

CHAPTER 5

THE ROLE OF SOCIAL NETWORKS IN SMALL-SCALE ENTERPRISE ESTABLISHMENT AND EXPANSION IN THE CHIMANIMANI DISTRICT

5.1 INTRODUCTION

The past decade has witnessed an increased interest in the use of the social network concept by social science researchers. Revived by Coleman's (1988) and Putnam's (1993) theses, the social network concept has since attracted wider application in various development policies and programmes (Fafchamps, 1997; Barr, 2000; Fafchamps, 2004; Jack 2005 and Katungi 2006 & 2007). The central tenet underpinning the social networks discourse is its being a conduit of beneficial information to economic agents for achieving their economic goals. An area that has since taken an interest in the social networks theory is the small-scale enterprise sector.

The social network concept has since been incorporated into the World Bank research portfolio with a view to understanding its role in socio-economic development. This comes in the wake of the failure by orthodox economic theory to steer countries out of economic distress towards a sustainable economic development course (World Bank, 2003; Zhang *et al.*, 2006). Tata and Prasad (undated) sustained an argument that the success or failure of small-scale enterprises depends on social networks that provide resources and other economic opportunities at below market cost. Social networks, seen as "lubricants" and "glue" for economic development outcomes, provide a bridge between the economy and the society (Sabatini, 2006).

On the other hand, studies show that small-scale enterprises contribute significantly to household incomes (Liedholm *et al.*, 1994; Kapoor *et al.*, 1997; McPherson, 1998, Perks, 2004; McDade & Spring, 2005). However, as was also observed by Jack (2005) small-scale rural non-farm entrepreneurs still face problems in attracting external finance to establish and expand their businesses. This can potentially derail their long-term economic contribution if no solution is found to unlock this problem of mediating external finance to establish and expand enterprises (Devey *et al.*, 2006; Zhang *et al.*, 2006).

Fafchamps *et al.* (1995) and Fafchamps (1997 & 2004), established that most small and medium manufacturing enterprises in Zimbabwe have limited access to external finance and resort to trade credit from product suppliers, overdraft facilities and informal loans. This was corroborated by Ligthelm (2005) who established that private savings and loans from family and friends are used

by no less than 82.6% of small-scale traders in South Africa as enterprise start-up capital; by the World Bank (1994) among Ghana's small-scale enterprises; and by Young (1995) in an investigation of small-scale enterprises in Scotland. However, Bell *et al.* (2002) established that asymmetric information hampers banks in Zimbabwe from extending microfinance to small-scale entrepreneurs. They concluded that donor funded financial assistance, if channelled through formal financial institutions can be an option. Pearson and Hungwe (1997) also established that most of Zimbabwe's urban based small-scale entrepreneurs resort to informal sources of microfinance because financial institutions prefer to work with large established enterprises.

However, as was also argued by Jack (2005), our knowledge in terms of the nature of social networks and how they operate in supporting small-scale rural non-farm business development is limited. Despite there being a consensus that social networks influence entrepreneurial processes in various ways there seems to be a dearth of critical work to demonstrate how these social networks operate in activities of rural entrepreneurs. The role of social networks in enterprise development therefore needs to be properly investigated if the sector is to fully contribute to the socio-economic development landscape. This study contributes to knowledge on the role of social networks in economic development by extending an understanding of the role of social networks – kinship, social groups, membership of organisations and contacts – from the predominantly urban and farm-based studies to the rural non-farm enterprise sector. It also contributes to literature on the gender dimension of social networks by building upon recent work by Katungi *et al.* (2008), who established that female headed households in Uganda are disadvantaged at social networking platforms, and Norris and Inglehart (2003), as well as by Shaw *et al.* (2006) who established bimodal funding patterns between male and female small-scale entrepreneurs.

5.2 OBJECTIVE AND HYPOTHESIS

The specific objective of this chapter is to investigate the role of social networks –kinship, social groups, membership in organisations and links and contacts maintained with individuals and other entrepreneurs – in the various stages of rural non-farm enterprises establishment and expansion. This is of particular importance to rural non-farm entrepreneurs who in most cases do not have enough own resources to establish and expand their entrepreneurial aspirations and cannot access these resources from the formal markets. For that reason, Fafchamps (1997) cautions that if a large segment of entrepreneurs remain constrained in accessing external finance; the pool from which prospective industrial captains are drawn and nurtured will remain small, resulting in constrained economic growth.

In order to establish, expand and develop enterprises, small-scale rural non-farm entrepreneurs need among others more information about business viability and markets, financial capital and reliable employees. The study hypothesised that because of the unique setting in which the rural-non-farm entrepreneurs found themselves in, they cannot access resources from formal markets and thus rely on mutual assistance from their social networks – kinship, social groups, membership of organisations and links and contacts maintained with individuals and other entrepreneurs – during the stages of enterprise establishment and expansion.

The remainder of this chapter is organised into the following sections. Section 3 discusses the conceptual framework and the data. This will be followed by section 4, which discusses the results, with section 5 providing a summary.

5.3 CONCEPTUAL FRAMEWORK

This study's theoretical orientation was informed by Granovetter's (1973) theory of "strong" and "weak" networks, which was then infused into the asymmetric information theory by Akerloff (1970), Stiglitz and Weiss (1981), Kletzer (1984) and Pindyck and Rubinfeld (2005). The study concedes that their socio economic settings prevent small-scale rural non-farm entrepreneurs from accessing microfinance and more information at formal markets when trying to establish their enterprises. They therefore resort to the strong social networks amongst themselves and their broad social environment. Formal financial institutions are not keen to lend financial resources to new entrepreneurs as they view their activities as risky investment areas because only the entrepreneurs have full information about enterprises' risk levels (Pindyck and Rubinfeld 2005). Venture capital is not an option for rural non-farm enterprises due to undefined property rights in rural areas. As a result, the new entrepreneurs resort to their own resources and those of friends and relatives. After establishing an enterprise, the next challenge will arise with respect to obtaining more capital for expansion, as capital from strong networks with relatives, family and friends will have been exhausted in the stages of enterprise establishment. Few of the entrepreneurs will have made adequate profits to meet their expansion needs. Their likely sources at this stage are networks based in social groups, membership of organisations and links and contacts maintained with individuals and other entrepreneurs and NGOs who would have developed some trust in them.

However, there is the gender dimension that has to be included in the above framework, since any society has social structures that determine who participates in what social networking platforms. To build social networks one has to actively invest time and resources, so differences in terms of

time and resources available to male and female members of the society are likely to lead to differential access to social capital. In addition, there are gender-based vertical and horizontal differentiations at the networking platforms that differentially reward the participants. For instance, there are strictly male-only and female-only social networking platforms. This justifies the need to factor gender into the framework.

The study took note of the multi-dimensionality of social capital and debates around different measures used in past studies as was also hinted by Sabatini (2006). As such, this study in line with the theoretical position taken settled for social networks proxied by kinship, social groups, membership of organisations and links and contacts maintained with individuals and other entrepreneurs. The study also used data on involvement in associational activities, number of contacts maintained, the social characteristics of the entrepreneurs such as education level, the number of employees at their enterprises, and their major sources of ideas and of start-up capital. Qualitative statements and cases were also used to develop a story around the quantitative data. The gender of the entrepreneurs and the respective enterprise values were used as focal points for analysis. For the analysis, the SPSS programme was used to handle the correlations, cross tabulations, with inductive analysis of the qualitative data completing the story. The analysis was organised around themes that emerged and was compared with past research results to look for similarities and differences, though guided by the theoretical framework.

5.4 DESCRIPTIVE OVERVIEW OF THE BUSINESS ENTERPRISES IN THE SURVEY

The study used the enterprise value as an indicator of business performance, as was also used by Parker (2004) and Shaw *et al.* (2006), as its foundation for further analysis. The respondents were asked about the value of their enterprises from two perspectives, first from the perspective of assets, investments and market share, and second with regard to income, in terms of how much income they were getting from the business on a monthly basis. The figures given were then used to establish the enterprise value of the enterprises under investigation. Enterprises run by male entrepreneurs had a higher average value (Zim\$6 567 676.47) compared to those run by female entrepreneurs (Zim\$4 500 714.29), although the highest average (Zim\$10 004 074.07) was among the family managed enterprises.¹

¹ During the survey the official government exchange rate was 1US\$=Zim\$ 824

Table 5.1 below shows the trends of the different types of enterprises in terms of employment and gender distribution. Starting from the gender side, male entrepreneurs were found in all the types of businesses, whereas female entrepreneurs were operating businesses in crafts, restaurants, hair salons, dress making, trading, office services and other unspecified types. The family-run businesses were also found in all types of enterprises except for crafts and restaurants, graphic and design work, and vehicle servicing and spare parts sales.

It was also noted that in terms of employment, most of the enterprises were started with between one and two employees, with only carpentry and office services having started with at least five workers. However, at the time of the survey there had been a shift, with a majority of the enterprises employing more than five workers. The craft and restaurants followed by the construction sectors registered the highest growth in terms of having more than five employees. For instance 85% of those in the crafts and restaurant business, where female entrepreneurs dominated, have more than five workers. On the other hand, 83% of those in the construction business had more than five employees at the time of the survey. The sector that had the least growth in terms of employment trends is graphics and design, followed by electronics and repairs enterprises.

When looking at employment trends in general, male entrepreneurs had the highest percentage of business growth as on average they have more than five workers at the time of the survey notwithstanding their dominancy of all business activities. This was also established by Shaw *et al.* (2006), who explained this in the light of a bimodal funding pattern between male and female entrepreneurs. From Table 5.1 below, at the time of the survey only four types of businesses employed only one person, with the majority having at least five or more employees. What can be concluded at this stage is that the increase in numbers of employees between the time of enterprise establishment and the time of the survey indicate definite growth and expansion overall.

Table 5.1: Type of business, employment trends and gender of the entrepreneurs

Type of enterprise	% of respondents with this number of employees at enterprise establishment (n=130)					% of respondents with this number of employees at time of the survey (n=130)					Gender of the respondent		
	1	2	3	4	5+	1	2	3	4	5+	Male % n=67	Female % n=36	Family Business % n=27
Trading	55.6	44.4	.0	0	0	11.1	5.6	22.2	11.1	50.0	13.4	11.1	18.5
Construction	33.3	50.0	16.7	0	0	0	0	16.7	0	83.3	7.5	0	3.7
Carpentry and welding	22.2	44.4	27.8	0	5.6	0	0	11.1	22.2	66.7	20.9	0	14.8
Craft and restaurants	9.5	47.6	23.8	19.0	0	0	4.8	4.8	4.8	85.6	4.5	50.0	0
Dressmaking and hair salons	58.3	33.3	8.3	0	0	0	16.7	41.7	8.3	33.3	3.0	25.0	3.7
Electronics and repairs	72.7	9.1	18.2	0	0	18.2	18.2	18.2	18.2	27.2	11.9	0	11.1
Agro-processing and manufacturing	33.3	33.3	33.3	0	0	0	11.1	11.1	11.1	66.7	4.5	0	22.2
Graphics and design	83.3	16.7	0	0	0	16.3	50.0	0	16.7	16.6	9.0	0	0
Office services and phone shops	66.7	26.7	0	0	6.7	6.7	0	40	26.7	26.6	10.4	11.1	14.8
Vehicle servicing and spare parts	66.7	16.7	0	16.7	0	0	0	16.7	16.7	66.6	9.0	0	0
Others	62.5	25.0	0	0	0	12.5	12.5	12.5	12.5	62.5	6.0	2.8	11.1

Source: survey data

Perhaps what can also be deduced from the above descriptive overview of these business enterprises at this stage is that there is gender-based distribution of types of enterprises. However, this should be interpreted in perspective with respect to sources of start-up capital used, who has access to what sources of start-up capital, and general use of various social networks by the respondents. In addition, the employment trends at the stage of enterprise establishment should be interpreted in line with the type of business besides the source and size of start-up capital. For instance, some types of businesses such as graphics and design are easier to start with one employee whereas other businesses, like craftwork and the restaurant trade, are very difficult to run with only one worker.

Table 5.2 below shows the average enterprise value when cross-tabulated by the gender of the entrepreneurs. Whereas male entrepreneurs were distributed across all the bands, female entrepreneurs were found mostly in one band. There were very few female entrepreneurs running enterprises whose value was above Zim\$10 000 000, compared to male and family businesses. Perhaps those male entrepreneurs who were found to be operating low value enterprises had just

entered business. It could also be suspected that there are restrictions in terms of capitalisation that hamper female entrepreneurs from expanding their enterprises beyond the ten million dollar value. Answers to such questions may be found after looking at the sources of capital used by the entrepreneurs during the various stages of enterprise development, but below Table 5.2 shows the average enterprise value of the enterprises by gender.

Table 5.2: Average enterprise value

Average enterprise value	Male % (n=67)	Female % (n=36)	Family business % (n=27)
Below Zim\$ 50 000	8.8	0	0
Between Zim\$ 5 000 and Zim\$ 1 000 000	11.8	2.9	0
Between Zim\$ 1 000 001 and Zim\$ 10 000 000	64.7	94.2	77.8
Above Zim\$ 10 000 000	17.6	2.9	22.2

Source: survey data

5.5 SOCIAL NETWORKS AND START-UP CAPITAL FOR RURAL NON-FARM ENTERPRISES

An analysis of the start-up financing pattern of the enterprises during establishment was done and the results showed heavy reliance for start-up capital on strong social networks with friends and relatives. In total, 70% of the respondents got their start-up capital from informal sources that are relatives, friends, and own resources. Across the different categories of the respondents it was established that 59% of the family-managed enterprises got their start-up capital from friends and relatives, with 37% of the male entrepreneurs and 25% of the female entrepreneurs getting their start-up capital from their friends and relatives respectively. Of the male entrepreneurs, 43% used own resources to start their businesses, as compared to 25% of the female entrepreneurs and 11% of the family-managed enterprises respectively. A possible explanation why a large percentage of male entrepreneurs used own savings to establish their enterprises might be that from the biographical data collected more men had previous working experience than female respondents. This, coupled with the fact that previously men had previous preferential advantage at the formal employment market from which they are likely to have saved enough to start their own businesses, can partially explain the above observation.

It was noted that most of the businesses activities were started with low start-up capital ranging between Zim\$3 000 and \$380 000. However, when the level of start-up capital was disaggregated by gender it was noted that on average the lowest start-up capital (Zim\$3 000) was among female entrepreneurs with the lowest among male entrepreneurs being Zim\$20 000. Those who obtained

capital from friends and relatives started their enterprises with an average of Zim\$250 000, followed by those using own resources (Zim\$125 000) and those funded by donors, starting with Zim\$45 000. Table 5.3 below shows the major sources of start-up capital used by the entrepreneurs in the study.

Table 5.3: Sources of start-up capital for establishing rural non-farm enterprises

Source of capital	Male % (n=67)	Female % (n=36)	Family managed businesses % (n=27)	Each category % (n=130)	Average size of start-up capital from each option (Zim\$)
Own resources	43.3	25.0	11.1	31.5	125 000
Relatives & friends	37.3	25.0	59.3	38.5	250 000
Loan	16.4	2.8	22.2	13.8	40 000
NGO	3.0	47.2	7.4	16.2	45 000
Business partner	0.0	0.0	0.0	0.0	0
Total	100.0	100.0	100.0	100.0	

Source: survey data

However, a worrying observation was that across the sample relatively fewer female entrepreneurs used start-up capital from friends and relatives compared to the other respondents. This explains why female entrepreneurs had the lowest start-up capital and ran enterprises with the lowest value. With no other explanation, what can be concluded is that while strong social networks are very important for enterprise establishment they tend to favour male entrepreneurs over female entrepreneurs.

Those who mainly rely on kinship for start-up capital agreed that they do not have easy access to formal channels of microfinance and the responses indicated the significance of kinship in the establishment of enterprises. Most of the respondents indicated that family members and relatives trusted them and were willing to offer start-up capital to the new entrepreneurs. Their relatives and friends were also preferred as they could negotiate the terms of repayment with them, and they would be more understanding if there were delays in repayment. One young entrepreneur indicated that he resorted to his friends and family members since they knew that he could not run away with their money. He narrated his ordeal when he asked a local bank manager to give him a loan, but was turned away because he did not have collateral. A female respondent indicated that friends and family members have full information about the new enterprise, and are thus

sympathetic when lending their money and constantly monitor the use of their money. All the respondents concurred that banks ask too many questions and require too many conditions, which most of them could not meet. This becomes particularly true for rural entrepreneurs whose properties rights are not well defined and so cannot be used as collateral. The entrepreneurs thus resort to their strong social networks with relatives and friends, who have full information about the business projects and where there is a high level of trust between them. This also explained the causal relationship between the relatively low levels of start-up capital and reliance on relatives and friends, who are not likely to have huge amounts of capital to loan.

As shown in Table 5.3 above, NGOs are a significant source of start-up capital for 16% of the respondents. However, across the categories of the respondents, female entrepreneurs (47%) followed by family managed enterprises (7%) and lastly male entrepreneurs (3%) got loans from NGOs. When asked about how the NGOs extend their microfinance, it was established that NGOs also relied on some elements of group solidarity – strong social ties – that glued the members together thereby making it easier for self monitoring and sanctioning by the borrowers themselves. The NGOs, worried about information asymmetries and contract drawing issues between themselves and the borrowers, resorted to a group-lending strategy to persons who had undergone basic business training. They encouraged such groups to be composed of persons who were familiar with one another so that group members will easily monitor each other's the activities. Most beneficiaries of such group lending are the female craftwork entrepreneurs and some entrepreneurs in carpentry whose selection was based on familiarity so they could use their strong social ties to enforce repayment of the loans. In some cases the loans were revolving funds to be passed on to other members, hence, there is self-monitoring by the members, thus shifting the burden of information asymmetry and contract enforcement problems from the lender to the borrowers – a salient form of social capital at work.

Only 13.8% of the respondents accessed loans from the formal market and this was linked to the stringent requirements used by the lenders, as was noted by Bell, Harper and Mandivenga (2002). However, when those who indicated that they obtained loans were further asked about the source of the loans, it was established that more than half of the loans came from the Chimanimani Business Trust, with the government accounting for the remainder. The trust is a membership-based organisation that mobilises financial resources and extends them to entrepreneurs in the district in a revolving fund format. The Trust's lending is more like a rotating credit scheme and its members know each other as they are all from the same area. What can be concluded at this point is that strong social networks are a critical source of start-up capital for enterprise establishment in the district.

Cross tabulation of sources of start-up capital and education level of the entrepreneurs revealed that generally those receiving start-up capital from NGOs have the least number of years of formal education, with those using own capital and that from relatives and friends being the most educated. The results given in Table 5.3 above, when interpreted with Table 5.4 below, show that female entrepreneurs are those with the lowest education levels and also are the least likely to get start-up capital from their “strong” ties with friends and relatives. This, together with the fact that on average female respondents started with low capital, may also explain their dominance in activities such as craftwork, dressmaking and hair salons. Table 5.4 below details the relationship between education level and sources of start-up capital used by the respondents.

Table 5.4: Sources of start-up capital and level of education of the entrepreneurs

Sources of start-up capital	% of the respondents with this education level (n=130)									
	5yrs	6yrs	7yrs	9yrs	11yrs	13yrs	14yrs	15yrs	16yrs	17yrs
Own resources	0	0	3.1	0	53.1	21.9	9.4	6.3	3.1	3.1
Relatives and friends	0	0	4.2	6.7	28.4	28.25	22.25	2.1	2.1	10.3
Loan	0	0	0	0	18.2	45.5	18.2	9.1	9.1	0
NGOs	23.8	4.8	52.4	0	0	0	9.5	9.5	0	0

Source: survey data

A few cases from the study further demonstrate the significance of strong social networks in the mediation of start-up capital by some of the respondents. One case was that of an entrepreneur who after having worked for the local district council for more than 20 years accumulated information from local networks that he used to establish his own enterprise. He said he gained enough contacts and experience to run his own successful general dealer’s shop. He said that during his working period he had built a good reputation with his friends and relatives, who not only lent him capital but also allowed him to start the business at the family premises. His two brothers later on joined him and pooled in some further capital.

There was also the case of the son of a businessman who decided to start his own enterprise after having worked in his father’s business since childhood. He indicated that while working in his father’s business he developed trust-based relationships with most local business people in nearby towns, who trusted him and gave him information on business management. Because of the exposure he gained from working in his father’s business he was now well connected within the business and was even appointed to represent the district’s youth on the board of the Chimanimani Business Trust. He also used his kinship relationship with his father to establish his

own enterprise as his father not only lent him start-up capital but also allowed him access to vehicles to run his enterprise, though at a cost that he paid off later.

One female entrepreneur used to work at a general dealers and butchery as a general hand and discovered an opportunity to sell prepared lunches for workers at the business centre. Having worked at the general dealer's for a long time, she developed a trust-based relationship between herself and the business owner, who later on lent her start-up capital to establish a small restaurant within the premises. She indicated that had it not been for the trust-based relationship that led the business owner to extent credit to her, she would not have started her own enterprise. She also got some business supplies from the general dealer on credit from time to time. At the time of the survey, her enterprise had grown and employed four other women. The three cases above show the importance of strong social networks in the establishment of enterprises by the respondents.

The findings differ from the study by Fafchamps *et al.* (1995), which established that small-scale manufacturing enterprises in urban areas of Zimbabwe use trade credit from their suppliers when establishing their enterprises. The rural non-farm entrepreneurs mainly depend on their kinship networks and own capital to establish their enterprises and this can be linked to their different setting. At this point, what can be concluded is that there is a relationship between strong social networks and enterprise development, as having strong social networks was positively correlated with having higher start-up capital and higher enterprise value.

5.6 SOCIAL NETWORKS AND CAPITAL FOR RURAL NON-FARM ENTERPRISES EXPANSION

In pursuit of long-term survival, external finance for the expansion and stability of small-scale, rural non-farm enterprises is crucial. One of the respondents, when asked about the significance of external finance in business, summed it up with a saying that goes, '*a bird that does not venture beyond its nest's periphery will never become fat*'. Literally, the saying denoted that a bird has to venture beyond the periphery of its nest if it is to grow. This illustrates the importance of external resources, which are needed to expand and survive competition. Few of the entrepreneurs are likely to have accumulated enough profits to buffer themselves against the expansion demands, so they still need external finance.

Table 5.5 below shows the sources of capital used for enterprise expansion. The contribution from relatives and friends has dwindled to only 8.5% from the initial 31.5% that was shown in Table 5.3 above. As shown in Table 5.4 only 2.8% female entrepreneurs, 10.5% male

entrepreneurs and 11% family managed enterprises used finance from friends and relatives for expansion and no one used own resources for this purpose. There is a significant change from the initial strong social networks used to source start-up capital. The sharp decline in the number of those who used relatives and own capital to expand their enterprises could be linked to the fact that funds from relatives and even own capital have been exhausted in the process of establishing the business, and profits are not yet large enough to meet both the operational and business expansion requirements. This can be explained in terms of the limitation of strong social networks in mobilising external resources as was theorised by Granovetter (1973).

Table 5.5: Sources of capital for rural non-farm enterprise expansion

Sources of capital for enterprise expansion	Male % n=67	Female % n=36	Family managed businesses % n=27	Each category % n=130	Average size of expansion capital Zim\$
Own resources	0	0	0	0	0
Relatives & friends	10.5	2.8	11.0	8.5	50 000
Loan	1.7	5.7	3.9	3.1	40 000
NGO	35.8	61.0	40.7	43.8	100000
Business partner	52.0	30.5	44.4	44.6	350 000
Total	100.0	100.0	100.0	100.0	

Source: survey data

However, there is a shift in the sources of finance to expand the enterprises, as business partners (those business people who were already operating at the time when the respondents started their own enterprises) were cited by 44.6% of the respondents. It was noted that 52% of the male entrepreneurs used this source as compared to 30.5% of the female entrepreneurs and 44.4% of the family-managed enterprises respectively. When the respondents were asked about the location of these business partners, 60% indicated that their partners were from outside the district. This means that the respondents have forged business linkages with already established business partners specifically to advance their business interests, which can be termed “weak” social networks. The significance of such “weak” ties is in mobilising important resources for enterprise expansion. Having an extensive “weak” network enables entrepreneurs to bridge structural holes in terms of accessing useful information and other resources, as was argued by Burt (1992) and Granovetter (1973), that while “strong” ties are important in getting started it is mostly “weak” ties that enable one to get access to more resources in order to get ahead. “Weak” social networks with other business people located outside the district enabled the entrepreneurs to access not

only diverse entrepreneurial intelligence but also capital to expand their businesses. The entrepreneurs indicated that networking with other entrepreneurs outside their area made them visible and trusted as reliable business partners. Most of the respondents concurred that they had developed trust with their business partners, since failure to disclose information about one's business operations may lead the entrepreneur to be socially ostracised and punished.

Table 5.5 above shows that mostly female respondents obtain capital for expansion from NGOs. These financed the expansion of 43.8% of the respondents' activities, of which 61% were female entrepreneurs, 35.8% male entrepreneurs and 40.7% family-managed businesses respectively. A probing of these revealed that some who initially used own capital to start their enterprises joined the group lending programmes run by the NGOs. It was also established that a significant number of the male-owned and family-managed enterprises were expanded by capital from NGOs. It was also established that the respondents were networked at the Chimanimani Business Trust seminars with other NGOs who were providing capital for expansion. As to reasons why NGOs support more female entrepreneurs than the other categories, this is explained by the fact that these philanthropic organisations deliberately target female entrepreneurs who have been disadvantaged in the economic activities of social structures. On the other hand, female entrepreneurs, with their low levels of education, have no choice but to attend the training sessions of the NGOs, after which they can get credit.

The sources of start-up capital as well as capital for expansion were correlated with enterprise value, as shown in Table 5.6 below. The two major sources of start-up capital were found to be significant at the 1% level. These were relatives and friends, and own resources, which means that an increase in kinship networks leads to having more start-up capital and operating a more valuable enterprise. Most of the sources of start-up capital were local and were found to be statistically significant at the level of 5%. This is an indicator of the significance of kinship relations in enterprise establishment. Business partners and NGOs – the top two sources of capital for enterprise expansion – were found to be statistically significant at the level of 1%, as shown in Table 5.6 below. The implication is that kinship relations are critical sources of start-up capital when establishing an enterprise, but that “weak” connections with established business persons are more important during expansion. The education level of the entrepreneur was also found to be statistically significant at the level of 1%. The implication is that more education enables entrepreneurs to develop social networks for information and even capital during the various stages of enterprise development.

Table 5.6: Correlation between enterprise value and sources of capital

	Enterprise value
Top two sources of start-up capital	0.193**
Location of sources of these start-up capital sources	0.164*
Top two sources of capital to expand enterprises	0.437**
Location of these sources of capital to expand enterprises	0.180*
Education level	0.232**

** Correlation is significant at the 0.01 level .

*Correlation is significant at the 0.05 level (1-tailed Pearson correlation test).

Source: survey data

5.7 MEMBERSHIP OF ASSOCIATIONS AND CONTACTS MAINTAINED

Most respondents indicated that they maintain membership of a number of associations, as shown in Table 5.7 below. The entrepreneurs concurred that they relied on the linkages with other business persons for information and factors at below market prices. They indicated that at these association platforms they meet other different entrepreneurs, and exchange information and other business contacts. In fact, the main financial association, the Chimanimani Business Trust, organises business workshops for its members where they interact with other entrepreneurs.

Table 5.7: Social networks (membership of associations and contacts maintained)

	Male % (n=67)	Female % (n=36)	Family managed business % (n=27)
Religious association	82	97	100
Financial association	88	100	100
Social club	88	74	70
Professional association	25	8.6	33.3
Production association	25.4	48.6	25.9
Govt initiated association	58.8	62.9	29.6
Contacts with entrepreneurs in similar business (average number)	7.90	8.70	7.85
With entrepreneurs in different business (average number)	5.50	4.10	6.30
With entrepreneurs outside the district (average number)	5.10	4.40	6.30
With bankers (average number)	2.30	1.78	2.90
With civil servants (average number)	3.06	3.83	1.59
Contacts with other entrepreneurs (average number)	12.80	12.50	12.7

Source: survey data

The professional associations mentioned by respondents included teachers' and nurses' associations, whose members are drawn from all over the country, where members not only share information about their professional issues but also share business information. When asked about the importance of being a member of social clubs, the respondents indicated that besides

socialising, the clubs are also places at which networking with other entrepreneurs is done and where information about possible employees is obtained.

Besides maintaining group-based mutual associations, the entrepreneurs also maintained a number of contacts with other entrepreneurs, both in the district and outside it. These contacts are sources of diverse and non-redundant information. Among these are contacts with bank officials, although in the previous section it was established that few entrepreneurs obtained loans from the banks. When asked how they benefit from such contacts, one of the respondents replied, '*No business person can survive without connections in a bank*'. When asked further about the benefits of having contacts with bank officials, the response was that bank officials give important business advice in terms of handling business finances, getting short-term overdrafts. Another advantage of having connections with the bank manager is that obviates the need to spend time in queues when depositing or withdrawing money. One female entrepreneur indicated that she had almost had to close her business because previously she did not bank her money and her husband used to misuse the capital. After contacting a bank official, she was shown how to open a bank account, and was no longer worried by this problem.

Having looked at the role of kinship-based social networks in enterprise establishment and expansion, further analysis was done to test the role of social groups and contacts with individuals and other entrepreneurs in this regard. Social capital literature argues that membership of associations and participating in such social groups makes useful information and other resources available to the members. Table 5.8 below shows the results of correlations between enterprise value and membership of associations. Membership of financial associations and enterprise value was found to be statistically significant at the level of 1%. The implication is that greater participation in financial associations exposes the respondents to more information, which leads to better performance and increased enterprise value. Such networks provide not only financial resources but also business information and advice. Membership of religious associations was also found to be significant at the 5% level. Social associations are important sources of employee referral, and allow sharing of business information outside normal associational activities. The significance of religious and social associations is that they are platforms where members meet frequently and thus develop high levels of trust and strong social links. Government initiated associations, on the other hand, were found to be less significant than other associations. Table 5.8 below shows the results of correlations between enterprise value and the various associations maintained.

Table 5.8: Correlation between enterprise value and membership of associations

	Enterprise value	Religious association	Financial association	Social association	Professional association	Production association	Govt initiated association
Enterprise value	1						
Religious association	.157*	1					
Financial association	.215**	.280**	1				
Social association	.181*	-.131	.037	1			
Professional association	.313**	.208**	.060	.121	1		
Production association	.273**	.118	.037	.250**	.071	1	
Govt initiated association	.025	-.039	-.173*	.057	-.134	.359**	1

Pearson Correlation Sig. (1-tailed). ** Correlation is significant at the 0.01 level (1-tailed). * Correlation is significant at the 0.05 level (1-tailed).

Source: survey data

Further correlation analysis of enterprise value and contacts, in Table 5.9 below, shows that except for contacts with civil servants all other contacts have statistical significance. Contacts with other entrepreneurs in general and contacts with bank officials were found to be of high statistical significance. Having more contacts with entrepreneurs outside the district will lead to an increase in enterprise value because they are likely to provide resources needed for expansion. This is particularly true for rural non-farm entrepreneurs, who have to rely on mutual connections for extra resources since most financial institutions are unwilling to extend microfinance to them. It is also likely that having more contacts will lead the entrepreneurs to have access to better markets for their products, which will ultimately increase enterprise value.

Table 5.9: Correlation between enterprise value and contacts maintained

	Enterprise value	Education level	Contacts with other entrepreneurs	Contacts with same line enterprises	Contacts with different line of enterprises	Contacts with entrepreneurs outside district	Contacts with bank officials	Contacts with civil servants
Enterprise value	1							
Education level in years	.128	1						
Contacts with other entrepreneurs	.578**	.072	1					
contact with same line enterprises	.418**	-.040	.699**	1				
Contacts with different line of enterprises	.423**	.264**	.581**	.484**	1			
Contacts with entrepreneurs outside district	.532**	.238**	.824**	.546**	.566**	1		
Contacts with bank officials	.578**	.340**	.655**	.533**	.546**	.654**	1	
Contacts with civil servants	.089	-.256**	.372**	.408**	.121	.188*	.071	1

Pearson Correlation Sig. (1-tailed). ** Correlation is significant at the 0.01 level).

*Correlation is significant at the 0.05 level (1-tailed).

Source: survey data

The significance of such contacts for the activities of small-scale rural non-farm entrepreneurs comes. A typical example noted during the survey was that of female entrepreneurs in the craft business who have networked with a Japanese tourist who has since been assisting them with information to market their craftworks. The tourist was now a conduit of reliable market information from outside the district about designs and quality standards from possible buyers of craftwork as well as information about pricing. Table 5.9 above provides the results of the correlation analysis between enterprise value and contacts maintained.

5.8 SIMPLE REGRESSION ANALYSIS RESULTS

A simple regression analysis was run to triangulate the results from the descriptive statistics and analysis of variance. The results confirmed those from the analysis of variance as most variables were found to be statistically significant in explaining the enterprise value. For instance the results show that having more contacts with other entrepreneurs was associated with running a

high value enterprise. The explanation could be that by having more contacts with other entrepreneurs one is better positioned to acquire more information and other resources from such weak ties that will be used to expand the enterprise. The same was also observed with education level of the entrepreneur as well as sources of start-up capital and capital for enterprise expansion. Perhaps a high level of education gave the entrepreneur the edge to network with other entrepreneurs as well as being able to quickly gather information leading to improved business outcomes. Having a high number of strong social networks enabled a prospective entrepreneur to have access to more start-up capital.

Belonging to more associations also was found to be statistically significant and the explanation could be that from membership one gets more information and resources to be invested in the enterprise. Associations have been found elsewhere to be conduits of non-redundant information and resources that cannot be found locally. The regression analysis results are presented in Table 5.10 below. However it should be emphasized that this was a simple regression analysis to add further depth to the analysis as well as reinforce the results from other analysis done earlier.

Table 5.10 Regression analysis results

Variable	t	Sig
Contacts with other entrepreneurs	2.500	0.014
Belonging to an association	1.943	0.055
Education level	1.854	0.066
Contacts with establish businesses	2.067	0.041
Number of contacts with relatives and friends willing to offer start up capital	1.699	0.092

Dependent variable: Enterprise value

Source: survey data

5.9 SUMMARY

The findings from this chapter show that in starting up their enterprises, rural non-farm entrepreneurs resort to their strong kinship networks for start-up capital, but that in the expansion

stages they resort to their connections with other established entrepreneurs, mostly from outside the district. The reason for their dependence on these forms of capital could be linked to their setting and the nature and scale of their operations. This reflects a different set of circumstances from those found by Fafchamps *et al.* (1995) in their study of urban-based small-scale manufacturing enterprises, which mainly get capital to expand from bank overdrafts, suppliers' credit and by reinvesting profits. Moreover, this study has shown that business partners are a critical source of resources for rural entrepreneurs trying to expand their activities. This emerging pattern of how rural non-farm entrepreneurs use social networks to get resources for enterprise establishment and expansion has not been previously documented in social networks literature. Perhaps a new form of venture capital arrangement between established and new entrepreneurs governed by social networks can be explored for rural non-farm enterprises.

Whereas a study of urban-based Ghanaian small-scale manufacturing entrepreneurs by the World Bank (1992) established that overdraft, suppliers' credit and advances play a crucial role in the expansion of the enterprises; this was not found to be the case with small-scale rural non-farm entrepreneurs. Despite the existing gap in the demand for and supply of finance for rural non-farm entrepreneurs, banks still are reluctant to capitalise the establishment and expansion of rural non-farm enterprises. They find it costly to do business with rural entrepreneurs because of lack of information and issues of collateral. Moreover, there are still differences between male and female entrepreneurs in terms of using the different banking options for expanding their enterprises.

CHAPTER 6

SOCIAL NETWORKS AND COORDINATION OF INTRA-ENTERPRISE ACTIVITIES IN THE CHIMANIMANI DISTRICT

6.1 INTRODUCTION

The previous chapter examined the role of social networks in the various stages of rural non-farm enterprises establishment and expansion in the Chimanimani district. This chapter investigates the role of social networks – kinship, and links and contacts maintained with workers – within the enterprise, and how such relationships are established and maintained. Difficulties of coordinating the various activities in a small business are bound to arise, as in most cases its operations cannot be governed by formal contracts due to its setting and level of operations.

Although previous studies by sociologists and anthropologists have demonstrated how social interactions influence workforce behaviour (Jack 2005), economists have only recently embraced the theory (Bandiera *et al.*, 2008). Underpinning the social capital debate is the argument that people increasingly identify with their local communities, using their local relationships as an important foundation for economic and social action (Duke *et al.*, 2005). Literature shows that social networks have become very influential in economic policies and development programmes. In fact, researchers building upon the work of Granovetter (1973 and 1985) argue that social networks can act both as a “glue” and as a “lubricant” to facilitate socio-economic action. The argument in labour economics is that workforce behaviour is not controlled solely by pecuniary variables, given the observation that employers and employees use their social connections to achieve mutual goals.

A field that has recently taken an interest in social networks is labour economics, once dominated by orthodox economic theory that understood monetary incentives to be the major factor shaping the behaviour of workers. Labour economists’ recent acknowledgement of the failure of monetary incentives to govern worker behaviour has drawn attention to the role of social networks at work places. Lawson (1993), Dew *et al.* (2004) and Bibow *et al.* (2005) argue that, faced with problems of coordination and contracting, urban-based entrepreneurs rely on social conventions and mimetic behaviour to make their actions more predictable.

What is emerging from the literature is that social networks and learning are closely related, as people who are actively involved in social networks are better informed about new approaches to adopt in conducting their businesses (Duke *et al.*, 2005). As Duke *et al.* (2005) also observed,

social networks and sociability are important ingredients in any coherent strategy for developing learning and a sustainable economy. Recent research on social networks and socio-economic development by among others Isham (1998), Barr, (2000), Johnson *et al.* (2002), Tiepoh & Reimer (2004), Duke *et al.* (2005), Granovetter (2005), Nyangena (2005), Sanchez *et al.* (2005) and Katungi (2006), have established that there are beneficial outcomes from social links and mutually based connections. Bandiera *et al.* (2008)'s investigation of the use of social connections by managers and workers at firms found that managers use social connections to ameliorate moral hazards and shirking.

Although the academic treatise of social networks and the benefits of such relations is convincing, studies on its use within small-scale rural non-farm entrepreneurs in Zimbabwe is still limited. While Barr (2000) and Fafchamps (1997, 2001 and 2004) pioneered work with respect to mobilisation of financial resources and reduction of market access transaction costs by on-farm and urban-based small-scale entrepreneurs, there is yet to be work specifically on the use of social networks in intra-enterprise activities by rural non-farm entrepreneurs. This is important, since these entrepreneurs still face problems of information asymmetry and contract enforcement. The need to overcome these problems is crucial if the country is to realise the full benefits of a vibrant small-scale enterprise sector. Perhaps the assumption is that small-scale rural non-farm entrepreneurs follow the model of large-scale enterprises, which use formal contracts and monetary bonuses to shape workers' behaviour in improving productivity. This is despite the recent realisation in development economics that the drawing up and enforcement of contracts is problematic in small firms and that they use non-monetary incentives (Pindyck and Rubinfeld, 2005). As such, it is important to understand the use of social capital and relationship building within rural enterprises.

6.2 OBJECTIVE AND HYPOTHESIS OF THE CHAPTER

Building on the "weak" and "strong" ties theory propounded by Granovetter (1973, 1985), Johannisson *et al.* (2002) and Granovetter (2005), the objective of this chapter is to explore the role of social networks, defined in this chapter as kinship ties, and links and contacts maintained with workers in achieving mutual economic goals within the enterprises. The chapter also investigates how entrepreneurs facilitate the development of such strong social networks at their respective enterprises.

The study hypothesised that because of the nature of their setting and size of operation, small-scale rural non-farm entrepreneurs cannot rely on enforceable written contracts and monetary

incentives to govern their relationships with their employees but rely on mutual assistance based on kinship and links and contacts maintained with workers (strong social networks) to coordinate intra-enterprise activities. They also invest resources and time in non-productive activities within their enterprises to build strong intra-enterprise relational networks, which they use to overcome moral hazard and principal agent problems.

The chapter is organised according the following sections. Section 3 provides the conceptual framework and briefly introduces literature on social networks and intra-enterprise activities. Section 4 concerns the data used in the study. Section 5 presents the results from the research, followed by section 6, which summarises the findings.

6.3 CONCEPTUAL FRAMEWORK AND SURVEY OF LITERATURE ON SOCIAL CAPITAL WITHIN ENTERPRISES

In an ideal situation, after setting up an enterprise the entrepreneur has to establish systems to coordinate intra-enterprise activities. Contractual agreements have to be entered into with the different workers, who have different knowledge stocks, different expectations, perform interrelated but different functions, and who are also remunerated differently. There arises a potential principal agent problem given that the entrepreneur will not be always present to monitor the behaviour and performance of the workers. For that reason, nurturing a co-operative climate within the workforce and building trustworthy relationships generally becomes an important task for management.

Given that most entrepreneurs, due to their setting and size of operation, find it costly to gather all the information needed to design complete contracts with their workers, they therefore rely on negotiated and incomplete contracts, in which the parties can mutually cooperate (Foss & Foss, 1999). To this end, rural non-farm entrepreneurs rely on their mutually driven social connections and facilitate the creation of more familial environments where workers and employees are psychologically contracted to the enterprise. The entrepreneurs rely on enlisting voluntary cooperation from employees to increase productivity within the enterprise through mutual agreements.

6.3.1 Social networks and intra-enterprise activities

In this era of knowledge-driven economics, individuals who are actively involved in learning have better chances to realise more value from a given bundle of resources. For that reason, Elsnér (2005: 19) argues that a more realistic understanding of economics today has to start from

the two socio-economic phenomena of dilemma-prone interdependencies and strong uncertainty among agents. This entails ubiquitous or potential coordination failure, and hence the redefining of economics as a science of effective coordination. It is in this light that social networks and sociability have emerged as twin pillars in intra-enterprise activity coordination and productivity and robust economies.

Research shows that firms stand to benefit by organising their activities in a way where workers voluntarily cooperate with each other (Rob & Zemsky, 2002, Akerlof & Kranton, 2005; Goette *et al.*, 2006). When workers cooperate, their different talents complement each other, and this positive learning facilitates mutual information flow and eliminates ‘free riding’ at the workplace. It is in the best interest of entrepreneurs to devise strategies that foster internal linkages, which in turn encourage network development. The question is: what conditions encourage workers to remain integrated and voluntarily cooperating in cases where they have different functions and status levels in a firm?

Conventional economics literature explains this from the perspective of pecuniary incentives, namely, wages and performance bonuses. With well-designed rules, codes of conduct to be followed by workers, and financial rewards, entrepreneurs can enlist the total commitment and cooperation of workers. However, research shows that monetary incentives and written codes alone remain a blunt instrument to motivate workers, because they are imperfect measurements of individual effort based only on variables observed by management. Production processes at any enterprise depend on collective team efforts (Akerlof & Kranton, 2005). Using financial rewards as the sole tool for enlisting cooperation from workers creates differentiation in economic social status that in turn threatens or severs ties between workers and put at risk the survival of the group (Kosfeld & Von Siemens, 2006). Lack of strong intra-group connectedness and social learning is likely to impede coordination and productivity at workplaces, as workers also seek intangible rewards and recognition.

Akerlof & Kranton (2005) established that strategies that inculcate a sense of identity and attachment of employees with the firm make them behave in concert with the organisation’s goals. Such strategies ensure that workers are willing to put in more effort even for less financial remuneration. When workers identify with an enterprise, they become insiders who do not require large monetary rewards to induce them to contribute and be more productive, and to avoid shirking. This leads to a lower wage bill, ultimately making it profitable for the firm to invest in identity-fostering programmes for the workers.

The use of non-monetary incentives has now been repackaged in economics as ‘corporate culture development’. Corporate culture within a firm changes beliefs and persuades employees to behave and believe that members of their own group are more likely to cooperate in efforts towards the group goals (Goette *et al.*, 2006). Goette *et al.* (2006) concluded that the social capital of organisations yields important benefits such as fostering efficiency and workers’ willingness to cooperate. Literature from labour economics suggests that the creation of a corporate culture leads to a more cohesive, highly motivated workforce, with fewer barriers to interpreting, transferring and diffusing of valuable information. Individual workers’ different goals are realigned towards a single mutual goal, as group goals will prevail over individual aspirations. There is mutual approval of individual efforts with respect to planning for strategies to sustain future employability. This has been central in the social networks and collective action discourse and Elsner (2005) argues that by fostering cohesion among workers, intra-enterprise networks make feasible the planning of future-oriented collective action at firms.

In a study of high performance workplaces in the United Kingdom, Heywood *et al.* (2005) established that workers perform better when they are in a family environment where mutual information exchanges is facilitated. They established that such familial work environments foster a psychological contract between workers and management. Such familial relationships act as cost-effective self-monitoring mechanisms where workers and employers share information more openly, leading to high levels of productivity. A high level of worker participation in decision-making during strategic planning sessions enlists more worker commitment than mere financial rewards.

The Japanese are renowned for having successfully converted workplaces into an extended family entity and other Asian, and Chinese successes in business are suspected to be connected to their having converted their strong family ties into viable corporate entities (Pun *et al.*, 2000). Running through the leading arguments in the social capital debate is the idea that a good economic institution must be one rich in social capital that promotes lifelong learning. It is within this framework that this study will look into coordination strategies used by the non-farm entrepreneurs in the Chimanmani district. In this chapter, social networks are defined in the context of kinship ties, and links and contacts maintained with relatives and workers to achieve mutual goals.

The above perspectives are from studies of large-scale enterprises mostly from urban-based settings whose conditions are very different from rural non-farm enterprises’ settings. However, the question is whether similar strategies can be used to explain the activities of rural non-farm

entrepreneurs. The significance of the above discussion is to serve as a relevant background to understand how the small-scale rural non-farm entrepreneurs coordinate their intra-enterprise activities.

6. 4. SOCIAL NETWORKS AND INTRA-ENTERPRISE COORDINATION IN THE CHIMANIMANI DISTRICT

6.4.1 Employee sources and education level

Table 6.1 below shows the sources of employees for the different entrepreneurs, disaggregated by educational levels. From the data it seems those with lower educational levels reverted to their kinship networks for employees. The explanation could be that these less educated entrepreneurs wanted to benefit from the trust level they have with their relatives and friends. On the other hand, those with higher levels of education tended to employ anyone who qualified for the job, regardless of whether or not they were a relative. It was also interesting to note that female entrepreneurs dominated those with a lower education level and who preferred to choose their employees from relatives and friends. Few female entrepreneurs with more than 14 years of education were also in the category of those preferring to employ anyone who qualifies for the job.

Table 6.1: Sources of employees and gender versus education levels

Employee preference and gender	Percentage of those with this level of education (years)										Total
	5	6	7	9	11	13	14	15	16	17	
Relative or friend	100	100	92.9	100	38.5	37.0	19.0	50.0			43.6
Anyone who qualifies			7.1		61.5	63.0	81.0	50.0	100	100	56.4
Male			7.1	75.0	53.8	55.6	76.2	83.3	33.3	50.0	51.6
Female	100	100	78.6		28.2	18.5	4.8				27.0
Family business			14.3	25.0	17.9	25.9	19.0	16.7	66.7	50.0	21.4

Source: survey data

When the choices of employees were disaggregated by gender, some interesting trends were established with respect to use of kinship in labour choices. Of the sampled respondents, 68.6% of female entrepreneurs, 36% of family-run enterprises and 33% of male entrepreneurs prefer to employ friends and relatives. The remainder in each category prefer to employ anyone who qualified for the job. Various reasons were given by the respondents for employing relatives or friends, or anyone who qualifies. Among them were that relatives and friends are not difficult to

work with, they are sympathetic if the business is not doing well, and problems can be solved amicably using social systems, as relatives and friends want to share in the business' success. As was also established by Johnson *et al.* (2002), entrepreneurs who employ relatives and friends are assured of greater commitment as well as a greater possibility of forging non-monetary reward systems that foster productivity. One female respondent indicated that family members and friends are loyal and they help with information about what is going on in the community. She said she trusts the information she gets from her friends and relatives concerning business. Table 6.2 below shows the trends.

Table 6.2: Gender and employee sources

Employees preference	Male % (n=67)	Female % (n=36)	Family business % (n=27)
Relatives or friends	33.8	68.6	37.0
Anyone who qualifies	62.2	31.4	63
Total	100	100	100

Source: survey data

However, this preference should be viewed with caution, as it might equally become difficult to control or reprimand family members when they start messing up at work, or even lead to employment of family members who are not qualified for the job, thereby compromising the business goals. Such reliance on homogeneous ties can be a disadvantage, as some workers might engage in shirking behaviour as they cannot be harshly punished. This might well exacerbate adverse selection, whereby the entrepreneur will select relatives who might not be highly productive at the expense of highly productive workers.

Most of the respondents who preferred to employ relatives and friends agreed that they do not need to draw up elaborate contracts when employing friends, nor have to keep an eye on them at work. Of these, 56% indicated that friends and relatives are also more willing to share information that helps in enterprise growth and that their commitment to the enterprise activities does not necessarily come from monetary remuneration alone. Entrepreneurs who also used previously developed strong social ties to solve problems at the enterprise reinforce this view. In this regard, entrepreneurs used the psychological contract between them and their workers for coordinating the operations of the enterprise. However, the downside of this is that there is a high chance that some of the entrepreneurs might under-pay their relatives, since strong relational ties will deter them from reporting their bosses to labour authorities.

By resorting to relational ties to find employees, the entrepreneurs reduce transaction costs related to setting up elaborate supervision mechanisms because the familial ties between them solicit cooperation. Relational ties developed before engagement in commercial activities become important ingredients for developing and coordinating a sustainable economic unit (Duke *et al.*, 2005). A high prevalence of employing relatives and friends was also reported by Hite & Hesterly (2001), who argued that new entrepreneurs resort to engaging workers they have some previous ties with to reduce contractual challenges. Johannisson *et al.* (2002) established that such social ties act as both glue and lubricant for entrepreneurial processes. As glue, they bind the relatives and friends to render their total commitment to the entrepreneur and as a lubricant the social relations make it easier to coordinate the activities at the enterprise.

Reliance on relatives and friends shows that the entrepreneurs want to benefit from trust within their strong social networks, as was also argued by Granovetter (1973, 1985 and 2005) and Johannisson *et al.* (2002), who referred to strong social ties as a lubricant to economic activities. Use of strong social networks was observed even among those who reported that they employ anyone who qualifies, as 47% also indicated that some friends referred job seekers to them. In that case, the workers are more likely to behave well so that they do not tarnish the image of the referees, and on the other hand, the employers are less likely to cheat the workers otherwise they will be socially ostracised by their peers. Entrepreneurs benefit by recruiting from homogeneous social networks, be it with the workers or the referees, since previous repeated interactions have led to the development of trust and mutual understanding. Moreover, those entering a firm through personal contacts are not likely to compromise such networks by engaging in shirking behaviour and will preserve cooperation and promote good performance. According to Granovetter (2005), some entrepreneurs deliberately recruit relatives and friends to benefit from the loyalty and social control that already exists between them. In such social relations is what Dasgupta (2005) terms 'installed social channels' that create trust among employees and entrepreneurs to freely share tacit knowledge.

There are several explanations for why more female entrepreneurs than family-run enterprises or male entrepreneurs prefer to employ relatives and friends. In the study, female entrepreneurs tend to operate generally smaller enterprises in terms of capital outlay compared to the other two categories. The mean value of female, male and family-owned enterprises respectively were

Zim\$4 500 000, Zim\$6 500 000 and Zim\$10 000 000.² The small size of their enterprises deterred female entrepreneurs from attracting and employing qualified employees. Their option then was relatives and friends, who will be more ‘helping hands’ than being full-time employees.

Most female entrepreneurs employed relatives and friends to complement their human capital shortcomings, as most of them have comparatively fewer years in school than the other two categories of entrepreneurs. The logical explanation could be that they are using their trusted relatives to complement their low human capital. One respondent indicated that relatives and friends keep her informed about the market as they are also part of the business. As such, male entrepreneurs with their superior education have better chances of dealing with information about workers’ performance than female entrepreneurs.

When the entrepreneurs were asked about their recruitment strategies, further insights were gained as to the use of strong kinship networks. Among the respondents, 47% used a referral system in which workers were referred to them by friends and relatives, based on the trust felt by the employees and their capacity to carry out the duties in question. The importance of this referral system is that the friends and relatives have information about the possible employees from previous engagements or may be related to the employee. Because of such kinship networks, the prospective employer will not have to spend time and resources to look for employees. The employee is also socially bound to perform his/her duties in a manner that will not tarnish their relationship with the referees. Some 29% indicated that they get their employees from connections at their social associations. It is interesting to note that 20% used formal employee selection processes. Overall, the fact that 72% used their social networks to get their employees agrees well with the results in Table 6.2 above. Table 6.3 below gives the trends in recruitment strategies used by the entrepreneurs.

²During the survey the official government exchange rate was 1US\$=Zim\$ 824

Table 6.3: Recruitment strategies used

Recruiting methods	Percentage
Referral system from friends and relatives	47
Recommendation from social acquaintances	32
Placed a poster to notify possible employees	21

Source: survey data

6.4.1 Intra-enterprise bonding strategies

In any enterprise, the challenge is to nurture and foster strong internal linkages and networks to facilitate knowledge sharing and the diffusion of new skills. The development of such intra-enterprise knowledge-sharing platforms is critical in a broader workplace strategy (Heywood *et al.*, 2005). For this reason the entrepreneurs were asked how they forge familial networks among workers.

It was noted that most entrepreneurs in the sample use non-pecuniary forms of motivation such as providing lunch and breakfast to workers, being open and transparent with workers and in-service training. Financial support given to an employee who encounters a social problem such as the death of a family member topped the forms of motivation used. Awards and bonuses, including giving discounts to workers when buying from the enterprise, also emerged as a significant way of motivating employees. The responses are indicative of deliberate efforts made to create a family environment and strong psychological contract within the enterprise. The frequencies of the responses are given in Figure 6.1 below.

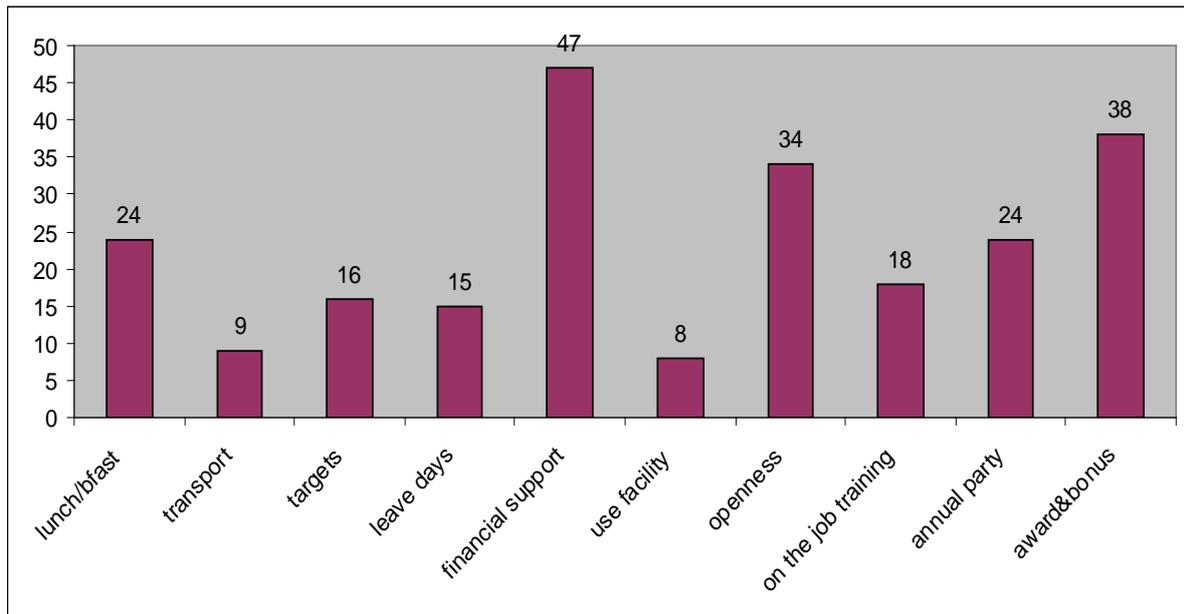


Figure 6.1: Strategies used to facilitate commitment from workers

Source: survey data

Most male entrepreneurs (45%), as shown in Table 6.4 below, indicated that they provided financial support to employees who may have encountered a personal problem. Production bonuses have also been established by Bandiera *et al.* (2008) to lead to an increase in productivity by workers and managers within firms in United Kingdom. This has the effect of reducing information asymmetry by facilitating joint problem solving, and encourages workers to exert more effort for less financial rewards. Such social connections will reduce the entrepreneur's need to participate in non-core business activities. Bandiera *et al.* (2008) also established that use of such incentives would encourage managers to direct more attention to the more productive workers, which is in the best interest of the enterprise. Table 6.4 below shows the forms of incentives used to bond the workers at the enterprises.

Table 6.4: Incentives used to bond workers at enterprises

	Male % (n=67)	Female % (n=36)	Family managed enterprises % (n=27)
On the job training	13.4	13.9	14.8
Being transparent to workers	26.9	30.6	518.5
Personal use of enterprise resources	3.0	5.6	14.8
Financial support in case of social problem	45.0	22.2	29.6
Generous leave days	7.5	5.6	29.6
Transport allowance to workers	9.0	2.8	7.4
Providing breakfast and lunch	10.5	16.7	40.7
Setting production targets	3.0	27.8	14.8

Source: survey data

Female entrepreneurs indicated that they held end-of-year parties, gave awards and production bonuses, and tried to be open and transparent with their employees. Family-run enterprises mainly motivated their workers by providing lunch and breakfast, giving generous leave days, offering financial support in case of social problems, and giving awards and production bonus incentives.

6.4.3 Coordination strategies used by the entrepreneurs

In the previous section, it was observed that male entrepreneurs mostly prefer to employ anyone who qualifies for the job. By offering financial support to workers who would have encountered social problems as well as being open and transparent, male entrepreneurs are creating a familial relationship with their employees. A related phenomenon is that most female entrepreneurs prefer to employ relatives and friends, so hosting annual family parties, setting production targets, offering awards and bonuses as well as being open and transparent with their workers are better strategies to cement strong social ties. Ironically, few female entrepreneurs provide financial support for employees who may have encountered a social problem. One explanation might be that any social problem encountered by a relative or friend (whom they mostly employ) is integral to their personal behaviour and not reported as part of their entrepreneurial life. Production targets, end-of-year parties, making awards and being open with their workers will motivate workers to increase production as they will anticipate a large end-of-year celebration, with its associated awards and bonuses. For family-run enterprises (“who want to keep the wealth in the

family” as one respondent indicated) having lunch and breakfast together is a platform to discuss daily operations, and strategies to achieve set objectives.

Looking at the motivation methods through a social capital lens, what can be discerned is that the entrepreneurs want to knit the team at their enterprise into a family structure where there is trust. This concurs with arguments in favour of “strong” ties articulated by Rob & Zemsky (2002), Davidsson & Honig (2003) and Granovetter (2005), that non-financial incentives foster loyalty as well as homogenising workers. Such intense social relations based on extended family and friendships are likely to ease coordination at such enterprises. However, though not established in the study because no workers were interviewed, this strategy has a downside as it might lead to the employment of unqualified workers, which would also result in poor performance. In such an arrangement, it would be very difficult to discipline and even fire under-performing workers. Furthermore, if employed relatives are underpaid or otherwise ill-treated, strong relational ties will make it difficult or even socially unacceptable for them to stand up against their employers, even in cases of bad labour practice.

Heywood *et al.* (2005) also established that traditional monetary incentives are not the best mechanisms to enlist total commitment and coordination of workers. In such scenarios, where relatives and friends are employed, a culture of shared perceptions of mutual obligation and trust within the workforce forges a psychological contract between entrepreneurs and their workers, which will facilitate coordination of intra-enterprise activities. Based on the extensive use of non-financial incentives by the entrepreneurs in the study, what can be concluded is that this serves to create a psychological contract whereby workers are free to share knowledge and its diffusion within the enterprise. With respect to sourcing subtle tacit information, entrepreneurs would rather employ people they already know, such as relatives and friends with whom they have developed trust from previous engagements outside business circles.

6.4.4 Planning at the workplace

From the results of this research, is clear that entrepreneurs get significant benefits by organising their activities in a manner that workers voluntarily cooperate, as efforts are directed at fostering their workers’ cooperation through socialising the workplace. In the survey, 92.3% indicated that they conduct planning sessions with their workers and only 7.7% saw no value in planning with their workforce. All family-owned enterprises plan with workers, with 88% of the male entrepreneurs and 94% of the female entrepreneurs also doing the same. The frequency of planning meetings annually is shown in Table 6.2, where almost 70% of the respondents meet

between 48 and 96 times a year. A majority of the family-run enterprises (62.97%) meet four times a month with 58.82% of female entrepreneurs meeting 8 times a month or twice a week.

When probed on the benefits they derive from engaging in such time-consuming planning meetings, a number of insights were given. The major benefits, in order of priority, were correcting mistakes, tapping into workers' knowledge, and developing a shared vision and setting realistic goals and meeting of targets. This confirms the findings by Davidsson & Honig (2003) that for nascent entrepreneurs constant interaction with the workforce increases the entrepreneurs' diverse knowledge and entrepreneurial intelligence and leads to successful exploitation of opportunities. Table 6.2 below shows the frequency of planning with workers as was given by respondents. This also confirms the fact that one has to invest in social capital building activities if one expects to benefit from social networks.

Table 6.5: Frequency of planning with workers per year

Number of meetings per year	Male % (n=67)	Female % (n=36)	Family owned % (n=27)	Total % (n=130)
Bi-monthly	0.0	8.82	3.70	3.33
Monthly	16.95	8.82	7.41	12.5
Twice a month	0.0	0.0	3.70	0.83
Four times a month	28.81	17.65	62.97	33.33
Weekly	1.7	0.0	0.0	0.83
Twice a week	37.29	58.82	11.11	37.5
Daily	15.25	8.88	11.11	11.67

Source: survey data

In this study, it was established that while mostly male and family entrepreneurs plan with workers to tap into ideas from workers, female entrepreneurs mainly plan with workers to timeously correct mistakes within their enterprises. Female entrepreneurs are the majority of those with lower levels of education, and thereby such social planning platforms augment their shortcomings in human capital. What emerged is that entrepreneurs use intra-enterprise planning networks to set goals and vision, important hallmarks of learning institutions, and hence tap into the diverse knowledge stocks of their workforce. Figure 6.2 below is a synthesis of the benefits that accrue from planning with workers.

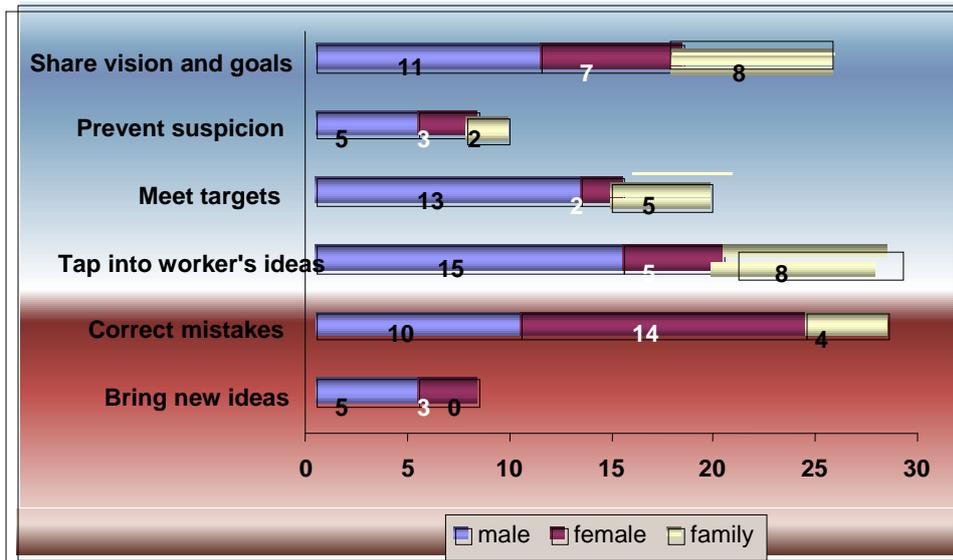


Figure 6.2: Benefits of planning with workers

Source: survey data

A synthesis of the benefits that entrepreneurs derive from planning with workers shows that the respondents also want to tap into the enclaves of workers' tacit knowledge. Mantzavinos *et al.* (2003) defined this as a collective learning process, where workers freely give feedback to the entrepreneurs. Because workers are more closely in contact with the market, they are better placed to inform the entrepreneurs how their external environment feels about the business. Such planning sessions create an environment for two-way collective learning between the entrepreneur and the workers. Besides, such participatory planning platforms assist in finding collective solutions to problems. One respondent indicated that giving workers such an opportunity helps remove suspicion about the financial position of the business, and thereby encourages trust.

The observation that most respondents plan with their workers means that efforts are made to create strong bonds within the enterprise that will facilitate cooperation to achieve the goals set, since workers will identify with and be involved in setting them. The planning platform facilitates interaction between workers and the enterprise owner, making it easier for two-way diffusion and coordination of tacit knowledge. As was also established by Nonaka *et al.* (2000), Mantzavinos *et al.* (2003), Steiner (2004) and Piergiuseppe & Giuseppina (2005) such a learning environment is key for entrepreneurs to attain and maintain a competitive edge. One respondent: 'My employees are the core of this business as they keep me informed about what is happening around us.' The importance of such a learning platform was also noted by Steiner (2004) in a study of the Austrian province of Styria's industries, where strong social networks provided social learning

platforms for knowledge generation and diffusion as well as cooperation within firms. Such established strong social networks developed within the enterprise help to fill the gap in the entrepreneurs' business knowledge, as was also confirmed by Giuliani (2005).

Planning with workers, such as was noted from the respondents, creates a psychological contract binding workers to carry out their duties with little supervision as well as preventing entrepreneurs from cheating their workers. Resources that would otherwise have been devoted to monitoring and evaluation will then be put to other productive uses in the enterprise. Planning with workers facilitates the generation of trust and adherence to contractual obligations by all parties. Such strong intra-enterprise ties “glue” the workers and entrepreneurs together, leading to smooth implementation of intra-enterprise activities. Such non-pecuniary incentives persuade workers and entrepreneurs to demonstrate organisational citizenship behaviour (Heywood *et al.*, 2005).

However, research elsewhere has also established that, in the end, benefits from strong social networks will have limited effects if a majority of the employees are relatives and friends who have the same stock of knowledge (Dasgupta, 2005, and Duke *et al.*, 2005). While such “strong” ties facilitate coordination of intra-enterprise activities, they tend to preclude entrepreneurs from accessing outside ideas. However, because most small-scale entrepreneurs do not have research and development components as part of their enterprises, such intra-enterprise social networks become very useful in facilitating knowledge sharing and diffusion.

Another indication of the role of strong social networks within the enterprises was revealed when the respondents were asked as to whom they leave in charge of business when they are away. It was shown that 53 % leave the business in the hands of a friend or relative, with 46% preferring an assistant, and 1% trusting no one, so they would rather close their businesses for that time. After cross-tabulation by gender, the results showed that 75% of the female entrepreneurs and 70% of the family-managed enterprises would rather trust their relatives and friends to run the enterprise with 64% of the male entrepreneurs opting to leave the business in the hands of an assistant. Since all the respondents are small-scale entrepreneurs, it becomes logical to leave a trusted friend or relative or alternatively an informed assistant in charge.

Table 6.6: Who takes care of the business when the owner is away?

	Male % (n=67)	Female % (n=36)	Family business % (n=27)	Total % (n=130)
Relative or friend	34.3	75	70.4	53.8
Assistant	64.2	25	29.6	46.2
Close shop	1.5			.8
Total	100	100	100	100

Source: survey data

The interpretation that can be made of the above is that a majority of the entrepreneurs rely on their strong social networks to co-ordinate activities at their enterprises. The reliance on such strong relational ties has some similarity with the Chinese business culture, which draws heavily on strong familial ties in which the family is the basic building block in business (Pun *et al.*, 2000). However, as was noted by Yamagishi *et al.* (1998), such reliance on strong familial trust and ties prevent the entrepreneurs from developing trust in other entrepreneurs beyond the confines of the family, which results in limited capacity to network and outsource capital to expand.

On the other hand, male entrepreneurs, who mostly prefer to leave their assistants in charge, are trying to reinforce workers' identification with the enterprise, given that most of them indicated that they prefer to employ anyone who has appropriate qualifications. By extending such responsibility to workers, they are developing trust that will then make it easier to coordinate enterprise activities. In the final analysis, the responses given by the entrepreneurs highlight the significance of strong social networks and sociability as important pillars for the coordination of small-scale rural non-farm enterprises. This observation surely sends a message to labour economists in terms of strategies to harness workers' productivity and the design of incentives to reduce shirking by workers.

6.5 SUMMARY

This chapter examined the role of social networks in the coordination of intra-enterprise activities by entrepreneurs in the Chimanimani district. The results show that most rural non-farm entrepreneurs employ relatives and friends to benefit from the trust inherent in such strong social networks when coordinating intra-enterprise activities. They also develop strong social bonding within their enterprises using non-financial incentives and planning with their workers

The implication is that strong social networks play a great role in the economic development of small-scale non-farm entrepreneurs by facilitating coordination of intra-enterprise activities. However, there appears to be a reliance on different aspects of social networks. This is shown by the fact that most male entrepreneurs employ anyone who qualifies and would rather trust assistants to run the enterprise when they are away, whereas most female entrepreneurs prefer to employ relatives and friends whom they also would trust to run the business when they are away. This resonates with the findings by Katungi *et al.* (2007) that a network of relatives generates trust and reduces risk aversion within an organisation. However, most respondents, irrespective of gender, use a number of social and relational networks as reinforcing motivation mechanisms to create a sense of corporate citizenry and a psychological contract between themselves and their workers.

CHAPTER 7

THE MOST IMPORTANT SOCIAL NETWORKS FOR SMALL-SCALE RURAL NON-FARM ENTERPRISE DEVELOPMENT IN THE CHIMANIMANI DISTRICT

7.1 INTRODUCTION

In the previous chapter, the role of social capital in intra-enterprise coordination was explored and it was established that rural non-farm entrepreneurs mainly use their kinship connections to mobilise start-up capital and then resort to their connections with business partners for capital to expand their enterprises. Indicative from results presented in chapter 5 is that the size of the entrepreneurs' social networks – kinship, membership of associations and contacts maintained with other entrepreneurs – is positively correlated to the ability to source and catalyse information and other resources from both inside and outside their locale for achieving economic goals. This chapter aims to isolate from the many forms of social networks maintained by the rural non-farm entrepreneurs those most important aspects of social networks for the different categories of rural non-farm entrepreneurs in the Chimanimani district.

Ever since Putnam (1993)'s motivation that the social environment of economic agents determine their economic outcomes there has been a resurgent of studies on social capital to demonstrate how social networks influence the economic outcomes of small-scale entrepreneurs (see Barr, 2000; Masuku, 2003; Mitchell 2004; Duke *et al.*, 2005; Nyangena, 2005; Sabatini, 2006; Katungi, 2006 and Katungi *et al.*, 2007). In particular, social networks are now accepted to be important life-long learning platforms through which entrepreneurs access useful information and other resources beneficial for their activities at lower transaction cost. In as much as scholars of the social networks and life long learning discourse are in agreement that entrepreneurs' social networks give economic agents the ability to perform economic functions at lower transaction cost, the social networks concept is still beset with measurement problems. At present, only proxies of social capital are used (Nyangena, 2005; Sabatini, 2006), implying that research to isolate the specifics of social capital has not grown at the same pace as the theoretical treatment of the concept (see Routledge & Amsberg, 2002; Christensen & Knudsen, 2004; Rogerson, 2004; Sabatini, 2006). It should therefore be reiterated that if social capital is to be more relevant to development policy, then robust methodologies of handling its measurement are needed.

For instance participation in farmers' group activities and farmers' associations have been found to be important social capital building platforms for smallholder farmers' adoption of new technology that improves productivity, according to studies in Kenya by Nyangena (2005) and in

Uganda by Katungi, (2006) and Katungi *et al.* (2007). An understanding of such issues is critical in the design of policy to make extension services more responsive to the needs of smallholder farmers. This makes it possible to strategically target those important social capital building platforms. For that reason, isolating the small-scale non-farm entrepreneurs' most important social networks could equally go a long way in assisting policy formulation aimed at improving their activities.

7.2 OBJECTIVES AND HYPOTHESIS TO BE TESTED

Policy makers would like to be equipped with answers to the following outstanding questions: which specific aspects of social networks and associations are critical social learning platforms for small-scale rural non-farm enterprise development? Moreover, what can be done to facilitate wider application and benefits from those specific social networks and associations for future development of rural entrepreneurial activities?

The specific objective of this chapter then is to isolate the most important social networks used by rural non-farm entrepreneurs during the various stages of enterprise development and then to suggest possible policy implications for small-scale rural non-farm enterprise development. This will be achieved by use of the Principal Component Analysis (PCA) model and a two-way Analysis of Variance (two-way ANOVA) technique to isolate the principal social capital for the different categories of non-farm entrepreneurs in the Chimanimani district.

The study hypothesised that whereas small-scale rural non-farm entrepreneurs maintain membership of many social networks and associational activities, there are a few particularly important aspects of social networks for the various stages of enterprise development. This will be tested in this chapter, using the Principal Component Analysis model to isolate those few especially important social networks from the myriad social networking activities maintained by the entrepreneurs.

This chapter is organised as follows. Section 7.3 briefly discusses the conceptual framework within which the social networks and economic-development debate is presented. Section 7.4 presents the descriptive statistics of the social capital variables used in the study. Section 7.5 then introduces and specifies the Principal Component Analysis model, and section 7.6 presents the results of this analysis. Section 7.7 discusses these findings and presents the results of the two-way ANOVA to establish the level of significance of the most important social network aspects and the enterprises' values. Finally, section 7.8 provides a summary of the chapter.

7.3 SOCIAL NETWORKS AND ECONOMIC GROWTH NEXUS

Social networks are generally understood to produce beneficial outcomes for individuals connected to and actively involved in them (Coleman, 1988 and 1990; Putnam, 1993; Lin, 2000 Dasgupta, 2005). Social networks literature reveals that those entrepreneurs with many social connections, and who maintain membership of associations and mutual groups, achieve greater economic outcomes from their enterprises. Underpinning this line of thought is that entrepreneurs will have to actively engage in searching out new networks and participating in their activities as well as maintaining old ones. It could be argued that entrepreneurs resort to and maintain social networks due to inherent failures in market institutions. It is only when market institutions improve their operations that entrepreneurs will reduce their use of social networks.

Reminiscent of the social networks debate is that networks in which economic agents maintain membership operate at two levels. At one level are networks within homogeneously related people – strong relational ties according to Lin (1992) – that facilitate the development of high levels of trust. On the other hand, there are what Granovetter (1973) called “weak” ties between loosely connected heterogeneous members who come together for context-specific purposes. Other scholars have described these as bridging networks, structural holes or linking networks. The major contribution of these networks is that they are sources of useful, rich and diverse information for members.

Katungi (2006) and Katungi *et al.* (2007) established that small-scale banana farmers in Uganda who participate in group activities are better placed to adopt production-improving technology. Isham (1998) showed the same with respect to technology adoption by smallholder farmers in Tanzania. In the same line, Barr (2000) established that social networks are important conduits of information needed by small-scale manufacturing entrepreneurs in Ghana. In that sense, economic agents always revert to their social environment for information and other resources requisite for improved economic activities. Nonaka *et al.* (2000) argued that even when given the same bundle of resources, those economic agents with more social networks are likely to realise more value from the same bundle of resources than those with less. It is within this context that lifelong learning of economic agents is fast becoming an interesting subject of research to establish and isolate those social learning platforms.

The underpinning point in the social networks and social learning arguments is that social capital appreciates with use and becomes redundant if not frequently used. For that reason entrepreneurs invest time, commitment and other resources to maintain their networks. They therefore actively

involve themselves in the activities of the networks, participate in decision-making and meet regularly to maintain contacts. In the final analysis, economic agents, including small-scale entrepreneurs, end up maintaining a myriad of diverse social networks and engaging in diverse social activities to build social capital. It could be suspected that while there are many social networks and association activities from which entrepreneurs draw social capital there are some social networks and social activities that are principal for entrepreneurs' economic development. A critical review of the diverse social capital proxies used currently leaves unanswered the question as to which aspects of social networks account for the most variance between the entrepreneurs.

7.4 DESCRIPTIVE STATISTICS OF THE SOCIAL CAPITAL INDICATORS

This chapter makes use of the data collected on various aspects of social networks – membership of various associations and participation in their activities, membership of voluntary groups as well as connections maintained by the sampled entrepreneurs. The data was collected using a modified World Bank Social Capital Initiative's social capital assessment tool, which was administered to 130 small-scale rural non-farm enterprises. The data collected was enriched by reviewing economic profiles of the district as well as reports from the major economic development stakeholders in the district. Specifically, this chapter analyses data on the following: membership of associations; trust within the associations; time spent per month in the activities of the associations; origin of members; whether the members are active in decision-making; number of contacts with other entrepreneurs; contacts with entrepreneurs in similar and different lines of business; contacts with entrepreneurs outside the district; contacts with bankers and civil servants and the value of the enterprise. More about how the data was collected can be found in chapter three. By and large, the data was enhanced by observations and discussions with the entrepreneurs with respect to the role of networking and associational engagements.

Admittedly so, it should be acknowledged and affirmed that within the data collected there are a myriad relationships, which makes interpretation using simple techniques a difficult task. For instance, a large percentage of the respondents are members of religious associations, with a few being members of professional associations. There is a high level of trust amongst the members of religious associations, though the trust level is lower amongst members of financial associations. Another interesting aspect of social capital is that of being active in decision-making in group activities. Table 7.1 below provides the various social capital variables to be analyzed in this chapter.

Table 7.1: Descriptive statistics of the social capital indicators used

Variable	Owner		
	Male	Female	Family
Religious association. Yes =1 No=0	0.82	0.97	0.85
Trust members in religious assoc. Yes =1 No=0	0.98	1.00	1.00
Average time spent per month. Hours	10.7	11.7	14.4
Active in decision-making. Yes=1. No=0	0.52	0.88	0.91
Origin of members. Inside=1. Outside=0	0.69	0.94	0.81
Financial association Yes =1 No=0	0.88	1.00	1.00
Trust members in financial assoc Yes =1 No=0	0.78	0.57	1.00
Average time spent per month Hours	1.95	1.20	1.40
Active in decision-making Yes =1 No=0	0.78	0.43	1.00
Origin of members Inside=1. Outside=0	0.73	0.97	0.89
Social association Yes =1 No=0	0.88	0.74	0.70
Trust members in social assoc. Yes =1 No=0	0.98	0.96	1.00
Average time spent per month Hours	10.83	6.35	11.95
Active in decision-making Yes =1 No=0	1.00	1.00	1.00
Origin of members Inside=1. Outside=0	0.85	0.96	0.84
Professional association Yes =1 No=0	0.25	0.09	0.33
Trust members in professional assoc Yes =1 No=0	1.00	1.00	1.00
Average time spent per month Hours	4.76	2.30	3.55
Active in decision-making Yes =1 No=0	1.00	1.00	1.00
Origin of members Inside=1. Outside=0	0.29	0.33	0.22
Production association Yes =1 No=0	0.25	0.49	0.26
Trust members in production assoc Yes =1 No=0	1.00	1.00	1.00
Average time spent per month Hours	2.35	1.00	3.71
Active in decision-making Yes =1 No=0	1.00	1.00	1.00
Origin of members Inside=1. Outside=0	0.76	1.00	0.57
Government initiated association Yes =1 No=0	0.59	0.63	0.30
Trust members in government initiated assoc Yes =1 No=0	0.83	1.00	1.00
Average time spent per month Hours	2.13	1.23	1.50
Active in decision-making Yes =1 No=0	0.73	1.00	1.00
Origin of members Inside=1. Outside=0	1.00	1.00	1.00
Contacts with other entrepreneurs (average number)	12.80	8.50	12.7
With entrepreneurs in similar business (average number)	7.90	6.70	7.85
With entrepreneurs in different line of business (average number)	5.50	3.10	5.30
With entrepreneurs outside the district (average number)	5.10	2.40	6.30
With bankers (average number)	2.30	1.78	2.90
With civil servants (average number)	3.06	3.83	1.59

Source: survey data

The figures given in Table 7.1 above show some level of variability with respect to the number of contacts maintained between the various entrepreneurs. A quick look at the descriptive statistics in the table shows that there is high level of participation in networking activities by the entrepreneurs. However, there is variability in terms of contacts maintained with other entrepreneurs, with male entrepreneurs having most contacts with other entrepreneurs outside the district. Female entrepreneurs have most contacts with similar entrepreneurs when compared to male and family entrepreneurs. Holding other things constant, trying to find an explanation for enterprise value differences between the respondents becomes a challenge. This has been a major criticism of the social capital and economic development discourse. As such, trying to establish which of these social networks are especially important for the various stages of enterprise development becomes a difficult task, as at face value the variables look to be the same.

Even when a one-tailed Pearson correlation coefficient test was run to test the level of statistical significance between contacts maintained and enterprise value it shows a high level of statistical significance. All variables were statistically significant at 1% level except for contacts with civil servants. So, to isolate the most important aspects of social networks in the development of rural non-farm enterprises for policy purposes becomes very difficult. For that reason there is a need to employ robust techniques that isolate those few aspects of social networks that can be used to account for the major variability within the entrepreneurs' activities. Such multidimensionality of the social network proxies has led some researchers to doubt the efficacy of social capital as a research enterprise. The correlation results are shown in Table 7.2 below and coming up with meaningful interpretation from such results is difficult.

Table 7.2: Contacts maintained and enterprise value correlation

	Enterprise value	Contacts with other enterprises	Contacts with entrepreneurs in same line of business	Contacts with entrepreneurs in different line of business	Contacts with entrepreneurs outside your area	Contacts with bankers	Contacts with civil servants
Enterprise value	1						
Contacts with other enterprises	.578**	1					
Contacts with entrepreneurs in same line of business	.418**	.699**	1				
Contacts with entrepreneurs in different line of business	.423**	.581**	.484**	1			
Contacts with entrepreneurs outside your area	.532**	.824**	.546**	.566**	1		
Contacts with bankers	.578**	.655**	.533**	.546**	.654**	1	
Contacts with civil servants	.089	.372**	.408**	.121	.188*	.071	1

Pearson Correlation (1-tailed). ** Correlation is significant at the 0.01 level).

Source: survey data

7.5 BASIC ANALYTICS OF THE PRINCIPAL COMPONENT ANALYSIS MODEL

For that reason the Principal Component Analysis model was adopted to try to reduce the multidimensional nature of the social networks and reduce the variables to a small number that makes interpretation possible. The Principal Component Analysis technique was used as it has the potential to reduce the problems inherent in such a data set. This model is fast becoming a popular and standard technique and has found wide application in social capital research (Grootaert, 1999; Nyangena, 2005; Katungi, 2006; Sabatini, 2006). The technique is concerned with explaining the variance co-variance structure of a set of variables through a few linear combinations of the variables (Johnson & Wichern, 2002). The general objectives of the

technique are data reduction, thereby offering opportunities for further deeper interpretation. It was for this reason that the technique was selected with the aim of identifying underlying non-observable structures between the various aspects of social networks which are of particular interest, such as membership of associations and contacts, time committed to the activities of such associations and diversity of members. On the other hand, the technique enabled reduction of the multidimensionality within the original dataset into a smaller set of uncorrelated variables that are easier to understand and use for further analysis.

The Principal Component Analysis technique seeks to identify a few uncorrelated linear combinations of the original variables that capture most of the information in a total population. The premises is that within a large dataset it is possible to account for the variability of most p components by a smaller number k of the principal components that have as much information as in the original variables.

Algebraically, principal components are particular linear combinations of the random \mathbf{p} variables $X_1, X_2, X_3, \dots, X_p$. The principal components are those uncorrelated linear combinations $X_1, X_2, X_3, \dots, X_p$ whose variances are as large as possible.

The first principal component = the linear combination \mathbf{a}' that maximises

$$\text{Var} (\mathbf{a}'\mathbf{1X}) \text{ subject to } \mathbf{a}'\mathbf{1a}=1$$

The second principal component = linear combination $\mathbf{a}'_2\mathbf{X}$ that maximises

$$\text{Var} (\mathbf{a}'_2\mathbf{X}) \text{ subject to } \mathbf{a}'_2\mathbf{a}_2=1 \text{ and}$$

$$\text{Cov} (\mathbf{a}'_1\mathbf{X}, \mathbf{a}'_2\mathbf{X})=0$$

The i th principal component = linear combination $\mathbf{a}_i'\mathbf{X}$ that maximises

$$\text{Var} (\mathbf{a}_i'\mathbf{X}) \text{ subject to } \mathbf{a}_i'\mathbf{a}_i=1 \text{ and}$$

$$\text{Cov} (\mathbf{a}_i'\mathbf{X}, \mathbf{a}_k'\mathbf{X}) = 0 \text{ for } k \text{ being smaller than } i$$

The above procedure was then performed on the dataset. The operation was made easy by the use of the STATA computer programme. The first few components however usually account for most of the variations in the dataset's variables and in this case, these first few attracted the study's interest. The critical statistics of the Principal Component Analysis are the loadings or vectors $\mathbf{a} = (\mathbf{a}_1, \mathbf{a}_2, \dots, \mathbf{a}_p)$ associated with each principal component and its associated eigenvalue or variance. Whereas the pattern of the eigenvectors for a principal component aids in interpreting the principal component, the eigenvalues provide an indication of how well they account for the variability in the dataset for their relative sizes are indicative of the relative contribution of the variable to the variance of the principal component.

7.6 ISOLATING THE PRINCIPAL COMPONENTS

After computing the data, the next challenge was to decide how many components to retain, since in literature on the Principal Component Analysis technique this is yet to be resolved. While there is no definite answer yet, issues to be considered include the amount of total sample variance explained; the relative sizes of the eigenvalues and of course the subject matter interpretations of the components (Johnson & Wichern, 2002). A component with eigenvalue near to zero is dropped as it indicates an unsuspected linear dependency in the dataset. The Kaiser Principle is commonly used, which states that only values with eigenvalues greater than 1 are to be retained (Johnson & Wichern, 2002). A scree plot was thus used to determine the number of principal components to be retained by ordering the eigenvalues from the largest to the smallest versus its number. The cut-off point of the number of the components to be considered according to this formula is where the scree plot bends into an elbow such that the remaining eigenvalues are relatively small and almost the same (Johnson & Wichern, 2002). To demonstrate this procedure the eigenvalues and their numbers were then plotted on a scree plot as shown in Figure 7.1 below.

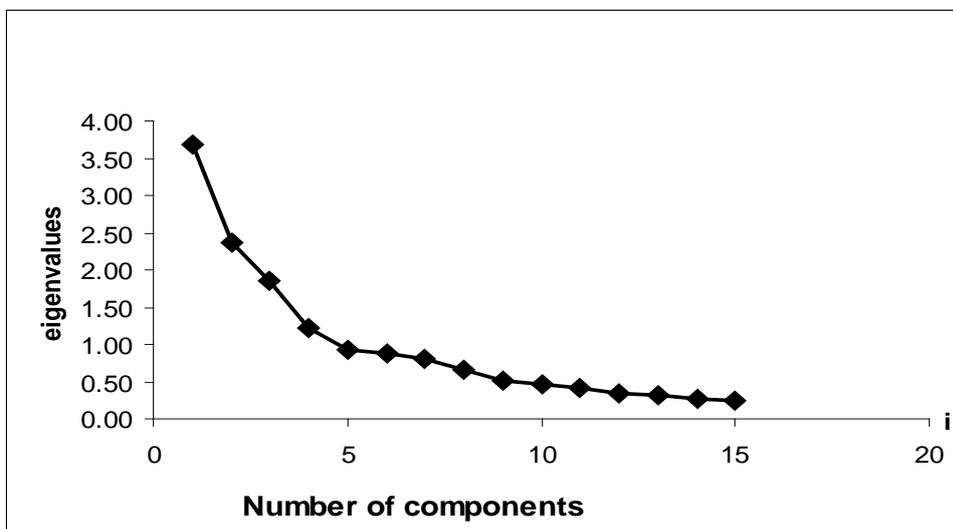


Figure 7.1: The scree plot results

Source: survey data

From the 1st to the 4th components there is a marked difference, but from the 5th to the 15th components there is not much difference, hence the cut-off point of the principal components was determined at the fourth component as the remaining ones are relatively small and about the same size. According to Johnson & Wichern, (2002), there being no other evidence, these four principal components can effectively account for most of the sample variance and as such these are the ones to be concentrated on in the analysis of the social networks. Table 7.2 below shows

the principal components and their respective eigenvalues and variance percentage explained by each component as derived from the scree plot.

The four selected principal components in Table 7.2 cumulatively explain 60.97% of the sample components' variance (with the first principal component explaining 24.58%, the second one 15.75%, the third one 12.43% and the fourth one 8.21% of the sample variance respectively). In a study of social capital and institutions in Kenya, Nyangena (2005)'s four principal components accounted for 38% of the variations in the original sample of 19 variables. Therefore, this study's 4 components explaining 60.97% of the variance in the dataset is largely quite in place. What remained then was to identify what aspects of the social capital proxies make up these principal components.

Table 7.3: Results from the principal component analysis

Components	Eigenvalues	Variance %	Cumulative variance explained %
1	3.69	24.58	24.58
2	2.36	15.75	40.33
3	1.87	12.43	52.76
4	1.23	8.21	60.97

Source: survey data

Besides offering opportunity for deeper explanation of variability in the sample data set, the four principal components have also reduced the dimensionality of the variables in the original data set to only four, which still explain 60.97% of all the variation in the original variables. Table 7.3 below presents the results of the retained eigenvectors, which were then used to construct the four principal components. Having isolated the principal components, the next stage is to label them to allow further analysis. This was done after considering their loadings.

Table 7.4: Loadings of the first four principal components

Variables	Components			
	1	2	3	4
Active in decision making in a financial association	0.336	-0.588	0.180	0.245
Time spent in financial association activities	0.405	-0.298	0.087	0.649
Active in decision making in a government association	0.075	0.812	0.034	0.187
Time spent in production association activities	0.384	0.256	-0.166	-0.465
Time spent in professional association activities	0.583	-0.115	-0.174	-0.208
Active in decision making in religious association	0.299	0.253	0.754	-0.080
Time spent in religious association activities	0.398	0.130	0.679	-0.284
Time spent in social association activities	0.283	-0.174	-0.584	-0.120
Number of contacts with bank officials	0.814	-0.164	-0.112	0.131
Number of contacts with other entrepreneurs in general	0.232	0.734	-0.033	0.077
Number of contacts with entrepreneurs in different line of business	0.704	-0.002	-0.296	-0.008
Number of contacts with entrepreneurs outside area	0.781	0.002	-0.171	-0.058
Number of contacts with similar entrepreneurs	0.742	0.367	-0.074	0.023
Time spent in government association activities	-0.078	0.558	-0.176	0.554
Membership of financial association	0.459	-0.257	0.477	0.139

Note: Bolded figures are the high loads from the considered variables that were then considered in building the principal components

Source: survey data

7.7 THE MOST IMPORTANT SOCIAL NETWORKS FOR RURAL NON-FARM ENTREPRENEURS IN THE CHIMANIMANI DISTRICT

The most important aspects of the rural non-farm entrepreneurs' social networks has high loadings on the number of personal contacts with bank officials, number of contacts with entrepreneurs outside the area, number of contacts with similar entrepreneurs and number of contacts with entrepreneurs in a different line of business, in that order. This factor was therefore termed "personal contacts maintained" (**component 1**).

The second most important component of the rural non-farm entrepreneurs was their participation in association activities, (**component 2**) as it has high loadings on being active in decision-making in association activities. Also related to these are the aspects of having contacts with other entrepreneurs and time spent in government association activities, which also have high loadings.

The third most important aspect of the rural non-farm entrepreneurs' social networks was socialization (**component 3**) and has high loadings on time spent in religious and social association activities. Equally related to this is the high loading on being active in decision-making in religious associations, and membership of financial associations.

The fourth most important component was therefore termed commitment to mutual groups' activities (**component 4**) as shown by high factor loadings on time spent in financial, governmental and production associations' activities. With respect to some of the government associations, it is interesting to note that these were associations initiated by the local government with the help of some donors to establish a woodwork incubator and a number of female entrepreneurs doing craftwork. These were government-initiated associations meant to nurture entrepreneurs in the carpentry and joinery and craftwork businesses.

Having used the Principal Component Analysis technique to successfully reduce the number of explanatory variables from the original data set to four, it is now easier to interpret the results in a more meaningful way such that with these few variables deeper analysis of the subject matter can be made.

7.7.1 Personal contacts maintained (Bridging social networks: Component 1)

The most important component accounting for 24.58% of the variability within the entrepreneurs – personal contacts – has high loadings on number of contacts with bank officials, number of contacts with entrepreneurs outside the area, number of contacts with similar entrepreneurs and number of contacts with different entrepreneurs. The importance of personal contacts to rural non-farm entrepreneurs is with respect to availing useful information and other resources from heterogeneous sources.

It is necessary now to understand the story behind why membership of such networks is important to the entrepreneurs. As shown in Table 7.1, more male and family entrepreneurs are members of professional associations than female entrepreneurs are. On the other hand, female entrepreneurs tend to maintain more networks with similar entrepreneurs than either male or family entrepreneurs. It was established that male and family entrepreneurs have more contacts with entrepreneurs outside the district and even with entrepreneurs in other lines of businesses than female entrepreneurs. Over and above that, male and family entrepreneurs have more contacts with bank officials than female entrepreneurs. Such background perhaps makes it easier to discuss the importance of personal networks that were shown to be an important conduit of social capital resource for the entrepreneurs in the study.

Such findings refute the fallacy that access to financial capital alone is all that differentiates successful businesses from less successful ones. As was also established in the previous chapters, very few entrepreneurs got loans from banks to capitalise their enterprises. However, personal contacts with bank officials ensure that the entrepreneurs have more information and advice to

manage their own financial resources as well as more business information. Personal contacts become crucial to rural non-farm entrepreneurs in the study for a number of reasons. The Chimanimani district does not have an urban centre close by and available information about business is more theoretical than practical. It is little wonder that heterogeneous networks become handy for the entrepreneurs. This should also be viewed in the perspective that most of their enterprises are small in terms of their scale of operations.

A case worth noting relating to this aspect of social networks, is that of the son of one prominent entrepreneur in the district who was just over 25 years of age but had been exposed to business world after having worked for his father for more than ten years. He used to do the orders for his father's shops, from which he developed contacts with wholesalers as well as other established entrepreneurs. He has been elected as the representative of the district's youth at the district council. He indicated that it was from such membership that he has developed many contacts, such that at the time of the survey he had acquired a franchise with the Lucky 7 group of supermarkets. When asked about the benefits from such networks he indicated that although they are time-consuming in terms of attending meetings, he does not regret this. He said he knew the right persons at wholesalers who will assist him in getting orders by just making a phone call. Furthermore, he does not have to spend a lot of time queuing at the local few banking halls to withdraw or deposit money as he can just call the bank managers about his requests before getting to the bank. Being a board member of the Business Trust, he has the chance to network with entrepreneurs in different lines of business. He maintains that although working in his father's businesses has helped him a lot in terms of knowing how to run a business, to him the greatest benefits were in being exposed to the business culture of networking.

Whereas a study of rural households in Kenya, by Nyangena (2005) identified membership of associations as the most important principal component, in this study personal networks are found to be important conduits of knowledge for the entrepreneurs. The significance of heterogeneous networks lies in their being channels of tried and tested non-redundant and context-specific information for rural non-farm entrepreneurs. This is particularly so for rural non-farm entrepreneurs who do not have access to alternative channels of information. The non-farm entrepreneurs are a special case, as they are not like their farming counterparts who have access to extension services.

Rural non-farm entrepreneurs operate in a business environment characterised by high levels of uncertainty, such that personal networks become particularly important for opening doors to information on new clients and business opportunities as well as offering information on tried and

tested strategies. As De Klerk & Havenga (undated) would argue, entrepreneurs rely on their social networks when navigating through complex and dynamic social relations to advance the commercial interests of their businesses. Sabatini (2006) established that such linking and bridging networks also improve economic agents' human capital, also known as entrepreneurial intelligence. It is therefore not surprising that networking with entrepreneurs outside the district and those in different lines of businesses are seen as a very important aspect of social networks, because members access diverse, practical and rich business information.

A case noted in this study was that some female entrepreneurs in the craftwork business have networked with a Japanese tourist who has since been assisting in marketing their craftwork. Because of this relationship, they are able to get large orders and new designs specification that they would not otherwise have dreamt of before. One of the female entrepreneurs summed it up by saying that the Japanese had opened their eyes.

Entrepreneurs with a great number of personal networks have more access to information about existing, reliable and trustworthy trading partners and even potential trading partners (Bezemer *et al.*, 2004). Besides the need for information about whom to sell their small volumes of outputs to, these small-scale entrepreneurs also need reliable and less costly information on where to purchase inputs and who to engage in their enterprises. In such cases personal networks enhance the collective capacity of network members, which also leads to them accessing useful information at a lower cost.

While it is true that transaction costs are to be incurred in maintaining such personal networks, surely networks provide diverse information to the entrepreneurs at a lower transaction cost, as Bezemer *et al.*, (2004) argued. From their personal bilateral networks, entrepreneurs also get access to tacit knowledge as well as highly specialised context-specific knowledge from their peers that is easier to apply to their enterprises contexts. However, while networks in general could contribute to business success for the entrepreneurs in the study, research elsewhere shows that in most sub-Saharan African countries entrepreneurs still find difficulties in establishing and maintaining business networks that function effectively (De Klerk & Havenga, undated). This leads to a lack of diverse heterogeneous networks, which keeps them out of the spiral of information, assistance, stimulation of innovation and new technology that are critical for business improvement. The conclusion that can be drawn is that bridging social networks in the form of personal bilateral connections are crucial social capital conduits for rural non-farm entrepreneurs, as they proffer useful context-specific information.

7.7.2 Participation in social association activities (Bonding social networks: Component 2)

Participation in the activities of social association activities accounted for 15.75% of the variability within the enterprise activities. Whereas most social capital literature assumes that being a member of an association automatically results in members capturing benefits from the association, results here suggest a new dimension with respect to association dynamics, notably that being active in decision-making is very important to members if they are to reap benefits from the resultant social capital.

Government associations mentioned by the respondents are on two levels. On one level are loose associations initiated by the district council with assistance from some donors to train entrepreneurs in carpentry and joinery. This resulted in the establishment of a woodwork training facility where the trainees spend some time getting instruction and a number of equipped incubator workshops where the graduate trainees will be housed to practice as fully independent entrepreneurs. On the other hand, was an association of female entrepreneurs in craftwork. They have organised themselves into an association that lobbies for training and resources from some non-governmental organisations and central government ministries.

The graduates at the woodwork workshop frequently meet to discuss business-related issues. The issues range between discussing prices, sharing ideas on how to maintain equipment, bulk buying of timber as well as safety issues. At the time of the survey, six of them were working jointly on a bulk order given to them by a non-governmental organisation to supply desks to some schools in the district. When asked about the selection process of those who were to participate in the deal, the team leader indicated that selection was based on commitment to group meetings. Those who were seen not to be committed to group meetings were left out for fear that they might compromise meeting of the deadline for completing the job. This was equally the same for female entrepreneurs; although they produce the crafts individually, they also meet to discuss pricing, standards and quality when working on a joint order. They have contributed resources to build some craft shops, where they take turns to sell the crafts.

The main financial association operational in the district is the Chimanimani Business Trust, which besides assisting entrepreneurs in the district with information, also mobilises financial resources which members access as loans. Membership of the Trust is backed by a compulsory membership fee and voluntary contributions to a revolving fund. Members are supposed to attend meetings, which are normally held at the beginning of the year, at midyear and at the end of the year. The decision as to who should be given funds amongst those who have applied is based on

records of their attendance at meetings, being paid-up members, as well as the amount applied for, considering the availability of funds in the Trust's account.

From this one can understand why being active in decision-making in associations is important for the entrepreneurs. Given such scenarios, members stand to benefit indeed if they are actively involved in setting the agenda and direction of the associations. Members stand to benefit because by being actively involved in the decision-making process of the association they make it easier for collective monitoring and enforcement of values and standards amongst themselves. Collective action and trust generation among association members seems to be high. Participation in the decision-making of financial associations is a way of monitoring the activities of the association as well as dispelling rumours of misuse of financial resources. It is also interesting to note that the main financial association mentioned is also engaged in training and information sharing besides mobilising financial resources for its members. In this light, being active in decision-making ensures that the association responds to the needs of members.

The results are also close to the findings by Grootaert (1999) that locally initiated associations are characterised by a higher degree of active participation by members in the decision-making process. In other words, such associations become more responsive to the needs and aspirations of the members, as members decide on the direction of the associations. Johnson *et al.* (2002) established that wood-processing entrepreneurs appear to benefit more from entrepreneurs in the same line of business than from the general business community.

A closer look at the associations shows that members are more or less homogeneous with respect to activities they are engaged in and to geographical location, resulting in them benefiting from such homogeneous networks (Chiffolleau *et al.*, 2006). In such solidarity networks, there is mutual sharing of information within a line of business, which is of paramount importance to small-scale rural-non-farm entrepreneurs given the high level of uncertainty in which they find themselves operating. Such solidarity networks also reduce factors that create uncertainty, which tends to undermine the efficiency of entrepreneurs.

Viewed from a different angle, members who are actively involved in the decision-making processes of an association will find it easier to coordinate associational activities, since these create strong elements of trust and social cohesion. This is particularly so given that most of the associations' members are more or less homogenous. In the final analysis, the results concur with what was established by Grootaert (1999)'s bonding social networks in that participation in the

decision-making processes of associations benefits members, as they are directly involved in setting the agenda of the associations in line with their expected benefits.

7.7.3 Socialization (Strong ties: Component 3)

The third important component is that of socialization mainly in religious associations and social clubs like sport and women's clubs. This component accounts for 12.43% of the variance in the dataset. It is also quite interesting to note that female and family-owned enterprise members have greater membership of religious associations than male entrepreneurs do, though male entrepreneurs dominate membership of social associations.

By virtue of being involved in social activities, an entrepreneur can benefit from information spillover that extends beyond social activities to other spheres like production and marketing of their enterprise products. Such social associations are also places where values and trust are inculcated in the members. A case in point is that some of the female entrepreneurs indicated that after church services they meet as women in what they call *Ruwadzano*, a Shona word literally meaning "we are united as one", to share information concerning many aspects of their lives including their enterprises. Such associations instil shared values and norms amongst members making it almost impossible for members to engage in uncooperative business practices. Those who do not attend church services regularly definitely miss out on some important business information.

These social associations, though not created specifically for economic gains, serve as important platforms where entrepreneurs get feedback on their entrepreneurial activities, since members informally and openly discuss their activities. Social activities like sport are also places where potential workers and business partners could be matched. It is also most likely that bonding and team building between members of an enterprise can be easily achieved which can then be carried over to the enterprises' activities. In addition, by actively partaking in social activities, entrepreneurs become visible to members of the community who are also the market for their products.

7.7.4 Commitment to mutual group activities (Bonding social networks: Component 4)

This last principal component, commitment to mutual group activities, accounts for 8.21% of the variance in the dataset and has high loadings for time spent on activities in government, financial and production associations. This concurs with the general observation in social capital literature, where social capital appreciates with use and depreciates with disuse. Members have to actively

invest in association activities in terms of time and even resources, otherwise they will be cut off from the group and its benefits.

Membership of these associations has to be maintained by annual subscriptions and attendance at meetings. Those who attend meetings are informed of association activities and benefits. One of the members of a financial association summed it up quite accurately by quoting a local Shona adage – *mbira yakashaya muswe ngekutumira* – translated as “the rock rabbit failed to get a tail because it sent someone to get it on its behalf.” She was referring to association members who have a tendency of asking for feedback from others who have attended meetings.

At the end of the day, actively investing one’s time in association activities is seen as investing in the association in anticipation of reaping future benefits from the created social capital. This has also been associated with an increase in possible trading opportunities, as observed by Bezemer *et al.*, (2004). Johnson *et al.*, (2002) also established that entrepreneurs who belong to more groups and associations and spend time in associational activities are more likely to obtain and use social capital than those who do not. This is particularly so with respect to the associations in question, where time spent in the associations’ activities will lead to high levels of trust among members, which also translates into high potential for collective action.

7.8 ASSOCIATIONS MAINTAINED AND ENTERPRISE MEAN ASSET VALUE RELATIONSHIP

Entrepreneurs’ bilateral contacts, being active in decision making of associations, socialisation and commitment to associational activities were isolated by the Principal Component Analysis technique as being the important social networks aspects for the development of rural non-farm enterprises. Further, a two-way ANOVA analysis was done to test whether the isolated social networks can be associated with significant differences in mean value of the businesses run by the different respondents. It should be noted the decision to select a two-way ANOVA was mainly due to its robustness in handling the data than any other theory behind the decision. Table 7.5 below shows the Analysis for Variance between the most important social network aspects and enterprises value.

Table 7.5: ANOVA of most important social networks and enterprise values

	Sig.
Contact with bankers	0.05
Contact with enterprises outside area	0.05
Contact with entrepreneurs in different line of business	0.002
Contact with same line enterprises	0.003
Contacts with other entrepreneurs	0.05
Time spent in government initiated association	0.027
Active in decision-making in religious association	0.052
Membership of financial association	0.018
Time spent in production association activities	0.033

Source: survey data

The results show that the aspects of social networks that have been isolated, such as contacts maintained with other entrepreneurs whether in same line of business or with others outside the district and membership of associations, as well as participation in group activities, are highly significant in explaining the differences in mean enterprise values for the different respondents. The results further reinforce the research findings from chapter 5 that established that the average asset value of the enterprises differed according to the gender of the respondents (the family enterprises having the highest mean enterprise value followed by male-owned enterprises, with female-owned enterprises lowest in value).

The results imply that it is not enough just to be a member of social networks but that there is a need to commit time and to be involved in social networking activities, as this is associated with an increase in mean enterprise value. The explanation could be that such association activities ensure access to beneficial conduits of important resources and to information critical for achieving economic goals. The other explanation can be seen in the types of enterprises in the study. Most female entrepreneurs are in craftwork activities that depend on the tourism variability, whereas male and family entrepreneurs dominate enterprises such as carpentry that require timely information.

Increased membership of associations and having more contacts were associated with a high mean value of the enterprise, because entrepreneurs are thereby strategically positioned to access the information and resources needed in the various stages of rural non-farm enterprise

development. This is particularly so in a rural setting, where sources of information and other resources are mainly derived from one's social networks. The results also confirm the findings from the previous chapters, where social networks were found to be crucial not just for access to start-up and expansion capital but also for the coordination of intra-enterprise activities. The anecdotes narrated, showing how that the entrepreneurs value participation in associational activities, equally validate this significance of membership of associations and networks.

There are some inherent gender dimensions to this, as female entrepreneurs were reported to have fewer contacts as well as membership of fewer associations and were running lower value enterprises. Caution should be taken, however in encouraging entrepreneurs to join simply any association, as this might militate against the economic development of their enterprises, as much productive time and human labour will be spent attending meetings besides the need to pay membership fees. As such, there is a need to balance the long-term benefits of such associations and the costs that will be incurred. What cannot be disputed is that such associations are developed to fill in the void created by lack of properly functioning formal resources markets. The Principal Component Analysis model and the two-way ANOVA established the most important aspects of social networks needed in the various stages of enterprise development in rural areas. However, what can also be deduced is that there are differences in terms of membership and participation in social networks between male and female entrepreneurs, which also ripple through to the differences in mean enterprise values. This has important implications for policy directions with respect supporting rural non-farm entrepreneurs.

7.9 SUMMARY

This chapter has isolated the most important social networks used in the various stages of rural non-farm enterprise development in the Zimbabwean context. Through the application of the Principal Component model and the two-way ANOVA tool, the chapter has managed to isolate the most critical social learning platforms that could be categorized as bridging social networks and bonding social networks that accounted for 60% of variability among the entrepreneurs. The results have an important bearing on the design of rural enterprise development programmes. This is of great importance given that the development of literature on social capital has paid more attention to what it does, with less emphasis on which specific aspects of social capital are important. The results of the ANOVA analysis further buttressed the importance of the principal social capital platforms used by rural non-farm entrepreneurs in the study. Finally, the importance of the isolated social capital components found to be significant in the development of rural non-farm enterprises in the study area could also be tested in other regions.

CHAPTER 8

CONCLUSIONS, POLICY IMPLICATIONS AND AREAS FOR FURTHER INVESTIGATION

8.1 SUMMARY

Social capital is a multifaceted and multidimensional concept and has been approached from different angles. There is a general consensus among researchers from diverse disciplines that social capital comes from relational engagements, social structures within which members are involved and from which members, by virtue of being actively involved in social associations and structures, derive benefits to achieve certain goals. For this study, social networks were settled for as a proxy for social capital. Literature also shows that social networks are productive assets, though not completely tangible and specific to certain activities and contexts.

Despite the definitional problems that still riddle the concept, social capital has been widely applied to the investigation of various socio-economic phenomena that have previously eluded the explanatory powers of conventional economic theories. As a measure of social capital, associational activities, networks and relational ties were mainly used, as these have also been applied in similar studies elsewhere. However, it is important to point out categorically that social capital is context specific, and varies with respect to time, place and who is using it.

It is also important to highlight that the conceptual framework was derived from reviewed literature on large-scale urban-based enterprises as well as from on-farm based firms. The rationale was to develop a framework to guide this exploratory study, as there are currently no such investigations specifically in Zimbabwe from which to draw parallel conclusions. It was also considered from a lexical point of view that it is possible to apply social capital to the outcomes of rural non-farm enterprises, given the rural context in which they are operating, where they have limited interaction with formal market institutions.

While the broad aim of the study was to investigate the role of social capital in the economic development of rural non-farm enterprises using a study of 130 rural non-farm entrepreneurs from the Chimanimani district in Zimbabwe, the specific objectives of the study were to establish:

- The role of social capital in the establishment and expansion of rural non-farm enterprises;
- The role of social networks in the organisation and coordination of intra-enterprise

activities;

- The most important social network aspects used in the various stages of rural non-farm enterprise development; and then to suggest possible policy implications for general entrepreneurship support programmes and what could be done to facilitate wider application of social capital for the benefit of rural entrepreneurs' development.

The study established that there are some differences between the different categories of entrepreneurs – male, female and family – with respect to the use of different aspects of the social network. It also established that there are some different kinds of social networks used by rural non-farm entrepreneurs when compared to the widely documented urban-based entrepreneurs' social networks.

The study was carried out over a period of more than six months, as different data collection techniques were used. Research assistants from the study area were trained on how to collect the data. The questionnaires were pre-tested before the final data collection process. A modified social capital assessment tool designed by the World Bank Social Capital Initiative was used as the major tool. However, because it is rather long, it was therefore modified into a shorter version that was easier to administer to the respondents. This was followed by a questionnaire capturing the biographical details of the respondents, which also served as a guide to the discussion with the entrepreneurs as to their historical background and various aspects of entrepreneurship. The different tools captured both qualitative and quantitative data.

For the analysis, a combination of techniques was employed to handle the qualitative and quantitative data. The statistical results were corroborated by the qualitative results from discussions and observations made. Descriptive statistics were mainly analysed by the SPSS package. The STATA programme was also used to handle the Principal Component Analysis model that was applied to isolate the most important social capital aspects for the rural non-farm entrepreneurs. A two-way analysis of variance (ANOVA) was used to test for the level of significance between membership of associations and the mean values of the enterprises. The analysis was handled in three stand-alone chapters, each on a specific objective of the study.

8.2 CONCLUSIONS AND POLICY RECOMMENDATIONS

8.2.1 Conclusions and policy recommendations from results in chapter 5

Several conclusions can be drawn from the findings in chapter 5. Chapter five's results show as was hypothesised that because of their socioeconomic environments rural non-farm entrepreneurs

rely on their social networks to establish and expand their enterprises as 86% of the rural non-farm entrepreneurs rely on informal sources of finance to establish and expand their enterprises. While social networks were found to be critical for enterprise establishment and expansion access is still gender biased as where as 80% male entrepreneurs used social networks to establish their enterprises only 50% female entrepreneurs used this source of capital. Further, whereas Fafchamps (1997) concluded that trade credit and overdrafts are used by small-scale urban entrepreneurs in Zimbabwe, with the same conclusion made for Ghana by the World Bank (1994), in this study own capital, relatives and friends and business partners are the major sources of capital, together with NGOs. Basically female entrepreneurs seems to be bowling alone hence the observation that although they participate in most local social associations they are likely to benefit less form such localized networks when compared to male entrepreneurs who network with other entrepreneurs from outside the district.

This has important implications for policy on the design of entrepreneurship support programmes, as it highlighted the prevailing financing options that could also be used to account for the presence of generally low-value enterprises dominating the rural non-farm enterprises landscape. However, while such social networks assist in the establishment of rural non-farm enterprises, they have their own limitations with respect to the expansion of the enterprises. It is suspected that reliance on strong local networks translates into limitations in the sources of resources to start and expand enterprises and can be a contributing factor behind the over-traded rural economic space by small-scale enterprises. This reliance on strong relational ties can be indicative of lack of sustainable financing options innovation among most rural non-farm entrepreneurs, as such strong localised networks retard the activities of heterodox entrepreneurs who are important in sustainable economic growth.

The second conclusion is that while social networks – kinship, social groups, membership of organisations, and links and contacts maintained with individuals and other entrepreneurs– are critical in the various stages of rural non-farm enterprise establishment and expansion, this should be treated in light of the historical social arrangements of the entrepreneurs. Associated with the inherent historical socio-economic relationships between male and female members of the rural society are differences with respect to types of enterprises to engage in, and access, use and benefits from social capital, which are mostly in favour of male entrepreneurs. The study also concluded that male and family entrepreneurs run higher value businesses and have access to more social networks compared to female entrepreneurs. This should be taken into consideration in programmes aimed at improving rural communities' livelihoods where women form a majority

of the population. This is a contribution to the literature, as most studies on entrepreneurship used to generalise without disaggregating according to gender.

Another conclusion that was drawn from the study was that established businesses and NGOs are the major sources of capital for rural non-farm enterprises expansion needs and this could be used to inform a new kind of venture capital between established business persons and new entrepreneurs. This is because the established business leaders were found to be important sources of finance for rural non-farm enterprise expansion, since their experience and tacit knowledge are very important to the new entrepreneurs. Besides the fact that new entrepreneurs have high levels of confidence in them, established entrepreneurs also offer context specific and practical advice needed, rather than the generalist advice provided in most entrepreneurship training programmes. From chapter 5 the most important points to be noted is that strong bonding social networks are critical for getting started and the bridging or linking social networks are critical in the getting ahead needs of rural non-farm entrepreneurs.

Related to the above conclusions is that policy on rural non-enterprise development should take gender diversity into consideration when designing programmes to facilitate access to resources and entrepreneurship training, rather than generalise that all entrepreneurs are a homogeneous entity. However still on the gender perspective to use of social networks chances are that there are inherent vertical and horizontal differentiation in accessing resources from social networks even amongst female entrepreneurs themselves. Differences in education level and other social stratifications are also likely to impact on access to social networks. Entrepreneurs' knowledge sharing platforms in the form of business trusts and business expos should be facilitated to enhance wider networking and learning. Resources to establish and expand rural non-farm enterprises could be channelled through entrepreneurship networks and non-governmental organisations, as they appear to be better placed to effectively target the needs of new entrepreneurs. Programmes to finance entrepreneurs should be engendered if issues of economic equity are to be addressed in rural areas.

Entrepreneurship-development education should also be incorporated into learning systems, starting from a tender age, so as to develop confidence in future entrepreneurs and allow them to appreciate and internalise the power of networks and benefits from working with other entrepreneurs outside their locale. It is equally important for mentorship programmes to be initiated, where established businesses both from rural and urban areas take in young aspiring entrepreneurs as interns. As much as entrepreneurship education is important it is equally crucial

that rurally contextualised, innovative enterprise support should be explored, both financial and with respect to suppliers of information.

This then brings in the question of possible areas for further investigation, given these conclusions. In the light of these arguments, a further step to understand the role of social capital in small-scale non-farm enterprise development could be to investigate possibilities of inter-enterprise networks and innovation and how to break the gender-based network barriers. Investigation of trust between the established and new entrepreneurs and ways of building strategic social capital between them should be investigated to explore chances of them getting into joint venture-capital arrangements. This is in light of the resource and information limitations as well as trying to draw parallels from studies on the forces behind the economic growth robustness of, for example, the Silicon Valley entrepreneurs (Lubeck & Eischen, 1999).

8.2.2 Conclusions and policy recommendations from results in chapter 6

Results from chapter 6 prove correct what was hypothesized that because of their social settings and size of operation rural non-farm entrepreneurs rely on their mutual social networks and homogeneous ties to coordinate intra enterprise activities. Results show that entrepreneurs invest and cultivate these intra-enterprise social networks to coordinate and enhance information generation and diffusion within an enterprise.

While such strong networks are beneficial in “getting started” and other immediate needs of the entrepreneurs, more diverse and richer knowledge stocks come from bridging and linking social networks. This appears to be lacking among entrepreneurs in the study. What can also be concluded is that initially the entrepreneurs stand to benefit from such familial relationships between themselves and their workers. However, the fear is that since most entrepreneurs tend to employ relatives and friends, how do they draw the line between social obligations to relatives and friends and rational economic goals at their enterprises? Otherwise, this reliance on friends and relatives will end up having the entrepreneurs caught up and bound in counter-productive economic growth traps. This is in the sense that entrepreneurs will end up just employing trusted relatives and friends, who might not be the right persons to take the enterprises to higher levels, on one hand, and alternatively, the danger of entrepreneurs cashing in on their unquestioning trust to exploit the workers. Such employment relationships, if encouraged, will result in the exclusion from the employment market of those who do not have friends and relatives who own enterprises. However, while cohesive, strong intra-enterprise networks benefit the entrepreneurs with respect to coordination of intra-enterprise activities, care should be taken otherwise this will prevent

entrepreneurs from seeing and appreciating the benefits of wider network formations and an outward-looking approach to business.

As a policy recommendation, entrepreneurship education should be availed and facilitated in communities so that prospective entrepreneurs could benefit from an informed labour force. Entrepreneurship-training establishments should analyse and identify beneficial social networks that balance the social and economic requirements of economic agents. Otherwise, enterprises will just be mere loci for social engagement rather than potential drivers of economic growth. The needs of entrepreneurs go beyond the capacities of the generalist business advisor. In this light, policy strategies should be implemented that encourage and maintain active social relations within and between enterprises as wider platforms to share information and strategies. In this case, business associations and trusts can surely play a significant role along these lines. Linkages and networks with urban-based entrepreneurs should be explored to cross-pollinate ideas with respect to employment and intra-enterprise coordination strategies.

An area for further investigation could be related to the potential benefits of networking between workers and entrepreneurs from different enterprises with respect to bringing in new ideas about improving coordination at the enterprises that takes less time from effective production activities. A possible area for further investigation is how wider social learning platforms to share experiences on how to improve information diffusion on coordination can be institutionalised amongst entrepreneurs and what the constraints are to such arrangements. This is in light of the fact that such social learning platforms have been found to be instrumental to technology adoption amongst farmers by extension agencies (Katungi, 2006). Related to this could be more research on gender and networks and the inherent constraints in creating social capital.

8.2.3 Conclusions and policy recommendations from results in chapter 7

Results from chapter 7 show that while rural non-farm entrepreneurs maintain membership to many associations and contacts there are some particularly critical social network aspects for the various stages of small-scale rural non-farm enterprise development. It was concluded that for rural non-farm entrepreneurs having more personal contacts (bridging social networks), participating in social networks, socializing and being committed to group activities (bonding social networks) were the most important aspects as they accounted for 60% variability amongst the respondents. This observation flies in the face of the fallacy that financial resources are all that entrepreneurs need to succeed in business.

In a recent investigation on social capital and adoption of technology that improved banana production by small-scale farmers in Uganda, Katungi (2006) established that group-based organisations are critical. While this had important insights for small-scale farmers' development, in our study of small-scale rural non-farm entrepreneurs', personal contacts (bridging social networks), being active in the decision-making of associations, socialisation and commitment to associational activities (bonding social networks) were isolated as being critical for enterprise development. This is an important contribution, as whereas previous research concur that having more social networks leads to more benefits, this study concludes that it is not just having more contacts alone that matters but that entrepreneurs have to invest time and be active in decision-making in associational activities if greater benefits are to be reaped.

As such, those intending to benefit from social capital need to go beyond membership of associations and should include activities that build trust and create shared norms and values. Personal contacts are cost-effective sources of useful and diverse information needed by the entrepreneurs. On the other hand, being active in the decision-making process of associations ensures that members influence the direction of the association and are assured of smooth coordination and trust between members. By involving themselves in social activities, entrepreneurs also become visible in the community, which is their major market. Entrepreneurs invest in associations through committing time to associational activities in anticipation of reaping benefits from such social associations.

The research results, beside supporting the conclusions arrived at from other social capital studies, took a step further by looking at the use of social networks in the establishment and expansion of rural non-farm enterprises, the use of social capital in the coordination of activities within enterprises and identifying the principal social capital accounts for the development of rural non-farm small-scale entrepreneurs. The imperfections within the market institutions created by information asymmetries and coordination of intra-enterprise activities lead entrepreneurs to rely on their social capital. The use of such social capital varies when it comes to male, female and family-run enterprises.

A possible policy recommendation that can be drawn from chapter 7 is that ways of infusing and factoring in economic components into social activities such as religious and social clubs should be encouraged. These associations are platforms where entrepreneurs engage in mutual group activities and openly discuss issues, so ways to extend the boundaries of such platforms to infuse economic aspects should be encouraged. Perhaps an investigation of the inherent weaknesses in rural socio-economic institutions using an institutional economics approach can assist in

identification of those blockages which inhibit the civic participation, as was established by Putnam (1993) in the research done in Italy. Participation in social activities as a social marketing strategy to improve the economic development of rural non-farm entrepreneurs should also be exploited.

Having come to the above conclusions, there is need to improve the understanding of the social capital and enterprise-development nexuses by investigating how social networks influence the entrepreneurs' access to markets and innovations. This is because whereas this study focused only on processes within the enterprise, markets and other players are equally important with respect to enterprise development. Perhaps limitations with respect to volumes of their products and access to lucrative markets reduce the potential of such entrepreneurs to establish, expand and properly organise intra-enterprise activities.

This study also produced some insights into the role of social networks in the development of rural non-farm enterprises. Perhaps more insights could be revealed if the same methodology is applied periodically to ascertain whether the results are consistent over time or even applying the same methodology to entrepreneurs in similar lines of business. In the final analysis, researchers on social networks and entrepreneurship development should never lose sight of the fact that entrepreneurs revert to their social capital as long as there are shortcomings in the existing economic institutions. Consequently, with improvement in the performance of these institutions, so there will be changes in the use and benefits from such social capital.

This study has managed to extend the knowledge about the role of social capital and economic development from the predominantly urban and farm-based enterprises to the rural non-farm enterprises of Zimbabwean from the three publications made so far. Moreover, the study has added a gender dimension to the social networks treatise after establishing that while social networks leads to improved economic outcomes, there are differences in their use between male, female and family-managed businesses. This is important when designing enterprise development programmes in which social capital is to be factored in. The application of the Principal Component model, which has successfully led to the isolation of the crucial aspects of social capital used by rural non-farm enterprises, has also added to the theoretical ways of analysing social capital. Generally, the conclusion that social capital plays an important role in the development of rural non-farm enterprises in Zimbabwe can also be tested in other regions.