Candidates for such variables include age of the village, age of the most active local organizations, ethnic heterogeneity, and village migration. With a set of such variables, the analysis will then reestimate (1) using the following two-stage procedure:

⁵² Equation (1) will be estimated with ordinary least squares, using appropriate tests and corrections for heteroskedasticity and multicollinearity.

$$(2) Q_i = \beta_0 + X_i\beta_1 + P_i\beta_2 + K_{1i}\beta_3 + K_{2i}\beta_4 + \varepsilon_i,$$

$$(3) K_{2i} = \alpha_0 + X_i\alpha_1 + P_i\alpha_2 + K_{1i}\alpha_3 + V_i\alpha_4 + \eta_i,$$

where V is an instrumental variable that meets the required statistical properties.⁵³ The final list of potential instrumental variables will be identified during the survey design, in close consultation with the survey team that is already familiar with these projects.

The second econometric approach will look for evidence on the timing of the service performance. If the association between selected inputs and service performance was not causal, there should not be an association between events that occur as the service is starting to function — proximate determinants of service performance — and selected inputs. These would include the quality of the service infrastructure and the quality of operation and maintenance after six months and one year. Consequently, the basic quantitative results of such proximate determinants will be reported as well as the econometric results of:

$$(4) PQ_i = \theta_0 + X_i\theta_1 + P_i\theta_2 + K_{1i}\theta_3 + K_{2i}\theta_4 + v_i,$$

where PQ_i is a proximate determinant of the coproduced service in community i .

Finally, the analysis will report abbreviated case studies of service performance in selected communities. In particular, the project and survey teams that are already familiar with communities will be asked to select a set (from six to ten) of communities which they believe are illustrative of coproduction in Indonesia. The survey teams will then be asked to collect additional qualitative information on these communities, and these case studies will be used to explore the causality from selected inputs to service performance.

Relations Between Government and Local Civil Society

Central to the successful coproduction of decentralized services is accountability and transparency among stakeholders, particular between community members and civil servants (Isham and Kähkönen 1996). Because of market and collective action failures, government intervention in the provision of infrastructure services is often justified. In theory, government can provide the Pareto-optimal level of the service by using lump-sum taxation from community members as a selective incentive to coerce collective action. In practice, governments often fail to provide water and sanitation services optimally because of: nonavailability of lump sum taxes; fiscal constraints due to a limited tax base; lack of knowledge of users' needs; and shirking and corruption by civil servants.

⁵³ To assure the proper estimation of this two-stage procedure (including the proper selection of instruments) and to compare these results with that of the estimation of (1), a set of available statistical tests will be used, including the Hausman test, the Hausmann-Taylor test, and the Sargan test.

Coproduction of water and sanitation services may alleviate government failure by: alleviating fiscal pressures on the government; providing a means of revealing community members' preferences; and increasing transparency and accountability within the government. In particular, adopting coproduction may help to reveal community preferences and ensure that services match what community members want, are willing to pay for, and will be motivated to maintain. Overall, this type of interaction between members of the government and local civil society leads to the improvement of the mix of inputs that enhances the quality of delivery.

Coproduction may also decrease the opportunities for shirking and corruption among civil servants by increasing transparency and accountability. When community members participate in the design, operation, and maintenance of services, the flow of information and the interaction among stakeholders reduces the opportunities for civil servants to embezzle tax revenues or other funds allocated for public works. Overall, this type of interaction between members of the government and local civil society leads to increased inputs for coproduction, an efficiency effect.⁵⁴

What are the exact roles of community members and civil servants, and how do they fit in the coproduction framework? Members of both groups contribute inputs into coproduction: the nature of these inputs depends on the stage — design or implementation — of the coproduction process. During the design stage, public officials guide the design and selection of the service. They provide a menu of service options to the community that are technically and financially feasible, based on previous experience with similar communities as well as preliminary knowledge of the community's needs. They can commit the government to partial funding and technical support of the service. In turn, community members discuss and select a service from the menu of options, based upon their preferences and willingness to pay. They also commit to time inputs for management of the system: these include participation in W&S association (WASA) meetings and in selected operation and maintenance activities. During the implementation phase, members of both groups are expected to jointly construct, operate and maintain the facility. Public officials are responsible for overseeing service funding from the government, providing technical support for installation and operation of the infrastructure, and co-managing the system with the community WASA. Community members are responsible for contributing the agreed upon user fee and time towards co-management of the system.

⁵⁴ More technically, improving the mix represents an improvement of the coproduction technology, and increasing inputs represents a movement towards the coproduction frontier. See Ostrom (1996) and Isham and Kähkönen (1996) for diagrams of these two effects.

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SOCIAL CAPITAL INITIATIVE - PROJECT II

Kenya Local Community Action Project

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Overall Project Description

This study proposes to examine a series of development activities undertaken in rural communities in Western Kenya by Internationale Christelijke Stichting (ICS), a Dutch nongovernmental organization. In cooperation with academic researchers and the World Bank's research department, ICS has built a randomized experiment into the design of their development interventions in order to enhance the evaluation of impacts.

The proposal extends this rare and valuable randomization of the allocation of benefits to two new features to the project, which are related to social capital, by which we mean the network of interrelationships amongst individuals that facilitate groups' ability to cooperate and act effectively.

Women's Groups

The activities of ICS are going to be expanded to include an agricultural project to give financial and technical assistance to women's self-help groups. ICS is again willing to use randomization in designing the intervention in order to rigorously evaluate the impact of this assistance. These groups represent a particular form of social capital, as they are networks of mutual support used by women as means of capital accumulation, a source of labor, and a kind of general assistance. The research would evaluate the effect of assistance not only on the women and their living standards but also on the organizational structure, procedures, and membership of the groups. This addresses a key research priority in the area: whether assistance provided from the outside (either from the government or foreign NGOs) changes the social characteristics of the assisted groups.

School and the Community

Second, the previous research on the impact of the school interventions will be expanded by testing the effects of assistance on variables other than test scores and the pedagogical functioning of the schools. In particular, we will monitor the impact of financial assistance provided by the NGO on the community and parent involvement in the schools, on teacher and school administration involvement (in the school and community), and Ministry of

Education involvement in the production of educational outcomes and the ways those three groups interact.

Social Capital Components

Women's Groups

ICS is now beginning an agricultural project which will provide assistance to 40 women's groups in western Kenya. The study will evaluate the impact of this assistance by selecting the groups that will receive the assistance randomly (from a previously enumerated universe of such groups) and using a comparison group of 40 women's groups in the same area who do not receive assistance. The randomization is an important element of the method, and helps to address many questions about impact evaluation, including the self-selection into the groups and self-selection of groups into participation in the evaluated activity, and the direction of causality. This research will allow us to evaluate not only the effectiveness of the assistance in improving the financial and material position of women's groups, but the extent to which the assistance promotes the kinds of social capital outcomes that are increasingly thought to matter for effective long-term development. In particular, the research will examine:

- The financial impact of grants to women's groups.
- The impact of grants on women's groups as social organizations in terms of social capital creation and organizational evolution.
- The effect of assistance on the coproduction (individual, group, community, government) of development outcomes.

The key variable that has not yet been determined is the exact nature of the assistance that these groups will receive. ICS has allotted the money for the project and has hired a coordinator for the project, but has not yet completed the project design. At this stage the project will combine technical assistance on the group's agricultural activities and some direct financial assistance. On the one hand, the fact that the intervention is still being designed is useful because the evaluation side of the project can have input into the project design, but it also makes it difficult to make precise statements about what exactly will be evaluated. However, the interest is as much in the impact of the outside assistance on the groups itself (for which the exact intervention is not as crucial) as the impact on outcomes (like incomes), although they are obviously related.

Schools

Out of a total sample of 100 primary schools in Busia, Kenya, 25 randomly chosen schools received assistance in the form of a grant in 1996. The total amount of these grants varied by school size, but each school received approximately \$4.00 per pupil in grades 3-8. The school committee, together with the PTA, decided how that money would be spent and ICS provided the chosen inputs, less 10% for transportation expenses. An additional 25 randomly chosen schools received a donation of books with a value of approximately

\$3.00 per pupil. Each school received the same books for the same subjects for grades 3-8. The number of books was determined by enrollment; each school received one book for every two pupils in each grade. An additional 50 randomly chosen schools received no assistance. These schools serve as the comparison group for those 50 who received assistance.

The proposed evaluation activity would extend previous work by focusing on outcomes other than the efficacy of the school in providing learning (e.g. test scores) and in particular the effects of assistance on forms of social capital at the school level which include: parental involvement, school personnel involvement, and Ministry of Education involvement in the provision of education. The main hypothesis is that assistance should improve local involvement in the schools, and that this involvement should in turn foster even greater improvements in educational outcomes. However, there is an alternative hypothesis, that assistance increases involvement, but this involvement leads to worsened educational outcomes because of: 1) increased conflict over school spending, 2) increased corruption, 3) increased conflict over the ownership of outcomes.

Social Capital Monitoring Methodology

The primary research question is how development assistance of the kind often provided by governments, NGOs and donors affects social capital. With the women's groups the key question is whether the features that are most crucial to making voluntary groups effective are negatively or positively affected by assistance that is external to the group. With schools, the question is whether greater resource availability "crowds in" parental and staff involvement and hence creates social capital or whether the money substitutes for parent, staff and government effort and hence "crowds out" voluntary efforts.

Women's Groups

For the women's groups there are three separate research questions. Measuring each of these requires separate approaches and methods. The three broad areas of concern are:

1. What is the impact of the intervention on the outcomes for the group (e.g. incomes, savings, agricultural production)?
2. What is the impact of the intervention on the way in which the groups operate and (potentially) function as social capital (e.g. openness to new members, procedures for selecting leaders, involvement of men, interactions with public officials)?
3. What is the impact of changes in the group, either in outcomes of functioning, on those outside the group (e.g. village cooperative activity, innovational spillovers, etc.)?

Impact of the Project on Group Outcomes

The first component of the research is to measure the impact of assistance on the intended outcomes: income, and agricultural production. The variables to be measured in this component are the most conceptually straightforward, although getting reliable estimates for variables like group income and agricultural output is notoriously complex. This component of the project will examine outcomes primarily at the group level and will look at the effect of the project on the following areas:

1. *Group income.* This will involve the collection of information not only on output, but also on inputs, including: contributions of members in cash, kind, or labor, sale of agricultural output.
2. *Group assets.* This will include landholding, tools and implements, stocks of seeds and agricultural products, cash on hand, cash in the bank, debts owed to the group.
3. *Changes in agricultural output and crop mix and changes in agricultural husbandry.*

This data will be collected from the baseline and followup survey with group officials, from group records, and from interviews with individual group members. Resources will be too limited to interview every group member, but a random sample of members from each group will be interviewed to verify the information received from group officials.

What is the Impact of the Intervention on the Way in Which the Groups Operate and (Potentially) Function as Social Capital?

The first component of the project described above, will examine how the project affects the groups' ability to increase women's income and labor availability. The second component will examine the groups as a form of social capital. There are two components to this social capital formation as we conceive it: one internal and one external. The external form will be examined in the third and final component. This component will examine how the assistance affects group functioning, project success and networking and assistance among group members.

Women's groups tend to serve several important functions in western Kenya. First they are a source of savings and capital for women. Second, they are often a source of labor during peak agricultural seasons, when groups work on each others' land. Third, they are a source of identity, of group solidarity, and a vehicle for education, the transmission of information, and the sharing of experiences. Since women leave their family home for their husband's upon marriage, relatively complex relationships with in-laws historically formed part of a woman's network and resource base. As these ties grow less important, women's groups provide a useful format for community action for women.

The researchers will collect information, both historical and current, on the following features of group activities:

1. *Frequency and type of meetings.* Women's groups in western Kenya have several types of meetings in a given month. Two types of meetings general rotate around to member's houses: 'merry-go-rounds' where each member contributes a given sum of money which is left with the host, and one or more meetings where members gather to work on a particular member's personal land. There may be additional meetings for group business and planning, and for work on group land. The research will differentiate between all these types of meetings. For example, does assistance affect the nature and timing of particular kinds of meetings? Are types of meetings substituted for each other? Is there more work on group land or individual member's land?
2. *Does the nature of governance changes with assistance?* Are elections held more or less often, or are they more contested? Are more elaborate rules for membership, meeting procedure, or sanctions for violations of rules instituted. Do groups develop more elaborate internal procedures or rely more on external authority for enforcement?
3. *Networks and information transmissions.* How often do group members meet outside of the group, how much do they rely on other members for help outside the group, how important are other group members as sources of information on local and national events?

In addition to the survey, at least one group meeting will be observed for each group and (with the group's permission) recorded. This will allow a more qualitative analysis of group functioning and group dynamics.

The project will collect information on individual group members: education, occupation, religion, home area, length of membership, number of other groups to which they belong. Individuals will also be questioned about reasons for joining the group and their satisfaction with the group using two techniques: focus groups of subsets of group members, and individual structured interviews with a sample of members. In this way one can explore the effects of individual characteristics on group functioning, and report on how the members assess the groups effect on their own lives.

What is the Impact of the Assistance on Group Interaction With Nongroup Members, I.E. on the Creation of Social Capital Within the Community as a Whole?

The above hypothesis will test whether assistance tends to strengthen social capital formation within groups. How does assistance affect the amount of interaction the women's groups have with organizations or institutions outside of the group? Are the assisted groups more likely to be involved in community activities? How does assistance affect the involvement of individuals in community activities?

Through the baseline and followup surveys, as well as the focus groups and structured interviews with groups and individuals, the following questions will be addressed:

- Do groups become more or less open to new members?
- How does assistance affect the involvement of men/husbands in group activities?
- Local administration such as village elders, district officials, and officers like community development assistants are prevalent figures in Kenyan village life. How does assistance affect the involvement of such non-members in the group? Does this involvement appear to have positive or negative effects? Are groups that receive assistance more or less likely to be visited by public officials?
- Are assisted groups more likely to be involved in community activities: schools, church groups, harambees (fundraisings)?
- Are assisted groups more likely to participate in training seminars, agricultural shows, or other organized activities? Is this participation initiated by the groups themselves or by local administration?

Finally, this third component will also assess the diffusion of agricultural technology and practices to community members. The project will include the provision of fertilizers, hybrid seeds, and training on appropriate crop husbandry for hybrid and other nontraditional crops. Does this technology spread to members' personal plots? Does the technology spread to neighbors? At the end of the third phase of the project in August 1998, a survey will be done of a random sample of individuals for each group as well as a random sample of their neighbors. For each group, the survey will assess whether the types of seeds or techniques introduced to that group have spread to individual members' cultivation or to that of their neighbors. Since each group will be picking a package of interventions specifically tailored to their needs, these surveys will then assess diffusion based on that particular groups package.

The component of the research on social capital in women's groups hopes to assess the importance of assistance in strengthening women's groups as local organizations, and increasing their involvement and visibility in local communities. Thus, as noted above, the process of social capital formation can be seen as having three measurable components:

1. Project outcomes and success: agricultural productivity and income
2. Internal group organization: affecting recruitment, procedures, member involvement, and the formation of networks of resources.
3. External group interaction: groups becoming more or less involved in communities.

While one would hope that project assistance would have a positive affect in all these areas, it can be difficult to predict *a priori*. Outside assistance may cause groups to become more hierarchical or exclusionary, or leadership may be taken over by outsiders. The randomized evaluation format will be particularly helpful in measuring outcomes in this complex setting.

Primary Schools

The existing research on the effects of assistance on primary schools has focused almost exclusively on academic achievement as measured by standardized test scores and school attendance. This part of the research will not add a new intervention, but will investigate a different aspect of an existing intervention. The research will examine the creation of social capital characteristics in primary school communities focusing on two areas: involvement of parents in school activities and the involvement of schools in community activities. Again, the randomized experimental format of the education assistance will be used to evaluate the questions. These include:

- How did the intervention change the functioning of the school committees? How much more (or less) involved are parents as measured by PTA and other group attendance? Are parents more or less willing to contribute to school activities? Do teachers and parents interact more frequently? Does staff attendance and morale improve?
- Do the additional activities in the school committees have other ramifications for the local areas, that is, are there spillover effects of having more active and involved parents or other areas of concern? Are assisted schools more likely to let their school compound be used for meetings of community groups? Are school members (teachers, school committee members) more likely to be involved in community activities?

In addition to a quantitative, closed-ended survey to measure outcomes such as payment of fees, attendance, etc., each school will be visited to conduct individual interviews with a random sample of teachers, administrators and parents. These interviews will be used to assess more difficult questions such as the level of trust among teachers, administrators, and parents.

SOCIAL CAPITAL INITIATIVE - PROJECT 12

Understanding Trust and Social Capital

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Social capital is interpersonal trust as expressed in institutions. The manner in which people relate to each other in and through the institutions which affect their lives determines the quality of those lives and the degree to which they will improve them. Given the fundamental quality of trust as arbiter of an institution's utility to the realization of people's aspirations, development becomes more effective when based on an understanding of trust as related to institutions, particularly — with the dearth of trust in formal institutions among the poor — those involved in poverty reduction activities. The nature of trust can best be understood in an atmosphere of trust. This atmosphere is the basic prerequisite to effective listening, as practiced in the beneficiary assessment (BA) approach to developmental learning. It is the overall objective of this research project to gain an operationally-useful understanding of trust as a key ingredient to social capital in relation to intermediary human associations as revealed in the training and visit (T&V) system of agricultural extension, particularly as regards the use of contact groups (CGs) for communication.

The approach to social research known as beneficiary assessment can contribute to the understanding of trust in two ways. First, the linchpin of the BA approach is the establishment of trust between interviewer and interviewee by the utilization of qualitative research techniques which are meant to instill confidence and create rapport. These include, inter alia: the use of an interview guide for conversational interviewing which allows the interviewee to become the subject of a discourse he or she leads; the preference for keeping paper and pencil out of sight as much as possible during the interview so as not to create the ambiance of an interrogation; structuring the interview by beginning with topics which show respect and concern for the interests of the interviewee, such as the health of the children of the household. These techniques show a certain deference and at the same time place the interviewee at ease. Second, the very nature of the object of inquiry, trust, is one about which little valid and useful information will be revealed unless a high degree of trust is present between the interviewer and the person being interviewed. To reveal who one does and does not trust and why — topics which are heavily laden with social, economic, and political implications — one must first trust that the person to whom one is divulging such information will not use it in ways injurious to oneself. Thus, the beneficiary assessment methodology, in capitalizing on the establishment of trust for

deriving insights, is particularly appropriate to an inquiry into the nature of trust about which little is apt to be revealed outside of a setting of high confidentiality.

Three particular aspects of trust as related to institutions will be the focus of this inquiry. The first is the trust between technician (agricultural extension agent) and farmer which may be necessary for the latter to follow the counsel of the former; the second is the trust that binds the members of the association into a cohesive whole. The third is the trust which transcends the association and allows it to act for and serve the interests of the larger community of which it is a part. This project would be executed by gaining comprehensive insights on the nature and determinants of trust as a catalytic force for development in representative samples of beneficiary populations making up or affected in some way (even if by neglect or exclusion) by the contact groups used in agricultural extension.

The need for a study of this sort comes from institutionally related concerns in the agriculture sector. Agricultural extension in the T&V model depends on the intermediation of the contact group to assure the diffusion of technological advances. The nature of this association plays a large part in determining the success of the activity. One key to understanding this institutional nature is by assessing the character and intensity of trust using the qualitative techniques of beneficiary assessment. The principal hypotheses underlying this research are that first, the degree and nature of trust between a) the members of a community association (contact group) and b) those members and the residents of the community of which that association forms a part determine the effectiveness of those associations, as operational entities within themselves and as catalysts for community development, respectively; and second, the nature and degree of trust between the farmers and the agricultural extension agent is key to the generation of increases in agricultural production and the role of the contact group is vital to this trust. Other, more specific underlying hypotheses include:

1. The higher the level of trust between the members of a contact group and those farmers in the area served by that group who are not members of the contact group, the more effective will that group be in transmitting agricultural technology to that larger group of farmers.
2. The higher the degree of acceptability of the technology addressed by extension work, the more readily will trust act as a factor in facilitating communication and, ultimately, increasing production.
3. Regarding the methodology employed, beneficiary assessment, with its emphasis on qualitative, naturalistic techniques to elicit candor, will enable trained observers to gain insights into the nature of trust otherwise unrevealed.

Having stated these hypotheses, it is a central tenet of this qualitative research approach that much of what we wish to know about a given reality is best discerned by viewing that reality without the blinders imposed by a priori hypotheses. Rather, much of

what we will learn from this research will come inductively from keen observation of the nature of interaction, and other indicators of the bonds of trust, between the various actors in the associations and communities under review. This observed reality may eliminate one or more of the above hypotheses and lead to the introduction of others.

Methodology

To carry out this project one consultant would visit Mali for a period of six weeks. This consultant would contract two local interviewers for the time she is in-country. Together with local management, representative samples of members and non-members of contact groups would be selected for interviewing. Given time constraints, statistically significant sampling will be impossible. However, experience with the conversational interviewing of the beneficiary approach demonstrates that three persons can cover 100 persons in four weeks (allowing time for focus group interviews and one of the three to conduct participant-observation).

The sample frame for this project will give needed weight to the institution of the contact group, as related to farmers and extension agents in two regions of Mali. One region (Kayes) will be where contact groups have been found by the beneficiary assessment done in 1996 to be particularly ineffective as transmitters of agricultural information; the other region (Segou) will be where the contact group was found by farmers to serve very well as an effective intermediary. The percentages of non-members of contact groups who received most of their agricultural information from these associations varied from 25 to 76 in these two regions. Three communities will be selected in each region for this inquiry. In each community conversational interviews will be conducted with five members of the contact group and ten non members, comprising 15 CG members and 30 other farmers per region for a total of 90 farmers for the total region. Over 80 % of the members of the contact groups are male. The other farmers will be divided equally by gender. Three focus groups will be conducted in each community, one with the contact group and two with the other farmers (not necessarily those sampled); these group discussions should take roughly one day a week. Participant observation will be conducted in one community per region for a period of roughly two weeks; this will produce five case studies (drawn from community leaders, contact group members and other farmers). These ten cases, together with the 90 interviews discussed above, will bring the total number of farmers sampled to 100.

The first week in-country would be spent on the sampling, training the interviewers and refining the interview guide. This guide, which will be adapted for the farmers and members of the contact group, will be divided into two broad areas, personal and technological, and will be broken down to cover a number of topics which should serve as indicators of trust, as follows:

Interview Guide (to be refined in the field)

Personal (rank from 1 to 5)

- Openness, truthfulness
- Ability to keep secrets
- Propensity to misuse/abuse public property
- Reliable; keeps commitments
- Respectful of others
- Returns borrowed property

Technological Issues

There is recognition in the field of agricultural extension that the matter of trust is not just one of interpersonal relations but also hinges on the nature of the technology being advanced by the extension agent. Certain technologies (composting is often mentioned) appear to almost "sell themselves", while others (such as spacing) require more of an effort, or a "harder sell", on the part of the extensionist. It is thus important to include the dimension of technology as a factor inhibiting or inducing productivity in discussions with farmers regarding trust. The technological areas which will be topics of the interviews will again be ranked from 1 to 5 according to their perceived trustworthiness (or reliability) and will include:

- Composting
- Spacing/planting
- Rice nurseries (where applicable)
- Fertilizer
- Introduction of new seeds
- Other (to be specified in the field)

The focus of inquiry for this applied research project is trust as an element of the social capital represented by the institution of the contact group within the contexts of the larger community of farmers and the agricultural extension development intervention. The degree and nature of trust is seen to relate not only to interpersonal factors but to technological ones as well. It is expected that this qualitative inquiry into the trust factor in agricultural extension will reveal the existing blockages to, as well as potential opportunities for, positive change in this important field of endeavor, be they in the relations between those farmers who are and those farmers who are not contact group members, in the relations between members of the contact group itself (sometimes considered to be overly closed and exclusive of the broader community) and in the relations between the farmers, particularly those in the contact groups, and the extension agents. Throughout, particularly in the relationships outside of the contact group, the dimension of technology will be assessed as detracting or contributing to trust and thereby relating to the formation of social capital.

As indicated, a combination of qualitative techniques would be used in this research. In addition to the conversational interviewing with representative samples, there would be focus groups done with both members and non-members of the contact groups and participant observation involving residence of two weeks in at least one community in each of the two regions of the project area (visited by the extension agency). The participant observer would conduct five case studies (with community leaders, farmers who are and who are not members of contact groups, local government officials, etc.) in or near his or her place of residence during this time. The individual interviews would get at the people's perceptions uninhibited by the presence of peers. Focus groups would assess the points of view of large numbers of people in short periods of time with peer presence as a check on validity. Participant observation would enable trained observers to understand the sociocultural and political context in which the contact groups function.

Outputs

This research is clearly exploratory. It attempts to bring into development operations a more precise and useful understanding of trust and of how to assess trust than has hitherto been available. Particular outputs of this research will include a deepened understanding of:

1. the qualities of trust which affect the performance of institutions in agricultural extension;
2. the indicators of trust in grassroots institutions;
3. the centrality of trust to the cohesiveness and effectiveness of institutions;
4. ways to engender or elicit trust, with reference to specific technological factors; and
5. the utility of various qualitative techniques to gaining a useful understanding of trust and, more generally, social capital.