

CHAPTER THREE: Study Design and Methodology

Chapter two covered the literature related to this study. This chapter will focus on the study methods that were used in this study. The study used qualitative research method and data was generated using interviews, focus group discussions, observations and secondary data sources. In addition, samples and sampling techniques, population, methods of data collection and data analysis and ethical consideration were outlined. The study used qualitative research method and data generated was largely descriptive and exploratory in nature. This method was chosen as it is flexible and had the advantage of providing details on behaviour, personality characteristics and emotions of people (Madrigal *et al*; 2012). It further investigated the why and how, in addition to the what, where, when and who makes decisions.

Qualitative research being the main research method in the study of social sciences is a descriptive and non-numerical way of generating and interpreting data. It is also highly contextual, and data is generated in natural life settings thereby going beyond being a mere snapshot or cross section of events but shows how and why things happen the way they happen (Charmaz;1995). According to Fleming (2007) human learning is best researched by using qualitative data, this is further argued by Cuba (1981) who suggests that it is imperative to select a paradigm whose assumptions are best met by phenomenon being investigated. This study looked at lived experiences of the people of Nyajena in relation to CSR interventions since the inception of Renco Mine, in 1982. The focus was on establishing the factors limiting the full realisation of community development through CSR interventions by Renco Mine and therefore the impact on the lives of the people of Nyajena that is, placing emphasis on processes rather than outcomes. Price (2002) argues that when the understanding of an event is a function of personal interaction and perception of those in that event and the description of the processes that characterise the event, qualitative approaches are more appropriate compared to quantitative designs to provide the insight necessary to understand the participants' role in the event and their perceptions of the experience.

The purpose of this study was to establish the factors limiting the full realisation of community development through CSR interventions by Renco Mine in Nyajena, Masvingo South. The focus was on perceptions, meanings of processes and events of CSR by the mine. Due to the typical processes used, the qualitative approach better accounts for the group behaviour. The essential processes in the study included observing, investigating and noting in detail the experiences of the people in the Nyajena Area with regards to CSR programmes and projects by

Renco Mine. The processes that have resulted in these experiences and analysing of the descriptive data were all undertaken by the study as a participant in the study. A qualitative study of the participants' lived experiences and inductive analysis of data is therefore most appropriate for purposes of this study.

Qualitative research approach was therefore a suitable method to use in this study as it aimed to bring out lived experiences of the community of Ward 25 in Nyajena in so far as CSR by Renco Mine is concerned. It also allowed the study to get to the inner experiences of the participants, that is, to discover rather than to test. Qualitative research method investigates how people live, work and interact with each other and how they manage their lives. It is largely a data enhancer as it brings out the key aspects of cases more clearly. In addition, it is more concerned with meaning as it provides information about the "human" side of issues that includes beliefs, opinions, behaviours and emotions. It pays attention to finer details that give importance to the lived experiences of people instead of giving numerical values that generalise issues (Madrigal, 2012).

To this end, the qualitative research design was appropriate in the attempt to understand the factors limiting the full realisation of community development through CSR interventions by Renco Mine. The qualitative design was also applied to assess Renco Mine's CSR interventions in terms of community development in Nyajena, Masvingo South. Its suitability was based on the ability of getting the lived experiences of the local community of Nyajena on the subject under study.

Qualitative research was also selected to capture data in a strategic manner from the participants. For instance, the ability to read feelings and expressions through group discussions in this case assisted in capturing important information concerning opinions on the factors limiting the full realisation of community development through CSR interventions by Renco Mine in Nyajena. This approach also allowed the study to get more information through further probing as it provided a platform for phrasing and rephrasing questions to extract the required information as well to seek clarity concerning responses which would otherwise be unqualified.

Qualitative research method enabled the study to capture data in a very strategic manner from the participants. For instance, it managed to capture feelings and expressions through the opinions gathered through FGDs that focused on the factors limiting community development through CSR interventions by Renco Mine. The approach basically has the strength of allowing the study to get more information and to ask and be able to understand the behaviour and attitudes of

the respondents as to capture relevant data. In addition, qualitative methods focus on the signs and symbols that decode reality, seen by the target populations (Saunders, 2003). The use of interviews captured opinions and expressions towards the feeling of the participants' perceptions on the.

Using qualitative research method has its own disadvantages and the study came across many challenges regarding the use of this method. Firstly, generating qualitative data through interviews was time consuming and costly because it involved travelling to meet with participants and focus groups.

According to Cresswell (1994), data from qualitative studies describes the qualities or characteristics of something, hence that cannot easily be reduced to numbers as is done in the quantitative research method. The quality of research is more dependent on the skills of the study therefore it can be easily manipulated by personal biases of the study. This often results in the study results being generalised therefore having a bearing on the accuracy, of the study. In addition, the quantity of data generated makes it difficult for interpretation seeing that it is time consuming. In this study data was generated from various sources, hence it was time consuming to analyse every bit of information. The results were therefore generalised to establish the factors limiting community development through Renco's CSR interventions. The other disadvantage of qualitative data is that the presence of a researcher in the data generating process can have a bearing on the outcome of the findings as responses can be influenced by the same. In this study some of the participants, particularly in the FGDs gave out more information than necessary in the hope of proving to the study that they had more details on the subject under study. Furthermore, some politicised the discussions, particularly those involved in politics. The study participants were reassured that the study was for academic purposes only. Issues of confidentiality are also compromised in the qualitative research method. This can pose challenges during the gathering of data.

Cresswell (2008) states that a research population consists of many individuals or objects that form the main focus of a scientific query. Baron *et al* (2013) refers to the study population as one that is based on the population on which the study is on. However, it is both costly and time consuming to test everyone in a population. The population of this study was made up of 5000 people in Ward 25 in the Nyajena Area Masvingo South District. As a result, the study could not cover the whole due to time and financial limitations. Therefore, a sample was taken to represent the population.

According to Loss (2008), a sample is a subset of a population. Sampling is the method (or process) of selecting certain members to represent the whole group. The process restricts the investigation to a small but well-chosen group of subjects that is called the sample. It represents a much wider group (the population). The study was carried out in Nyajena Masvingo South and it focused on Ward 25.

The chosen sample making up the FGDs was chosen basing on the number of years that the respondents had stayed in the area. This was important in that the people who have been in the area before the mine started in 1982 were envisaged to have the correct information about the socio-economic development state of the area before Renco Mine and make a comparison to the present state. This information was deemed vital to establish the socio-economic state of Nyajena Area before and after the CSR interventions by Renco Mine.

Secondly the study participants were also chosen based on their understanding of CSR in relation to community development. The importance placed on this condition was that having a basic knowledge of what is CSR would help the study in saving time by getting into much detail to ensure understanding of the respondents. The sample size comprised of 26 people.

Since it is generally impossible to study an entire population, researchers typically rely on sampling to acquire a section of the population to perform an experiment or observational study. It is important that the group selected be representative of the population, and not biased in a systematic manner (Teddlie and Yu, 2007). Sampling techniques are classified as either non-probability or probability. In probability sampling the basic assumption is that every element in the population has an equal chance of being selected in the sample and that it can be determined (Loss, 2008). This approach makes it easy to make an approximation and unbiased estimates of the population parameters using sample numbers. All methods under probability sampling have a non-zero probability of being sampled and they all involve random sampling. In non-probability sampling method, some elements in the population have a zero chance of being chosen, hence it is not possible to make estimations of sampling errors. Non-probability sampling method include purposive or judgemental sampling, which was used in this study.

Purposive or judgemental sampling was used to select the respondents for the study. This entailed the use of personal judgement for the interviewees. The aim was to get a broad-based overview of the factors limiting community development through CSR interventions by Renco Mine.

The advantage of probability sampling is that it is less prone to bias and it allows for estimation of sampling errors from which one can determine the statistical significance of differences in indicators. Macionis (2000) states that a sampling error is a degree to which a sample might differ from the population. Results are reported at plus or minus the sampling error. However, the disadvantage of this method is that it requires for one to have all sample elements therefore becomes more time consuming and costly. On the other hand, the advantage associated with non-probability sampling is that it is more flexible, less costly and less time consuming and the samples may be preferred when small numbers of elements are to be chosen. In non-probability sampling, the degree to which the sample differs from the population is unknown (Teddle & Yu, 2007). The study therefore used non-probability sampling method, that is, purposive sampling method as it allowed the study to make the selection using the researcher's discretion and judgement. This technique involved the use of the judgement of the study in coming up with a study sample that was seen as representative of the target population. Purposive or judgemental sampling was used to select the respondents for the study. This entailed the use of personal judgement for the interviewees. The aim was to get a broad-based overview of the factors limiting the full realisation of community development through CSR interventions by Renco Mine.

Another advantage of purposive sampling is that it allows and enables the study to select information valid for the purposes of in-depth analysis. Purposive sampling entails the study's judgement to influence the decision on choosing the participants to be included in the sample. To minimise on costs and time, the researcher used her own judgement to select the participants who were generally viewed as good prospects for acquisition of accurate information and as key participants in the community who would elicit views and opinions on the factors limiting the full realisation of community development through CSR interventions Renco Mine in Nyajena.

Purposive sampling was also used in selecting the villages that are directly affected by the mining activities by Renco Mine and those who have benefitted from CSR interventions. This allowed for ease of access to respondents. Ward 25 was purposively chosen as the sample due to its proximity to Renco Mine and due to the fact that most of the impacts of mining activities at Renco Mine are felt more by ward 25 community than others situated a bit farther from the Mine. In this study, a total of 26 people were interviewed for purposes of gathering data. They were selected for their knowledge of the subject, many years spent in the area and participation in CSR initiatives by Renco Mine. FGDs participants were selected for their previous and current participation in CSR projects by the mine.

The village heads and ward 25 councillor were chosen on their position as go between, between the mine and the community.

The Environmental Management Agency (EMA), official responsible for Masvingo District was also made subject in the study as they are responsible for environmental management in the district. Furthermore, the Masvingo Rural District Council Chief Executive Officer was part of the respondents representing the Local government authority in the area that is impacted by Renco Mine activities. Key interviewees from Renco Mine were selected based on years of service with the mine, degree of interaction with the Nyajena community and involvement with the design and implementation of CSR initiatives by Renco Mine. One officer from the RioZim Foundation was part of the total number of respondents of the study. The numbers are disaggregated in the table 3.5.1;

Table 3.5.1 Sample Size

Stakeholder	Designation	No of participants
Renco Mine	General Manager Human Resources Manager Environmental Manager Company Liaison Officer	4
RioZim Foundation	Foundation Secretary	1
Environmental Management Agency of Zimbabwe	Officer in charge of Masvingo District	1
Masvingo Rural District Council- Nemamwa	Chief Executive Officer	1
Community Leadership	Village Heads Ward 25 Councillor	3 1
Community Members	Ward 25 villages	15
TOTAL		26

The table above shows the number of the respondents and their position in the communities and the respective organisations. They formed the sample selected in gathering of data that sought to establish the factors limiting the full realisation of community development through CSR interventions by Renco Mine in Nyajena, Masvingo South District.

Data collection instruments are tools that are used in the collection of data to find solutions to a research problem. In this study, the study used three methods of data generating that is the interview, focus group discussions, observations and secondary data in a bid to establish the factors limiting full realisation of community development through CSR interventions by Renco Mine in Nyajena, Masvingo South.

Interviews constitute one of the most important sources of information in any research. Gray (2004) describes an interview as a conversation in which the interviewer asks the interviewee questions to get information on a particular issue. They are basically a systematic way of talking and listening to people. They give room for further probing to explore new paths not considered initially. The study designed interview questions considering the goal of bringing out the factors limiting the full realisation of community development through CSR interventions by Renco Mine. The question to key participants mainly focused on the evidence of CSR programme interventions by Renco Mine for community development. This was based on the status quo before CSR by Renco and the CSR interventions put in place for community development. Generally, the interviews were a way of generating evidence of CSR by the mine and establishing their limitations in fully realising community development in Nyajena.

Bernard (1988) asserts that, interviews are best used when there is only one chance to interview a respondent. In the study the study prepared the interview questions in advance (semi-structured). This allowed the study to be well prepared and therefore appeared competent during the interviews. In addition, time allocation for the interview was very important, therefore the study made the appointments in advance. The interview with the Environmental manager at Renco entailed having it at one of their sites, the Jig Tailings and Water Reticulation plant. This was to make the study have an appreciation of the Mine's efforts to curb against the environmental impacts that the mine had on the environment and on the Nyajena community.

In addition, the interview with the Ward 25 Councillor was conducted at Tugwane Dam, one of the CSR projects by Renco Mine in Nyajena. This was also to demonstrate the presence of CSR in Nyajena. Upon getting permission and consent on the same, the study was guided by the instructions on how interviews were carried out that included open ended questions. To kick start, the interview, the study posed introductory question covering the interviewee's background then proceeded to asking the interviewee's the basics on CSR. The interviews allowed for further probing to bring out the evidence of CSR Nyajena and therefore the factors limiting the full realisation of community development.

Interviews with key informants were mainly open ended to allow for further probing. The benefits of using face to face interviews were that they allowed for accuracy as the individual being interviewed could not provide false information on their gender or age. It also captured verbal and non-verbal cues. Since the interviews were unstructured, they allowed for open ended questions which the study found to be important as they allowed for further probing and soliciting for

additional information. Interviews with other key respondents followed the same pattern save for the community leadership. Interviews with the community leadership were held in their respective homesteads. Permission and consent were sought from and granted by the Acting Chief Zengeya of Nyajena.

Focus group discussions were also employed to gather data in this study. Powell (1996) refers to FGDs as occurring among groups that consist of individuals that have been identified to discuss their personal experiences in relation to the subject matter. Emphasis is on the questions and responses. They bring out feelings and attitudes, experiences and beliefs on the subject. The participants in an FGD are encouraged to freely participate by openly expressing their feelings without their being intimidated by the others present. According to Loss (2008), responses or views of groups are at times enlightening than individual responses.

In this study one focus group comprising of 15 participants from the 11 villages of Ward 25 was used to establish the factors limiting the full realisation of community development through CSR interventions by Renco Mine in Nyajena. The advantages of FGDs are that they can be relatively low cost and provide quick results, the exact time and cost for planning, conducting and analysing data may be very small as compared to other methods such as interviews. In this study only one session was held with the focus group and as discussions progressed most elements being sought in this study came out. This was due to the diversity of knowledge that everyone had. Different perspectives ensured that the discussions provided the answers that the study was looking for. Furthermore, their experience with CSR initiatives by the mine added much value to the outcome of the study as some had been in the area since the mine started, therefore had gone through they has seen it all. Furthermore, the participants from FGDs aired different views that were authentic as others would quickly oppose to a statement they were not agreeing with.

The focus groups are also seen as flexible as interactions between the moderator and the participants allow for further probing issues in-depth, address new issues as they arise and ask participants to elaborate on their responses. In the study the FGD achieved this assertion as further probing generated more information and clarification on issues at hand. The study was therefore able to make important connections because of additional information on the causes of persistent underdevelopment of Nyajena. Another advantage is that some participants may feel more comfortable in talking in a group than individually. Moreover, interactions may generate more discussion and therefore more information. Data in the respondents' own words is more easily understood and provides insights into how respondents perceive the topic. Perceiving what the focus of the

discussions was about, proved difficult at the beginning of the discussions. However, those who were aware explained to others in their own what CSR was all about and its link to community development by the mine.

According to Palomba and Banta (1999: 9), the weaknesses of focus group discussions is that groups can be difficult to manage as the setting may influence the responses of the individuals. FGDs are also problematic when a dominant member affects outcomes. The small numbers in focus groups can limit the extent to which the results can and should be generalised. This was encountered in the study. Male members wanted to dominate the discussions by proving that they had more knowledge than women. Women's views were therefore undermined to an extent and those who felt that they were, became very vocal towards the males, also trying to prove a point. To this end, it became difficult to control them as in some cases arguments were personalised. In some cases, everyone agreed with an influential individual's view even though it did not hold much water.

The small numbers within the group also meant that an influential member of the community could easily influence the whole group to agree with his/her view. This was evidenced by the politically powerful participants; they did not allow others to freely express themselves unless they agreed with the view. Such behaviour may compromise on the outcome. It is important for the study to have leadership skills that allow for intervention. Palomba and Bantal (ibid.) also argue that the quality and quantity of focus group data is dependent on the ability of the moderator carefully handling a group of people from different backgrounds skilful. However, this was not a problem for the study as previous experience from other research studies helped in containing the situation within the FGDs.

Another data generation method that was used in this study was the observation method which complemented the interviews and FGDs. According to ZOU (2007), at times the study must observe events as they unfold and there is no substitute to observing events as they manifest. Observing events in their natural state is the best way of getting information about the phenomenon being observed. There is no pretence when events unfold in their natural setting, subjects may not be aware that there is an enquiry going on. Hence, they are unlikely to exhibit perceived behaviours, and the data is more likely to be accurate. There are two types of observations, the participant and the structured observation. According to Richardson (2000), in participant observation, the observer participates in on-going activities and records the observations. It extends beyond naturalistic observation because the observer is a player the action. On the other hand, structured observation refers to a structured

technique where the study gathers the required information without any respondents or interviewees. Data is collected through pre-defined rules and procedures.

In this study, participant observation method was used as part of data gathering. The study observed and participated in the study through attendance of Community Liaison Meetings held every month at Renco Mine, comprising of the community leadership of Nyajena and Renco Mine officials. The study requested to attend these meetings as it was seen as vital to do to establish the situation at ground level on CSR interventions by Renco Mine in Nyajena. The study observed how the meetings were conducted, input from the community leadership, the level of participation and the relevance of the meetings in CSR of Renco Mine in Nyajena.

The advantage of attending such meetings by the study was that being observed in their natural settings, there was ease and good flow on information that resulted in the study being able to gather more data to complement the FCDs and the interviews. However participant observation has its own drawbacks as was established by the study. Firstly, it is time consuming. In the study, the study had to attend the meetings that lasted for 4 hours or longer. The study observed that the long hours were due to the fact that most community leaders attendees were advanced in age hence, the chairman of the meeting slowed down on issues on the agenda. Furthermore, another challenge seen was lack of knowledge on the part of the community leadership, they took time to comprehend issues, needing a lot of elaboration. It was evident that they all wanted to table their issues for debate.

Another disadvantage of participant observation was the issue of documenting the data. Richardson (2000) argues that it is difficult to record and document everything while observing. The study therefore relied on memory which might have left a lot of vital information which might also result in biased results.

Secondary data in the form of books, scholarly journals, newspaper articles, internet sources was used. Mpofu (2011) argues that secondary data collection can be quick and inexpensive. Use of secondary data had the advantage of saving on time and financial resources. However, secondary data had the disadvantage of being out-dated, and at times the sources were not authentic. Furthermore, data would not come out the way the problem was being looked at or tackled by the study. The study therefore mostly used peer reviewed journals and published articles.

Analysis of data is a process of inspecting, cleaning, transforming and modelling data with the goal of discovering useful information, suggesting conclusions and supporting decision making. Data analysis has multiple facets and approaches encompassing diverse techniques under a variety of names in different business, science and social science domains. Qualitative data analysis is therefore the process of turning written data such as interview and field observation notes into findings. There are no formulas or rules for this process (Bryman; 2004).

According to Strauss (1987), a common way to approach qualitative data analysis is the construction of themes. Data is also analysed by selecting quotes to support the presentation of the findings. In this study, data was presented thematically since the study was largely qualitative in nature. It was descriptive and interpretational. The case study narrative fully brought out subject insight into the explored phenomenon.

The data was analysed in the manner that best answered the questions and addressed the hypotheses of this study (Saunders, 2003 and Mason 1997). This involved qualitative research. The qualitative phase developed a robust view of attitudes, motives, behaviour and perceptions that were based on interviews and observations in a bid to establish the factors limiting the full realisation of community development through CSR interventions by Renco Mine in Nyajena.

Dibb *et al* (2001) contends that data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it. The process of organizing and thinking about data is key to understanding what the data does and does not contain. Analysis of data is a process of inspecting, cleaning, transforming, and modelling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains. In this study data was analysed in the manner that best answered the questions and addressed the hypotheses of this study. Saunders (2003) states that presentation and analysis of qualitative data are supposed to be put under a screening process that involves reading through data, tallying of data into relevant themes and drawing up of conclusions which then inform recommendations made in a study is also an important aspect of data analysis. The data collected in this study was largely descriptive in nature, describing the phenomena hence it was presented thematically.

Data collected in this study was obtained through observations and interviews techniques. Interviews were used to gather in depth information that obtained

descriptive information that was presented in themes. The discussion element was the study's interpretation of findings, what they meant and how they confirmed or contradicted to what was contained in the literature review section.

The study ethics are premised on the Nuremberg Code which has the following principles: research participants must voluntarily consent to participation; research aims should contribute to the good of society and the study must avoid unnecessary physical and mental suffering. The ethical considerations are centred on confidentiality, informed consent and anonymity. In this study, the study sought permission from Mine Management, the Acting Chief of Nyajena, EMA and Chief Executive Officer of Masvingo-Nemamwa Rural District Council. The study made it clear to all involved in the study that the purpose of the study was strictly for academic purposes only. The study did not judge or use deception on the participants. Thus, a letter of approval to carry out the study from Midlands State University was used to get community approval to carry the study.

Confidentiality is one of the major aspects of ethical consideration. According to Hatch (2002), the information secured from the respondents should be used for the study purpose only. It should not be availed to other persons or institutions for whatever reason without their consent. The identity of the respondents should be protected. This principle makes it imperative upon researchers to protect the informants by withholding the identity of subjects, unless subjects expressly consent to the release of personal information. All information obtained from the study should be treated with confidence and at no time should it be used against the subjects or for other hidden agendas. This is important as it ensures that the information so obtained is not used to discredit the reputation of the subjects who will have honestly participated in the first place. Any leaked information would be damaging, and the participants will in the future close their doors to any other researchers or will consider litigation. This would in turn dent the institution from which the study is coming (Hatch, 2002). The study therefore pointed out to all respondents that the information gathered in this study pertaining to the factors resulting in lack of CSR effectiveness by Renco Mine will be treated with full confidence.

According to Bam (2003) to attain informed consent, the study must provide research participants with as much information as possible about events and procedures a study will deal with before they agree to participate in the study. The respondents must also be informed that they are free to walk out of the study at any time they wish to do so. They must understand that by participating they have no obligation to commit themselves and can choose to quit.

Researchers need to uphold the credibility of the profession as unethical conduct may hurt their credibility. This means that when one conducts research, the data collected ought to be consistent with the realities on the ground. It is unprofessional to falsify information or exaggerate the results to suit certain previously constituted ideas. This would mislead all those who might want to use that information (Cresswell, 2009). Ethical considerations are therefore important because they protect the image or the professional standard of the institution and assist in dealing with ethical dilemmas that arise in research.

In this study, participants consented in participating in the study, after the study had explained the purpose of the study, its intended goals and benefits. Assurance was given to the effect that researcher would respect their choice, that is to participate or not. Consent was given verbally as some participants particularly those from the FGD lacked education and therefore not able to fill in a consent form.

Chapter three has provided the background on how the study was conducted. The instruments used in the study were analysed and the concept of validity and reliability of research instruments employed in the study were discussed in detail. The chapter also explained the data collection procedures in terms of sampling techniques, the strength and weaknesses of research instruments as practical approaches to data collection. Data analysis and presentation procedures were also explained in this chapter.