

3. RESEARCH METHODOLOGY

Research can be formulated in certain ways depending on the objectives as indicated in the research problem. Many research activities help to categorize the approach in terms of the research into three ways, namely exploratory, descriptive & explanatory (Saunders, et al, 2000).

This chapter will provide a detailed idea about how the research will be conducted and methodology which was used. This includes the purpose of the research, research approach, research strategy, selection of samples, data collection methods and data analysis approaches.

3.1. Research Purpose

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered as yet. Each research study has its own specific purpose (Kothari, 2008).

Interpretive, or the qualitative approach, is a way to gain insight through discovering meanings by improving our comprehension of the whole. Qualitative research explores the rich, depth, and complexity of the phenomena. Qualitative research, broadly defined, means "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (Strauss & Corbin, 1990).

Qualitative studies are tools used in understanding and describing the world of human experience. Since we maintain our humanity throughout the research process, it is largely impossible to escape the subjective experience, even for the most seasoned of researchers. As we proceed through the research process, our humanness informs us and often directs us through such subtleties as intuition or 'aha' moments. Speaking about the world of human experience requires an extensive commitment in terms of time and dedication to process; however, this world is often dismissed as 'subjective' and regarded with suspicion. This paper acknowledges that small qualitative studies are not generalizable in the traditional sense, yet have redeeming qualities that set them above that requirement (Mayers, 2002).

Table 1 Research Methodologies

Types of Research		
Based on Inquiry	Based on Purpose	Based on Method
* Rationalistic	* Basic	* Historical
* Naturalistic	* Fundamental	* Descriptive
	* Developmental	* Qualitative
		* Case Study
		* Content
		* Ethnography
		* Quantitative
		* Survey
		* Cross Sectional
		* Longitudinal
		* Trend studies
		* Cohort Studies
		* Parel Studies
		* Correlation
		* Casual Comparative
		* Evaluation
		* Formative
		* Summative
		* Experimental
		* Field Experiment
		* Quasi Experiment

(Juliet, 2002)

In the times researcher may find it impossible to formulate a basic statement of the research problem, exploratory research is used to develop a better understanding (Hair, et al, 2003). Exploratory study is a valuable means of finding out what is happening, to ask questions, to seek new insights and to assess phenomena in a new light. It is particularly useful if researchers wish to clarify understanding of a problem. There are three principle ways of conducting exploratory research: Searching the literature, talking to experts on the subject, conducting focus group interviews (Saunders, et al 2000).

According to Guba & Lincoln (1994) there are two methods or approaches that are available to researchers – qualitative and quantitative.

Data collected in this research can be qualitative and quantitative in nature. In general as to what data collection approach to use depends on the research problem. This

study tends to use Qualitative method. The researcher will use structured questioners & in-depth interview through semi structured interview to collect information.

3.2. Research Approach

Statistical methods used in research approaches claimed to be either quantitative, qualitative or mixed (Creswell, 2003).

3.2.1. Quantitative Approach

Quantitative research is one in which the investigator primarily uses post positivism claims for developing knowledge (i.e., cause and effect thinking, reduction of specific variables, and hypotheses and questions, use of instrument and observation, and the test of theories), employs instruments that yield statistical data (Creswell, 2003).

3.2.2. Qualitative Research

Qualitative research is one in which the inquirer often makes knowledge claims based on constructivist perspectives (i.e., the multiple meaning of individual experiences, meaning socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/participatory perspectives (i.e., political, issue oriented, collaborative or change oriented) or both. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data (Creswell, 2003).

In this research, qualitative approach is done to explore the research topic. A detailed literature review was carried out to determine the factors effecting on successful beneficiary participation projects and what are the failure factors. It was reviewed after informal interviews with a few project directors and JICA and ADB project officers. Finally the questionnaire was prepared according to the factors identified as above literature review and preliminary interviews.

Information on RDA, Beneficiaries, and other external experts is adopting exploratory & descriptive studies to attain the necessary information as regards to the research. This approach will further help us to understand and describe the phenomenon. The study also describes events, situation and draw conclusions on data collected. Also the study seeks to clarify understanding of problems which the researcher is unsure of the precise nature of the problems to be investigated.

3.3. Research Strategy

According to Yin (2003) there are five primary strategies in the science of conducting research. Thus Experiments, Survey, History, Analysis of archival information, Case studies. Each of these strategies has a different way of collecting and analysing empirical evidence and can be used for exploratory, descriptive or explanatory research.

Since the limited time available for the completion of this research, the researcher only take the Construction phase of the project to analyse. It is the limitation of this research.

For the purpose of this study the survey method will be used & the prepared questioners will be distributed to the selected sample as described in the sample selection method. Also one to one interviews with Project Directors, Chief Engineers & policy makers will give insight to the expected outcome of this survey.

The secondary data obtain from the JICA and ADB projects for beneficiary participation (for PDP and PRP II projects) are analysed to understand the successful and unsuccessful projects and filter the raw data obtain from field surveys. While collecting the data, it has categorized according to the successful project or not. Those who completed the project within the budget (allow 20% of contingencies) and within the allocated time period were taken as successful projects.

3.4. Sample Selection

The samples were drawn from the projects funded by ADB and JICA for rehabilitation of internal roads of estates at 07 districts of the country. The sample was included with project management staff from RDA, Estate managers and other beneficiaries as participants. The researcher was careful to segregate the survey sample into following types shown below.

- Management staff –(RDA)
- Beneficiaries
 1. Estate managers
 2. Workers
 3. Villagers

3.5. Appropriate Survey Design

There are no best form surveys; each survey has its own advantages and disadvantages. The survey design consists of two major segments, namely the management staff and the Beneficiaries. Hence, the researcher selected the following sample size to conduct the survey.

Table 1 Sample Selection

Respondents Segment	Respondents	Representation as a %
Management Staff (RDA)	20	20%
Beneficiaries	80	80%
Total	100	100%

In this study, the management staff supervises the projects. And they are who estimate the individual projects and checking the quality control and process the payments. Beneficiaries who get the allocation from JICA or ADB and execute the project with participation of all benefitted parties.

Since some of beneficiaries can only understand one language, the questionnaire was prepared in three languages (ie. Sinhala, Tamil, English) for beneficiary party.

3.6. Method of Data Collection

After finalizing the sample, questionnaire was distributed to respondents by e-mail, fax. Some of the RDA officials and state management were interviewed personally with the questionnaire. A questionnaire was modelled so that it can easily understand to the relevant parties. Some questions were only given to management party, since only they can answer those questions. Therefore two types of questionnaires are given for the management and beneficiaries. But the research has tried to keep the both questionnaires identical as possible since it helps to do the comparison at analysing stage.

While collecting the data, it has noted down the receiver identification number. Hence it can filter the data came from successful project or not on the analysis stage.

3.7. Secondary Data

The secondary data will be captured from the following sources and summarized and interpreted in the data analysis.

- Data collected from the 'Plantation development project' and Plantation rehabilitation project II'.
- Institute of Engineers – library (Researcher is a registered member)
- Published articles and written reports in the library
- Newsletters
- World Wide Web: access previous studies.

3.8. Data Analysis and Interpretation

Qualitative studies carried out using tools understanding and describing the risk involved management experience, exposure and knowledge gained. The researcher tried to maintain the humanity throughout the interview process, as we proceed through the field research process.

A major strength of qualitative approach is the ultimate aim of the perspectives situation and to providing a well-written research report that reflect the researcher's ability to illustrate or describe the corresponding phenomenon. One of the greatest strengths of the qualitative approach is the richness and depth of explorations and descriptions of the project.

3.9 Summery

Qualitative approach is done to explore the research topic. A questionnaire was designed after having preliminary interviews with the Project Director and donor officials and literature review.

The questionnaires were distributed among the RDA officials, Estate managers and other beneficiaries are involved with the project. Data was collected through mailing, e-mailing and interviews.

The secondary data obtained from the project office also analyses to categorize the each and every project was successful or not. Accordingly the collected data was analysed.