

Research Report ESCOR # R7650

From Strangers to Neighbours: Identifying the pre-conditions for social capital development

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I. Background and Objectives

Between independence and 1997 over 70,000 Zimbabwean households were resettled on land previously owned by white farmers under the Rhodesian government. Most of these were resettled into villages made up entirely of newly resettled households that had not been neighbours previously. As a result and in stark contrast to non-resettled households, they found themselves surrounded not by kin and friends but by strangers. Two decades after independence, this research project aimed to tell the story of how some of the first resettlers coped with this situation. It looked at whether and how they set about changing strangers into neighbours, i.e., about building a new stock of social capital, and how their relative success in this endeavour affected their ability to solve collective problems, take advantage of shared opportunities, and thereby improve their individual and village-level social well-being.

At the time when the proposal was written (1999/2000) the Zimbabwean government was starting to prepare for another wave of organized land reform and resettlement. In response the Southern African Regional Institute for Policy Studies (SARIPS), with the assistance of several international donors, was setting up the Zimbabwe Land Reform Research Network (ZLRRN). The aim of this research network was to look at the lessons that could be learnt from the earlier resettlement exercises and to facilitate dialogue on this topic between researchers, policy-makers, and bureaucrats. The 'From Strangers to Neighbours' project was to interface with and complement this larger effort. Unfortunately, the subsequent land invasions and related changes in the Zimbabwean political climate changed the research context considerably and rendered the primary objective of informing the government as it planned its next phase of organized land reform irrelevant, at least in the short term.

Another objective of the research was to derive insights about the process by which social capital is created and its importance for the process of development more generally. In this context, the Zimbabwean resettlement exercise of the early 1980s, is best viewed as a natural experiment in which a sample of households are placed in a new environment characterized by, among other things, a near-zero stock of social capital. In this regard the project was more successful. The research produced a series of insights into how people go about building social capital, unassisted by government or NGOs, how they build trust, and encourage and maintain cooperation. These findings are of relevance, not only to Zimbabwean policymakers, if and when they are ready to consider them, but to a wider audience keen on learning about the link between economic and social development.

Finally, although it was not stated explicitly as an objective in the proposal, during the course of the research we were able to explore and assess to potential value of methods of experimental economics and human psychology to development issues. The referees of the proposal expressed mixed opinions about the likely value of this methodology but saw the testing of the methodology as a potential contribution of the project. Bearing this in mind, we went beyond our original proposal of using 'off the shelf' economic experiments as a means of generating certain variables of interest. Having established that experimental methods could be applied to data generation in this context, we designed two new experiments, one an adaptation of an

experiment conducted in a European University, one completely new, to help us explore certain aspects of cooperation. In so doing, we paved the way for a careful and considered assessment of the potential value of this relatively new methodology to the study and, as we explain below, the process of development.

This report has six sections. Following this review of the project's background and objectives, section II reviews the methods we used focusing, in particular on the experimental methodology. Section III then summarizes our findings and explores their implications for policy. Section IV describes or dissemination activities and section V documents our efforts at capacity-building and collaboration. Finally, in section VI we list and describe the papers that have been produced under the project.

II. Methods

In accordance with our proposal, several data generation methods including surveys, focus group interviews, participatory exercises, and economic experiments were used. The data on household income, wealth, composition used in the analysis was drawn from the Zimbabwe Rural Household Dynamics Project (ZRHDP) survey (recent rounds funded by DFID, Zimbabwe). The data on associational activity since resettlements was collected during a series of focus group and individual interviews. The challenge here was to collect good quality recall data. By combining focus group and individual interviews we facilitated corroboration between villagers about the past associational activity. The approach is described in detail in 'Forging Effective New Communities: The evolution of civil society in Zimbabwean resettled villages' (attached). The economic experiments generated data on social norms, trust, and various forms of social behaviour. The experiments are described in detail in 'Kinship, Familiarity, and Trust: An experimental investigation,' 'Cooperation and Shame,' and 'Risk-pooling and limited commitment: An experimental analysis' (attached). The data generated by the surveys, focus group and individual interviews, and experiments were analysed using statistical regression analysis, various non-parametric tests, and social network analysis, all in accordance with current best practice. (Each of the attached papers describes the analytical techniques used in detail.) Whenever possible the results were then taken back to the villagers to be discussed.

Our decision to use economic experiments both intrigued and concerned the referees of the proposal. One referee believed that the adoption of this previously untested methodology added to the risks associated with the project, but saw the testing of the methodology as a potential contribution of the project. The other was concerned that the economic experiments would not take account of historical context. Because of these concerns, we dedicate the rest of this section of the report to our experiences using this methodology.

The methodology involved playing games with the Zimbabwean villagers for real money that they got to keep. The games were designed to capture key aspects of certain everyday decisions facing the villagers while abstracting from the many other factors that can hinder comparisons across different communities and contexts. We played four games with the villagers. The first two were ‘off the shelf’ games that have been played with students in laboratory settings in the US and Europe many times and in some developing country settings. They generated data relating to norms of fairness and reciprocity and to individuals’ willingness to trust one another. This data has been used to compare the resettled Zimbabwean villagers with their non-resettled counterparts and with other communities all over the world. The second two games were specially designed for the Zimbabwean context. The design for one was developed during a discussion with the field research team and several senior members of one of the surveyed communities. It yielded data on the villagers’ willingness to cooperate and on the role of praise and criticism in supporting cooperation within both resettled and non-resettled villages. The design for the final game was informed by the literature on risk pooling and the application of contract theory to its analysis. It yielded data on the villagers’ willingness to take on risk and the problems associated with enforcing reciprocal agreements to help one another in times of crisis.

In each of the experimental sessions (one per experiment per village, 84 in total throughout the course of the project), the presence of the real incentives, i.e., the fact that they were playing for money caused the villagers to reveal at least something about their true preferences – if someone wanted to appear fair or trustworthy they had to forego some money. Similarly, if someone wanted to appear cooperative or trusting, they had to take a real financial risk relating to how cooperative or trustworthy their fellow villagers would be. The impact of this on people’s willingness to talk frankly about how well their villages functioned as communities was

profound. Prior to the games, it proved very difficult to get people to diverge from an account of how people ought to live within a community. We would be told about how cooperative people were, how everyone trusted everyone else, and so on. Attempts to get people to talk about what happened when cooperation and trust broke down either failed or led to one-on-one discussions about particular incidents that, while interesting, did not facilitate the building of a picture of the cooperativeness of each village as a whole. The villagers instantly understood that through the games all, or at least a great deal more, would be revealed about how trusting and cooperative they really were. Following the games, the villagers would enter into new discussions, often without prompting from the research team, about how ‘trustingly’ or ‘cooperatively’ they had played.

After every experimental session we held a group discussion. The primary objective of these discussions from our point of view was to elicit information that would help us interpret the resulting data, especially when people played in a way that was not in accordance with economic theory. However, in several cases the objective of the villagers was different. They wanted to know how their behaviour in the games compared with that of other villages – whether they were more, or less, trusting, trustworthy, and cooperative – and how those villages that achieved higher levels of trust and cooperation had done it. Thus, in several villages the games acted as a catalyst for spontaneous participatory research exercises in which the villagers reflected on their current state with respect to cooperativeness and explored ways in which it could be improved. Response to this interest, in the last round of village visits, Barr presented some of the results from earlier games and thereby generated further discussion. The participants in these discussions were encouraged to consider whether and how the degree to which villagers trust and cooperate with one another affected their everyday lives.

At all times we remained aware of the referee’s comment about economic experiments being devoid of historical context. In laboratory-run experiments where subjects are assumed not to know one another and often do not even meet during the course of the experiments historical context is clearly absent. However, in the Zimbabwean context we ensured that the players of the games always knew that they were playing with someone from their own village. Hence, their expectations about others’ behaviour, at least at the start of the games, was always based on their past experiences. Taking this one step further, the design of the final experiment explicitly

allowed players to form alliances with whosoever they chose from their own village. Thus, we were able to look at whether the choices that people made within the abstract context of the game reflected similar decisions that they make in everyday life. The results suggest that they did.

On the basis of these experiences, we are now exploring the possibility of developing games to be used not as data generation tools but as development tools. We know of one DFID-funded project, 'Tapping into Existing Social Capital: A New Urban Interface' led by Social development Direct, within which off-the-shelf games have been used as facilitation devices in participatory research programmes with very good effect. However, our experience suggests that the potential exists to develop a series of games that are more fun, more relevant (from the perspective of the players), and, thus, more powerful, in terms of their ability to facilitate useful discussion. Our experience suggests that getting players to interact strategically both anonymously and face-to-face (off-the-shelf games tend to be played anonymously only) so that they can compare their own behaviour across the two domains is very fruitful. Our statistical analysis often indicated that members of different communities, clans and genders behave differently in strategic situations; some are more trusting, trustworthy and cooperative than others. However, the magnitude of the differences is usually small. In development work as opposed to research the strength of these methods lies in their ability to quickly reveal the similarities between people from different backgrounds. The games become a shared experience that people can discuss freely, making reference to real world social dilemmas only if they feel comfortable doing so. This being the case, we think that such methods might be particularly useful in post-conflict reconciliation work as a device for encouraging people to think about adopting more cooperative approaches to life.

Returning to experiments for research purposes, our experiences in Zimbabwe have convinced us that economic experiments are a valuable data generation tool. Thus, we are planning several new experimental research programmes, including one looking at the importance of trustworthiness and cooperativeness in labour markets and the functioning of enterprises and one looking at petty corruption in the health sector in sub-Saharan Africa.

III. Findings

This section both draws on and goes beyond the seven papers that been produced during the project and the two that are forthcoming. Because of the focus on relatively new and untested methodologies, the papers produced thus far have tended to focus on particular, narrowly defined aspects of the issue under investigation. So, we have used the writing of this final report as an opportunity to draw all of the findings together, find and fill the various lacuna with preliminary results, and thereby provide a comprehensive picture of how the resettled villagers in the study have coped with the transition from strangers to neighbours. The findings are presented under five sub-headings:-

1. The social problem faced by the resettled villagers and their response;
2. The effectiveness of the response in generating trust and trustworthiness;
3. Building and maintaining cooperation;
4. The impact of social capital accumulation on economic outcomes; and
5. Policy implications.

Under 'Policy implications' we focus on two questions:-

1. Is there a role of interventions designed to assist resettled villagers in their efforts to build social capital in the form of associational activity? and
2. Should newly resettled communities have any particular characteristics in order to best ensure their successful future social development?

Note that the policy questions are not specific to the Zimbabwean context. Given the recent developments in Zimbabwe, throughout the project we have aimed to draw out those findings that are likely to be of most general interest and widest relevance. In some instances this has caused the work to become more abstract than originally planned. However, we believe that as a result it could provide a very strong foundation for future work in the field of social capital development in various contexts.

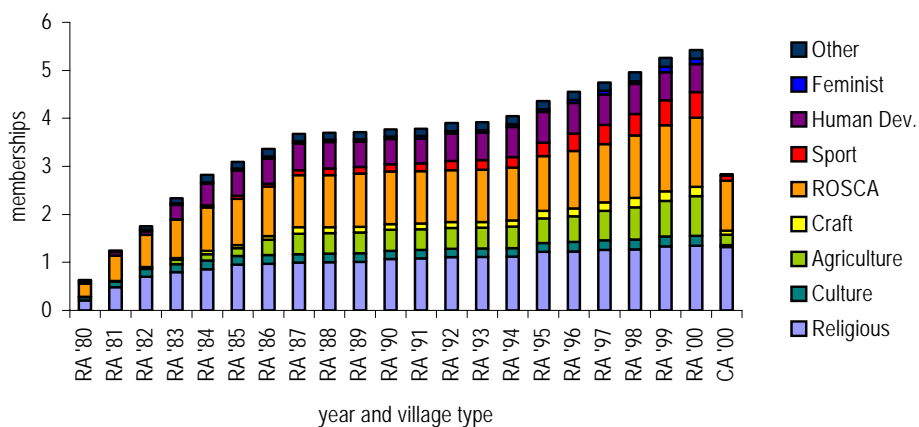
The social problem faced by the resettled villagers and their response

1. Stocks of 'traditional' kin- and clan-based social capital are much lower within the 22 resettled villages in our study than in the 6 non-resettled villages. We found significantly fewer blood relations between households and much greater ethnic or clan diversity. (See

‘Forging Effective New Communities: The evolution of civil society in Zimbabwean resettled villages’ (attached))

2. The resettled villagers have responded to this situation in two ways:-
 - a. they have increased the density of their kinship networks through intermarriage between unrelated households within the new villages; and
 - b. they have developed civil society by forming clubs and associations.
3. Intermarriage provided a basis for various forms of traditional non-market exchange relating primarily to bride wealth. Such exchanges facilitate risk pooling between households. (see Dekker and Hooegeveen (2002) ‘On Bridewealth and Social Security in Zimbabwe’ (attached))
4. With respect to the building of civil society, it took the resettled villagers only four years to raise their level of associational activity (measured in terms of group memberships per household) from zero to the level that we observe in non-resettled villages today. But they did not stop there. The level of associational activity continued to grow. By 2000 the average resettled household was maintaining twice as many associational memberships as the average traditional household. (See Figure 1)

Figure 1: Group memberships per household



Labels on horizontal axis: RA indicates resettled villages, CA indicates non-resettled villages. The two digits following the letters indicate the years to which the data applies.

5. This notwithstanding, there is considerable variation in levels of associational activity across the resettled villages in the study. In general, where there are fewer kinship ties and greater ethnic or clan diversity, there is more associational activity. This lends support to the

hypothesis that associational activity is acting as a substitute for kin- and ethnic-based social network capital.

6. Further, households with a greater proportion of older members are more active in civil society, suggesting that older members of village communities may play an important role in promoting, even this relatively innovative form of pro-social behaviour. (See 'Forging Effective New Communities: The evolution of civil society in Zimbabwean resettled villages' (attached) for more on the evolution of civil society)

The effectiveness of the response in generating trust and trustworthiness

7. Preliminary results suggest that, where resettled villagers' have responded to a lack of traditional kin- and ethnic-based social network capital by becoming more associationally active, they have generated trust.
8. This result holds even when we take account of variations in the density of kinship networks. Indeed, according to our data kinship provides no basis for trust. This result came as no surprise to the villagers. They acknowledged that blood relations generated familiarity but that, when combined with rivalry and jealousy, they could often lead to anti- rather than pro-social behaviour.
9. Further, the relationship between associational activity and levels of trust holds even when we take account of the other key determinant of within-village trust, the degree of and variance in within-village trustworthiness.
10. The analysis of trust and trustworthiness reveals another social investment strategy adopted by resettled villagers. Trust is primarily an expectation of trustworthiness. However, resettled villagers display relatively high levels of trust when the trustworthiness of their fellow villagers is low – they appear to trust with the objective of promoting a trustworthy response, sometimes to no avail. (See 'Trust and expected trustworthiness: An experimental investigation' (attached) for more on trust as an expectation and trust as social investment.)
11. Both these strategies notwithstanding, even two decades after resettlement, levels of trust are, on average, lower in resettled villages than in non-resettled villages. This may be due to lower levels of inter-household familiarity – they simply do not yet know how trustworthy their new neighbours are. This might explain why levels of associational activity are still on the increase in the resettled villages: the villagers are still trying to achieve an optimal stock

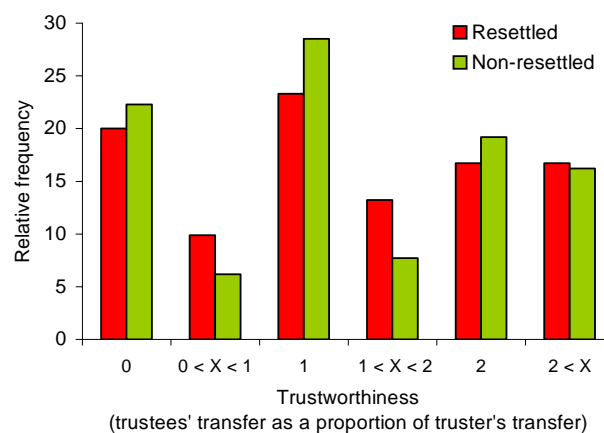
of social capital. (See ‘Kinship, Familiarity, and Trust: An experimental investigation’ (attached)).

Figure 2: Trust in resettled and non-resettled villages



12. Unlike trust, there is no deficit in trustworthiness within the resettled communities. Further, there is no evidence to suggest that anything that the villagers have done with respect to associational activity or social-investment-type trust has contributed towards this trustworthiness.

Figure 3: Trustworthiness in resettled and non-resettled villages



13. While more work is required in this area, the results suggest that the resettled villagers' levels of trustworthiness is predetermined. This being the case, it might be appropriate to describe the resettled villagers' efforts at building trust as a process of familiarization during which they learn about each other's behavioural norms and modes of strategic interaction.

Building and maintaining cooperation

14. Two decades after resettlement, there is no relative absence of cooperativeness in resettled villages. Indeed, results from the economic experiments suggest that resettled villagers are, on average, more cooperative than their non-resettled counterparts.
15. There is no evidence that this willingness to cooperate in new and relatively abstract setting derives from the higher level of associational activity found in resettled villages. And efforts to find a simple alternative cause for the higher level of cooperativeness have failed. It may be that we are looking at a 'restart effect.' Experimental economists use the term 'restart effect' to describe the increase in cooperativeness that is commonly observed when subjects are placed with new sets of co-players in strategic games. However, restart effects are associated with laboratory experiments and, to our knowledge, have never before been identified as a real-world phenomenon.
16. Interestingly, many of the villagers described the process of resettlement in these terms. 96% of a sample of 372 of the resettled villagers in our study responded that the statement 'Resettlement provided us with a chance to make a new start' applied perfectly to themselves and their family.
17. One of the means by which cooperation is promoted and supported within villages, is by the imposition of social sanctions in the form of appropriate criticism of behaviour that is deemed antisocial and the reserving of praise for behaviour that is deemed social.
18. Within villages where people felt able to (gently) criticize of uncooperative players, higher levels of cooperation were achieved not only among the criticized but also among onlookers. However, in some villages not only low but high levels of cooperation were deemed sanctionable (and by inference antisocial) (see Figure 4). Then, while sanctioning led to greater conformity, it did not necessarily lead to greater overall cooperation (See Figure 5). (See 'Cooperation and Shame' (attached) for more on the effects of social sanctions on cooperation.)

Figure 4: Cooperation and social sanctioning

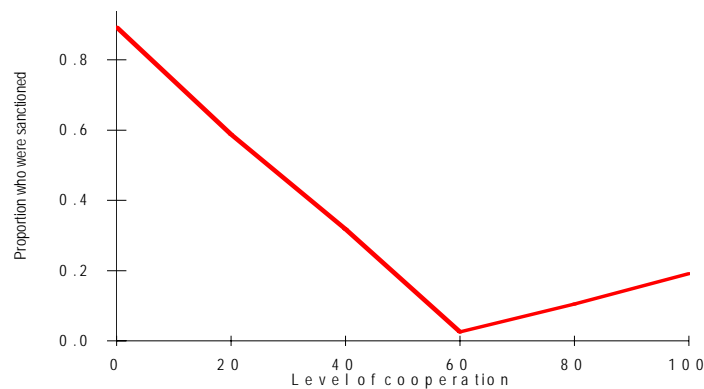
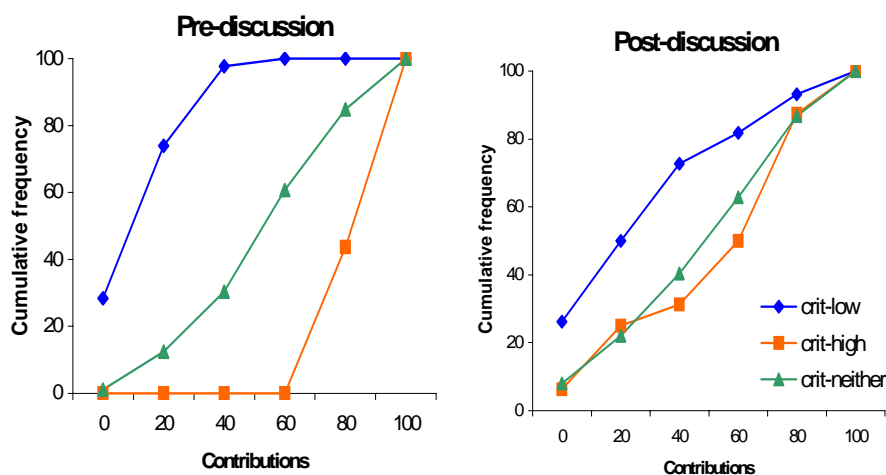


Figure 5: Distribution of cooperation pre and post within-village discussions



19. The threat and imposition of social sanctions improves cooperativeness to different degrees among people with different characteristics. While work is continuing in this area, it appears that women are more likely to respond to social sanctioning by increasing their cooperativeness than men. If this result is found to hold not only in Zimbabwe but in other contexts as well, it might explain and possibly justify the gender bias in group based micro finance.
20. While conformism appears to be of value to the villagers, confrontation is viewed as costly and this suppresses people’s willingness to rely on social sanctions as a device for enforcing informal contracts. Towards the end of Barr’s fieldwork for the project (two years after she first met the villagers), the villagers had significantly greater faith in her as an enforcer of contracts than they did in themselves. (See ‘Risk-pooling and limited commitment: An experimental analysis’ (attached) for more about informal contract enforcement.)

The impact of social capital accumulation on economic outcomes

21. Throughout the project the villagers have repeatedly referred to and emphasized the importance of cooperation, trust and, civil association to their individual and collective well-being. Many identified the direct link between pro-social behaviour and well-being, i.e., the notion that associating ‘harmoniously’ with others makes us happy, as the most important, and in some cases the only, link. Others talked about the importance of being able to rely on others for help and the need to invest in the social life of the village as a result. And others identified the ability to cooperate and work together as a village in order to take advantage of collective opportunities and solve shared problems as critical to their continued well-being.
22. This notwithstanding, it has proved very difficult to statistically identify links between the dimensions of social capital and related modes of social behaviour described above and economic outcomes.
23. For example, we have been unable to identify any relationship between levels of associational activity and household income. This result (or lack of one) stands in marked contrast to the work of many other researchers in this field. We suspect that the absence of a relationship may be due to the fact that a very high proportion of the incomes of the villagers in the study is derived from the sale of cash crops to agents based outside the communities under study: within-village social capital may be of little relevance as a determinant of this monetary indicator of well-being. In future work the focus will shift away from income and towards non-monetary indicators of well-being and away from levels of associational activity and towards the structure of that activity, i.e., who associates with whom and how power, influence, and information is distributed throughout the resulting networks.
24. There is evidence of a link between associational activity and intra-village trade, with higher levels of the former being associated with greater involvement in the latter both at the household and village level. However, thus far, attempts to establish whether this is because the associational activity provides a basis for more trusting and so less costly modes of transaction have been unsuccessful.

Policy implications

Is there a role for interventions designed to assist resettled villagers in their efforts to build social capital in the form of civil society?

25. The strongest evidence that the civil social activity observed in resettled villages is generating well-being derives from the villagers' continued willingness to invest time and energy in its generation. Given the current research, there is no evidence that they are under-investing and, thus, no rationale for intervening in the creation of civil society.
26. This notwithstanding, there may be a role for interventions designed to complement the villagers' own efforts in building mutual trust. Recall that, despite being no less trustworthy, having lived as neighbours for nearly two decades, and having engaged increasingly in civil social interactions, the resettled villagers are still less trusting than their non-resettled counterparts.
27. The experimental methods used to generate the data relating to this issue, could be adapted to form the core of an intervention programme designed to assist resettled and displaced people, not only in Zimbabwe but elsewhere, learn to trust one another.

Should newly resettled communities have any particular characteristics in order to best ensure their successful future social development?

28. In Zimbabwe in 1999, when plans were still being made for an orderly resettlement process involving applications by would-be resettlers, there was considerable debate about whether individual households should be resettled in villages of strangers as in the current study or whether entire villages should be resettled together. The second approach would allow the resettled villagers to take their traditional kin- and clan-based social capital with them to their new homes and save them the effort associated with building new, substitute forms of social capital. However, if the new forms of social capital generated by the resettled villagers are more conducive to development than the old, traditional forms, this effort might have been worthwhile.
29. Our results suggest that the effort might have been worthwhile. Recall that levels of trust are positively related to associational activity and unrelated to the density of kinship ties.

30. In addition, there is the restart effect. While statistically we cannot at this time rule out the possibility that this is linked to the relocation and not to the mixing of households from different prior social contexts, our interviews with key informants strongly suggest that the restart effect is associated with the latter rather than the former component of the resettlement experience.
31. One other demographic factor appears to be important for the social health of a village. Both in the experiments and in the analysis of the associational activity data, the over fifties display more pro-social modes of behaviour. If planners focus solely on the capacity of potential new community members with respect to physical production, they may underestimate the potential contribution of the older generation.

IV. Dissemination

At the time when the proposal was written (1999/2000) the Zimbabwean government was starting to prepare for another wave of organized land reform and resettlement. In response the Southern African Regional Institute for Policy Studies (SARIPS), with the assistance of several international donors, was setting up the ZLRRN. Barr attended the inception meeting for the ZLRRN in September 1999, identified two Zimbabwean network members to work as part time staff on *From Strangers to Neighbours* and discussed how the findings of *From Strangers to Neighbours* might be disseminated to policy makers and other stakeholders through the ZLRRN's planned programme of workshops and proposed policy briefing paper series. Subsequent events in Zimbabwe caused the World Bank and other international donors to withhold their financial support for the ZLRRN and made it difficult for members of any research organizations, networks, or individual researchers based in Zimbabwe to get involved in objective research on land reform and resettlement.

These developments had two impacts on the 'From Strangers to Neighbours' project. First, the two members of the ZLRRN withdrew, thereby severely slowing down the collection and analysis of the data on associational activity and leaving the project low on human resources.¹ Second, the planned routes of dissemination closed.

¹ This also explains the under spending on the project. Some but not all of the funds budgeted to pay the two ZLRRN members for their involvement on the project were reallocated to other activities.

Subsequent efforts to identify other policy briefing paper series in Zimbabwe that could act as dissemination vehicles for this research also drew a blank. Thus, in the end we decided to hold back with respect to our efforts to disseminate to policymakers in Zimbabwe and elsewhere in Southern Africa. As we have mentioned in our quarterly reports, as and when the political situation in Zimbabwe starts to change, we plan to hold a conference in Zimbabwe at which the findings of both this and the many other projects that have utilized the ZRHDP data will be disseminated and discussed.

With this avenue closed, our dissemination efforts focused on three audiences: the subjects of the research, i.e., the villagers themselves; the UK and worldwide academic community; and latterly development practitioners.

As indicated above, dissemination to the villagers took place during post experimental session meetings and discussions. In the final series of meetings, Barr presented some of the findings from the analysis of data collected during previous fieldtrips. In every village, the participants in the meetings were particularly interested in how their behaviour compared with that of villagers elsewhere. They showed some pride in the fact that they behaved in a significantly more pro-social manner than some ethnic groups in the Amazon basin. However, their particular interest was their performance relative to the other Zimbabwean villages.

Dissemination to the academic community has involved seminar and conference presentations in several UK universities (University of Oxford, University of Warwick, University of Manchester, London School of Economics, University of Bath) as well as in the Free University and the Tinbergen Institute in Amsterdam, Institutional Reform and the Informal Sector at the University of Maryland, and at the University of California in Los Angeles, at the World Bank. In every instance the presentations were to audiences from diverse disciplines.

Dissemination to development practitioners took three forms. First, in Zimbabwe a small number of agricultural extension officers were involved in a workshop that focused on how we might assess the cooperative potential of a village and compare it with the cooperative potential of other villages. The aim of the workshop for the agricultural extension officers was to help the

officers think more objectively about the cooperative potential of the villagers in their area and take their assessments in this area into account when planning projects for and discussing projects with the villagers. The officers were engaged in an exercise involving the ranking of a set of nine villages in one of the areas in the study. The rankings were first based on the officers' subjective opinions and then on more objective assessments of how the villages had performed with respect to each of a set of common public-goods-type challenges such as cattle dip tank maintenance, gully erosion prevention, public building construction and maintenance. The final ranking was then compared with a ranking based on the data from one of the games and the differences discussed. Second, papers have been presented at seminars at the World Bank and during conferences on Land Reform at the US Institute for Peace. And third, some of the earlier outputs of the project, having been disseminated as CSAE working papers reached the desks of UK-based development practitioners/consultants working on a variety of issues including the reconstruction of civil society in post-conflict Angola, grassroots urban development in South Africa and Sri Lanka, the development of good governance in sub-Saharan Africa, and democratic citizenship and alienation in the London. The focus of subsequent dialogues has been the development of the experimental methodology into a policy intervention tool or to facilitate research in new areas.

V. Capacity-building and collaboration

The demise of the ZLRRN also had implications for capacity building and collaboration. As we explained above, the two ZLRRN members that were to have joined the project withdrew. For both of these the project would have provided an opportunity to learn new research techniques and interact with members of the international research community. Further, as active members of the network, we would have refereed papers by other local authors and both run and participated in methods workshops organized by SARIPS for ZLRRN members.

Instead, our capacity-building efforts have focused on the villagers during the meetings described above, agricultural extension officers in the workshop described above, and on the field research team, which was expanded to include several new junior members following the withdrawal of the ZLRRN members. The Zimbabwe-based team had seven members:

32. Mr. Michael Shambare, who graduated from data collection to collaborating author with Professor Michael Bourdillon of the University of Zimbabwe during the course of the project
33. Mrs. Nyaradzo Dzobo Shaynewako, a resident of one of the resettlement areas in the study who is continuing to work for several of the researchers using the Zimbabwe Rural household Dynamic Project (ZRHDP) survey remotely via the internet;
34. Mr. Brighton Denga, who, having had his first experience of field research during the project, has worked on several other projects since and is using the his income from the project to put themselves through college;
35. Miss Chipu Mukova who, having had his first experience of field research during the project, has worked on several other projects since and is using the his income from the project to put themselves through college;
36. Mr. Causemore Samanga, who, having had his first experience of participatory research methods during the project, has subsequently secured a position with a local NGO;
37. Miss. Portia Manja, who gained her first experience of data collection during the project has worked on one other project since; and
38. Mr. Roy Manyaria, our data capture expert in Harare, who the CSAE is now contracting to enter data collected not only in Zimbabwe but elsewhere on the continent due to his skills in capturing and cleaning data.

The collaboration with Gunning and Dekker of the Free University of Amsterdam went ahead as planned. Dekker and Barr's fieldwork activities were often highly complementary both in terms of how they were organized in the field and in terms of the data they generated. The kinship data used in the research described above was generated by participatory research exercises conducted by Dekker, while the associational activity data collected by Barr is now being used by Dekker in her analysis of informal social security (Dekker (forthcoming)). Barr visited Amsterdam twice and Dekker visited Oxford once during the course of the project to present and facilitate exchanges of data and ideas with Dekker and Gunning. Further visits for collaborative purposes are planned for the near future.

VI. Research Output and Appended Papers

To date, seven papers have been written under this project and two more are forthcoming

1. Kinship, Familiarity, and Trust: An experimental investigation

Author: Abigail Barr

Abstract: In Zimbabwe, people in resettled villages trust each other less than people in non-resettled villages. This does not appear to be due to differences in socially transmitted rules of behaviour. Further, there are good reasons to believe that it is not due to the self-selection of a particular type of person into resettlement. Rather, the variations appear to be due simply to a lack of familiarity and to the consequentially greater uncertainty faced by resettled villagers when trying to predict each other's behaviour in strategic situations. The most likely reasons for this relate to the difference in the density of kinship networks in the two types of village. In resettled villages they are less dense.

Status: This paper is forthcoming as a chapter in *Cooperation, Reciprocity and Punishment: Experiments in 15 Small Scale Societies* edited by J. Henrich, J., R. Boyd, S. Bowles, C. Camerer, H. Gintis, R. McElreath, and E. Fehr. Book manuscript under review at Princeton University Press.

2. Trust and expected trustworthiness: An experimental investigation

Author: Abigail Barr

Abstract: An economic experiment involving 24 small, tightly knit communities allows us to distinguish between trusting behaviour based on expectational and non-expectational motivations. A model linking trusting behaviour to expectations of trustworthiness explains over half of the variation across communities. However, the estimated parameters of the model are different (while being equally well defined) for traditional and resettled communities. This is taken as evidence that there are non-expectational motivations at work that vary with community type. Both the data and certain stylised facts suggest that altruistic motivations matter less and motivations relating to shared social identities matter more in resettled communities.

Status: Originally disseminated as a CSAE working paper, WPS/2001.12. Now under review at *Economic Journal*.

3. Forging Effective New Communities: The evolution of civil society in Zimbabwean resettled villages

Author: Abigail Barr

Abstract: This paper explores one of the processes through which farmers resettled soon after independence in Zimbabwe might have transformed their new co-villagers from strangers into neighbours. That process is the building of social capital through civil social activity. The paper finds that, nearly two decades after resettlement, resettled villagers engage in significantly more civil social activity than comparable non-resettled villagers. They caught up with their non-resettled compatriots within four years of resettlement and have carried on expanding their activity ever since. Further, this difference is entirely explained by the lower incidence of kinship ties and greater ethnic diversity within resettled villages. Village size is also important. Within villages, larger households and households with a greater proportion of elderly members are more active. There may also be a positive causal link between household wealth and civil social activity. These results suggest that policy makers and planners could influence the development of civil social activity within resettlement areas by choosing particular mixes of resettled co-villagers. However, further research is required to establish the welfare effects of different kinship-based and civic-based social capital on welfare.

Status: Forthcoming in *World Development* as part of a special issue on land reform in Zimbabwe.

4. Cooperation and Shame

Author: Abigail Barr

Abstract: Using two economic experiments I investigate how a sample of rural communities in Zimbabwe approach social dilemmas. When provided with an opportunity to impose sanctions in the context of a public goods game, fourteen out of eighteen communities achieved higher levels of cooperation. In thirteen communities the imposition of shame-based sanctions in the form of light-hearted criticism was observed. The resulting data revealed that: both non-cooperators and cooperators were criticised; community members cared about what their neighbours thought of them and made adjustments to their behaviour accordingly; the overall pattern rather than individual experiences of criticism affected subsequent behaviour; those who made low contributions and witnessed the criticism of others who made similar contributions, made higher contributions subsequently; while those who experienced such criticism first-hand made significantly smaller adjustments to their behaviour; those who made high contributions and witnessed the criticism of others who made similar contributions, made lower contributions subsequently; and to the extent that an opportunity to criticise passed by unexploited subsequent levels of cooperation were reduced.

Status: Originally disseminated under the title ‘Social dilemmas and shame-based sanctions: experimental results from rural Zimbabwe’ as a CSAE working paper, WPS/2001.11. Now submitted to *American Economic Review* – the editor has recommended that we revise and resubmit.

5. Risk-pooling and limited commitment: An experimental analysis

Author: Abigail Barr

Abstract: The hypothesis of full risk pooling within villages is almost universally rejected. Evidence suggests that this is due to limited commitment. That limited information might also be playing a role is often dismissed on the basis of causal observation and argument. Progress here is hindered by the immeasurability of the degree to which information and commitment are limited. I use an experimental approach to circumvent this problem and find that less limited commitment is associated with more risk pooling, but that agents behave as if information is limited even when it is not and that more information can lead to less risk pooling. This may be because agents are averse to social awkwardness and confrontation.

Status: Presented at the CSAE conference on ‘Understanding Poverty and Growth in Sub-Saharan Africa’ in March 2002. Forthcoming as a CSAE Working Paper.

6. Economic man in Cross-cultural Perspective: Behavioural experiments in 15 small-scale societies

Authors: Joe Henrich, Robert Boyd, Sam Bowles, Colin Camerer, Ernst Fehr, Herb Gintis, Richard McElreath, Michael Alvard, Abigail Barr, Jean Ensminger, Kim Hill, Francisco Gil-White, Michael Gurven, Frank Marlowe, John Q. Patton, Natalie Smith, and David Tracer.

Abstract: Experiments have revealed consistent deviations from self-interest. Existing research cannot determine whether this results from universal human motives or is a property of university the students used as subjects. We undertook a cross-cultural experimental study in fifteen small-scale societies. We found that (1) the self-interest model fails in all of the societies studied, (2) there is more variability than had previously been observed, (3) group-level differences explain a substantial portion of the behavioral variation across societies, (4) individual-level economic and demographic variables do not explain behavior, and (5) experimental play often reflects the interactional patterns of everyday life.

Status: Under review at *Behavioral and Brain Sciences*.

7. Gossip and social control revisited

Author: Michael Bourdillon and Michael Shambare

Description: Interest in the subject of gossip arose as we became increasingly aware of the villagers’ aversion to confrontation. We asked Professor Bourdillon of the University of Zimbabwe to work with Michael Shambare, one of our field researchers to review some of our findings about the role of gossip in social control from key informant interviews in the light of the sociological and social anthropological literature on gossip. The result is a background paper that may be used to motivate future research.

Status: Mimeograph

8. Social capital and intra-village trade in rural Zimbabwe (provisional title)

Author: Abigail Barr and Margaret Gleason

Description: This paper explores the relationships between social network capital, trust, and both the incidence and modes of intra-village trade in rural Zimbabwe. We use a mix of data

derived from surveys and economic experiments and find that levels of associational activity predict the likelihood of individual households being involved in within village trade and overall levels of involvement in such trade across villages. Levels of associational activity do not, however, predict how trust-dependent the chosen modes of transaction are within such trading relationships. Current work is incorporating the results of the economic experiments conducted in the same villages in order to build up a richer picture of what determines the degree of trust-dependence of the chosen modes of transaction.

Status: Forthcoming

9. Do men really have no shame?

Author: Abigail Barr

Abstract: Microfinance schemes are probably the most common development interventions of our time. They are also one of the most gender-biased. One of the justifications given for this bias, especially when the microfinance scheme involves group-level underwriting of loans, is that women are more responsive to the social sanctioning of non-cooperators than men. In the words of one female microfinance group member, ‘men have no shame.’ Here, I treat this statement as a hypothesis, which I test using data from an economic experiment conducted in thirteen Zimbabwean villages. The experiment involved a public goods game played under three different institutional treatments: Treatment A, in which players have no information about other’s contributions to the public good; Treatment B, in which players choose their levels of contribution knowing that they are going to have to declare them so that they can be discussed; and Treatment C, in which players choose their levels of contribution after such a discussion and knowing that they are going to have to, once again, declare them. The analysis indicates that women contribute more to the public good even under Treatment A and that, while men and women respond similarly to the threat of sanctions associated with the move from Treatment A to B, women are significantly and quite dramatically more responsive to the imposition of social sanctions, in the form of mild criticism of low contributors to the public good, than men, i.e, to the move from Treatment B to C. Further, women respond to criticism that they merely witness in the same way that they respond to criticism that they experience first hand. There is some evidence that it is young men, rather than all men, that are uncooperative and unresponsive to social sanctions, but work is still underway to test the robustness of this result. So, in Zimbabwe at least, there is empirical

support for the hypothesis that (young) men have no shame and good reason for the gender-bias in group-based microfinance interventions.

Status: Forthcoming. Due to be presented at the Northeast Universities Development Consortium's Conference at William College, Williamstown, USA, in October 2002.

Abigail Barr is planning to continue work on the extremely rich dataset that she has constructed during the course of this project.