Chapter- 3
Research Methodology

In the previous chapter, the justification for the study was outlined in terms of the current literature. This chapter deals with the methodology of the study.

The review of the literature revealed the following research gaps:

i. NGO led service delivery is one of the most critical areas to be explored. Multiple stakeholders, no profit motive, challenges faced in delivering services are some of the areas that needed to be investigated. The researcher has not come across any specific study on service delivery process of NGOs carried out in Assam.

ii. Strategic Planning is the most important area to be explored. With the help of strategic planning NGOs could set realistic goals, design polices and serve better. No such study is carried out in NGO sector in Assam, which has given stress on strategic planning and its impact on service delivery, relevancy and legitimacy of the services provided by the NGOs.

iii. Another important area to be investigated is beneficiary perception on service delivery quality. Because only beneficiaries could provide feedback on the quality of services provided by NGOs. The researcher also has not come across any such study till date, which was conducted to understand the perception of beneficiaries on service delivery quality of NGOs in Assam.

iv. Knowledge management is another most important area to be explored since with adequate information flow and use of database any organization could offer services in an efficient way. Moreover intellectual capital and use of Information Technology could be the tools that help NGOs to function in an efficient manner. No study on knowledge management practices and its components, intellectual capital and uses of IT could be found in NGO sector so far.

v. The importance and popularity of Reengineering in for-profit sectors opens up the possibilities to be examined whether there is need of Reengineering in NGO sector. Literature Review opens up the gap to be explored.

3.1 Objectives: The following objectives are proposed to be fulfilled through this study.

i. To assess the strategic planning of the studied NGOs

ii. To study the existing service delivery process of the studied NGOs.

iii. To determine the need for Reengineering in context to service delivery on the basis of strategy of the organization and measures of performance.

3.2 Scope and Limitation of the study: The study was conducted in one of the North Eastern States of India, Assam. Present study tried to explore qualitatively, the service delivery process of nine NGOs, serving in different parts of the state for more than 15 years. The study attempted to identify various indicators that have direct impact on the functioning of NGOs, its resultant service delivery and beneficiary satisfaction. It also tried to study the influence of strategic planning, knowledge management and intellectual capital on service delivery performance of the studied NGOs. The study attempted to assess the need for Reengineering, in context to service delivery of the studied NGOs.

The study is concentrated only to the service delivery process; hence other areas which are not related to service delivery are not considered. The study has focused only on the studied NGOs' service delivery processes. The projects that are evaluated under the study are limited to the state of Assam only. Since the study is based on case study method and data collected qualitatively the findings cannot be generalized.

This section presents key methodological issues that were followed to conduct this research. Among the areas covered include; the nature of research design, the population of the study, the sample size, sampling techniques and data analysis methods used.

3.3 Research Design: The first decision involved in choosing the research methodology for this study was linked to the sample. This study selected a case study research approach. Yin (94) believes that the application of a case study approach is appropriate when the main purpose of the research is exploratory. Using the case study approach, the researcher systematically gathers in-depth information on a single entity-an individual, group, organization, or community-using a variety of data gathering methods. Furthermore, case studies can involve a textual analysis of similar situations in other organizations, in which the nature of the problem and the problem definition happen to be the same as the one experienced in the current situation (Cavana, Delahaye and Sekaran, 28). The choice for the case study research was also based on the need to reflect deeply on the individual organization practices, which would not be possible if so many organizations were involved and with a lesser experience. As a case study research, the organizations bore salient characteristics among others including; a long history with donor funding of over 12 years, many projects, hosting many donors and implementing many donor aided projects. This would no doubt provide the chance to consider an assessment of their service delivery for which there were few organizations with this history. In order to collate the impact of these donor projects, a progressive analysis of projects and project beneficiaries was done.

3.4 Data collection methods: For decades social scientists have debated the merits of quantitative and qualitative research methods. Quantitative methods are based on numeric data, (mostly) linear constructs and mathematical models. In contrast, the qualitative research tends to focus on data in the form of interviews, observations and in-depth analysis of natural settings. Some scholars contend that the differences between the research methods are only stylistic (King, Keohane and Verba 194); others argue that major differences exist between the two methods (Creswell 62-71). The goal of quantitative research is to test a theory whereas qualitative research is an iterative process in which theory evolves. This research employed qualitative methods of data collection, among others included; Focus Group Discussions, Key Informant interviews, Observation and Documentary review. For the FGDs and Key Informant interviews were guided by interview schedules that were specifically designed according to the category of respondents in the research.

3.4.1 Focus Group Discussions: The Researcher conducted Focus Group discussions with beneficiaries and community members where the projects were implemented. This method was treated as the most suitable while discussing with members who had directly and indirectly participated in the projects. The researcher also chose this method because of its ability to capture many responses from many respondents and in a short time. FGDs were conducted to capture the information on how the projects are implemented and what are the possible gaps in project implementation.

3.4.2 Key Informant Interviews: The researcher also conducted individual interviews with Key informants and these were in the category of local leaders, civic leaders, project officers and board members and project advisors. The choice for key informant interviews was based on the fact that, this category of respondents had different perspectives on the topic of research because of the different roles that they played in the project planning and implementation.

3.4.3 Observation: This method was chosen in order to get hands on experience in the design and the delivery of donor-aided projects. Therefore, this researcher passively and actively observed the project activities, and data was generated. This researcher for example had observed how the projects were designed and implemented. This experience gave the researcher hands-on experience of what the NGO staffs go through and the feeling of how the whole process is done. The researcher was an inactive observer at the selection meetings for groups that were being presented to benefit from donor aided projects. Further observation was done at the beneficiary level; where this researcher had to physically look out for the actual impact among project beneficiaries.

3.4.4 Documentary Review: This study also reviewed literature obtained from the case study organizations. This literature included project documents, project and annual reports, project review reports and research reports that had been conducted by the case study organization on the projects that they implement. This method was chosen because; it was vital in providing background information and facts about projects implemented by the case study organizations before primary data could be collected.

3.4.5 Survey: This study used survey methodology for accessing beneficiary satisfaction on service delivery process and to understand knowledge management infrastructure and intellectual capital. Schedules were designed on the basis of already used research instruments by different researchers.

3.5 Data analysis techniques: This research generally relied on qualitative analysis techniques where all the data collected, coded and arranged according to the research themes. Quantitative analysis also used to understand beneficiary perception on service delivery quality and knowledge management infrastructure as well as intellectual capital.

3.5.1 Analyzing Strategic Planning: Two models were used to guide the analysis. These were: the stages of development model (Becker, 31) and the 'levels of complexity model' (Olive Subscription Service, 30; James, 126-127). The 'levels of complexity' model was used to analyze the factors affecting the process of strategic planning in studied NGOs while different versions of the stages of organization development model were used to analyze the roles and responsibilities of the key players in the strategic planning processes of the selected organizations.

i. Levels of complexity model

Table 3.1: Levels of complexity model

Level of complexity	**Factor affecting the strategic planning process**
Resources	The resources needed for the strategic planning process and its implementation.
Skills and competences	The skills and competences needed to effectively go through the strategic planning process and to manage organizations in general.
Policies, systems and procedures	Mechanisms guiding formal decision making and practices in the organization.

Relationships	How well individuals, departments relate within the organization. It also refers to how leaders and subordinates relate within the organization. It also refers to how the organization relates with its different stakeholders.
Vision and mission	Articulation of the change the organization wants to see in its task environment as a result of its work and the purpose for its existence.
Values	The shared behaviors an organization must embrace in order to serve its beneficiary effectively.
Task environment	The political, economic, socio-cultural and technological factors presenting opportunities and challenges to the organization.

Adapted from Olive Subscription Service, 30

The 'levels of complexity model' was chosen for four reasons:

a) It is an analytical tool that shows that in any organizational system a problem may have its causes from more than one or more sources (levels).

b) It is a guide to the type of interventions that might be undertaken to address the problem. A specific type of intervention addresses each level. For example, lack of funds can be addressed by acquiring more funding from different sources while relationship problems may be solved through team build and conflict management type of interventions.

c) It is also an indicator of the amount of effort and energy the organization needs to address the problems. As one goes deeper the levels it becomes more and more complex to address the problem therefore demanding more and more effort and energy. A donor signing a cheque can easily resolve lack of adequate funding but lack of shared values needs more comprehensive efforts to address and may not be solved overnight.

d) The model also shows where the organization should concentrate its efforts when addressing its problems. Addressing lower level needs like training staff while ignoring higher level needs like a shared vision and mission does not improve organizational effectiveness in the long run.

According to Olive Subscription Service (30), the levels of complexity framework helps organizations to identify organizational:

a) Strengths to build on
b) Problems to tackle
c) Weak areas to strengthen
d) Blockages to unravel

ii. The stages of development model: According to Kaplan (19–28); and Livegoed (73) organizations go through three distinct stages of development. These are the dependent stage, independent stage and the interdependent stage.

The dependent stage is characterized by an organization that is newly formed and is led by one or more charismatic leaders. The organization is run almost like a family unit, personally and informally. Decision-making is very informal and intuitive with the leader personally involved in every aspect of the organization. Internal systems are rudimentary and there are high levels of energy motivation and commitment.

Eventually, the pioneer phase becomes over ripe and leads to a crisis which leads to further development. As the organization grows, the need for structures and procedures gradually eclipses informality. Staff is no longer content simply to follow–they have themselves been developing all the time.

At this point, the organization enters the independent stage: the formation of specialized sub-systems, of formal structures and procedures. The crisis of this phase enters when standardization leads to feelings of isolation and alienation.

At this point integration is necessary and the organization reaches an interdependent phase. At this stage the organization is no longer driven by structures and procedures but by purpose, a sense of meaning and direction. Leadership is developed throughout the organization. And most of all the organization 'wakes up' and becomes conscious. This is called the stage of effectiveness.

The stages of development model is a descriptive and analytical tool that shows at what stage of development the organization is and what type of challenges it is likely to face. It shows what the organization's priorities must be for it to move proactively to the next stage of development and therefore the priorities that the strategic planning processes should emphasize (Smillie and Hailey, 51).

In summary, the levels of complexity model was used to analyze the factors in the strategic planning process with the aim of understanding at what level they existed and therefore the types of interventions needed to address them. The stages of organization development model was used to analyze the stages of development of the key players in the strategic planning process with the aim of identifying the interventions needed to shift the players to a higher stage of development and therefore more effectiveness.

3.5.2 Assessing Service Delivery Process

i. Beneficiary Satisfaction: Early research work (Donnelly, Shiu, Dalrymple and Wisniewski, 20-26; Vaughan and Shiu 87-104; Vaughan and Shiu 196;-112 Shiu, Vaughan and Donnelly, 74-82; Vaughan and Shiu 89-105) in the area of service quality within the non-profit and voluntary sector had signaled the need for a bespoke service quality model and instruments for the measurement of the beneficiaries' view of the quality of service delivery.

ARCHSECRET is a model and instruments for measuring service quality of NGOs, based on the assumption that service quality is critically determined by the difference between beneficiaries' expectations of excellence and their perceptions of the service actually delivered(Vaughan, L. and Shiu, E,131-144). Present study was undertaken to investigate the level of service quality shortfall experienced across the 10 dimensions of the ARCHSECRET model by the beneficiaries of the studied NGOs. ARCHSECRET

A –Access, R – Responsiveness, C-Communication, H-Humaneness, S-Security, E-Enabling/Empowerment, C-Competence, R- Reliability, E- Equity, T- Tangibles

ii. NGO led Service Delivery Challenges: The challenges of service delivery were analyzed with grounded theory, which was originally developed by two sociologists, Barney Glaser and Anselm Strauss. Grounded analysis is well suited to answer "how" and "what" questions because it permit us to observe human interactions in different social settings, processes and changes, conditions and influences (Glaser 18, 99; Glaser & Strauss 57; Strauss 32).

The data collection was guided on the basis of the methodology suggested by Strauss and Corbin (128). They have suggested that grounded analysts need the following six attributes: (1) an ability to step back and critically analyze situations; (2) a knack for identifying one's own biased predispositions and those of others; (3) a propensity for abstract thinking; (4) an ability to be flexible, willing to change course, and to seek criticism and suggestions from others; (5) an aptitude for observing subtlety in words and actions of those under study; and (6) a willingness to become absorbed in the analytic process. Although grounding concepts in data is the core feature of this method, creativity of the researcher is also important for good grounded analysis (Sandelowski 132). As Strauss and Corbin (1998) have argued, grounded analysis is the interplay between researcher and data.

Strauss and Corbin (1998) proposed three stages of coding activities known as the core of grounded analysis: open coding, axial coding, and selective coding. Data were analyzed as per the process suggested by the authors.

In the first stage is open coding where researcher "open up the text and expose the thoughts, ideas, and meanings contained there (Strauss and Corbin, 102). In this stage, the data is broken down to conduct a micro analysis of the ideas, thoughts and meanings to identify them with codes and concepts. These codes and concepts are often grouped as native[1] or in vivo codes and sociological[2] codes (Strauss 187, Brower & Jeong, 829).

The second stage of coding is axial[3] coding. Hence, axial coding is employed to reassemble the concepts and code more specifically within one category in order to identify relationships pertaining to a particular phenomenon.

The third and final stage is selective coding. During this stage emergent theory is "integrated and refined" (Strauss and Corbin, 143). After the open coding and axial coding procedures, the researcher integrates the different elements of a grounded theory and identifies the central theme and central story line. In this stage the researcher refines the theory[4] .

iii. Knowledge Management Infrastructure and Organizational Performance: The three chosen factors of the KM infrastructure organizational culture, organizational structure and IT support are well established and validated constructs with measures adapted from previous research.

a. Evaluation for Organizational Culture: Questions for the evaluation concerning the organizational culture were based on the Organizational Culture Assessment Instrument (OCAI) developed by Quinn and Cameron (112). The OCAI assesses organizational culture in terms of four key factors. Each key factor is associated with a set of core values, beliefs, and assumptions that characterize the different culture types within the organization. These core values, beliefs, and assumptions are also found in the KM literature and are important organizational traits for KM efforts in the nonprofit sector (Roman-Velazquez, 20-24). The reliability and validity of the OCAI had been tested in former research studies (Yeung, Brockbank and Ulrich, 10-11; Quinn and Spreitzer, 15-18) and OACI tool has been used to diagnose the culture in many organizations and found to be useful and accurate to measure the key dimensions of organizational culture (Velazquez ; Quinn and Spreitzer, 54-57, Cameron and Quinn, 76-79, Quinn and Cameron, 32-36). The OACI is structured in six main sections (Quinn and Cameron, 2006): *Dominant Characteristics,*

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[1] Native codes are expressions that are unique to the settings or lexicon of the natives of a setting. Grounded researchers try to preserve such terms in the analysis if they are important terms that capture a unique notion not easily explained in other everyday language

[2] Sociological codes are "concepts taken from social science literature or terms that analysts invent to describe the behavioral and social phenomena that they observe

[3]The process of relating categories to their subcategories, receives its name axial because coding occurs around the axis of a category, linking categories at the level of properties and dimensions

[4] Consists of reviewing the scheme of internal consistency and for gaps in logics, filling in poorly developed categories and trimming the excess ones, and validating the scheme

Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphasis and *Criteria of Success*. Each section has four alternatives and the organizational culture is determined through assessment of the six items. Questions for organizational culture in this research were adapted from the OCAI tool with the modification; *Criteria of Success* was not included due to its special focus on for-profit organizations. Questions for organizational culture are summarized in Table 3.2.

Table 3.2: Adaption of the OACI questions for Organizational Culture

OACI	
Section	Participants were asked (open ended questions)…
Dominant Characteristics	How could the overall Organizational culture be described?
Organizational Leadership	How could leadership in the organization be described?
Management of Employees	How could the management style in the organization be described?
Organizational Glue	What holds the organization together?
Strategic Emphasis	What is the strategic emphasis of the organization?

b. Evaluation for Organizational Structure: Questions for the evaluation concerning the organizational structure are adapted from the research concluded by Lee and Lee (16-34) with minor modifications. Instead of analyzing centralized and decentralized decision making within an organization which operates in only one location, this study focused on analyzing centralized and decentralized decision making in regards to the relation between the local offices and the head office.

Therefore, measures on centralization/decentralization were based on the locus where the main decisions were made in the organization and to whom and what has to be reported by the local offices. “Main decisions” involved decisions to be made regarding budgeting, staffing, overall strategy, and IT structure. Questions used to measure organizational structure are summarized in Table 3.3.

Table 3.3: Adaption of the Lee and Lee (16-34) questions for Organizational Structure

Lee and Lee (16-34) Research Model	**This study**
Research method: Survey	Research method: Interviews
Participants were asked several questions about the decision making process with the following potential replies:	Participants were interviewed (open ended questions) about the decision making process.
…can take action without a supervisor	Sample Questions: How are decisions made in the local
…are encouraged to make their own decisions	

…do not need to refer to someone else	offices? Which decisions are made by the local offices, Which have to be consulted with the head office
…do not need to ask their supervisor before action (R)	
…can make decisions without approval	Does the local office need to refer to another party when making decisions?

c. Evaluation for IT Support: Questions for the evaluation of the IT support are adapted from the research model conducted by Lee and Lee (16-34) and are described in Table 3.4

Table 3.4: Adaption of the Lee and Lee (16-34) questions for IT Support

Lee and Lee (16-34) Research Model:	**This study:**
Research method: Survey	Research method: Interviews
Participants were asked several questions about the IT support with the following potential replies:	Participants were interviewed (open ended questions) about the IT support provided by the organization
…provides IT support for information	Sample Questions: Does the organization provide IT support for information and knowledge creating, storing, sharing and acquisition? In addition: the existing databases were evaluated based on richness and usefulness of the content and accessibility
…provides IT support for information	
…provides IT support for knowledge	
…provides IT support for knowledge finding and accessing	
…provides IT support for customer information gathering	

d. Summary of the Evaluation for KM Infrastructure

In total, four questions where used in order to evaluate organizational culture, three questions for evaluating organizational structure and five questions for evaluating IT support. An overview about all questions for the KM Infrastructure construct can be found in Table 3.5

Table 3.5: Overview of questions in respect to KM Infrastructure

Constructs	**Questions**	**Variable name**
Organizational Culture	How could the overall organizational culture be described? How could leadership in the organization be described? How could the management style in the organization be described? What holds the organization together? What is the strategic emphasis of the organization?	OC

Organizational Structure	How are decisions made in the local offices? Which decisions are made by the local offices, which have to be consulted with the head office? Does the local office need to refer to another party when making decisions?	OS
IT Support	Does the organization provide IT support for information and knowledge creating, storing, sharing and acquisition? In addition: the existing databases were evaluated based on richness and usefulness of the content and accessibility	IS

These questions were then used in the semi-structured interview in order to evaluate the KM Infrastructure (organizational culture, organizational structure and level of IT support) of the two participating organizations.

In order to evaluate the intellectual capital (IC), measurements for the three levels of IC had to be defined.

e. Exploring Human Capital: Based on the categorization by Kaplan and Norton (45-53), human capital can be described through three sub factors: employee capability, employee satisfaction, and employee sustainability.

<u>Employee capability</u> includes individual competencies, soft skills, and an individuals' investment in their human capital (Dulewicz and Herbert, 12-24; Mayo, 123-126). Several methods to measure employee capabilities already exist and include for example items such as managers with advanced degrees (Edvinsson and Malone, 17-21) or education and work-related knowledge (Brooking, 16-23). In this study, employee capabilities were measured via their perception of how well participants were aware of the knowledge they needed to fulfill their job effectively and if they always had full access to the knowledge needed to fulfill their job effectively.

<u>Employee satisfaction</u> refers primarily to an employees' emotional or affective state. An employee's overall satisfaction is related positively to job satisfaction reflecting the difference between what the employees' want from their job and what they perceive it is offering (Moon and Kym, 16; Locke, 46-51). In this study, employee satisfaction in the context of KM was measured through their own assessment of how satisfied they were with the sources for knowledge creation provided by the organization as well as how satisfied the employees were with the training opportunities provided by the organization in order to enhance knowledge creation.

<u>Employee sustainability</u> refers primarily to retention of employees. Voluntary turnover can threaten the livelihood of an organization as accumulated organizational knowledge is lost as organizational members leave (Bontis and Fitzens, 22-29). In this study,

employee sustainability is measured through the length of the time worked in the organization in relation to the length of time of their total working experience. The measure items for human capital are summarized in Table 3.6.

Table.3.6: Overview of Items of evaluating Human Capital

Constructs	Questions	Variable name
Employee capability	Participants were asked if they …	
	… are fully aware of the information/knowledge needed to fulfill their job effectively	HC/EC1
	…always have full access to the information/knowledge needed to fulfill their job effectively	HC/EC2
Employee satisfaction	Participants were asked if the organization …	
	…always provides the necessary sources (internet, publications, colleagues, etc.) to create the knowledge they need to fulfill their job effectively	HC/ES1
	…provides opportunities on a regular basis to attend internal training to enhance knowledge creation	HC/ES2
	…provides opportunities on a regular basis to attend external training to enhance knowledge creation	HC/ES3
Employee sustainability	Relation between participants total years of work experience and the length of time working for the organization	HC/ESu1

f. Exploring Structural Capital: Based on the categorization by Moon and Kym (60), structural capital can be described through organizational processes and information systems.

Organizational processes refer to how people actually use the information or knowledge resources available to them in the workplace. Only codified knowledge, which is captured in databases and not in the minds of the employees, is part of the structural capital of an organization. In this study, organizational processes were measured through the level of codified knowledge sharing in comparison to the level of personalized knowledge sharing. Moreover the importance of their own database as a source for knowledge creation was also observed.

Information systems refer to information technology used in managing knowledge. Information systems facilitate collaborative work and enable knowledge sharing, but only if they are used. Therefore, in this study, information systems were measured through the usage rate of the organizations' own databases. The items used for structural capital are summarized in Table 3.7

Table 3.7: Overview of Items for evaluating Structural Capital

Constructs	Questions	Variable name
Organizational Processes	Participants were asked …	
	…which approach (codified or personalized) they used for knowledge sharing	SC/OP1
	…which are their three most important sources for creating new knowledge	SC/OP2
IT Systems	Participants were asked if…	
	…they used their information database regularly	SC/ITS1
	…they used their knowledge database regularly	SC/ITS2

g. Exploring Relational Capital: Relational Capital is described through the relation to all stakeholders that influence the operations of the organization be they customers, suppliers, donors or local government and pressure groups.

Various measurements for relational capital can be found in former research. Bontis et al. (40-57), for example, measured the *customer satisfaction*, *market share* and *longevity of relationships*, while Brooking (56) measured relational capital through *brands*, *customer loyalty* and *distribution channels*.

This study focused on relations of the local offices with other stakeholders who might hold information and knowledge which might be valuable for the local offices. Therefore, relational capital was measured through the level of knowledge sharing with the main stakeholders (colleagues in other local offices, staff from the head office, staff from the funding organization and staff from other related organizations). The items for relational capital are summarized in Table 3.8.

3.8: Overview of Items related to Relational Capital

Constructs	Questions	Variable name
Relation to Stakeholders	Participants were asked if they shared information/knowledge regularly with…	
	…colleagues in other local offices	RC1
	…staff of the head office	RC2
	…staff of the funding organization	RC3
	…staff of other related organizations	RC4

h. Summary of the Evaluation for IC: In total, six items were used in order to evaluate human capital, four items for evaluating structural capital and four items for evaluating relational capital. An overview about all measure items for the IC construct can be found in Table 3.9.

Table 3.9 Overview of Items considered in respect to IC

Constructs	Questions	Variable
Human Capital		
Employee capability	Participants were asked if they …	
	… are fully aware of the information/knowledge needed to fulfill their job effectively	HC/ EC1
	…always have full access to the information/knowledge needed to fulfill their job effectively	HC/ EC2
Employee satisfaction	Participants were asked if the organization …	
	…always provides the necessary sources (internet, publications, colleagues, etc.) to create the knowledge they need to fulfill their job effectively	HC/ ES1
	…provides opportunities on a regular basis to attend <u>internal</u> training to enhance knowledge creation	HC/ ES2
	…provides opportunities on a regular basis to attend <u>external</u> training to enhance knowledge creation	HC/ ES3
Employee sustainability	Relation between participants total years of work experience and the length of time working for the organization	HC/ ESu1
Structural Capital		
Organizational Processes	Participants were asked …	
	…which approach (codified or personalized) they used for knowledge sharing	SC/ OP1
	…which are their three most important sources for creating new knowledge	SC/ OP2
IT Systems	Participants were asked if…	
	…they used their information database regularly	SC/IT
	…they used their knowledge database regularly	SC/IT
Relational Capital		
Relation to Stakeholders	Participants were asked if they shared information/knowledge with…	
	…colleagues in other local offices	RC1
	…staff of the head office	RC2
	…staff of the funding organization	RC3
	…staff of other related organizations	RC4

Overall, the questionnaire comprised five sections: A) General Knowledge Management, B) Knowledge Needs, C) Knowledge Creation, D) Knowledge Sharing and E) Personal Background.

<u>Knowledge Creation:</u> The third section was developed in order to make statements about employee satisfaction with the sources for knowledge creation provided by the

organization as well as to make statements about employee satisfaction with the training opportunities provided by the organization. Participants were asked if the organization always provided the necessary sources to create knowledge needed to fulfill the job effectively or if the organization provided opportunities on a regular basis to attend training (internal and external) to enhance knowledge creation.

Participants rated their answers based on a 5-point Likert scale ranging from "strongly agree", "agree", "not sure" to "disagree" and "strongly disagree".

The last question of this section was developed to make statements about the sources used most for creating knowledge. The responses to this question were determined through a given choice of possibilities. This question was developed in order to measure the importance of the organizations' own database as a source for knowledge creation.

This section collected data for item measures HC/ES1 (participant's satisfaction with knowledge creating sources provided by the organization), HC/ES2 and HC/ES3 (participant's satisfaction with internal and external training opportunities provided by the organization in order to create new knowledge) as well as SC/OP2 (importance of the own database for creating new knowledge).

Knowledge Sharing: The fourth section was structured to investigate how information and knowledge was shared (personalized of codified approach) as well as with whom the participants shared information and knowledge.

The response to the question if information and knowledge was shared on a regular basis with various others had to be given on a 5-point Likert scale ranging from "strongly agree", "agree", "not sure" to "disagree" and "strongly disagree". Questions regarding how the knowledge was shared were determined through the choices "automated processes/databases" and/or "personal ties".

The responses of the participants allow an analysis of the knowledge sharing behaviour with regard to with whom and how they share knowledge and therefore gathered data about item measures SC/OP1 (codified or personalized approach to knowledge sharing) and RC1 to RC4 (relation to various stakeholders).

Personal Information: The last section was developed in order to gain demographic information about the survey participants. Participants were asked to provide information about gender, work experience in general and how long they have been working for the organization. Additional questions were related to the location of their office and how the office is financed.

The data for item measure HC/ESu1 (employee sustainability) was collected through questions from this section. An overview about the different sections of the survey and the corresponding item measures can be found in Table 3.10.

Table 3.10: Overview about the different sections of the survey and the corresponding items

Section	Item measures
Section A: General Knowledge Management	SC/ITS1, SC/ITS2
Section B: Knowledge Needs	HC/EC1, HC/EC2
Section C: Knowledge Creation	HC/ES1,HC/ES2, HC/ES3
Section D: Knowledge Sharing	SC/OP1
Section E: Personal Information	HC/ESu1

3.6 Sampling Design:

3.6.1 Target Population: The population of the study was drawn from the groups and communities; board members, staff of the studied NGOs, donors, members of direct beneficiary groups from the studied NGOs implemented projects, community members, local leaders, local government officers, households in the respective areas where projects have been implemented, civil society activists, and civic leaders as well as the local leadership at district and respective areas.

i. Element*:* Office bearers of NGOs, Sponsoring Agencies, Beneficiaries, and other related stakeholders covered during sample survey.

ii. Sampling Unit: 6 High Performing and 3 Low Performing NGOs studied.

iii. Extent: The study is conducted in the project areas of the studied NGOs in Assam.

iv. Time: Survey was conducted during the period of December 2010 to March 2013.

3.6.2 Sample size: During the study, 24 leaders and technocrats including, block development officers, political leaders, representatives from sponsoring and supporting agencies, heads of education and health departments were interviewed as key informants. More so, 47 community groups (47×5=235) with direct support by the case study NGOs participated in the research and Focus Group Discussions were held with each group. Interviews were also conducted with 27 board members, 9 chief functionaries of NGOs, 62 Employees and 3 Community Process Facilitators drawn from the intervening areas of the studied NGOs. Also, 590 (542 beneficiaries and 48 non beneficiaries) households of both beneficiary and non-project beneficiary members were interviewed. In quantitative terms, the calculated number of respondents, that participated, including

Focus Group discussions and Key Informant interviews across 9 NGOs was 950 respondents.

3.6.3 Techniques: Judgment sampling method was used to select the NGOs. Convenience sampling was used for selection of donors, project staff, other stakeholders and beneficiary selection and snowball sampling was used for key informants.

3.6.4 Sample Selection: Sample selection is conducted in four phases (a) NGO Selection, (b) beneficiaries selection (c) Staff Selection, and (d) Stakeholders selection. This is explained below.

i. Selection of NGOs*:* The NGOs were selected for the study into three phases. In the first phase list of the NGOs were collected. Since there is no official list available we have collected NGOs lists from funding and supporting agencies, like CAPART, NABARD[5], IIBM[6], RGVN, PWD[7] of Assam, NACO[8], NRHM[9], AACS[10] and Economics and Statistics Department, Assam. In the second phase, parameters are set to shortlist the NGOs. While selecting the parameters, researcher solicited opinions of experts (NGO leaders, Donors, Academicians, Supporting Agencies, Civil society activists) and previous research study conducted in NGO sector. Parameters are:

a) Head Office should be in Assam.
b) Total number of Regular paid Employees should not be less than 10.
c) Geographical area covered (at least 1 district).
d) Total number of years in Existence (not less than 12 years).
e) Total number of donor funded Projects handled since inception not less than three.

On the basis of above parameters, 42 NGOs were shortlisted. The researcher physically verified the details provided by these NGOs and found that only twenty NGOs fulfill the criteria set.

In the third phase, out of twenty NGOs, six high performing and three low performing NGOs are selected for case study.

<u>Selection of High Performing and Low Performing NGOs</u>: An NGO that has the capacity to satisfy or influence its stakeholders is termed as High Performing NGO, while an NGO that lacks this capacity is known as Low Performing NGO (Hashemi and U I Karim). Fowler also maintained that impact should be judged on the basis of the

[5] National Bank for Agriculture and Rural Development
[6] Indian Institute of Bank Management
[7] Public Works Department
[8] National AIDS Control Organization
[9] National Rural Health Mission
[10] Assam State AIDS Control Society

effective satisfaction of the rights and interests of legitimate stakeholders in keeping with its mission. High Performing NGOs' accountability is directed 'downward' towards the beneficiaries whereas Low Performing NGOs' accountability is directed 'upward' towards donors.

In this study, NGOs were selected on the basis of the following performance criteria. The criteria includes: Outreach, Commodities Availability, Support Services, Enabling Environment, Community response to program services, Organizational capacity, Budget utilization, pattern of Expenditure, system of Record Keeping, Bank Account, Cash in Hand and Procurement system. Information were collected from Beneficiaries, Donors, Supporting agencies, NGO officials and Board members.

On the basis of above criteria the twenty NGOs were ranked and from them six high performing and three low performing NGOs are selected for the study. High Performing NGOs are those NGOs who have scored more than 50 out of composite score of 100 and those NGOs who have scored less than 50 are low performing NGOs out of composite score of 100.

High Performing NGOs	Low Performing NGOs
Bosco Reach Out (BRO)	Shanti Sadhana Ashram (SSA)
Rashtriya Grameen Vikas Nidhi (RGVN)	Sipajhar Diamond Club and Community Center (SDCCC)
North East Affected Area Development Society (NEADS)	Tezpur District Mahila Samiti (TDMS)
Deshabandhu Club (DBC)	
Seva Kendra Dibrugarh (SKD)	
Center for Rural Development (CRD)	

ii. Selection of beneficiaries: Beneficiaries were selected on the basis of their involvement with the NGOs. It was kept in mind that they should have at least one year experience of availing facilities from the NGOs

iii. Selection of Staff: All the project heads were included in the study. While selecting staff, the study attempted to include predominantly senior employees.

iv. Other Stakeholders: In case of other stakeholders, like donors, members from supporting agencies, community leaders were chosen on the basis of their knowledge level on the studied NGO services.

3.7 Statistical Tools: As explained before, the study is basically qualitative so only descriptive tools namely mean and standard deviation were used. MS Excel and SPSS 16 were used to analyze the data wherever necessary.

3.8 Validity and Reliability: Some of the limitations of case study research relate to the requirements of research to conform to the constructs of validity and reliability. Miles and Huberman (50-53) proposed a number of criteria, such as triangulation, to ensure the highest possible reliability and validity. Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. Denzin (42- 45) distinguished four forms of triangulation:

i. Data triangulation, which entails gathering data through several sampling strategies, so that slices of data at different times and social situations, as well as on a variety of people, are gathered.
ii. Investigator triangulation, which refers to the use of more than one researcher in the field to gather and interpret data.
iii. Theoretical triangulation, which refers to the use of more than one theoretical position in interpreting data.
iv. Methodological triangulation, which refers to the use of more than one method for gathering data.

In order to conform to the constructs of validity and reliability this study uses the form of methodological triangulation by cross-checking the data through four different data collection methods: interviews, in-depth document research, focused group discussion and survey.

The chapter contains details of objectives, preliminary survey, and the research design of this study. The sampling design and the details of the statistical tools applied were also presented in this chapter.