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Scaling Social Innovations:
The Case of Gram Vikas

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Scaling Social Innovations: The Case of Gram Vikas

by

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ABSTRACT

The purpose of this study is to better understand the process of innovation transfer between social sector organizations, an area that is at the nexus of research on social entrepreneurship, scaling, and knowledge transfer. We are guided by a primary research question: *How are social innovations transferred to other organizations to increase their impact?* Drawing on field observations, interviews, and archival data from an ongoing social innovation transfer attempt in rural India, we show that the scaling process is fraught with challenges, but can nevertheless be managed by focusing on the “Arrow core” of elements which enable a social innovation’s success.

Keywords:

Social entrepreneurship, innovation transfer, developing countries, scaling, international development, rural development, India

INTRODUCTION

There are hundreds of innovations brought to market every year by socially-oriented entrepreneurs (Dees, Anderson, and Wei-Skillern, 2004; Phills, Deiglmeier, and Miller, 2008). While many of these innovations fail, some prove successful in their local context, addressing a pressing social problem and improving the economic and social conditions of populations. Successful social entrepreneurs then face a choice: do they want to continue working in their current region, and fulfill predominantly local needs, or do they want to increase their impact by replicating their innovations in other geographies? Entrepreneurs who choose to scale social impact are faced with limits to organizational growth such as scarce resources or decreasing returns to scale. They often confront this challenge by transferring their innovations to other socially-oriented organizations.

The purpose of this study is to better understand the process of innovation transfer between social sector organizations, an area that is at the nexus of research on social entrepreneurship, scaling, and knowledge transfer. While there is prior work on “social alliances” that involve at least one non-profit organizational partner and serve non-economic objectives such as increasing social welfare (e.g., Berger, Cunningham, and Drumwright, 2004), for the most part there is very limited research analyzing how social entrepreneurs use *knowledge transfer as a strategy to achieve increased impact*. We aim to fill this gap with the present study. By taking the perspective of a successful social innovation and following the process through which the organization transfers the innovation to a partner, we hope to shed light on the various theoretical and practical concerns which arise in social innovation transfer.

In particular, we look at how social entrepreneurs work to maintain the fidelity of their innovation across a replication attempt; fidelity relates to whether the innovation being

transferred resembles or deviates from the original innovation as it is transmitted (Ansari, Zajac, and Fiss, 2010). Knowing where variation is likely to emerge during the transfer process may be useful in aiding social entrepreneurs to minimize deviation from a preferred model, or at least from the “core” elements of that model (Winter and Szulanski, 2001). Social entrepreneurs who fail to limit the extent of variation in their innovation as it is adopted by outside organizations may end up losing the meaning and goals of the original innovation during the transfer process, thereby impacting the reputation and acceptance of the original innovation.

We are guided by a primary research question: *How are social innovations transferred to other organizations to increase their impact?* We address this issue by focusing on Gram Vikas, an Indian rural development organization. Founded in 1979 in the state of Orissa, Gram Vikas delivers comprehensive water and sanitation systems by working together with beneficiaries in villages that have limited access to such infrastructure. Our goal is twofold. First, we explain Gram Vikas’ unique approach to rural development issues, in particular through its flagship Movement and Transformation Network for Transformation of Rural Areas (MANTRA) program. This is the successful *social innovation* the paper focuses on. Second, we elaborate upon the strategies used by Gram Vikas to scale the MANTRA program beyond Orissa to other parts of India. Drawing on field observations, interviews, and archival data, we describe an ongoing attempt by Gram Vikas to transfer MANTRA to an organization outside Orissa. We show that the scaling process is fraught with challenges but can nevertheless be managed by focusing on the “Arrow core” of elements (Winter and Szulanski, 2001) which enable the social innovation’s success. Although a focus on replicating the Arrow core during transfer attempts may result in less wide-spread implementation of the social innovation, such focus maximizes social impact by identifying

the contexts in which transfer is most likely to succeed. The paper concludes with some observations for future field-based research on scaling social innovations.

THEORETICAL BACKGROUND

The literature on transfer of innovations offers contrasting views on how successful transfer happens. Work in the area of knowledge transfer emphasizes the use of templates as a strategy for achieving successful transfers (Winter and Szulanski, 2001; Szulanski and Jensen, 2006). These studies follow a classical engineering-based approach to knowledge transfer, which sees knowledge bundles as interlinked routines and processes which interact in specific ways to produce specific results. Tampering with these elements and their associated interconnections can lead to the breakdown of the whole system. This view contrasts with findings from the institutional perspective in organizational theory, which stress the importance of adapting innovations to the local context (e.g., Djelic, 1998; Kostova and Roth, 2002; Boxenbaum and Battilana, 2005).

Winter and Szulanski (2001) established the theoretical foundations of a strategic view of replication by developing the concept of the “Arrow core,” which refers to an understanding of which knowledge attributes are replicable and worth replicating, together with knowledge of how these attributes are created and the characteristics of environments in which they are worth replicating. This information set can be thought of as the complete answer to the question: “What, how, and where should the replicator be trying to replicate?” With respect to the practice transfer and innovation diffusion literature, Winter and Szulanski note that replicating a template often involves transfers not only of varying scope (narrow vs. broad), but also transfers of knowledge or elements that are may be nonessential. As an example, the Intel corporation utilizes a “copy exactly” strategy in the construction of new manufacturing

plants based on the design and operation of successful existing facilities, down to the color of walls in new plants (McDonald, 1998). This is because of the complexity and precision of microprocessor fabrication and an inability to pinpoint the essential elements of the process. By zeroing in on an Arrow core over various replication attempts, organizations can come to a better understanding of the essential elements necessary for replication to succeed, and of the elements can be left out without jeopardizing this success.

Some empirical research supports the Arrow core hypothesis. These studies provide evidence that presumptive adaptation of knowledge assets from one national setting to another may be detrimental to performance (Szulanski and Jensen, 2006), that adhering to a template during the knowledge transfer process leads to more effective knowledge transfer (Jensen and Szulanski, 2007), and that firms replicate more when organizational knowledge is ambiguous, but prefer adaptation when knowledge is context-dependent (Williams, 2007). On the other hand, there is evidence to the contrary. Djelic's (1998) history of postwar reconstruction in mid-20th-century Europe demonstrates how France and Germany, to differing degrees, adapted American business models to "fit" their particular national contexts, resulting in hybrid industrial models which fueled substantial economic growth. Similarly, Boxenbaum and Battilana (2005) show how the "transposition" of human resources practices across national boundaries required adaptation to the institutional context of the target organization in order for successful implementation to occur.

For the most part, however, research in this area remains limited to transfer of knowledge within and between for-profit enterprises. It has yet to be applied in settings where transfers of knowledge take place between firms which have a primarily social mission such as innovations developed by social entrepreneurs (Dees, 2001). Social entrepreneurship involves

“entrepreneurial activity with an embedded social purpose” (Austin, Stevenson, and Weiskillern, 2006), and is often characterized by the allocation of resources (financial, human, political) to neglected social problems (Mair and Marti, 2006; Santos, 2009). Social entrepreneurs are the source of numerous innovations in both the developed and developing world, from the provision of low-cost preventive cataract surgeries to the distribution of low-cost loans to poor women to the revitalization of neglected urban and rural school systems (Bornstein, 2004; Elkington and Hartigan, 2008; Phills, Deiglmeier, and Miller, 2008). Because social entrepreneurs are often more interested in sharing their innovation to maximize impact rather than “owning” it to maximize profits, the knowledge transfer process may be qualitatively different from what is observed in transfers between purely for-profit enterprises. For instance, a profit-motivated transfer attempt implicitly represents a speculative judgment about what is profitable to replicate: it is important to replicate features which add value commensurate to their costs, value which can then be appropriated for the firm’s stakeholders (Winter and Szulanski, 2001; Desa and Kotha, 2006; Bloom and Chatterji, 2009). Social entrepreneurs also seek to add value, but do so with the primary intent of delivering solutions that address neglected positive externalities rather than to capture value: social entrepreneurs work to ensure that the value they create spills over to the whole of society rather than a small part. Thus, profit may be a concern, but only to the extent that it helps to sustain their solutions (Santos, 2009).

This then begs the question: what is the most effective way for social entrepreneurs to deliver these solutions and add value? While social entrepreneurs are often successful in establishing effective business models to address problems in their local areas of operation, they face enormous challenges in scaling their operations and also to achieve greater “social” returns for constituents such as funding agencies (Bloom and Chatterji, 2009). Transferring

knowledge to partners represents a relatively low-cost way for social entrepreneurs to scale a successful innovation, but it is a phenomenon which remains understudied as a method for scaling. It can be achieved by: (1) disseminating information through the use of “best practice” blueprints or intermediaries such as multilateral organizations and consulting firms; or (2) forming alliances with one or more partners for the purpose of knowledge sharing and replication (Dees et al., 2004).

The former strategy results in broad dissemination of the innovation, but suffers from a lack of control over the solution by the source firm. Organizations which choose to adopt the innovation can do so without any formal collaboration with source firm, and there is a greater possibility that the innovation may be utilized less effectively, or in a way for which it was not intended. On the other hand, the latter strategy – forming alliances with partners – leads to the dissemination of information over a much smaller sample of firms, but with greater control over the knowledge transfer process by the source firm (Powell, Gammal, and Simard, 2005). While this is certainly a slow-growth method for spreading the innovation, the source firm has greater room for flexibility with respect to the elements of its model it wishes to share and emphasize in its interaction with partners. The source firm can also more easily capture lessons on best practices and potential hold-ups to transfer when a strategy of direct partnership, rather than indiscriminate dissemination, is chosen. It is thus most appropriate at the earlier stages of scaling up a social innovation. For these reasons, we choose to concentrate on this second form of transfer in our paper. In doing so we address a problem at the nexus of research on social entrepreneurship, scaling, and knowledge transfer that deserves academic attention.

RESEARCH CONTEXT AND METHODS

In this study we focus on a single case: a dyadic alliance between two social entrepreneurs, a source organization and a target organization with the goal of knowledge transfer. The partners had engaged in reciprocal staff visits to share ideas and best practices in the two years prior to signing a transfer agreement, though no formal mechanism for innovation transfer was established before the agreement was signed. There is a clear source of knowledge and receiver of knowledge in this setting, so the outcome of the relationship is more straightforward than in other relationships where transfer can be non-cooperative and in both directions.

Case Selection and Data Sources

We chose Gram Vikas, the source social entrepreneur for our study, for its pioneering role as a social innovator. The organization, along with its founder and Executive Director, Joe Madiath, has received numerous social venture awards, including the Ashoka Changemakers Innovation Award, the 2007 Skoll Award for Social Entrepreneurship, and the 2006 India NGO [Nongovernmental Organization] of the Year Award. The partnership between Gram Vikas and the Comprehensive Rural Health Project (CRHP), the target organization in the study, is one of the best-documented ongoing partnerships in the organization's portfolio. Both of these organizations operate in the rural public health sector in India, albeit using different approaches to address the root problems of access to better sanitation and health in village areas. We were granted access to virtually all the paper and electronic records related to the partnership, which originated several years before the current transfer attempt, and were additionally able to interview key players involved in the partnership at both organizations, including beneficiaries at the village level.

In Yin's (2009) terminology, our method choice is an "in-depth case study" of the transfer attempt from Gram Vikas to CRHP. This approach is particularly suited to the study of social entrepreneurship: while being context and story "rich," social entrepreneurship suffers from a paucity of theoretical development (Eisenhardt, 1989; Dees, Anderson, and Weiskillern, 2004; Austin et al., 2006). Thus, our primary goal in choosing the in-depth case study research method was not to develop theoretical propositions or test specific hypotheses, but rather to generate insights which can guide future theory development research in social entrepreneurship by looking at a situation which previously has not received significant research scrutiny.

We relied on multiple data sources to develop the case study, including: field observations; interviews; organizational records; emails; meeting notes; annual reports; project reports and updates; briefs and monographs; books written about Gram Vikas and CRHP; consulting evaluations; and survey data. Table 1 provides an exhaustive list of sources of information used in the course of this project.

Insert Table 1 about here

Data Gathering and Analysis

Insert Table 2 about here

Data gathering and analysis proceeded in four phases as summarized in Table 2. In the first phase, a preliminary survey was sent out to Gram Vikas and several other social entrepreneurs in July and August 2008 to gather information on the innovations developed by

these organizations, and to gain a greater understanding of past, present, and future attempts to transfer these innovations. Data gathered from this survey and archival material was used to identify the CRHP partnership as most worthy of study, as it was ongoing and a potentially large volume of data would be available for analysis.

During the second phase, the first author undertook a one-month long visit to India in January and February 2009, approximately six months after the preliminary survey was administered. During this visit he visited both these organizations and conducted 28 interviews with senior executives, mid- and field-level project managers, and program beneficiaries. The conversations ranged from 30 to 90 minutes in length, and a total of 18 interviews were conducted at the source entrepreneur site. Additionally, 10 interviews were conducted at the target organization site. As several interviews at both the source entrepreneur and target organization were undertaken in a group setting, a total of 39 individuals were interviewed across the sites. All interviews were taped and transcribed.

In the third phase data from the field visit, including archival materials gathered on-site, was intensively analyzed. In addition to the interview transcripts, we were able to obtain access to periodic reports to a funding agency detailing aspects of the Gram Vikas-CRHP transfer process, as well as a proposal for funding related to the transfer attempt. Additionally, the first author was able to gather copies of numerous email exchanges related to the transfer attempt on-site in India, as well as legal documents and agreements related to the transfer attempt. First, we developed a thick description of MANTRA, Gram Vikas' social innovation, presented in the next section of this paper. Subsequently, we constructed a chronological event trace for the period 2005-2011 outlining the various transfer steps to MANTRA to Gram Vikas (Lincoln and Guba, 1985; Miles and Huberman, 1994). Finally,

we “added flesh” to the chronology, adding relevant quotes and creating an integrated narrative of the transfer steps. The summary of this chronology is presented as Table 5.

In the fourth and final phase of the study we followed-up in November 2009, nine months after our initial visit, by telephone and email with both Gram Vikas and CRHP to obtain further information and views on the transfer attempt. One phone call was made to each organization and several emails were exchanged. The data collected during this stage provided a fuller picture of the end of the “MANTRA Implementation” stage (described in Table 5 and below) we had observed in mid-operation in January and February 2009.

THE SOCIAL INNOVATION

Gram Vikas has its roots in the Indian voluntary movements of the 1960s and 1970s. During this period many university students became social volunteers. One of them, Joe Madiath, led a group which came to the state of Orissa (traditionally one of India’s poorest and least developed) from its southern neighbour, Tamil Nadu, in 1971. Setting out in the wake of a devastating cyclone which hit the eastern part of the Bay of Bengal, the group was highly motivated by the idea of social equity and wanted to do something for the countryside. After the crisis was over, Madiath and several other volunteers stayed on to continue with rural development activities in the state. For the next few years they experimented with various activities to help the poor, mostly in irrigation technology and agriculture. This group formed the core for what would become an officially registered organization, Gram Vikas, in January 1979, with Madiath as its Executive Director¹.

Gram Vikas, which means “village development” in both Hindi (India’s official language) and Oriya, the local language in Orissa, was originally formed to address the needs of the so-

called *adavasi*, or tribal minorities, of the state. After an initial period of success addressing the intertwined problems of alcoholism and debt within these communities, Gram Vikas began to get involved in other areas of rural development, including education, health care and sanitation, income generation, and small-scale energy production through the development of biogas generators. Table 3 summarizes Gram Vikas' main areas of activity. The driving logic behind all of these activities was to develop a comprehensive approach to addressing the underlying social conditions that kept the people poor. In particular the company's biogas program became very successful in the 1980s when the government of Orissa approach Gram Vikas to expand what was a nascent effort to bring energy to rural areas; between 1983 and 1993 Gram Vikas built over 80% of the biogas generators in the state, representing 55,000 individual units, while using only 15% of all the public funds allocated by the government in support of biogas projects (Gram Vikas, 2009).

Insert Table 3 about here

While Gram Vikas' biogas program was very successful, senior managers within the organization felt that it did not adequately address the fundamental problem of inequality in Orissa, and, further, it did not allow the organization to work with the really exploited section of the rural population – the extreme poor. In the course of a period of reflection and experimentation in the early 1990s, the biogas program was “spun off” into numerous smaller companies and the organization shrunk in size from 1000 staff members to less than 500. During this period, Gram Vikas developed a study of rural development problems and found that 80% of the morbidity and mortality in rural Orissa could be traced to the poor quality of drinking water. A direct cause of poor water quality was the unsanitary habits around human waste disposal. The organization thus began an initiative covering 337 families in five pilot

villages to bring water and sanitation services to rural villages (Gram Vikas, 2002). This program, known as the Movement and Action Network for Transformation of Rural Areas (MANTRA), is now the foundation of Gram Vikas' activities and its most powerful social innovation.

MANTRA begins with the starting assumption that water and sanitation services are not privileges exclusively reserved for the most prosperous, highest-ranking, elements of urban society; rather, they are a right and resource to be equally shared among all members of a community, regardless of social position or geographic location. Nevertheless, the prosaic reality of life in rural Orissa belies this aspirational ideal: even to this day – after 17 years of work on the problem by Gram Vikas and other NGOs as well as continuing work on the problem by the state government for decades – less than 20% of the rural population in Orissa has access to protected water, less than 1% to a piped water supply and less than 5% to sanitation facilities (Gram Vikas, 2008). For Gram Vikas this seemingly intractable problem presented an opportunity. By working to address the problem of poor (or nonexistent) water and sanitation facilities, the organization could simultaneously address the deep-seated problems of poverty and social exclusion in rural Orissa. MANTRA was therefore developed as a program which goes well beyond simple infrastructure development for water and sanitation:

MANTRA unites communities to overcome barriers of social exclusion. Water and sanitation, as an entry point activity in new settlements, is not only a vehicle for improved health, but also a way of transforming hierarchical caste and gender based exclusion into **equitable inclusion** (Gram Vikas, 2008; emphasis theirs).

At the surface level, MANTRA delivers concrete water and sanitation infrastructure to villages. Gram Vikas ensures that all the families in a MANTRA village will have access to the same minimum level of products and services, including: (1) toilets and bathing rooms in every house; (2) 24-hour piped water supply to the toilet, bathing room, and kitchen of every family; and (3) the construction of a water tank as a community asset (Gram Vikas, 2008; Keirns, 2007). Beyond this, MANTRA is guided by five Core Values – Inclusion, Social Equity, Gender Equity, Sustainability, and Cost Sharing – which link in fundamental ways to the broader social mission of “equitable inclusion” which Gram Vikas espouses. Table 4 provides a full description of Gram Vikas’ Core Values.

Insert Table 4 about here

To achieve “equitable inclusion” in MANTRA villages, Gram Vikas lays out two primary conditions, each of which encompasses different core values. First, villages join MANTRA only through an “all or none” scheme. Either 100% of the families in a village join the program, or no families join. There is no in-between. In this way, Gram Vikas emphasizes the value of “Inclusion” as a core value. This requirement is highly related to the values of “Social Equity” and “Gender Equity” as well, and these are manifested in villages by representation of all sections of the community in village decision-making processes and equal participation of men and women in community level decision-making and control.

Second, to ensure the financial and operational stability of the water supply and sanitation installed, all families must participate in the scheme by contributing, on average, 1,000 rupees towards a “corpus fund” which goes towards maintenance costs and expansion of the water supply and sanitation system once it has been installed. This condition is most closely

tied to the two core values of “Cost Sharing” and “Sustainability”, and is based on the principle that the poor can and will pay for development services, and that the beneficiaries of MANTRA themselves are reliable sources of revenue for maintaining the water and sanitation systems.

THE TRANSFER ATTEMPT

While MANTRA started small, initially in 5 villages covering 337 families, the program has grown since 1992 to become Gram Vikas’s central program around which the vast majority of the organization’s extant activities are organized. As of March 2009, MANTRA was operational in approximately 700 villages covering nearly 45,000 families and a population of over 240,000 people. Most of this population was within Orissa but a few scattered projects have reached neighboring states as well; Gram Vikas’s goal is to cover 100,000 families by 2010 (Gram Vikas, 2009). With the maturity of MANTRA, Gram Vikas’s leaders sought to increase its impact beyond the general area of Orissa. Joe Madiath, the Executive Director, in particular saw the organization’s mandate as being much broader:

[after] the spin off [of Gram Vikas’s biogas program] as the leader I had realized that we were not doing something for activities, we were trying to fill a gap. So if the government could not do it and there was no mechanism to do something then we would do it, and that also not forever. Only till it became mainstream, till it got assigned within the government programs, and so it was in my philosophy to never do an activity forever – do an activity, demonstrate it over a period and mainstream it².

Part of this mainstreaming effort at Gram Vikas involves developing partnerships with other organizations which might be able to leverage the MANTRA model and Gram Vikas’s unique approach to rural development. Such networking and outreach activities constitute a

“core strategy for expansion” of MANTRA in the years to come (Gram Vikas, 2008). Indeed, in mid-2008 the organization hired a full-time, senior-level “Expansion Manager” charged with growing MANTRA outside Orissa by partnering with other organizations, both within India and internationally.

One of the most prominent of these out-of-state partnerships, with the Comprehensive Rural Health Project (CRHP) in Jamkhed, Maharashtra, began as an informal collaboration with Gram Vikas a few years before the arrival of the Expansion Manager. CRHP has developed its’ own successful model of the Village Health Worker (VHW) as the basis for the overall health of a particular village over the past four decades. The VHW model is well-known as a primary health care model for rural areas in the developing world (Arole and Arole, 1994). By partnering with Gram Vikas, CRHP – which operates on a much smaller scale, covering approximately 70 villages – sought to bring comprehensive water supply and sanitation services to the rural areas around Jamkhed. Indeed, while CRHP’s work has greatly decreased the incidence of infant mortality and numerous preventable diseases in project villages, while concomitantly increasing the life expectancy relative to surrounding populations, the availability of good water and sanitation facilities remains limited for the vast majority of families served by CRHP.

Planned Transfer of Mantra to CRHP

Insert Table 5 about here

The transfer of MANTRA to CRHP from Gram Vikas is proceeding over a number of years. We identified four distinct phases of in the course of our analysis, and these are presented

along with a timeline in Table 5. First, in the period before implementation and prior to signing a transfer agreement, several senior-level staff members travelled to Gram Vikas to observe project villages and to better understand the underlying principles of MANTRA (as outlined in Table 2). Exchange also occurred in the other direction, with several Gram Vikas staff members travelling to Maharashtra to gain an overview of CRHP's village health worker program. This *informal collaboration* period lasted approximately two years, from 2005 to 2007.

In the second stage of transfer, a needs assessment was conducted and it was determined that the transfer of MANTRA to CRHP was desired by both parties. Meetings were held in six CRHP villages to gauge interest in the program, and one village, Sharadwadi, was selected as the model village for implementation of MANTRA. Two villagers from Sharadwadi, along with two CRHP staff, travelled to Gram Vikas for a short exposure visit, including on-site demonstration of water and sanitation facilities construction and discussions with communities which had benefited from MANTRA. Thereafter, a written agreement was signed which outlined the steps for the transfer of MANTRA; this created a formal mechanism for innovation transfer from Gram Vikas to CRHP. Following this, a group of four villagers from Sharadwadi, as well as a CHRP field coordinator, travelled to Orissa for a four-week program to study sites which had successfully implemented MANTRA, and also to receive training in the construction of bathing rooms and toilet areas as part of the program. This period of *transfer formalization* lasted approximately one year, from 2007 to early 2008.

In the third phase of transfer, actual implementation of MANTRA began in Sharadwadi. Upon returning from Gram Vikas the villagers sought to share their knowledge and

implement the MANTRA model in Sharadwadi with the help of CRHP staff members. This implementation took the form of: gathering building materials such as bricks and stone chips; forming a Management Committee for the corpus fund; construction of soak pits for toilet facilities; readying every household in the village to receive materials for necessary items that are unavailable locally (e.g. toilet pan, door, cement, steel, etc.); and, finally, constructing the actual bathing and toilet rooms as well as a communal well and water tank. This *MANTRA implementation* period has just recently been completed, and lasted for approximately one-and-a-half years, from early 2008 to the end of 2009.

In the fourth and final phase of transfer, MANTRA will be up and running in the model village. Staff from the target organization, CRHP, will work with Gram Vikas to facilitate regular village-driven meetings to discuss and solve any problems with use or maintenance of the new facilities, while working to maintain 100% community participation, to ensure proper upkeep, and to prevent abuse or overuse of the water supply. The functioning of MANTRA in this village will facilitate the spread of the program to other CRHP villages. This *maintenance* period, will begin in January 2010, when implementation at the model village is completed, and continue for at least one to two years until the model village become independent in maintaining the newly constructed water and sanitation facilities.

Actual Transfer of MANTRA

Despite the extensive collaboration between Gram Vikas and CRHP both before and during the *MANTRA implementation* phase, transfer of the program did not proceed as planned. Sharadwadi, the model village chosen by CRHP, failed to follow through on the actual implementation of the program. While at first weather conditions, including a particularly dry few months during the traditionally rainy monsoon season, were seen as a cause of

inaction on the part of villages, it was soon evident that this was not the real cause. Out of the 80 families in the village only 54 had contributed to the corpus fund by April 2009. A much smaller number of families (12 in total) had contributed brick, sand and other construction materials necessary for the project. Additionally, since many of the villagers who had not contributed were involved in seasonal work at sugar processing factories in another part of Maharashtra, and would not return home for several months, getting 100% contribution was at best going to be delayed till mid-2009. CRHP wanted to go ahead with construction nevertheless, with the assumption that the families who had not given building materials or money towards the corpus fund would eventually offer their contributions once they returned from the factories and saw the benefits received by participating village members.

This turned out, however, to be a serious point of tension between the leadership of Gram Vikas and CRHP. Whereas CRHP's leaders saw 54 out of 80 families (approximately 68%) contributing as a relatively impressive feat, for Gram Vikas this did not meet one of the fundamental elements of the MANTRA program, namely, 100% participation of families in project villages in the construction of a bathing area and toilet facilities for each household and also in the creation of a self-sustaining corpus fund for maintenance costs and subsequent installations. Gram Vikas's leaders see these conditions as being a non-negotiable part of MANTRA. There are two justifications for this. In the first instance, there is a public health imperative:

water is a common need for all, whether rich or poor, and clean water, that too is a common need for all.... So there is a logic [in MANTRA] for [100%] inclusion... if you do sanitation only for a certain section of the people, those who can afford to do it and the rest you just leave out, you are not going to get clean water in the area³.

The second justification goes to the deeper meaning of MANTRA. Because the program uses water and sanitation as an “entry point” into project villages where developing greater social equity is the overarching goal, compromising on this condition would jeopardize the one of the fundamental reasons for creating MANTRA in the first place. Leaving aside the impracticality of getting clean water in a village where even a small percentage of the population persists in unsanitary hygiene practices, the 100% requirement ensures that all villagers, regardless of caste or class or income, are equal on at least one dimension: access to clean water and good sanitation facilities. While this meaning was clear to Gram Vikas, which had purposely adopted a slow-growth strategy to ensure that this requirement be met in all project villages, for CRHP, which was less concerned with equality than ensuring the good health of villagers in its project areas, it was secondary to the goal of putting in water and sanitation facilities where they were not available before.

After much back-and-forth between the leaders of both companies, Gram Vikas and CRHP came to develop a temporary solution to the problem of less-than-100% inclusion at Sharadwadi. Instead of continuing to directly motivate Sharadwadi’s villagers to get to 100% contributions, CRHP created a “contest” between Sharadwadi and another nearby village in its project area, Mandwa. Mandwa, which is a much smaller village of 49 families consisting mostly of tribal peoples and nomads, was selected on the basis of the motivation and enthusiasm displayed by villagers to implement MANTRA (including the 100% requirement of contributions) dating back to the original attempts by CRHP to gauge interest in the program. In the end, it turned out that Sharadwadi was unable to implement MANTRA as originally intended, but Mandwa, with its’ smaller, more-motivated population, was able to

complete implementation of the project in December 2009 provide the successful demonstration project that CRHP needed to expand the program further.

KEY FINDINGS AND DISCUSSION

This study addresses the following research question: *How are social innovations transferred to other organizations to increase their impact?* Our in-depth case study of Gram Vikas's transfer of MANTRA to CRHP validates earlier work in the area of knowledge transfer. At the same time, we suggest some interesting applications of this work to the areas of social entrepreneurship and scaling social enterprises, where knowledge transfer may proceed with particular nuances and differences when compared to other settings.

Our first finding relates to the transfer of core elements of an innovation. They are essential. As noted by Winter and Szanski (2001), by zeroing in on an "Arrow core" of elements over various replication attempts, organizations can come to a better understanding of how innovation replication succeeds, and which elements can be left out without jeopardizing this success. Gram Vikas's work in rural Orissa since 1992 allowed many such replication attempts to take place, the vast majority of them under the organization's control and administered through project sub-offices. As the organization starts to expand by partnering with other organizations outside the state, this level of control is inevitably lost.

Differences among partners make the loss of control more problematic by leading to differences in implementation. Aside from differences in organizational size, structure, mission and culture – Gram Vikas is a registered social organization with roots in social movements whereas CRHP is a social organization which founded on the religious conviction of its founders, who are devout Christians – regional differences between various states in India may also play a role in the acceptance and implantation of MANTRA. For instance,

states differ significantly in their legislation and arrangements for water and sanitation, and they also differ in terms of what may or may not be culturally acceptable to the rural populations (Gram Vikas, 2009; Keirns, 2007).

With this understanding, Gram Vikas's attempt to transfer MANTRA has been characterized by a focus on the two key elements it feels are necessary to ensure the program's success: (1) 100% participation of families in project villages through the construction of a bathing area and toilet facilities for each household; and (2) creation of a self-sustaining Corpus Fund – for maintenance costs and new installations – belonging to the village into which every family contributes an average of 1000 rupees (approximately \$21 at current exchange rates in January 2010). These are the elements the organization insists that partners, such as CRHP, replicate as part of the MANTRA transfer. Changing these elements would change the nature of the innovation such that the expected outcome (100% availability of water and sanitation services in a village) would be compromised. Yet, we also observed that Gram Vikas was quite open to adaptation of MANTRA “around the edges” of the innovation, away from the core. For instance, in Orissa the sourcing of specialized materials for construction other than those contributed by villagers is done with the help of the state government, and subsidies are paid to villagers to aid in the MANTRA-related construction costs once the initial corpus fund contributions have been made. This ensures that villagers continue to feel an ownership in the project beyond their initial contributions. Gram Vikas was willing to relax these conditions, however, and fit them to the needs of CRHP, which relies less on government funding and more on charitable donations as a supplementary source of funding for its operations, and where the concept of direct subsidies to families in project villages is less established. This is in line with prior research on replication of innovations, which associates effective knowledge transfer with adhering to a template (in this case, the two broad “core”

elements of MANTRA) while acknowledging the role of necessary adaptation when knowledge is context-dependent (Williams, 2007) as with the case of varied sourcing procedures for procurement of MANTRA-related construction materials arising from differences in resource availability between Orissa and Maharashtra.

Importantly, this finding is also related to the nature of social entrepreneurs and the organizations they lead. Freed from the need to answer questions like “who wins?” or “who competes more effectively?” during an innovation transfer, social entrepreneurs can focus on the long term value created for society from spreading a particular technology or practice (Austin et al., 2006; Santos, 2009). Gram Vikas is able to pay greater attention to ensuring the impact of MANTRA on helping to break down caste and class barriers, even though such attention results in less wide-spread implementation of the program. Thus, by focusing on the Arrow core – the 100% involvement requirement and creation of the corpus fund – Gram Vikas increases the likelihood that MANTRA’s deeper intent will be realized, but it comes at the cost of slower growth for the organization. This is a cost Gram Vikas is willing to bear, as such focus maximizes social impact by identifying the contexts in which future transfer attempts are most likely to succeed.

Our second finding relates to the process of scaling innovations for social entrepreneurs. For Gram Vikas, which has worked for almost two decades to develop and refine MANTRA, its particular model of water and sanitation for rural areas is “patent free”. This means that the innovation can be freely shared with partners without consideration of concerns related to competition and losing “market share” to organizations which perform similar activities (Rothaermel and Boeker, 2008). In this respect Gram Vikas is similar to other social entrepreneurs, who have a predominant focus on value creation for the society rather than

value appropriation for shareholders and management (Santos, 2009). However, this does not mean that the innovation is freely implementable. For Gram Vikas creating value means creating value for all the members of a community, from the richest to the poorest in the village. As such the organization engages in a very controlled version of knowledge transfer with respect to MANTRA, a process which is governed by four distinct periods of engagement with the implementing partner, including: (1) an intensive period of “courtship” where Gram Vikas and the target partner learn about each other’s work (the *informal collaboration* period); (2) intensive training for both staff and villagers at the target partner’s project sites and the signing of a formal transfer agreement which governs the implementation of MANTRA at these sites (during the *transfer formalization* phase); (3) an extensively-monitored implementation of MANTRA at the transfer partner’s pilot project village (the *MANTRA implementation* phase); and (4) institutionalization of the MANTRA program through regular village meetings at the pilot site and collaboration with neighboring villages (the *maintainence* phase). By having a high degree of control over the transfer process, as is the case when firms enter into dyadic partnerships with well-defined milestones, social entrepreneurs can thus scale their innovations while keeping the original version of it relatively intact.

This leads to our third broad finding: the scaling process for social entrepreneurs is fraught with challenges, including those which arise with respect to the meaning of innovations as they flow from one organization to another. Social entrepreneurs are often interested in assuring consistent and faithful implementation of their innovation, but they are also aware that contextual adaptation of certain elements of the innovation may nevertheless be inevitable (Ansari et al., 2010). As noted by Powell, Gammal, and Simard (2005), the temporal and experiential nature of contact between the source and target organization in an

innovation transfer process can shape adoption at the target site. Thus, in the case of Gram Vikas and CRHP, the regular and faithful interaction of each organization's leaders during the various phases of the innovation transfer helped Gram Vikas limit deviation from the MANTRA model's core elements as it travelled from Orissa to Maharashtra. Gram Vikas was able, in this sense, to control the core and the "meaning" of the innovation, which is to increase the level of social equity in rural villages by means of comprehensive (i.e., 100%) water and sanitation coverage. To the extent that the philosophy of Gram Vikas' work is present at CRHP it may not be because of the two organizations' shared ideologies, but rather because the organization used various strategies to maintain core elements of the innovation and ensure fidelity to it (Ansari et al., 2010). Though Gram Vikas doesn't have formal power over CRHP, there is considerable influence as a result of the formalized partnership (Bradach, 1997).

Our fourth and final finding relates to the nature of partnerships that social entrepreneurs enter into, not only to scale their innovations, but also for the more general purpose of sharing knowledge and best practices. One of the notable characteristics of alliances and partnerships generally, in both the social and purely commercial realms, is the increasing diversity of partners, motives, and goals in entering alliances (Austin, 2000; Rothaermel and Boeker, 2008). This diversity is also manifested in the variety of governance structures or the formal contractual structures used to organize the partnerships. The variety of organizing structures implies that firms face an array of choices in organizing their alliances (Powell et al., 2005). For Gram Vikas, this structure was formalized in the form of a *transfer agreement* which laid out the conditions and specifications related to implementing MANTRA. In the early stages of inter-organizational transfer of a successful social innovation, we believe that this agreement may serve a function that is analogous to a *franchise agreement* for commercial

firms – including fast-food chains such as McDonald’s and services companies such as MailBoxes, Inc. – which expand through outlets run by non-company management (Bradach, 1997; Szulanski and Jensen, 2006).

CONCLUSION

The purpose of this study was to gain a better understanding of the process through which social innovations transferred to other organizations to increase their impact. We highlighted the importance of several key factors which influence these partnerships, including a focus on the core features of the innovation being transferred, the perils of not paying attention to potential variations in the meaning of the innovation at the source and target site, and strategies used by Gram Vikas to ensure that its “patent-free” innovation was not freely implementable, but rather followed a relatively precise sequence of steps as it was implemented by a partner organization. We believe that this study provides a foundation upon which future field-based research on scaling social innovations can build. In particular, we believe that the in-depth, single-case-study design utilized can be expanded to including multiple cases which can then be compared (Eisenhardt, 1989) to determine patterns related to the innovation transfer process for social entrepreneurs. This kind of study would go a long way towards advancing research in the fields of scaling, social entrepreneurship, and knowledge transfer.

ENDNOTES

1. Personal Interview with the Executive Director, Gram Vikas, February 2009.

2. *Ibid.*

3. Personal Interview with the Program Manager, Natural and Human Resources, Gram Vikas, February 2009.

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TABLES

TABLE 1
Case Study Data Collection Sources

| Interviews | Archival Sources | Observation | Preliminary Survey |
|--|---|---|---|
| On-site at project locations | Annual reports | Participation in meetings and direct observation at both source and target organizations | Data on innovations developed by source social entrepreneur |
| Multiple levels - managerial and operational - within the organization | Reports to foundations and other stakeholders | Visits to project sites, at both source and target social entrepreneur | Information on past, ongoing, and future innovation transfer attempts |
| With beneficiaries | Internal memos | Direct observation at points of interaction between beneficiaries and operational staff | Data on geographic scope of innovation transfer attempts |
| Follow-up via telephone | Email exchanges | Public presentations | |
| | Official correspondence | Other interactions between social entrepreneur staff and local population, government officials, donors, and other stakeholders | |
| | Draft documents | | |
| | Websites | | |
| | Consulting evaluations | | |
| | Books | | |

TABLE 2
Data Gathering and Analysis Stages

| Stage | Name | Time Period | Description |
|--------------|--------------------|-----------------------|--|
| 1 | Preliminary Survey | July-August 2008 | Short survey was sent out Gram Vikas to gather data on its social innovation, MANTRA. Information on past, present, and future attempts to transfer MANTRA was also gathered. |
| 2 | Field Visit | January-February 2009 | Field data gathered during a one-month long visit to India in January and February 2009. A total of 28 interviews were conducted, including 18 interviews at the source entrepreneur site and 10 interviews at the target organization site. All interviews were taped and transcribed. Additionally, important organizational documents available only on-site in India were collected. |
| 3 | Intensive Analysis | March-September 2009 | A thick description of MANTRA was developed along with a chronological event trace for the period 2005-2011 outlining the various transfer steps to MANTRA to CRHP. An integrated narrative of the transfer steps was created. |
| 4 | Follow-up | November 2009 | Follow-up by telephone and email with both Gram Vikas and CRHP to obtain further information and views on the transfer attempt. |

TABLE 3
Gram Vikas's Focus Areas for Activity

| Focus Area | Description |
|--------------------------------------|---|
| Self-Governing People's Institutions | By reinforcing the concept of community using universally important needs of drinking water and sanitation, a common ground is made for villagers to sow the seeds of a "village republic". |
| Health | Water and sanitation is the first activity undertaken by any new village under MANTRA. This is the first step towards better health. The program brings safe piped drinking water and a toilet and bathing room for each family. This project coalesces the community, releases women and girls from the drudgery of fetching water, and gives them privacy with dignity. |
| Education | Village-based pre-schools, primary schools, residential schools for tribal (<i>adivasi</i>) children and resource centers |
| Livelihoods & Food Security | Supporting communities to manage their natural resources like land, water and forest in a sustainable way is an integral part of Gram Vikas' programs. Such support actively promotes conservation of water resources, crop diversification and rotation, which leads to improved food production and food security at the household level. |
| Livelihood-Enabling Infrastructure | Community-based renewable and energy-efficient technologies are promoted by Gram Vikas to provide energy for cooking, lighting and provision of water in villages without electricity. |
| Human & Institutional Development | Gram Vikas works to enable people, both staff and community members, to widen their horizons and upgrade and expand their skills. This increases motivation and maintains momentum in addition to the direct benefits of newly learnt skills. |
| Outreach & Networking | Dissemination of information relating to the work of Gram Vikas happens through participation in various state- and national-level workshops and consultations organized by the Indian government, as well as by various national and international organizations. Links forged in these meetings, as well as with visitors and volunteers, result in great rewards in the long-term. |

TABLE 4
The Core Values of MANTRA

| Core Value | Description |
|----------------|--|
| Inclusion | All households must be involved in the development process and must benefit equitably. Participation of all households of a habitation is a non-negotiable condition of the program. |
| Social Equity | Representation of all sections of the community in decision-making processes across caste, economic status and other barriers to ensure that a level playing field is created. |
| Gender Equity | Equal representation and participation of men and women in community level decision-making and control. |
| Sustainability | Development processes have built-in institutional and financial mechanisms for sustainability, and are necessarily based on sound environmental issues. |
| Cost sharing | Poor people <i>can</i> and <i>will</i> pay for beneficial development services but there are some social costs which society at large must meet. |

TABLE 5
The Stages of Transferring of MANTRA to CRHP

| Stage | Time Period | Duration | Description |
|------------------------|--------------------|-----------------|---|
| Informal Collaboration | 2005 - 2007 | 24 months | Senior-level staff members and field coordinators engage in exposure visits; sharing of best practices, but no formal implementation of practices. |
| Transfer Formalization | 2007 - 2008 | 12 months | Needs assessment conducted; meetings held in six CRHP villages to gauge interest in the program; one village selected as model village for implementation of MANTRA; villagers and CRHP staff travel to GV for exposure visit; transfer agreement signed; technical staff from Gram Vikas will come to CRHP to help identify good water sources and confirm the appropriateness of model village for the project; a group of villagers from model village as well as a CHRP field coordinator travel to Orissa for a four-week training program |
| MANTRA Implementation | 2008 - 2009 | 18 months | Trained villagers share their knowledge and implement MANTRA in model village with the help of CRHP staff members; gathering building materials; forming a Management Committee for the corpus fund; construction of soak pits for toilet facilities; constructing the actual bathing and toilet rooms as well as a communal well and water tank. |
| Maintenance | 2010 - 2011 | Up to 24 months | MANTRA up and running in model village; regular village-driven meetings held to discuss problems with use or maintenance of the new facilities; villagers and CRHP staff work to maintain 100% community participation, to ensure proper upkeep, and to prevent abuse or overuse of the water supply; proper functioning of MANTRA in model village is expected to facilitate the spread of program. |

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