Design for Enabling Sustainable Livelihoods in Disadvantaged Communities: A Case Study in Amphoe Phrapradaeng, Samut Prakran Province in Thailand

An exegesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy (Communication)
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Siriporn Peters

School of Media and Communication
RMIT University
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Abstract

This research study was an investigation into the contribution of communication designers as researchers for enabling sustainability of livelihoods in a community. The objectives were to generate knowledge for the communication design field and also for communities which are seeking sustainable livelihoods. This investigation was guided by three main research questions: what strategies and tools communication designers as design researchers can use to enable themselves and a community to undertake a collaborative investigation; how design researchers use these strategies and tools to achieve research objectives; and what is the contribution of communication designers as design researchers in enabling a community to attain a sustainable livelihood.

This was a collaborative research project involving nineteen people with physical impairments who live in the Samut Prakran province in Thailand. This community was selected as a case study because this research evolved from my previous research which I completed with this group. The previous research marked a significant shift in focus of Thai research projects with this community because it aimed to work with the community to create new solutions to their problems. The solution from *my* previous project was no longer effective; therefore, this community was chosen as an intrinsic case study. Participatory Action Research (PAR) was employed as the research methodology because it allowed researchers and community representatives to have an active role in the process. Human-Centred Design (HCD) and Sustainable Livelihood Approach (SLA) were employed as key approaches. The research was constructed around four main workshops targeting four successive stages: 1) reflecting on the previous research which was undertaken with this community in order to clarify the research problems and plan for the next stage; 2) recruiting participants and facilitating them to investigate their own situation and set the livelihood goals that they desired to attain; 3) enabling the participants to create and implement their own ideas to improve their situation; and 4) monitoring the participants as they implemented the project in their community and evaluating the effectiveness of the implementation.

This study had main research outcomes. Firstly, the participating community stated that they had achieved the livelihood goals that they desired. They also devised a complementary income-generating activity which enabled them to continue to improve their capabilities, earn income and reinforce their value in their community and reduce their vulnerability. Secondly, PAR integrated with HCD and combined with SLA were shown to be effective strategies and approaches because they facilitated the transfer of knowledge to the community participants, gave them both incentive and ownership of their ideas and actions, and enabled them to create and pursue their own solutions. These strategies and approaches were not new; however, their effectiveness depended on design researchers having the mindset and behaviour of agents of sustainable change which was a focus and eventual outcome of this study. Finally, the research also demonstrated the benefits of reorientation of the communication designers’ role from that of a solution provider to that of an agent of sustainable change.
Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

Siriporn Peters

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Chapter One
Introduction

This exegesis discusses the key discoveries of my doctoral research and positions this research within the broader field of design research. This research has had multiple outcomes. There has been the direct impact of the research process and outcomes for the participating community. In addition, there is the profound change that has occurred in my own research practice and, through that, I present myself as a case study for other designers working in this field as researchers. It is my hope that they will be able to critique and consider what I have learnt, so they can then identify methods and issues which they can apply in their own research practices. Throughout the research I have published and presented my ongoing discoveries to the broader research communities which have been a form of ongoing contribution to the field.

This research has been undertaken as a ‘by project’ submission within the framework of RMIT guidelines. As such, the exegesis is just one part of a three-part submission. It is accompanied by an exhibition and public presentation; together these three elements comprise the presentation of the outcomes of my doctoral investigation into design for enabling sustainability of livelihoods in disadvantaged communities: a case study in Amphoe Phrapradaeng in the Samut Prakran province in Thailand. This research project intended to find ways to enable a disadvantaged community which participated in the project to attain a sustainable and satisfying livelihood.

This introductory chapter is composed of five sections. The first section outlines the research problems and questions. The second section focuses on the research objectives and the contribution of the research to the field. The third section identifies the background of the study. The fourth section is the research design, research procedures, as well as the timeline of the investigation. The last section of this chapter outlines the structure of the exegesis.

Research Problems

This doctoral research evolved from my previous research which I completed with groups of people with disabilities in the Amphoe Phrapradaeng community in Samut Prakran province and the Amphoe Prakret community in Nonthaburi province. These groups produced and sold handicrafts for a living in a semi-urban area of Thailand. The previous research was funded by the National Research Council of Thailand from 2006-2007. This research project was conducted by my research team at King Mongkut’s Institute of Technology Ladkrabang, Bangkok in Thailand (their names were acknowledged in page39). The research objectives were not only to generate new knowledge to industrial design and graphic design field but also to work with these groups in order to help them to develop new products for manufacture that were possible within their particular circumstances.

Typically Thai research projects with these communities are undertaken as ethnographic studies with the objective of finding out about communities but not necessarily creating change. Our project marked a significant shift in focus where rather than finding out about the community; our aim was to work with them to create new solutions to their problems. Consequently the team decided to employ Action Research as the methodology for undertaking the project as they felt that this was most closely aligned to the design process and there is a focus on ‘doing’ rather than ‘recording’. This particular
approach to the project was deemed to be an important contribution of the research by the Thai funding agencies, as they were concerned that these communities prosper as a result of the research.

My role in the previous research was a graphic designer who worked as a design researcher because my previous research in these communities focused on design for delivery. I treated these communities as if they were my design clients. After the research was completed and my research team withdrew from these communities, I had an opportunity to visit them and discuss their progress. I discovered that the groups had not continued developing their own products. At the time, I did not understand why they did not take up a solution which my research team and I had created for them. Subsequently, I decided not to continue conducting my research in these communities until I ascertained what went wrong with the previous research.

To find out how other researchers dealt with this kind of situation, I decided to take advanced research through a doctoral research program. After undertaking this program, I discovered that the previous research had generated a change in those communities; however, it was not a sustainable change the factors of which are explained in greater detail in Chapter Three.

Based on my review of the literature, so far I have not yet found a research and theoretical framework in the design field that explains what strategies and tools a communication designer as a researcher should use and how a designer could contribute to generating sustainability of livelihoods in community development. Consequently, this research was set as a quest for this knowledge.

In order to achieve a real outcome, this research study was designed to investigate a real-life situation in one particular disadvantaged community that I have had previous working experience with. My observations throughout my previous research revealed that a community of people with physical disabilities in Amphoe Phrapradaeng in the Samut Prakran province had many opportunities to attain a sustainable livelihood because local government organizations and academic institutions, such as my university, had provided various types of support for this community including financial support. However, this community did not continue to advance their opportunities. Therefore, this community was selected as a case study for this research.

Research Objectives

The objectives were to generate knowledge for the communication design field and also for communities which are seeking sustainable livelihoods.

Research Questions

This investigation was guided by three main research questions.

1) What strategies and tools can researchers use in order to enable themselves and the community to undertake a collaborative investigation?

2) How do researchers use these strategies and tools in order to achieve research objectives?

3) What is the contribution of communication designers as researchers for enabling the community to attain a sustainable livelihood?
Background of This Study

This research originated in the communication design field. This is also the field to which this research seeks to contribute new knowledge.

Communication design is the field which has evolved from the graphic design field (Erlhoff and Marshall 2008; Dunbar 2009). Communication design has extended the boundary of the graphic design field beyond the media that present information to include the audience who receive information as well. Media of communication design are not only prints but also other digital media for example internet, television, and mobile phone because the main goal is to reach broader audiences both local and global at the same time (Yu 2007; Erlhoff and Marshall 2008).

Communication design is not all about self-expression or making things beautiful. Every piece of communication design is created because someone wants to communicate with a particular group. The main goal is to affect a change in people or public’s knowledge, attitude, and behaviour by providing them information, persuading them to accept a new idea or attitude, and inspiring them to take actions in order to improve their knowledge and quality of life after the communication takes place (Frascara 2004). Generally, communication designers use images, text, and color to make complex information or messages clearly visible and easy to understand. As a result, the role of communication designers is widely known as an encoder.

According to Frascara (2004: 190) “design is an intellectual, sensitive, and practical discipline, requiring many levels of human activity: power of analysis, sensitivity to difference, mental flexibility, interpersonal skills, clarity of judgement, visual sensitivity, cultural awareness, and technical knowledge”. Frascara notes that the traditional field of communication design had been extended from a commercial activity into social development in order to reduce social problems. The contribution of communication designers in this development is substantial. Communication designers can make messages or information clear and facilitate the flow of information and messages in our society effectively (Frascara 2004).

Working for social development, communication designers often find themselves working collaboratively with other people from different disciplines including local community members who are seeking to improve their situation (Dunbar 2009). Communication design is a process which is no longer used exclusively by designers in order to make things or to create graphic designs for other people. Akama (2008: 161) asserts that, “communication design is a process that is based on how to apply and manifest different kinds of understanding and to explore what designed outcomes could mean for different people. Embracing and acknowledging the diversity and multiplicity of viewpoints of all stakeholders can allow the design process to explore the potential and possibilities of the meaning of different design outcomes” (Akama 2008). Dunbar (2009) explains that communication design has been positioned as a human-centered design activity, where by the nuances of human experience and culture become integral components to the communication design process (Dunbar 2009). Therefore, the role of communication designer also shifted from an encoder of signs or manipulator of visual grammar to a facilitator of a design process that may make use of communication design (Akama 2008; Dunbar 2009).
Even though this research originated in the communication design field, theoretical frameworks of this research were established in the field of Human-Centred Design which is a specific approach to design and in the Sustainable Livelihoods Approach, which is an approach to sustainable community development.

**Human-Centred Design**

Human-Centred Design (HCD) is a specific approach which is established in the design field which focuses on gaining greater understanding about what people do so that designers can design for them. (Rouse 1991; Webster 1999). HCD focuses on working with and for people who will use the design artefacts or systems, and the exploration of their particular needs or experiences provides a framework for achieving more successful design solutions (Hanington 2003; Chamberlain and Bowen 2006).

According to Chamberlain and Bowen (2006: 67) “HCD is a broader concept; a holistic approach that explores the relationships between the designers, the various end-users, and the other stakeholders’ within the system of productions and consumption”. Therefore, the challenge to this approach is establishing communication methods that provide a clear understanding between the potential diverse users and stakeholders involved (Chamberlain and Bowen 2006)”. Through this design approach, designers are able to accumulate knowledge and apply it to a new project.

Marc (2008: 22) states that, HCD is an attempt to bring designers, users, and stakeholders to work together as well as let users participate in and contribute to research and design. Even though this approach is shifted from designing for users to designing with users (Marc 2008), this approach continues to be a design delivery approach to design outcomes.

**Sustainable Livelihoods Approach**

Sustainable Livelihoods Approach (SLA) is a way of thinking about the objectives, scope and priorities for development. This approach is people-centered because it focuses on putting people who seek to improve their situation at the centre of development in order to increase the effectiveness of development assistance. This is because the people know their priorities (DFID 1999; Chambers 2005) and the means available to them of accessing available resources in their community better than anyone else. The Sustainable Livelihood Framework (SLF) was developed by The Department For International Development (DFID) in the United Kingdom in order to assist external agents in the understanding and analysis of the livelihoods of the poor. It is used as a tool for assessing the effectiveness of existing efforts to reduce poverty. SLF is like all frameworks. It is a simplification and the full diversity and richness of livelihoods can only be understood by qualitative and participatory analysis at a local level. Therefore, this research project employed a participatory approach.

**Research Design**

This section outlines the research design for this doctoral investigation. It is composed of the research methodology, research site, participants, procedures, timeline of the research project, research methods, tools, and limitations.
Research Methodology

Participatory Action Research (PAR) was the research methodology that I chose to employ for this research for the following reasons. Firstly, PAR provided me with opportunities to enter the real world of the people central to the study as it enabled the research to co-develop processes with people rather than for people. Secondly, PAR provided some community members in the particular community which was under study to participate actively in the quest for information and ideas to guide their future actions. Finally, PAR has been defined as an approach to empower people through the process of constructing and using their own knowledge to increase the relevance of the research process (Elden and Levin 1991; McTaggart 1997; Balcazar, Keys et al. 2006; Kindon, Pain et al. 2007; McIntyre 2008). PAR is widely employed in research projects which have A collective commitment to investigate an issue or problem, a desire to engage in self- and collective reflection to gain clarity about the issue under investigation, a joint decision to engage in individual and/or collective action that leads to a useful solution that benefits the people involved, and the building of alliances between researchers and participants in the planning, implementation, and dissemination of the research process (McIntyre 2008).

This research was built upon my previous research which aimed to generate a solution for communities of people with physical disabilities. After I re-evaluated my previous research, I realised that it generated a change in the communities. However, it did not generate a sustainable change in these communities. Therefore, the main goal of this doctoral investigation was to enable the community that I intended to work with to generate a sustainable change in their community so that they can continue flourishing after the investigation was completed and the researcher withdrew from their community. According to my review of the literature, sustainable change occurs when the community members who seek to improve their situation are able to create and implement their own ideas instead of accepting and implementing ideas that have been created for them (McNiff and Whitehead 2006).

Through my reflection on the previous research, I realized that both researchers and participants need to change their ways of thinking and behaviour to generate a sustainable change in a community. Researchers are no longer a solution provider for participants. They should provide an opportunity for participants to create and implement their own ideas. The participants are no longer recipients of a solution which has been created for them. They should be the ones who design for their own solution based on their strengths and available resources in their community. The full details of this reflection are outlined in Chapter Three.

This doctoral research differs from my previous design project as the community members who sought to improve their situations had full participation and co-determination with me through all phases of the research process. PAR is the methodology which encourages people to work together as knowing subjects and agents of change and improvement (McNiff and Whitehead 2006; Kindon, Pain et al. 2007). It was on this basis that I decided that PAR was the most appropriate research methodology for this project.

Research Site

The research took place mainly in a community of people with physical disabilities in Amphoe Phrapradaeng in Samut Prakan province. It is located in the South of Bangkok. This community was
established by a group of disabled people as an organization of people with disabilities which was called the Samutprakran Disabled Persons Association (SDPA) at the time. Their main goal was to access commissions from the local government organizations, such as a fortnightly commission of selling lottery tickets for the Government Lottery Office of Thailand and a four month commission of making artificial flowers for the local government once a year.

After this community was set up as the organization, they built the SDPA facilities as a centre to distribute lottery tickets for people with disabilities who were the SDPA members only. The SDPA facilities were operated by the leader of the community. For people with disabilities to be eligible to work at the SDPA facilities or distribute lottery tickets they must be members of the SDPA. To qualify as SDPA members, the people with disabilities must be a resident of the Samut Prakan province. At that time, this organization had 3,500 members who were registered as lottery retailers with them.

As I had an existing connection with the leader of this community and I had previously undertaken research with a group of disabled people who were the SDPA members, I decided to consult with him about potential collaboration in this research. After the consultation, he fully supported this undertaking. As the leader of this community he was also the president of the SDPA and he gave me permission to conduct my research project at the facilities of the SDPA and with the disabled people of the association. Thus, I conducted the research project primarily at the SDPA facilities.

Participants

Potential participants of this research initially were a group of people with physical disabilities who were the SDPA members. Based on my own observations throughout the previous research, I found that many of the people with physical disabilities in this community had mobility and literacy difficulties. According to the risk classification of the RMIT Human Research Committee, these conditions are classified as high risk research because this intrusion may cause discomfort and inconvenience to people with physical disabilities. In order to reduce the risk, I decided to invite a group of people with physical disabilities who were literate and had fewer mobility issues to take part in this study; for example, the committee members of the SDPA.

According to the database of the SDPA, there were approximately 3,500 people who were registered as members of the SDPA. In order to avoid burdening the whole community or organization, I invited only a limited number of people with physical disabilities (5-15 people) aged 25-45 years to participate. I did not invite the people with physical disabilities aged less than 25 years old because they were still in the education system and most of the people over 45 years old with physical disabilities were too old to work. As most of disabled people in this community were members of the SDPA, the participants of this research project were recruited through the SDPA.

Research Procedures

The research procedures for this investigation were composed of four phases (see Figure 1.1). The first phase aimed to reflect on my previous practice and research, which I completed with different groups of people with disabilities in Thailand between 2006 and 2007, and my doctoral investigation evolved from that research. The activities in this phase were established as Workshop One, which was
called Let Me Do It For You Workshop in order to give, in essence, a summary of the key discoveries through a process of critical reflection. My preparation, research tools, and ethics application were generated and obtained in this phase.

The second phase focused on recruiting participants, and collecting the data of the participants as individuals and as a community so that I could get to know them and understand their livelihood better. In the second phase, the participants were facilitated to investigate their livelihood as a community with me. The activities in this phase were enabled through a workshop called I’ll Show You How Workshop because my main goals were to demonstrate to the participants how to use SLF as a tool to gather their own data and do their own analysis. In this workshop, the participants were also enabled to identify their vulnerability, and the available livelihood assets that they could transform into positive outcomes.

The third phase concentrated on enabling and empowering the participants to develop sustainable livelihoods based on the available assets in their community, for example, human, financial, social, physical, and natural assets. The activities in this phase were set up as a workshop which was called Try It Yourselves Workshop because my main goals were to enable and empower the participants to deal with key issues so that they could understand what they had to do and why, to develop sustainable livelihoods and become more self-reliant.

The final phase involved the monitoring and evaluation of the effectiveness of this research. The participants and I took part in this phase, but both had different goals and employed different methods. The participants set their own goals and designed their own methods. Their mutual goal was to evaluate whether or not this research enabled them to improve their capabilities to achieve sustainable livelihoods in their community. On the other hand, I aimed to evaluate whether or not this research generated a sustaining project which could continue supporting the participants in pursuing a sustainable livelihood long after the research project had concluded and the researchers withdrew from the community. These activities in the final phase were undertaken in a workshop called It’s All Yours Workshop because the participants took their own action without my presence in their community. I collected the data in this phase by monitoring from a distance without any intrusion over approximately six months and then by direct observation and conversation with the participants in the community. After that, the participants and I used SLF to evaluate the effectiveness of the implementation of the research together before I withdrew from the community.
Figure 1.1 Research procedures

**Timeline of The Research Project**

This research project was conducted between 2007 and 2010. However, the activities in the second phase commenced following the Ethics Approval of the RMIT Human Research Committee between August 2008 and October 2009. (see research timeline in Figure 1.2). During that time, this research took place mainly in the Samutprakran Disabled Persons Association (SDPA) in the Samut Prakran province.

Figure 1.2 Research timeline
Research Method

The research method was a case study. The case study method was selected because it allowed researcher to retain the holistic and meaningful characteristics of real-life events (Yin 2009). As this research was designed to investigate a livelihood of one particular community and enable a community or community representatives to attain a sustainable livelihood, it was categorized as an intrinsic case study. According to Stake, an intrinsic case study is the case which is pre-selected because a research needs to learn about that particular case. Stake (1995:4) also notes that “The more intrinsic interest in the case, the more we will restrain our curiosities and special interests and the more we will try to discern and pursue issues critical to” (Stake 1995).

Research Tools

Sustainable Livelihood Framework (SLF) was the main tool for the participants and I to use for data collection and analysis of the livelihoods of the participants as a community before and after implementation of the research. The explanation of SLF is in Chapter Two. I also employed integrated methods for collecting evidence to support the effectiveness evaluation throughout the research activities including observation, interviews, group meetings, group discussions, and physical artefacts, such as photographs, and videos.

Research Limitations

This research was designed to investigate a real-life situation of people with physical disabilities in one particular community one of the most disadvantaged communities in Thailand. This research had three major limitations: participants, schedules and research methods.

The first limitation was the participants. As the participants were people with physical disabilities, this investigation was required to be conducted mainly at a particular place in their community where they could commune and work together. Moreover, the participants of this research were described as unstable populations because some of them may not be able to attend some of the activities. Some new people may join, or some might not be able to attend at all and withdraw from the research project. As a result, this research will refer three groups of people. The first group was the participants of this research who were recruited at the beginning of this research. The second group was the SDPA members who were invited to take part by the participants themselves. Even though they refused to sign their consent, they wanted their voices to be included as a community. As a result, I could not identify them or present their personal data in this exegesis. The last group of people were community members who lived and worked in the Samut Prakran province. They were not disabled, so they could not be the SDPA members. However, they worked with disabled people to support them at the SDPA facilities as a full-time employee or a casual worker of the SDPA. Therefore, they were called a community member or a resident instead of the SDPA members.

The second limitation was the research schedules. I was unable to predetermine the research schedule because it relied heavily on the availability of the participants in this community. According to the Ethics guidelines, the participants must be consulted or informed and approved before each research activity takes place. As a result, each research activity in this research had to be operated strictly within the limited time frame given by the participants.
The third limitation was the research methods. To obtain valid information, it was necessary to employ multiple methods because each method had its own limitation. In this research, I employed semi-structured interviews for data collection of the participants individually, so that I could get to know the participants as individuals and have a better understanding of the participants’ situations and livelihoods as a community. In addition, it helped me to obtain data on the participants which I could not directly observe, for example, their past experience or things that had already happened in their community. However, the interviews had the following limitations. An interview is a time-consuming process. In addition, the length of time varies depending on the availability of the participants (Creswell 2009; Simons 2009) Nevertheless, the interviews were chosen purposefully in order to reduce the burden on the participants because some of them may have had physical difficulties in writing their own answers or completing the questionnaires. Some of them may in fact have had no arms or fingers.

According to the Ethics guidelines, the participants must be informed and consulted as well as approved before each method was employed. Subsequently, the research methods were designed to be used alternately. For example, the semi-structured interview which was employed for collecting personal data which I could write for the participants, could be used as open-ended questions in which the participants could write their own answers. The other methods were observations. The observations were selected especially for collecting data for this research project because they enabled me as a researcher to have first-hand experience with the participants and the information as it occurred. However, the observations also have limitations because some phases of this research were designed for the participants to deal with tasks and issues by themselves without my presence in the community, for example the final phase. Therefore, I gathered the data during that phase from other physical evidence and artefacts, such as photographs and video which were collected by the participants.

**Research Analysis**

Discourse analysis was employed as research analysis. It is a qualitative research analysis. Generally, discourse analysis describes what speakers and headers are doing (Brown and Yule 2003). Therefore, discourse analysis generally cannot be properly understood without extensive reading (Brown and Yule 2003; Fulcher 2005; Wertz 2011). Discourse analysis was employed in this research because of two main reasons. The first of all, it helped me as a researcher to have a deeper understanding the contribution role of communication designers as researchers throughout this research. Secondly, it was to enable me to evaluate the efficiency and effectiveness of this research implementation from spoken data (Brown and Yule 2003) from a group interview and group discussions with research participants throughout the research process.

**Structure of This Exegesis**

This exegesis is composed of seven chapters. Chapter One is this introductory chapter.

Chapter Two is a literature review which focuses on the theoretical framework and research methodology of this research project. This chapter is divided into four sections. Sections one and two focus on design research approaches and methods. Section three outlines the ‘Sustainable Livelihoods Approach’ which is the key theoretical approach and method which has been used in this study. In the
final section I will discuss the integration of these two approaches to knowledge creation and how they were used.

Chapter Three is the first phase of this research. The title of this chapter, *Let Me Do It For You*, is in essence a summary of the key discoveries through a process of reflection. In this chapter, I will reflect on my previous research projects. The activities in this phase were set up as Workshop One. It highlighted that I had been focusing on designing for solving problems for the people who participated in the previous research process and this had many limitations for ongoing application by the communities that I worked with. At the end of this chapter, I will discuss how this came to be, and how it then framed my doctoral investigation resulting in an exploration of radical new ways of practicing this kind of design research.

Chapter Four is the second phase of this research. This chapter focuses on the participants. The activities in this phase were set up as Workshop Two, which was called *I’ll Show You How* because it was designed to enable the participants to investigate their situation and generate their own solutions. This workshop and the associated discoveries mark an important turning point in my practice as a researcher working with communities. This chapter is divided into three main parts. The first focuses on the people who participated in the investigation. In this part, I explain who they were, why they were invited to take part, and how I recruited them. The second part concentrates on the research activities that enabled the people to understand their livelihood as a community and investigate this livelihood with me. The last part of the chapter discusses and reflects on those activities in order to plan the next series of actions that resulted in Workshop Three.

Chapter Five is the third phase. This chapter discusses Workshop Three of this research. This workshop was called *the Implementation of a New Idea*. This chapter is composed of two main parts. The first part of the chapter concentrates on the activities in Workshop Three which was designed to enable the community to create their own sustainable livelihood. My main goals were to 1) enable the participants to deal with key tasks and issues so that they could understand what they had to do to improve their situation and why, and 2) to empower them to create and implement their own ideas, so that they could have a sense of ownership in their plan and action in order to become more self-reliant. In the second part of this chapter, I reflect on my own role and the activities in this workshop in order to plan the next action in Workshop Four. In this chapter, I also discuss the transition in my role throughout the research activities in this workshop.

Chapter Six is the final phase of this research. This chapter discusses Workshop Four which was the last phase of this research project. This workshop was called *It’s All Yours* because the participants operated the whole process by themselves from planning, making a decision, taking action, reflection and evaluation their own activities. The research activities in this phase concentrated on evaluating the effectiveness of the research project within the parameters of the real life context of the participating community. Participatory Monitoring and Evaluation (PM&E) was the method that was employed in this evaluation process by both the participants and me as this is the standard method for evaluating sustainable livelihoods outcomes (IISD 2011). The expectations of this evaluation varied between the research participants and myself, and reflected our differing ambitions of the overall research project. As such, two different methods for evaluation were used. Consequently, this chapter
is divided into three parts. Parts one and two focus on the activities in Workshop Four and the subsequent findings. Part three of this chapter is an overall discussion and reflection on activities in this workshop.

Chapter Seven is the conclusion. In this chapter, the research questions will be answered. The discoveries from this research will be illustrated and suggestions for future research are also proposed.
Chapter Two
Theoretical Framework and Methodology

This literature review chapter focuses on theoretical framework and research methodology of this research project. The chapter is divided into six sections. Section one is about design for sustainability. Section two is design approach. Section three is design research approach. Section four outlines the ‘Sustainable Livelihoods Approach’ which is the key theoretical framework and method which has been used in this study. Section five is design and sustainable livelihoods: the links. As this research was built upon theoretical framework from two fields, the final section discusses the integration of these two approaches to knowledge creation and how I used them in this research (see Figure 2.1).

Figure 2.1 Theoretical framework of this research
Design

The word “design” originated from the Latin word “Designare” which means to define, to describe, or to make out. Design originally began from a trade activity; therefore, design is most commonly known as a commercial activity. At a certain point in history, the definition of design shifted to a great number of human activities and became professional practice (Swann 2002; Erlhoff and Marshall 2008). Nowadays design is widely described as fundamental to all human activity which generally implies the action of intentional intelligence in order to create and invent useful artefacts that never existed before (Buchanan and Margolin 1995; Cross 2007; Ebenreuter 2007; Wahl and Baxter 2008). Therefore, design is also defined as conception and planning of all of the products made by human beings and a creation of our creative activities (Buchanan and Margolin 1995; Erlhoff and Marshall 2008). However, design is not all about creating artefacts. It is a process of change which intends to transform an existing situation to a preferred one (Lawson 2004; Erlhoff and Marshall 2008). Design is known as a problem-solving process because the designer’s task is to produce “the solution” or description of what that artefacts should be like to clients or users who will make a new artefact. Based on the evidence in literature, design has various definitions. In order to define the definition of design, Buchanan (1995) explains that it depends on the nature and practice of design, a subject matter of design, a method of design thinking and working, and the purposes or goals sought in design. In this research, design is defined as a process for enabling sustainable change and transforming an existing situation to a desired one because the main concept of this research was to investigate how a designer can contribute to enabling a community of people with disabilities to attain a sustainable livelihood.

As Jorge Frascara (2001) states, there are four kinds of design. The first kind is design for facilitating life. An example of this design is a traffic light. This design is essential because it makes our life possible to live together as a society. Without this design, it is going to be very difficult. The second kind is design for improving life. This design can be information, knowledge or education which helps people to improve their ways of thinking, living, or doing things. The third kind is design for supporting life, for example an instrument for health care centres or hospital. The fourth kind is design for decoration or to inspire people to have pleasant life, so this design is generated for commercial purposes. Most of these types of design concentrated on creating artefacts for our society and community.

Design for sustainability is a new area of design practice and research which is now well-established (Bhamra and Lofthouse 2007). Design for sustainability is composed of design for environmental sustainability and design for social sustainability. However, most design research concentrates on environmental sustainability, rather than design for social sustainability. Nowadays design research for environmental sustainability has already formed a structured discipline, and provided researchers with an established and definite theory and clear guidelines, methods, as well as tools.

However, there is little design research for social sustainability (Vezzoli and Manzini 2008). Recently, the debate has recommenced about design’s place in the socio-ethical dimension of sustainability and the possible design role in this dimension. There are some criteria on which a possible design role could be organized, criteria by which design could orientate (and assess) the results of a design process. The following criteria are the result of a recently concluded European research project that attempted to bring the complexity of the social-ethical issue in line with a
possible design activity, such as equity and justice, stakeholder relationship, living condition/quality of life, health and safety, employment and working conditions, respect for cultural diversity, and socially responsible consumption. This is an extremely vast and complex issue and its implications for design have so far been analysed very little (Vezzoli and Manzini 2008).

There was a paucity of evidence in the literature on design research for enabling sustainable livelihoods in communities so I constructed the theoretical framework of my doctoral research from the work of key scholars who contribute to design for social change, sustainable change, and social innovation. These scholars are Jorge Frascara, Carlo Vezzoli, Alastair Fuad-Luke and Ezio Manzini.

Frascara (2006) states that design has the power to effect a change in people’s or a public’s knowledge, attitudes and behavior. Designers give form to things and can create things which can influence or persuade people to change their attitudes and behavior or take action to improve their knowledge. Design is a problem-oriented, interdisciplinary activity, so designers are perceived as problem-solvers or solution providers. In addition, designers are often seen as problem identifiers because there is a need to identify important problems and develop interdisciplinary strategies to deal with them. However, it is not sustainable to continue just reacting to clients’ requests for design intervention. It is essential to consider the discovery and definition of physical and cultural problems as an essential part of design. The nature of each problem might suggest the spectrum of disciplines required to confront it. A set of tools for designers to look at the world will have to be developed by inquisitive, critical, interdisciplinary observation, performed by people in love with humanity (Frascara 2002).

Vezzoli (2006) expresses the view that design for sustainability, especially social equity and cohesion, is a new research frontier. The transition towards sustainability requires radical change in the way we produce and consume and in the way that we live. To achieve this change, we need to learn how to live better and reduce our ecological footprint. In this framework the links between environmental and social dimensions of these problems clearly appear and demonstrate that radical social innovation will be needed. There are only a few designers who work on these issues. Vezzoli emphasizes that designers who investigate design for environmental and social-ethical sustainability should possess such skills and abilities as to be able to promote and/or facilitate new sustainable ‘network enterprises’ starting from local people or resources that can be integrated into more extensive networks. These are skills and abilities relatively new to designers. In addition, designers will have to adapt or reinterpret skills, abilities, methods and tools in order to meet the specific conditions of emerging contexts(Vezzoli 2006).

Fuad-Luke (2009) points out that all design is social, as design is the enactment of human instinct and a construct that facilitates the materialization of our world. Design tends to fix or redesign something that results from a failure or inadequacy of form and to change existing situations into preferred ones. However, social design is the development of a social model of design and design process, which intend to contribute to improved human well-being and livelihood. In this social design, clients are taken through a step-by-step process of problem solving involving engagement, assessment, planning, implementation, evaluation, and termination. Designers who apply social design require a deepened ability to listen and holistically explore the environmental domains which would generate an improved satisfaction of human needs. Designing new functioning to elevate individual and community capability focuses the designer on the social dimensions of the outcomes but encourages the provision of enabling solutions that genuinely empower and extend the capability of the user. There are different approaches that designers can employ, for example, participatory design, co-

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design, user-centered design, inclusive/universal design, mass collaboration and user-innovation design, and slow design (Fuad-Luke 2009).

Manzini (2010) states a designer is an agent of sustainable change who tends to work with different groups in order to create a long-term solution. Often, design experts play different roles, such as facilitators, enablers and the social actors who received formal training in design. These design experts are able to use their specific knowledge to stimulate the design capabilities of the other partners by triggering the innovation processes with scenarios and proposals, supporting them with specific design tools, and recognizing in the emerging social invention the potentialities or new product service system (Manzini 2010). The role of designers in this instance is novel. It does not rely on the skill-set of one particular design principle, but rather it represents the use of design skills and design thinking in a more general sense in order to enable community residents to recognize and access the resources within the system, and to do so in a manner that makes a significant difference. The integrative and creative skills of the designers are still vital, as are traditional visualization and communication skills. It becomes the designer’s task to co-develop, with the community, new ideas and directions, and then to visualize and communicate these ideas back to the various community stakeholders. This is important if the solutions are to be accepted, implemented and advanced (Manzini, Walker et al. 2008).

Increasingly designers are expected to participate as members of an interdisciplinary or cross-functional research team, particularly during the early stages of the product development process. This is founded in a belief that designers can contribute something ‘special’ that other people in a product development team cannot provide in forming the concept of a new product. Working in such groups, the role of designers is not only as a creator but also as informal facilitator in order to guide a process and encourage the integration of contributions by other professionals. This requires a new maturity and sophistication in design practice that must come from better understanding of the discipline of design, not only as a body of professional practices and specialized techniques, but as an art of communication (Buchanan and Margolin 1995).

In order to ensure a successful solution, designers who practice in this area no longer work solely in their studio and rely on inference and personal insight. They work collaboratively not only with product development teams but also with the end users because of a belief that the end users are the ones who best know what they want. Recently, the user-centered design approach has been utilized in the design process in order to help designers to understand the end users’ desires and to ensure that the things being designed such as artefacts, communication, or service meet the needs of the users (Frasca 2002). In the user-centered design process, the end users are no longer the ones who receive the final solution which has been created for them. They are actually co-creators with designers. Therefore, the role of designers in the user-centered design process has shifted from the traditional creator to the creator of scaffolds. As Sanders (2006: 75) explains, “scaffolds are communicational spaces that support and serve people’s creativity, enhancing the conviviality of their lives”. Sanders also points out that a designer will learn to use their own creativity to amplify the creativity of other people. In the future, designers will be creators of scaffolds upon which everyday people can express their creativity, so that designers can provide the most satisfactory solution for them (Frasca 2002).

The literature review revealed that the role of designers is in a state of evolution and as it is the focus of this research project, it has great potential for contributing to broader issues of social change and equity. In this study, I have endeavoured to explore how this occurs in practice, and to do this, I have stepped outside of conventional design approaches to design solutions and explicitly explored the
potential of one social science approach to enabling change, with the intention of finding out how designers as researchers can contribute to enabling and facilitating ground-up social change. In particular the method is known as the Sustainable Livelihoods Framework.

**Design Approaches**

Over the past decade there has been an evolution into various approaches to design research that focus on design for people and with people, these include the fields of Human-Centred Design (HCD) and Participatory Design (PD). These approaches to design are often affiliated to the design and introduction of technology into communities which has spurred the field of User-Centred Design. In contrast HCD and PD are typically being used in evolving areas of design research such as Social Design and Design for Humanity. This research adds to this field, but rather than adopting one of these design specific approaches has explored the use of one particular social science method and integrated that with a design research investigation.

**Human-Centered Design**

Human-Centered Design (HCD) is a broader concept; a holistic approach that explores the relationship between the designer, the value end-users, and the other ‘stakeholders’ within the system of production and consumption (Chamberlain and Bowen 2006). HCD has become increasingly important in design practice and design research, especially in the fields of human-computer interaction. This approach to design usually focuses on the people who will use the design artefacts or systems, and the exploration of their particular needs or experiences provides a framework for achieving more successful design solutions (Hanington 2003; Chamberlain and Bowen 2006). Even though HCD investigations focus on gaining greater understanding about what people do so that we can design for them, this continues to be a design delivery approach to design outcomes.

According to Akama (2008: 18), human-centered design is a process of designing that values people equally to each other, and the role of designer is often to facilitate various people’s input(Akama 2008).

**Participatory Design**

Participatory Design (PD) is a major, orientating position in contemporary debate about design method. According to Carroll (2006: 3), “Participatory Design is a high-level feature of design methods that can be implemented in a myriad of ways. It is not a single and integral design method”(Carroll 2006). Carroll also points out that there are several dimensions of participation such as domains of human activity, roles of stakeholders in a design, type of shared design representations, the scope and duration of participatory interactions, and the relationship of users to design activity with respect to changes in their knowledge and skills (Carroll 2006). PD evolved as a way of exploring methods for designing with, rather than for, end users. Participatory design’s commitment to working with end users or a representative group is believed to both empower designers to better understand users, and to give users a voice within the design for their world. It was also felt that this would enable them to create more successful artefacts or solutions (Roth 1999; Laurel 2003).
In order to generate this deeper knowledge, some researchers have adopted participatory research methods from social science research as a means of enabling participants to be involved in the research process. Even though there is a shared commitment to the knowledge of research subjects (users), the intention of participatory social research is significantly different from design practice and research. Participatory research in the design field (known as participatory design) is employed as a means of empowering designers to understand users better and create more successful solutions with them; the participants are essential in the participatory design approach. They provide designers with essential information and a framework for achieving more successful solutions (Roth 1999; Laurel 2003).

**Design Research Approaches**

Design research is the methodological search for knowledge about design and for design and often, but not always, is undertaken through design (Friedman 2003; Blessing and Chakrabarti 2009; Poggenpohl and Sato 2009). With its origins in the applied crafts and trades and more recently recognition as a profession, design is an amorphous and messy entity. With numerous practices, values and outcomes existing across the many fields of design (including experiences, objects and systems), there is no ‘one’ unified definition of design, and yet there are consistent threads of concern and action across the domain.

Traditionally research has been conducted during the design process in order to generate particular knowledge about something (people, technology or contexts) that can help designers to create more successful artefacts or services (Buchanan 2001; Swann 2002); this is design research as an applied activity. Although many within the broader academy may deem design to be a recent area of scholarship and formalized inquiry, design research has been undertaken since the 1960s (Glanville 1999). It has been used to generate new knowledge not only for commercial activity but also for design education. Even though design research has a short history, it has yet to establish standard research methods in the vein of other research methodologies. Like the practice of design itself, it has adopted methods and frameworks from other disciplines in order to generate knowledge for the field as required within a project context.

It can be argued that design knowledge is generated from three main sources. The first source of design knowledge resides in people, especially designers. This knowledge focuses on human abilities such as how people design and how people learn to design. It can be obtained through engaging in and reflecting on that activity. Consequently, an empirical research method is commonly employed for extracting knowledge. The second source of design knowledge resides in processes. This knowledge is inherent in a design process or a production process of artefacts. A major area of this design research is methodology, such as a study of the processes of design, and the development and application of techniques that aid the designer. Some knowledge can be obtained through making and reflecting upon the making of those artefacts and gained through instruction in them. Therefore, employment of integrated methods, such as physical artefacts and observation, is essential to draw on this knowledge. The third source of design knowledge resides in products or artefacts. This knowledge can be gained through using and reflecting upon the use of those artefacts. This indicates that design knowledge is generally implicit. It is generated and accumulated through the actions of designers (Owen 1998; Cross 2007; Clark and Brody 2009). Therefore, it is a task of design research to make design knowledge explicit and available to others in a re-useable form.
Design research for generating explicit knowledge for others to reuse is very different from traditional research which is normally conducted for clients in particular firms; typically such design research is undertaken for commercial purposes and the outcomes and processes are confidential to the client.

**Categories of Design Research**

In the design field there are many categories of design research. According to Friedman (2003:510) and Buchanan (2001:17), design research is composed of three main categories (Buchanan 2001; Friedman 2003).

Basic research is the first category. Friedman (2003:510) states that basic research involves a search for general principles which generally have broad application beyond their field of origin (Friedman 2003). Buchanan (2001: 19) also adds that basic research is a rare form of research in the design community, but some does exist as systematic speculation on the nature of design or as empirical investigation. Buchanan also emphasizes that basic research is generally associated with design theory, which provides a foundation for all other activities in design. Moreover, the development of basic research often suggests bridges to other disciplines. Therefore, basic research is the most difficult and critical to the future of the field because it seeks to establish the significant facts and connections in our experience of design (Buchanan 2001).

Applied research is the second category. As Buchanan (2001:18) emphasizes, “applied research is directed towards problems that are discovered in a general class of products or situations. The goal is not necessarily to discover first principles of explanation but to discover some principles or even rules of thumb that account for a class of phenomena” (Buchanan 2001). Friedman (2003:510) also agrees that applied research involves developing and testing theories for these classes of problems. It may develop or generate questions that become the subject of basic research (Friedman 2003). Buchanan (2001:18) states that applied research is generally systematic in its procedures and rigorous. The kind of understanding that designers must have in order to work most effectively in concrete situations usually requires qualification and refinement through applied research-of the type provided by academic research or of the type that comes with extensive practical experience gained in working on many individual design problems(Buchanan 2001).

The third category of design research is clinical. As Friedman (2003:510) points out, “clinical research involves specific cases. Clinical research applies the findings of basic research and applied research to specific situation”(Friedman 2003). Buchanan (2001: 18) states that this kind of research in the design field uses the case study method to generate knowledge(Buchanan 2001). Clinical knowledge is a form of professional knowledge which is gained by practitioners who engage in human services through direct experience with those they are trying to help. Usually the researcher is a professionally trained clinician and acts according to professional standards and ethics. Moreover, clinical research can be qualitative or quantitative or mixed. However, professional and clinical knowledge rely heavily on qualitative inquiry because qualitative researchers normally intend to improve how things work (Stake 2010). Therefore, a case study is most commonly employed by designers and researchers.

Generally, design research aims to generate knowledge and solutions for specific cases. Designers are concerned with how things ought to be rather than with how things are (Buchanan and Margolin
1995; Swann 2002); as such, designers tend to generate a variety of possible solutions until they find the most satisfactory one. Therefore, it is hard for others to reuse this knowledge from their case studies, but it can be shared to demonstrate how things are done.

**Design Research Methods**

The design methods of such approaches to design research are often embedded in the practices of design whilst they may also draw on methods from across other knowledge domains as needed (for example, the use of social science or business methods such as focus groups, surveys, case studies of similar projects). However, as has been recognized in the literature, adopting new methods outside a discipline can be problematic as it may result in designers as researchers misinterpreting the original intention of the method and using it inappropriately (Poggenpohl and Sato 2009). An example of this is the recent developments in design methods or methodologies that particularly focus on people or users within the design context that have adopted and adapted methods from other qualitative research methodologies, for example ethnography, to support them in their investigations.

For some ethnographers, this use of ethnography is inappropriate as they are concerned about a lack of rigor and subsequent outcomes. At the same time there is a discourse within the design research community validating the use of ethnographic methods as part of a broader investigation; unlike the ethnographies of social scientists, the aim is not to do an ethnography, but rather to know more about people as part of an overall design investigation (Akama 2007). This has now resulted in a number of researchers specializing in design ethnographies or design anthropology; in these cases there are attempts to collaborate across methodologies rather than adopt methods on a case by case scenario. Similar concerns exist in the use of quantitative methods such as surveys.

Underpinning this focus on people within design research is the shift to wanting to know more about the real experiences of people who are associated with the design research outcome. The use of recognized methods is an important step forward in design research and ultimately for design research outcomes, and engages the concern of Poggenphol and Sato (2009). These researchers are not using the methods with the intention of creating deeper ethnographic understandings; rather they are utilizing a method so that they can create better design outcomes (Akama 2007). This desire for better design understandings and outcomes has in itself spurred a number of different people-orientated design approaches principally Human-Centered Design (HCD) and Participatory Design (PD), which have been particularly important for this study.

HCD research has become increasingly important in design practice and design research, especially in the fields of human-computer interaction. This approach to design usually focuses on the people who will use the design artefacts or systems, and the exploration of their particular needs or experiences provides a framework for achieving more successful design solutions (Hanington 2003). Even though HCD investigations focus on gaining greater understanding about what people do so that we can design for them, this continues to be a design delivery approach to design outcomes.

In contrast to this, participatory design evolved as a way of exploring methods for designing *with*, rather than *for*, end users. Participatory design’s commitment to working with end users or a representative group is believed to both empower designers to better understand users, and to give users a voice within the design for their world. It was also felt that this would enable them to create more successful artefacts or solutions (Roth 1999; Laurel 2003).
In order to generate this deeper knowledge, some researchers have adopted participatory research methods from social science research as a means of enabling participants to be involved in the research process. Even though there is a shared commitment to the knowledge of research subjects (users), the intention of participatory social research is significantly different from design practice and research. Participatory research in the design field (known as participatory design) is employed as a means of empowering designers to understand users better and create more successful solutions with them; the participants are the key element. They provide designers with essential information and a framework for achieving more successful solutions (Roth 1999; Laurel 2003).

Across both of these participatory research approaches, the research ‘subjects’ are empowered to understand their situations better and collaboratively seek to address change as needed. The participating communities are not only the informants of the research but also co-researchers who share their experience and knowledge as well as generate new knowledge with the researchers (Whyte 1991; McIntyre 2008). In these approaches, the researcher is not the expert, but is an enabler or facilitator, and this notion of expertise varies between the design fields and social science. The researcher in both contexts takes an emancipatory position and seeks to inform and impart their knowledge and skills to the people who are co-researchers in the project. From a social science perspective the researcher’s primary aim may be to provide specific technical advice to co-researchers to help them make informed choices whereas in participatory design they may contribute to the design outcomes of the investigation. In both cases, the research approach is action-led in that it explicitly aims to use the research to change social relationships and contexts (Kitchin 2000).

The significant difference between these two approaches is the agency of the researcher. In social science participatory research the researcher is an enabler of the process of discovery for its own sake and for the empowerment of co-researchers to create their own solutions. In participatory design research, the researcher is both a co-creator of knowledge and a design solution for the users, and they may also take this knowledge for the design of other products, systems or services for like situations. This example indicates that interpreting the original intention of research methods outside a discipline is essential. It is the task of researchers to interpret the original intention of research methods and develop operationally and conceptually appropriate methods for generating design knowledge (Poggenpohl and Sato 2009).

**Design Research and Case Study**

Case study research is a qualitative research strategy which gives researchers an opportunity to explore in depth a program, event, activity, and process in a particular community, group, or individual. Moreover, case studies enable researchers to engage participants in the research process, thereby enabling researchers to take a self-reflexive approach to understanding the case and themselves. This is useful for exploring and understanding the process and dynamics of change as the knowledge that results from the case study manifests through the events as they unfold in a real life setting (Simons 2009; Yin 2009).

There are three types of case study: intrinsic, instrumental, and collective. An intrinsic case study is a case which is studied for the intrinsic interest in the case itself. An instrumental case study is a case which is chosen to explore an issue or research question determined on some other ground, that is, the case is chosen to gain insight or understanding into something else. A collective case study involves
several cases which are studied to form a collective understanding of the issue or question. These distinctions help researchers to select research methods for conducting the case study appropriately (Simons 2009; Stake 2010).

The most common research methods for collecting data in case studies are interviews, group discussions, observations and physical artefacts such as photographs and video (Simons 2009; Yin 2009). Each research method has its strengths and weaknesses. In order to collect reliable data from case study research, researchers typically use multiple methods in the process of engagement.

In this research project I have endeavoured to integrate design knowledge and research methods including a deep focus on people within the context of a case study of one particular community. As part of this, and as will be discussed in the following chapters, I have also been required to critically reflect on my own practice as a researcher and how the methods that I use and have used, inform the communities that I work with.

**Sustainable Livelihoods Approaches**

*Defining sustainable livelihoods*

The phrase ‘sustainable livelihood’ is composed of two words which are combined initially without an explicit meaning, so that the phrase can be appropriated and given meaning by different actors to suit their conditions and purposes (Chambers 2008). According to Chambers and Conway (1991), ‘a livelihood comprises the capabilities, assets (stores, resources, claims, and access) and activities required for a means of living. A livelihood is sustainable when it can cope with, and recovers from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term’. This definition is widely adapted and modified by different organizations and scholars including the UK Department for International Development (DFID), which began exploring the meaning and practical application of sustainable livelihoods approaches for development and poverty elimination.

The idea of sustainable livelihoods was first introduced in the main concept of sustainable development by the Brundtland Commission on Environment and Development as a way of thinking of socioeconomic and ecological consideration in a cohesive, policy-relevant structure. According to Walker,

> Sustainable development is a widely used but often ill-understood term. It characterizes a type of development that simultaneously takes into consideration three key sets of issues - economic development, ethic and social concerns and environmental stewardship (Manzini, Walker et al. 2008).

Sustainable development is the concept which focuses on not only environmental sustainability but also social sustainability (Chambers 2008). Social sustainability is a life-enhancing condition within communities, and a process within communities that can achieve that condition (McKenzie 2004). As my research focused on social sustainability rather than environment sustainability, understanding of community processes and livelihood systems in particular communities is essential.
The 1992 United Nations Conference in Environment and Development (UNCED) advocated that a sustainable livelihood is part of social sustainability which has a broad goal for poverty eradication (Krantz 2001). A sustainable livelihood is a way of thinking about the objectives, scope and priorities for development, in order to enhance progress in poverty elimination. It generally aims to help people achieve lasting improvements against the indicators of poverty that they define. However, the sustainable livelihood is not all about poverty reduction. The livelihood of people with disabilities, for example, is a broader concept than income-generating activities because not all people with disabilities or their families are poor. Many of them have different levels of education, professional experience, family and community support. Thus, sustainable livelihoods are those that can avoid or resist such stresses and shocks and/or that are resilient and able to bounce back. Security is a basic dimension in livelihood sustainability (Chambers and Conway 1991).

The Handicap International Organization (2006:19) defines livelihoods of people with disabilities as the sum of ways and means by which individuals or communities make and sustain a living which is a broader concept than income-generating activities. It is a term used to describe self-employment and encompasses the economic activities that people develop but also their social, institutional, and organizational environment. Since this research study focuses on investigating the contribution of a designer to the enabling of a sustainable livelihood in a particular community of people with physical disabilities, sustainable livelihood is defined as a sum of ways and means not only to make a living but also to sustain a living (Development 2006). Sustainable livelihoods for people with disabilities occur when they are able to earn a living, live independently in their community, and enhance their self-fulfilment and self-esteem.

Achieving sustainable livelihoods requires the integration of local knowledge and community strengths with contemporary science, appropriate technology, enabling policies, effective and transparent governance structure, education and training and credit and investment (IISD 1999). To obtain this information, a researcher needs to use sufficient tools to gather information about the community which is under the study. The Sustainable Livelihoods Framework is known as one of tools that many community development practitioners use to help them to understand the livelihood of poor people.

**Sustainable Livelihoods Framework**

The Sustainable Livelihoods Framework (SLF) is a useful tool that offers a way of thinking about livelihoods that helps order complexity and makes clear the many factors that affect livelihoods. It is intended to be versatile for use in planning and management. It presents the main factors that affect people’s livelihoods and the typical relationships between these factors as shown in figure 2.1. Generally, SLF is composed of vulnerability context, livelihood assets, transforming structures and processes, livelihood strategies, and livelihood outcomes (DFID 1999; Krantz 2001).
Vulnerability Context

The vulnerability context refers to trend, shock, and seasonality which are beyond people’s control. These factors have a direct impact upon people’s asset status and the options that are open to them in pursuit of beneficial livelihood outcomes. Trends can be population trends, resource trends, national/international economic trends, trends in governance (including politics), or technological trends. Shocks can be economic shocks, human health shocks, conflict, or natural shocks like flood or earthquake. These shocks can destroy livelihood assets of people in a certain area directly because they can force people to abandon their home areas and dispose of assets prematurely as part of coping strategies. The last factor is the seasonal shift in prices or employment opportunities. However, not all these factors are negative or cause vulnerability. Sometimes they can be used as opportunities to secure livelihoods (DFID 1999; Krantz 2001; Carney 2003).

Livelihood Assets

The livelihood assets are resources (the basic material and social, tangible and intangible assets) that people require to achieve their self-defining goals, for example human capital, social capital, financial capital, physical capital, and natural capital. People generally need more than one asset to achieve their livelihood goals. Because the sustainable livelihoods approach is people-centered development, human capital is the main asset which enables people to pursue different livelihood strategies and achieve their livelihood objectives (DFID 1999; Krantz 2001; Carney 2003).

Human capital can be skills, knowledge, abilities to labor, good health, and professional experience that together enable people to pursue different livelihood strategies and achieve their livelihood objectives. Many people regard ill-health or lack of education as core dimensions of poverty. Overcoming these conditions may be one of their primary livelihood objectives (DFID 1999; Krantz 2001; Carney 2003).
Social capital is a key asset for people both in urban and rural areas to draw on while seeking their livelihood outcomes. Social capital can be networks and connections that increase people’s trust and ability to cooperate, membership in more formalized groups, and their systems of rules, norms and sanctions (DFID 1999; Krantz 2001; Carney 2003).

Natural capital is the term used for the natural resource stocks such as land, water, forests, and air quality. Generally, natural capital will be less significant in an urban setting and financial capital will be more significant (DFID 1999; Krantz 2001; Carney 2003).

Financial capital can be cash, credit, savings or jewelry and is essential for people in pursuit of any livelihood strategy. It is the most versatile because it can be converted into other types of capital or it can be used for direct achievement of livelihood outcomes. However, it tends to be the asset that is least available to the poor (DFID 1999; Krantz 2001; Carney 2003).

Physical capital comprises the basic infrastructure and producer goods needed to support livelihoods. It can be affordable transport, secure shelter, adequate water supply and sanitation, clean, affordable energy, access to information (communication) and education and health facilities which provide the opportunity for people to improve their own human capital. Housing is often one of the most important assets for people in urban areas because it is often used not only for shelter but also for both productive (for example, using the space as a workshop area) and reproductive purposes (DFID 1999; Krantz 2001; Meikle, Ramasut et al. 2001; Carney 2003).

Distinguishing between different types of livelihood capital is a key step to enabling people to shape their own choices and livelihood strategies.

Transforming Structures and Processes

Transforming structures and processes within the sustainable livelihoods framework are the institutions, organizations, policies, and legislations that shape livelihoods (DFID 1999) Kollmair and Gamper (2002: p8) also point out that structure can be described as the “hardware” (private or public organizations) that sets and implements policy and legislation, delivers services, purchases, trades and performs all manner of other functions that affect livelihoods. Processes constitute the “software” determining the way in which structures and individuals or groups of people operate and interact. The processes for livelihoods are essential because they may serve as incentives for people to make choices. They may be responsible for access to assets or they may enable people to transform and substitute one type of asset for another. Transforming structures and processes generally occupy a central position in the sustainable livelihoods framework and directly feed back to the vulnerability context (Kollmair and Gamper 2002). They can restrict people’s choices of livelihood strategies and may have direct impact on livelihood outcomes. Therefore, it is essential to have the local people who are seeking to improve their livelihoods fully involved in the sustainable livelihood analysis so that they can determine their own livelihoods strategies to pursue their livelihoods outcomes.
Livelihood Strategies

Livelihood Strategies comprise the range and combination of activities and choices that people undertake in order to achieve their livelihood goals (Kollmair and Gamper 2002). Livelihood strategies frequently vary between individuals and groups of people depending on differences in asset ownership, and social and political status in their community. In order to understand the complexity and differentiated processes through which livelihoods are constructed, it is essential to analyze the different aspects of livelihood resources and strategies and the institutional and organizational processes that link these various elements together. The institution is defined as regularized practices or patterns of behavior which are constructed by rules and norms of society and which have persistent and widespread use. It could be either formal or informal. It frequently affects the livelihood strategies.

Livelihood Outcomes

Livelihood outcomes are the achievement or output of livelihoods strategies (DFID 1999). For example, more income (e.g. cash), increased well-being (e.g. non material goods, like self-esteem, health status, access to service, sense of inclusion), reduced vulnerability (e.g. better resilience through increase in asset status), improved food security (e.g. increase in financial capital in order to buy food) and a more sustainable use of natural resources (e.g. appropriate property rights) (Kollmair and Gamper 2002). The livelihood outcomes can feed back into the vulnerability context and asset bases. Successful strategies would allow people to build asset bases as a buffer against shocks and stresses. On the other hand a poor livelihood outcome could deplete assets bases and increase vulnerability. Subsequently, livelihood outcomes may lead into either virtuous or vicious cycles (Farrington, Ramasut et al. 2002).

The Sustainable Livelihoods Framework is not only used for collecting data, which present the main factors that affect people’s livelihood, but also for planning new development activities and assessing the contribution to livelihoods sustainability made by exiting activities (DFID 1999).

Design and Sustainable Livelihoods: the Links

As previously discussed in the design approach section, there is an increasing awareness of the links between participatory, human-centred research methods and methodologies that link across the fields of social science and design. As Walker (2006: 31) states,

The discipline of design is also about exploring a new ground and charting new territory, and if we are to do this effectively and sustainably, we must be fully aware of the new context in which we find ourselves and learn to respond to it in an appropriate manner. We must also consider the baggage, in the form of preconceptions, that we bring along with us (Manzini, Walker et al. 2008)

Sustainable livelihoods also is about exploring new ground and charting new territory. The nascent nature of sustainable design or sustainable livelihoods ensures that this is an area ripe for exploration. In order to achieve this exploration, we might have to leave behind our preconceptions, and many of our expectations, about what design is, who does it and what the outcomes may be. This is not a
comfortable thing to have to do, but it is the nature of exploration. It is also the nature of design. To be a designer is to be on uncertain ground. The sustainable livelihood activities are also on uncertain ground. No one can identify and predetermine when livelihoods are sustainable. Only the people who are seeking a sustainable livelihood are able to recognize and identify it through their journey. In order to understand this sustainable livelihoods approach, an external agent or a researcher must learn to understand and recognize change through a process of change with the local people.

People and their contexts are at the heart of the Sustainable Livelihoods Framework. The achievement of sustainable living outcomes is always driven by, and realized through, their lived realities. Design approaches such as participatory or human-centred design with their focus on designing with people also act within such a framework. Therefore it can be seen that it is this shared focus on the agency of the people who are the focus of an investigation which is a synergistic link between design and SLF.

Design and sustainable livelihoods utilize participatory methods as part of this process. They are conducted in partnership with both the public and private sectors. Design activities are collective design processes which involve different participants as well as end users in order to produce a successful solution. Buchanan and Margolin (1995: XII) state that designers must work closely and persuasively with other participants, often including representatives of the general population expected to use a new product, so designers often play the subtle and informal role of facilitators in such a group in order to guide the process and encourage the integration of sound contribution by other professionals (Buchanan and Margolin 1995). As Manzini (2008: XIV) explains, every solution and especially a sustainable solution, brings a complex set of relationships into play with new forms of collaboration between the various actors involved. These forms of collaboration are not easy to accomplish. However, to achieve a desired result, one of the most important issues in the development of sustainable solutions is precisely that of cooperation and partnership. In the sustainable livelihoods approach, cooperation and partnership are also essential because the concept of sustainable livelihoods is to reduce the vulnerability context of people, enhance their strengths, enable them to access available assets and transform their assets to positive outcomes. In order to achieve these goals, the local people who are seeking to improve their livelihoods need to work collaboratively with different organizations both inside and outside their community.

**Designing and Researching in Action**

Typically research that is focused on change utilizes an Action Research (AR) methodology. Prior to undertaking this research I too engaged such an AR methodology which I integrated with the design process. Based on the evidence in the design literature, AR is the most common approach employed by designers because it is similar to the design process (Roth 1999; Swann 2002) Although AR is a people-centred approach the power that resides in the research design continues to reside with the researchers and not the participants, and in this way it models a design for a solution-based discovery model.

Even though AR is appropriate for a research which aims to produce practical knowledge that is useful to people in every aspect of their lives, whilst also bringing about change to a larger group, organization or community involved in the research process (Cherry 1999; McIntosh 2010), upon reflection, I realized that it had limitations for my research goals which I was setting out to explore. The element of control and power between researchers and participants as in AR methodology would
not result in sustainable change. When the participants are treated as informants and consultants, rather than co-researchers, they are not given opportunities to co-create an idea or an ongoing solution to a project that will continue when the researchers are no longer there. In my previous research this had a disempowering effect on the communities because there was no true knowledge transfer and therefore a lack of incentive to continue on with an idea or outcome that emerged through the research process. This limitation led me to seek other approaches that may be more useful working with such communities.

Through a review of the literature I discovered Participatory Action Research (PAR). This is an activist research approach which is widely employed for generating sustainable change in community development. PAR has empowering effects on people and communities which participate in long-term development projects because it gives a community or their representatives an opportunity to create an idea, to make a decision which affects their lives, and design a project which would be implemented in their community (Whyte 1991; McTaggart 1997; Balcazar, Keys et al. 2006; Kindon, Pain et al. 2007; McIntyre 2008).

Hence I decided to choose PAR as the research methodology for my investigation based on the following three reasons. First of all, PAR enables a researcher to take an active role in an investigation and allows the researcher to enter the real world of the people who are the center of the study. Secondly, PAR provides an opportunity for the people who are at the center of the study to have an active role in investigating their own situation with the researcher. Finally, PAR has been defined as an approach which is widely employed in research projects which have a collective commitment to investigate an issue or problem, a desire to engage in self- and collective reflection to gain clarity about the issue under investigation, a joint decision to engage in individual and/or collective action that leads to a useful solution that benefits the people involved, and the building of alliances between researcher and participants in the planning, implementation, and dissemination of the research process.

PAR treats people as autonomous, responsible agents who participate actively in making their own histories and conditions of life. They are able to be effective in making their histories and conditions of life by knowing what they are doing, and are collaboratively potent in the construction of their collective history and conditions of life. This methodology also encourages people to work together as knowing subjects and agents of change and improvement (McTaggart 1997; Kindon, Pain et al. 2007). It was on this basis that I decided that this is the most appropriate research methodology for this research study.

The design of this research investigation was iterative and responded to both my evolving knowledge and the changes that occurred from working with a community seeking change. This resulted in me exploring ways to integrate people-centered and participatory design approaches with the Sustainable Livelihoods Framework whilst using Participatory Action Research Methodology.

In the following chapters, I will discuss in greater depth the processes and discoveries of the research and the methods that were used at each stage of the inquiry. These were all undertaken in alignment with Ethics Approval from the RMIT Human Research Committee.
Chapter Three
Let Me Do It For You

Prior to commencing this doctoral research I had undertaken design research Projects with disadvantaged communities in Thailand. Between 2006 and 2007 I worked with two communities in Samut Prakan province and Nonthaburi province which are located to the south and west of Bangkok. These projects form the basis for what developed into my doctoral research. In this chapter I will briefly discuss what these projects were, their intentions and the subsequent outcomes for these communities. In doing this I will critically reflect on my subsequent realizations regarding the methodologies that were used and the engagement of the communities in the projects, and the implications of these for enabling long term change or sustainable livelihoods for them. Undertaking this reflection on these past projects is essential for understanding how the doctoral investigation emerged and the subsequent discoveries and propositions for a different kind of practice that emerged.

In order to understand the dynamics of my previous approach to undertaking design interventions with disadvantaged communities, it was essential for me to both critically examine the practices and process of these projects and to position these in the field. This enabled me to identify the various components that were informing what took place as I worked with these particular people. From there I then expanded from my local context to look at broader practices and theories as reported in the design literature. The outcomes of the literature review are presented in Chapter two. In this chapter I will draw on that theory in order to help position what I have done in practice. This method of moving between examining my local context and then linking it to the broader field and the practices of others has been an essential part of my research approach. This has included presenting my ongoing discoveries at conferences so that I could both connect with the broader field and gain feedback through a peer review process.

The title of this chapter, Let Me Do It For You, is in essence a summary of the key discoveries through this process of critical reflection. The activities of Workshop One highlighted that I had been focusing on designing for solving problems for the people who participated in the research process and this had many limitations for ongoing application by the communities that I worked with. The main activities of this workshop were reflection on my previous practice as shown in Figure 3.1 and 3.2.

In the following text I will discuss how this came to be, and how it then framed my doctoral investigation resulting in my exploration of radical new ways of practicing this kind of design research.
Figure 3.1 Timeline of the research procedures in the first phase

Figure 3.2 Reflection on the activities in the previous research
My Past Practice

As a result of Workshop One, it became clear to me that my past practice focused on a problem-solving approach to design solutions. My university education taught me to generate design solutions as a commercial activity and to transform existing client situations into preferred ones as the clients requested. After I graduated with a Master’s Degree in Graphic Design from the US, I practiced as a freelance graphic designer in Thailand. At this time I also began to teach industrial and graphic design courses at the Department of Architectural Education and Design, Faculty of Industrial Education, King Mongkut’s Institute of Technology Ladkrabang (KMITL), Bangkok, Thailand.

While teaching at this university, I conducted multidisciplinary research with professors from other Thai universities. My role in these projects was as the creative developer who made things and transformed ideas into action. Hence most of my previous research focused on making things for people within a research project framework. In many ways it could be said that I was a research designer; that is, a designer working within research projects. For example, designing a trade mark and packaging for products that the community had already made, or developing new handicrafts within their current production capabilities (see Figure 3.3 and 3.4).

Figure 3.3 Handicrafts of the community members in the Nonthaburi province
Towards the end of 2007, I was approached by these communities to undertake a new application with them. During the preparation I reviewed the outcomes of the previous projects and the development of the products. This review revealed that progress was negligible and that in fact the communities had not continued with the project. This was surprising and disheartening, raising questions about what had gone wrong and why. Consequently, I decided that I could not submit a proposal for a new
project until I knew why the previous projects had discontinued and how to prevent it from happening again. Not only was I concerned about the communities I worked with, but also as an academic my students would follow my methods and this raised even more concerns. The ongoing implications for both groups of people were too great, and I was committed to finding solutions.

**Activities in Workshop One**

The main activities in this workshop were reflection on my previous practice and research projects that I undertook with my colleagues in the Samut Prakran and Nonthaburi provinces involved working through a consultative process with groups of people with physical disabilities who produced and sold handicrafts in a semi-urban area of Thailand. Funded by the National Research Council of Thailand from 2006 to 2007, the main goal of the projects was to work with these communities to help identify new products for manufacture that were possible within their particular circumstances. This included their physical abilities, their financial assets and the technical infrastructure of the community. The research team was comprised of Udomsak Saributr, Sathaporn Deeboonme Na Chomphae, Thanet Ploomkran, Threerapat Lerdchumchongkhun, Duranee Thanawat, Suthasinee Bureekhampan, Sopa Phonpoo, Laddawan Vichien, and myself.

The Samut Prakran and Nonthaburi communities were identified by the Government as research study participants because they were self-employed and produced and sold hand-made handicrafts for a living, for example, artificial flowers and blown glass souvenirs. Although they had this capacity, their livelihoods were at this time threatened by the developing craft industries which were producing the same products on a commercial level. Factors such as quality and price were amongst the elements which were putting them at risk. To address this challenge, I proposed that they should seek new products to make and sell which would differentiate them from the commercial companies. They could not compete with them on similar products so finding alternate products seemed to be the optimum solution to their challenge.

Even though this seemed like an easy solution, it failed. These communities were not designers or professional product developers; this was something that they did to make a living. As such they were not able to make the transition easily nor were they able to continue the innovation process in the design of new products subsequent to my contribution through the research project.

In this research project, my role was as a designer who made ideas or solutions visible to the research team and the participants, and transformed the ideas into action. The research team was comprised of a number of different designers who each had different roles and contributions to make. We used the ‘studio’ as our central meeting point where we would collate our various discoveries and design responses. We would then employ a process of critique and refinement within the group to identify what we believed to be the optimum solution for the communities. My role was to refine and present these to the communities for review and evaluate for appropriateness for their clients and also for their own capability to produce the product outcomes. For example, the research team identified problems and potential consumer needs on behalf of the communities. We also generated design concepts and made prototypes for them to test in the market (see Figures 3.5 and 3.6). The participants would then confirm that these customized design solutions were satisfactory and suited their particular markets and potential.
Figure 3.5 Research activities in the disadvantaged community in the Nonthaburi province

Figure 3.6 Research activities in the disadvantaged community in the Samut Prakran province
The total timeframe for the project was 12 months with the first six months being used to explore market needs and community capabilities, and the second focused on the production of outcomes. A significant amount of this activity took place in our design studio and was not done on site with the community.

Before the research team withdrew from the community at the completion of the research project, they undertook a two day training workshop with the participants. The aim of the workshop was to explain to the community the design research process we had employed and to show them how to make the prototypes for themselves so that they could move forward and sell them in the marketplace. We did this as we wanted to ensure that the participants could continue developing their handicrafts and their individual and collective capabilities. The workshop took place at the facilities of the Samutprakran Disable Person Association (SDPA) because they had sufficient facilities to support the workshop activities (see Figure 3.7). They also had experienced staff who could support the research team in the workshop because some community members had speech and hearing impairment.

Figure 3.7 Product development area at the facilities of the SDPA

Approximately four months after we completed the project, I had an opportunity to revisit these communities to ascertain the progress that had been made. The visit revealed that the group had not taken up the solution that we had created for them.

After discussion with the leaders of these communities, I found that they did not continue developing their capabilities because they believed that the research team had not provided essential information. After the research team withdrew from the community, they did not understand what they had to do and why they had to continue developing new and different products as market demands changed. They also pointed out that the time frame of the last research project was too short, and they did not feel that they had had enough time to really engage with the researchers and what they were being
shown. The fact that we spent so much time in the studio and not out in the field contributed to this. The community leaders hoped that I would continue to work with them, so that they could continue developing their capabilities and reach their full potential to achieve sustainable livelihoods.

This discussion with the community leaders helped me to realize that this approach to undertaking research projects did not provide a long-term solution for the community, nor the continued support that they need to improve their capabilities once the research team withdrew from the community. At that time, even though I could hear the feedback from the leaders, I didn’t really understand what had happened nor how we could do things differently. We had used an Action Research cyclic methodology in conjunction with a design solutions approach and believed this would be the optimum way to realize the desired outcomes. At the time of completion of the research and submitting the final reports to the government it seemed to have been successful, but this feedback highlighted that it was not. Despite the community’s request that I continue conducting research with them, I was compelled to refuse as I needed to ascertain what went wrong and how a repetition could be avoided.

It was clear that the previous research projects had not yielded the expected outcome of continued development. Further investigation and research into this and other similar studies was therefore required. The advanced research capability of a doctoral program would provide the opportunity for an in-depth investigation using the previous research projects as a foundation. They are a crucial element of the study and will be referred to throughout the thesis.

Discoveries through Reflection on Previous Research

Once I enrolled in the PhD program, I started to discover new ways of thinking about how to undertake research in this area. Upon reflection through a literature review, I realized that undertaking a research project, which could continue to enable communities to improve their capabilities long after the life of the project is over, requires not only the development of good design solutions, but more importantly it must generate methods for knowledge transfer which can support sustainable change in the community. According to McNiff and Whitehead (2006), a sustainable change occurs when the community members who seek to improve their situation create and implement their own ideas instead of accepting and implementing the ideas which have been created for them by someone else. On realizing this significant shift in what is required I then also discovered that additionally this previous research did not generate a sustainable change in the communities because of the following two main factors: 1) the ways of thinking and behaviour of the researchers and 2) the ways of thinking and behaviour of the participants.

The ways of thinking and behaviour of researchers

The first factor relates to the thinking and behaviour of the researchers involved in the project. In the previous research project, there were various reasons which influenced my way of thinking and behaviour. Firstly, this project was inspired by my freelance design project and was generated from what I would call ‘a saviour mentality’. By this I mean my desire to use my skills to help others. Through my design teaching and design experience, I believed that design was a problem-solving process and a designer was a problem solver who provides a solution at the request of the clients. Therefore, I had high expectations that I could contribute to these groups because their income generating activities were involved directly in a commercial activity and I had the design solution skills that would address their problem.

Secondly, I was a design instructor who taught in the university near the communities. There was a
great expectation from the society, especially from the participants, that I possessed a great deal of knowledge and I could solve any problem for them. This expectation led me to believe that I should be the one who had all the answers for them: if I did not know, no one would. Therefore, I decided to do anything in my power to solve the problem for them.

Thirdly, I was also a graphic designer who usually provided design services for clients. Since this research was inspired by my previous freelance design project and funded by the National Research Council of Thailand, I believed that it was my full responsibility to provide a successful outcome in order to ensure future funding. Thus, I positioned myself as a problem-solver who would provide all solutions for the participants.

Finally, the participants in this project were groups of people with physical disabilities who had mobilization limitations and literacy difficulties, and I had considerable empathy for them. I assumed that they were unable to develop their own products because of their disadvantages in society (physical and educational). I also assumed that they were poor and needed my help. Therefore, I decided to provide a solution for the participants as if they were my own clients. These reasons greatly affected the structure of my thinking and behaviour in the previous research project.

The ways of thinking and behaviour of participants

The second factor that influenced the project’s outcomes is the model of thinking and behaviour of the participants. As the participants were people with disabilities they were treated and seen as incapable by Thai society. During my conversations and discussions with the participants throughout the project, they mentioned that people in authority from various organizations came into their community in order to provide them with training workshops and provide solutions for them. This led them to believe that they had to be the recipients of solutions that had been created for them by someone else.

Working in the project with the local authorities also led them to believe that they were in the lower rank of society, and as such they usually followed the instructions of authorities or people of higher rank without question. As the participants mentioned, they had been working under a commission for local government organizations. They had no power to negotiate with the authority or request more orders or increase their production cost. They had to do what they were instructed otherwise they would not get the commission for the following year. This is lack of empowerment and this perception of their role in society significantly influenced the thinking and behaviour of the participants in the research project.

Based on my working experience in different collaborative projects with the authorities and local people in Thailand (such as developing packaging for One Tambon One Product [OTOP] of the Department of Industrial Promotion of Thailand), I knew this kind of behaviour was the norm. Typically in Thai culture, people of lower ranks cooperate with the authorities as long as the authority is in the community with them or as long as they are paid to do so. Once the authority leaves the community, they usually stop the activities and go back to their old way of life. Local people rarely designed a project with the authorities. As a result, they had no incentive or ownership of the project.

The combination of the ways of thinking and behaviour of the researchers and participants resulted in there being no authentic knowledge transfer to the participants in the research process. Despite the fact that the participants were involved in the research process to a limited extent the researchers did not give the participants an opportunity to take part as co-creators and design a project which they
could implement in their communities. Consequently, the participants did not understand what was required to realize ongoing new design products that they could produce over a long period of time.

As a result of this reflection, I realized that there needed to be some significant procedural changes within research projects. In order to generate sustainable change, both researcher and participants have to change their ways of thinking and behaviour. This requires researchers to discontinue believing that they are the ones who provide all the solutions for people. They should provide people with an opportunity to generate and implement their own ideas, so they understand what they have to do to improve their situation and why (Peters 2009). To support this concept, the researchers need to shift their approach from designing to solve a problem for people to designing to enable people to transform their existing situations to preferred ones. In this way, the participants are no longer recipients of a solution which has been created for them. Rather, they need to become the ones who create and implement their own ideas because they are familiar with their situation and have the ongoing commitment to benefit from it.

**Discovery of the Limitation of Research Methodology**

I discovered a limitation of the research methodology which was employed in the previous research project based on my reflection through a literature review I undertook prior to attending a conference. In my previous research projects, we employed Action Research (AR) as the research methodology integrated with the design process. Based on the evidence in the design literature, AR is the most common approach which is employed by researchers because it is similar to the design process (Roth 1999; Swann 2002). In addition, this approach gives researchers authority to control all research procedures in order to ensure that we generate the most satisfactory result for the people who are going to use that design outcomes. Hence the people who were involved in the design process or design research projects, were treated as informants who provided information which could enable researchers to have a better understanding of their situations and how the final design is going to be used.

AR is appropriate for a project which aims to produce practical knowledge that is useful to people in every aspect of their lives and to bring about change in a group, an organization or a community which is involved in the research process (Cherry 1999; McNiff and Whitehead 2006; Greenwood and Levin 2007; McNiff and Whitebread 2009; McIntosh 2010). My previous research project definitely generated change in the communities that were involved in the research process. However, it was not sustainable change because the researchers tried to control all plans and procedures in order to ensure that the research project generated a positive outcome. The participants were treated as informants and consultants, rather than co-researchers. They were not given opportunities to co-create an idea or a project which would be implemented in their community because the researchers already had preconceptions and had planned what they were going to do for the communities. This had disempowering effects in the communities because there was no true knowledge transfer and a lack of incentive in idea and action even though the participants were involved in the research process. This limitation led me to seek other approaches that might be more useful for working with such communities.

Through undertaking a literature review of methodology in Chapter Two, I discovered that Participatory Action Research (PAR) is an activist approach which is widely employed for generating sustainable change in community development. PAR has empowering effects on people and communities which participate in long-term development projects because it gives a community or
their representatives an opportunity to create an idea or to make a decision which affects their life, and
to design a project which could be implemented in their community.

I decided to use PAR as the research methodology for my doctoral investigation for three main
reasons. First of all, PAR still gives the researcher an opportunity to have an active role in the
investigation and allows entry into the real world of the people who are the center of the study.
Secondly, PAR provides an opportunity to the people who are under study to have an active role in
investigating their own situation with the researcher. Finally, PAR has been defined as an approach
which has empowering effects on people or a community which participate in the research process.
PAR methodology was explained in greater detail in Chapter Two.

### Discovering New Research Approaches

A critique at one of my bi-annual student research conferences introduced me to the “Sustainable
Livelihoods Approach (SLA)”. Through reviewing the literature, I discovered that SLA and
sustainable livelihood concept is widely employed by scholars of sustainability in community
development. According to DFID (Department for International Development), this approach places
people at the center of development. At the practical level, this means that the approach starts with an
analysis of people’s livelihoods and how these have changed over time; it fully involves people and
respects their views; it focuses on the impact of different policy and institutional arrangements upon
people and the dimensions of poverty that they define; and it works to support people to achieve their
own livelihood goals (DFID 1999).

SLA was adopted by the Department for International Development (DFID) in the late 1990s and has
been adapted by other organizations to suit a variety of contexts, issues, priorities and applications, for
example, the Institute of Development Studies (IDS), the International Institute for Sustainable
Development (IISD), Oxfam and others. Sustainable Livelihoods Framework (SLF) is generally used
as a tool to gather data and analyze the livelihoods of the poor in order to enable external agents or
researchers to have a better understanding of their livelihoods (DFID 1999). It can also be used in
both planning development activities and assessing the contribution to livelihood sustainability made
by existing activities. It does not work in a linear manner and does not try to present a model of
reality. It provides a way of thinking about the livelihoods of people that will stimulate debate and
reflection by them in order to develop their capabilities to achieve livelihood outcomes (Peters 2009).
SLF was explained in detail in Chapter Two.

SLA has already been used for identifying, designing, and assessing new initiatives for projects and
programs, re-assessing existing activities, informing strategic thinking, and for research. DFID
demonstrated the variety of uses of SLA in many regions: Zambia, India, Kenya, Pakistan, Nepal,
Indonesia, South Africa, Zimbabwe, Latin America, and Russia. In addition, there are many
researchers from different countries who have employed SLA in Thailand. Most of them focus on
environmental sustainability in rural areas. For example, Krishna B. Ghimire (1994), Johnson Cragie
and Tim Forsyth (2002), Michael J.G. Parnwell (2005), Tim Forsyth (2007), Emma Calgaro and Kate
Lloyd (2008), Sayamol Charoenratana (2009), Arnim Wiek et. al.(2010). Even though there are no
cases set in urban areas or peri-urban areas of Thailand, there are many successful case studies in
other countries as mentioned above. Consequently, I decided to employ the Sustainable Livelihoods
Approach as the theoretical framework of my doctoral investigation.

The discussion with other researchers at the 11th UNESCO-APEID International Conference:
Reinventing Higher Education: Toward Participatory and Sustainable Development held December
12-14th, 2007 in Bangkok, Thailand, verified for me that the research approach and theoretical framework that I had selected for my PhD investigation were valid and appropriate. Even though PAR can empower a community, entrench the local elite, and bring benefits to local communities, it could also bring disappointment. Researchers need to understand the local power structure and the issues. It is best reserved for situations where the external agent is aware of the potential for damage, both to themselves and, more importantly, to the disempowered in the community. It also works best where the external agent has a clear status and relationship with the community and can command resources for a long-term commitment.

Conference discussions also helped me realize that design for enabling sustainable livelihoods in communities is likely to be new territory for a designer. At that time, it was clear to me that this kind of research cannot be achieved through conventional research methods which a designer normally uses when they create artefacts or solutions for their clients or research participants. No one really knows what a sustainable livelihood looks like and when it can be achieved. Only the people who seek it could clarify these aspects. Therefore, it is essential that the people who seek sustainable livelihoods take part in the quest with the researcher.

According to Peter Taylor, the keynote speaker of the UNESCO international conference in 2007, participatory development advocates believe in the need for participatory approaches in action and research, and bottom-up planning as well as decision-making processes at the grassroots level. Participatory development is a bottom-up, people-centered approach aimed at developing the full potential of people at the grassroots level, especially the poor and marginal social groups, through their full participation in development efforts that directly affect their lives. Participatory Action Research (PAR) is one research approach that is used by people working in Sustainable Livelihoods. It is a process of collective data collection and analysis that leads to the identification, design, and implementation and evaluation of projects or programs that address local problems which play an important role in participatory development efforts. In collaborative or participatory research processes that link theory with practice, action with reflection, project participants and community members are recognized for their capabilities and skills in producing unique and diverse knowledge of local conditions and promising project results.

The discussion with community development practitioners at the UNESCO workshop helped me realize that if I was to achieve my ambition of helping people have better lives through design, then my practice was required to shift from a problem-solving approach to a people-centred approach. Achieving a real outcome through research requires the full participation and collaboration of the people at the centre of the project because it is their livelihoods which are the focus of the inquiry and they are better positioned to know their priorities. Moreover, they would understand what they have to do and why they have to do it if they are to improve their capabilities, reach their full potential and subsequently achieve a sustainable livelihood (Servaes, Jacobson et al. 1996).

This shift in focus to being on people rather than problem marked a significant evolution in my understanding of what research and design are and how I as a designer could operate in this context. Exploring how to do this became the focus of my doctoral research and the next chapter discusses my first exploration of the sustainable livelihoods approach to working with people.
Chapter Four
A Fresh Start

In this chapter I will discuss Workshop Two of this research project. This was the second procedure of this research which commenced following the Ethics Approval and the completion of the reflection on my past practice (see timeline in Figure 4.1). This workshop and the associated discoveries marked an important turning point in my practice as a researcher working with disadvantaged communities. The chapter is divided into three main parts. The first focuses on the people who participated in the investigation. In this part, I explain who they were, why they were invited to take part in the research, and how they were recruited. The second part concentrates on the research activities that enabled the participants to understand their livelihood as a community and investigate this livelihood with me. The activities in this workshop were composed of recruiting participants, data collection, a group discussion for planning the first action, taking action with participants, observation, and then a group discussion for reflection and planning the next action after we learnt from the experience. In the following action, I still worked side by side with the participants in order to show them how to investigate their own situation as well as observing them taking action (see Figure 4.2). The last part of the chapter discusses and reflects on those activities in order to plan the next series of actions that resulted in Workshop Three.

Figure 4.1 Timeline of the second procedure
Participants

The participants in this research were people with physical disabilities drawn from the Samut Prakran province which is located in a semi-urban area of Thailand. They were also members of the SDPA (Samutprakran Disabled Persons Association), which is a local organization of people with physical disabilities. They were invited to take part in this research project for the following two reasons. Firstly, this research project was embedded in their community; I had worked with them on other research projects previously and this would be the next iteration of that research. Secondly, this project was designed to investigate the real-life situations of people, and enable them to develop sustainable livelihoods based on their capabilities and available resources in their community. To achieve such an outcome, it was necessary to recruit people who wanted to improve and investigate their livelihoods through working with their situation and with me.

At the time, there were approximately 3,500 people with disabilities registered in this community. To avoid burdening the whole community and in order to manage the scale of the inquiry that the project methods would allow, I intended to recruit only 10-15 community members. Based on my observations through my previous research project, I had concluded that many of the physically disabled community members had mobility and literacy issues. To reduce the risk factors of this research project, I invited only the committee members of the SDPA to participate as representatives of their community. Consequently, the recruitment took place at the SDPA facility following the Ethics Approval of RMIT Human Research Ethics Committee.
Through the recruitment process, I discovered that the main financial source for the livelihood of this community was through a fortnightly commission from selling lottery tickets for the Government Lottery Office of Thailand. At the time, this livelihood was threatened by the introduction of new technology. The Government Lottery Office of Thailand was in the process of introducing a new electronic lottery system for selling tickets to members of Thai society. This would have a significant impact on disabled communities, and resulted in substantial protests and the subsequent postponement of the system’s introduction by the Government. However, no one really knew how long this postponement would continue or when the government would implement this technology. In order to avoid the impact of this change, fifteen people at the meeting decided to take part in this research study so that they could seek an alternative livelihood with the assistance of the researcher.

However, not all of the community members at the meeting decided to participate in the project. They were not motivated to change their source of livelihood even though they were fully aware that the sale of lottery tickets as an income source was not sustainable. As they reasoned, this livelihood suited them and their family particularly because it required few skills or manual labour. Even though they did not have to work every day, they still earned a sizable income per fortnight. When they were unwell, their family could help them with the sale of tickets. If they could not sell all of the lottery tickets in time, they also had a chance to win the first prize just as the leader of their community had previously.

This explanation exposed unexpected information. I was very surprised by these insights because I had no knowledge of this livelihood before I commenced my investigation. However, this helped me to have a better understanding of their current situation and the background to their decision not to participate. It also changed my view of their vulnerability completely as this was not only their livelihood which had been threatened but also that of their family.

This information also raised more questions for me about my previous research projects. This could have been the key factor which affected their decision not to take up the solution designed for them in the previous research study. Questions were therefore raised about why this information did not become apparent during the earlier projects and whether this knowledge would have made any difference. It is possible that our preconceptions blinded us from hearing and seeing this information or maybe inappropriate tools were used for the data collection.

**Research Activities**

In order to find out more about the participants, I employed four integrated research methods: survey, group meeting, group discussion, and on site observation. My rationale was that this mix of activities and information sources would enable both myself and the participants to have a greater understanding of their current livelihoods, as individuals and as a community. The survey was used for the individual data collection in order to enable me to get to know the participants individually and to gather information in preparation for a group meeting, and to develop further questions to ask in the group meeting. The group meeting was utilized to collect the data of the participants as a group and to discuss their initial answers in the questionnaires. This enabled me to have a better understanding of their current situation and how they work together as a community. This occurred through multiple group discussions. The first group discussion was employed to facilitate and enable the participants to gather their data and do their own analysis so that they could recognize the potential solutions for their current situation and plan their next action. The action which they determined was used to guide the following group session where they discussed and reflected on their progress and problems, so that they could plan their next action effectively. Throughout this process I observed what was taking
place, took notes and recorded the activities in order to gather the data from the participants that could not be told or explained, for example the daily interactions and activities of the participants in their own environment and how they worked together as a community. Each method revealed essential information as follows.

Survey: Collecting Individual Data

The survey was divided into two sections. The first section obtained specific data including identification and contact details. The second section consisted of open ended questions that gave the participants the opportunity to describe their skills, employment details (participants indicated the nature of their employment, whether full-time, part-time or casual), their strengths and weaknesses (separately discussed), mobility issues, role in the community, barriers inhibiting community interaction, and the capabilities required to achieve sustainable livelihoods (see guiding questions in Appendix A-1). They also had the opportunity to state their individual expectations from this research project. My goal was to get to know them individually and build a foundation for further development; the questionnaire took approximately one hour to complete. Fifteen of the participants took part in the survey at the SDPA facility (see Figure 4.3). The survey produced the following results (see data from survey in Appendix A-2).

Figure 4.3 Survey for collecting individual data

I was surprised to discover that contrary to my understanding, not all of the respondents were residents of Samut Prakran province. Eight of the participants provided contact details identifying them as residents in the community. Three of them had contact details for different provinces and the remainder gave the SDPA facilities as their contact address. This created a high level of ambiguity, which I sought to clarify by discussion with the respondents in a group meeting I organised as the next stage in my research.

These responses from questions in Section One raised a series of issues for me. One of my initial research aims was to enable the participants to develop sustainable livelihoods drawing on the resources available to them in their communities e.g. a small business loan from the Ministry of Social Development and Human Security in Samut Prakran province, which only residents of this province could access. In order to understand how these individuals had been brought together and continued to work together, I generated the following questions for a group meeting. The answers to
these questions are in the group meeting results.

Why did four of the participants give the address of the SDPA as their contact details in the questionnaire?

Are they or are they not residents of this community?

If they are not residents what brought them together?

How did they work together as a community?

The following information was produced from answers to the questions in the second section. The participants had different skills. Some of them had completed a vocational training program in sewing. Some of them had skills in making hand-made items (hand-woven mats and mops from textile remnants from the textile manufacturers in their community, artificial flowers, papier mache sculptures, resin souvenirs, miniature Thai houses, and tie-dyed fabric) because different organizations and academic institutions, such as my previous research project, had provided them with a training workshop in their community. Only a few of them could use a computer. Some had either formal management qualifications or commercial marketing experience. As the participants stated that their existing skills were their strengths, my focus became the range of these various skill sets.

As I looked through the responses it became apparent that even though the participants had different strengths, they shared common weaknesses in their own physical disabilities. They also tended to have little formal education and work experience outside their community. Lack of financial support or credit from the banks was another weakness for some of the participants. Because of these weaknesses, some of them felt a lack of social status and lacked confidence in interacting with other people in the community. Eventually, these became barriers which they encountered in their communities. However, the majority did not request any compensation from this research project. There was only one who requested that the group meeting be on the same day as the SDPA meeting so that he could attend both meetings.

All of the participants had employment. Some were employed as full time staff of the SDPA. Some worked as casual workers making hand-crafted artificial flowers for a four-month commission by the SDPA. Occasionally they were also contracted to make resin souvenirs. Many identified themselves as self-employed, but did not give further details. In order to clarify this information, I intended to discuss the answers with the participants in the following group meeting.

Their answers regarding their role in the community exposed unexpected information. I had originally intended to recruit committee members, because I wanted to reduce any risk my research might entail to the community. However, not all of the participants were committee members as I initially intended. Some were staff members and members of the SDPA. The committee members, SDPA staff and members believed that their roles and responsibilities in this community were the same as their roles and responsibilities in the SDPA. For example, the SDPA president and committee members saw their roles as leaders of the community. The staff members of the SDPA believed that their role was to support the vision of the committee members and the leader of their community. The members saw themselves as community residents, even if they lived elsewhere.

While these findings were unexpected, I concluded that this group was the best combination as it
included participants of the program and key personnel who were collaborating to develop sustainable livelihoods in this community. This included some of the committee members and the SDPA president who together had the authority to obtain access to those available resources which were critical for developing sustainable livelihoods from idea inception through to implementation. This group encompassed those staff members who understood the processes and knew how to access various assets in their community and in other organizations. The SDPA members were a key factor in this research process because their skills and abilities were vital for developing potential solutions for this community (see Figure 4.4).

Figure 4.4 Fifteen participants and their role in the community

As I commenced this evaluation I identified mobility issues as being a major concern because they had prevented most people with physical impairments from taking part in my previous research activities. The survey included the specific question “How do you go to work?” to investigate this issue. I hoped to discover how the participants were able to commute to the SDPA facilities. Based on their answers, I found that the participants had fewer mobility issues than I anticipated. Even though they had physical impairments, most of them drove their own car and some had their own tricycle. A few walked and used public transportation such as a taxi and a motorcycle taxi.

The participants had different expectations of this research, but the majority had the expectation that this research project could improve their present situations in their community. A few were unsure what the research could bring. At the time, the participants were unaware of what skills or resources they needed to develop sustainable livelihoods and these prerequisites had not yet been identified. However, they had positive expectations that taking part in this research project could clarify the answers for the future.
Upon the conclusion of this data collection, I found that the participants had different skills and strengths. However, they shared common weaknesses and encountered similar barriers in their community. In order to clarify some answers in the questionnaires and understand how they worked together as a community, the group meeting was the next step in my investigation.

**Group Meeting: Collecting Group Data**

The group meeting aimed to collect the data of the participants as a group and to discuss the initial answers in the questionnaires in order to enable me to have a better understanding of the community and how they worked together as a community. A group interview was employed as a tool to collect the data (see guiding questions in Appendix B). The questions for the group interview developed from the participants’ answers in the questionnaires. This group meeting took place at the facilities of the SDPA and went for approximately two hours. Only four of the participants took part in the group meeting. Since four more new community members requested that they take part in this research, eight people took part in this meeting. Therefore, the research project had nineteen participants.

The new four participants were requested to sign their consent form and provide their individual data as the others had before the group meeting commenced. After I added their individual data to that of the previous group (see Appendix A-3), I found that three more people had provided the same address. These addresses were also the address of the SDPA. Therefore, I commenced the group meeting with the following questions.

1. Would you please introduce yourself, your employment, and your role in this community?
2. If you are self-employed, please clarify your job description.
3. Are you the residents of this community?
4. If you are not residents what brought you together?
5. How did you work together as a community?
6. What is your current situation in the community?

The group data collection revealed essential information. I found that the participants were composed of the president of the SDPA, committee members, staff, and members of the SDPA. Each participant had their own role and a different responsibility in the community. The participants who were the SDPA president and the committee members considered themselves as the leading team and representatives of the community. The participants who were the SDPA considered their role and responsibility as part of the leading team and worked in order to support the vision of the leaders of the community. The participants who were the SDPA members considered themselves as residents of the community even though they did not live and work in the Samut Prakran community. Because of their role and responsibilities, the participants had already determined their role in this research and took responsibility for any work which was relevant to their role in the SDPA. For example, the participants who were the SDPA staff worked and supported the group during the group meeting without being appointed (see Figure 4.5) as well as effectively providing information about the organizational structure and hierarchy of power in their organization (see Figure 4.6).
The majority of the participants were self-employed except the participants who were the SDPA staff. As they explained, they made a living by distributing lottery tickets for the Government Lottery Office of Thailand. Some of them became ‘middlemen’ who distributed large quantities of lottery tickets to other people in different communities who could not legitimately buy the lottery tickets from the SDPA while there were not enough tickets for other members. They were not proud of what they did for a living; however, it was the only self-employment that was available for them and their family. Therefore, they used the term ‘self-employed’ to describe their employment in the survey. The participants who were the SDPA members admitted that they also distributed lottery tickets in the community for a living because the artificial flower commission of the SDPA could not provide them with income all year around. However, they did not write it down in the survey because they did not want anyone to know about this. Therefore, they only described their employment as casual workers of the SDPA only.

Figure 4.5 Gathering group data with participants
Based on their initial answers in the questionnaires regarding their contact details, some of the participants who gave the address of the SDPA as their contact details were not residents of the Samut Prakran province and some of them were. The group who were not residents of the Samut Prakran province were the SDPA committee members. Since the participants were appointed as committee members of the SDPA by the president of the SDPA, they were advised to register their name as residents of the community so that they could be entitled to represent the community and have legitimate access to available resources in this community. This included such things as small business loans of approximately 40,000 bahts (AUS$1,600) from the Ministry of Social Development and Human Security in Samut Prakran province. The group who were residents were the SDPA members. They initially moved to this community for a two-year vocational training program at the government training centre, which is called the Phrapradaeng Vocational Rehabilitation Centre (PVRC). After the training, some of them had jobs in either textile manufacturing or leather manufacturing in the Samut Prakran province. When many of them returned to their homes, they found that there were no job opportunities in their communities, and consequently many of them returned and stayed in the community in order to look for a job.

This community was established by the former trainees of the PVRC who formed a group. Their main goal was to create income generating activities for themselves and disabled people. As the majority possessed tailoring, dressmaking and sewing skills, they use these skills to produce clothes to sell in the local market. Gradually, many people who completed the vocational training joined them as a production team and a community of people with disabilities was formed. However, this was a very
competitive market area and they could not compete with the mass production of textile manufactures. Consequently they decided to seek an alternative means of gaining a living. It was following this time that the group found that if they wanted to access commissions from the local government organizations they were required to set up their community as an organization of people with disabilities. For example, the fortnightly commission for selling lottery tickets for the Government Lottery Office of Thailand and a four month commission for making artificial flowers for the local government once a year. As a result, the group established a local organization of people with disabilities in Amphoe Phrapradaeng, Samut Prakran province. At the time, it was named the SDPA (the Samutprakran Disabled Person Association).

At the time of this study, the main source of income for the community was the fortnightly commission for selling lottery tickets. This had developed to become the livelihood for many people in this community. Many set up a small business to distribute lottery tickets in their local communities. Some of them became “middlemen” who distributed large quantities of lottery tickets to other people in different communities who could not legitimately buy the lottery tickets from the SDPA. Many more people with disabilities from different communities were drawn to this community so they could become members of the SDPA and have the right to distribute lottery tickets for the government.

At the time of the establishment of the organization, although the SDPA had approximately 3,500 members, they only had enough lottery tickets to supply 500 members. To solve this problem the committee members and the leader of the community who was also the president of the SDPA requested more lottery tickets from the government. However, their request was declined. Therefore, they sought alternative income-generating activities for their members such as making various hand-made products, such as Thai-house miniatures as souvenirs, artificial flowers, resin elephants, and papier-mache statues. However, there was little progress in generating income because there was no existing market for these items. Even though my previous research took place in 2006-2007, they still could not solve their previous problem because of the limitations which were discussed in Chapter Three.

In 2008, this community faced another problem when the government introduced electronic lottery tickets into Thai society. This technological change threatened the livelihood of the whole community. Even though the government decided to postpone its implementation, the community was left in a state of uncertainty and hence started to seek alternative approaches in order to minimize the impact from this expected change. Therefore, the community members who were concerned agreed to participate in this investigation in order to seek a solution for their current situation.

This group meeting enabled me to have a better understanding of their current situation and how they worked together as a community. The meeting also revealed the level of vulnerability that existed in their community. To avoid or reduce this vulnerability to external forces, the participants and their community were required to transform their existing livelihood assets from their current applications and contexts into positive future orientated outcomes. In order to find out more about available assets in their community and how they could access those assets, a group discussion was employed as the following method.
Activities in Workshop Two

*Group Discussion: Collecting Data and Group Analysis with the Participants*

The group discussion consisted of two sessions. The first session focused on facilitating the participants’ collection of their own data by using Sustainable Livelihoods Framework (SLF). The aim in using this was so that they could establish a better understanding of their livelihood as a community. The second session aimed to enable the participants to do their own analysis and empower them to make their own decisions about future actions, livelihood options and their subsequent implementation in their community. These activities were set up as a workshop called *I’ll Show You How Workshop*. The name of the workshop reflected my main goal which was to show them how to investigate their situation with me. This group discussion took place at the SDPA facility for approximately two hours with ten participants. The SLF exposed vital information as described below. These classifications are drawn from the Sustainable Livelihoods Framework referred to on page 27 of this text.

This was the first group discussion with the participants. My role was a facilitator who guided the participants to identify each livelihood component. In this group discussion, I contributed my visual communication skills to make each livelihood component visible and linked together so the participants could understand the connection and their livelihood as a community not as individuals (see Figure 4.7).

![Facilitating the participants to use SLF](image-url)
Vulnerability Context

The vulnerability context for these participants and their community was what is known as the population and technology trend. A population trend occurred in their community when a significant number of people with disabilities moved into the community in order to access the entitlement to distribute lottery tickets for the Government Lottery Office of Thailand. At the time, the committee members of the SDPA and the leader of the community still could not reduce this vulnerability. The technology trend occurred after the Government Lottery Office of Thailand introduced electronic lottery tickets into Thai society in 2008. This vulnerability threatened the livelihood of the participants and all of the SDPA members. In order to avoid or reduce their vulnerability, the participants agreed to use their available assets. Subsequently, the following section concentrates on identifying the livelihood assets of their community.

Livelihood assets

The livelihood assets are composed of six types of assets or capital: financial, human, social, physical, natural (DFID 1999) and information capital (Odero 2006). Each asset has a different significance for people in different communities, for example, a natural asset is vital for people in rural communities, but is less important for people in urban communities. Financial capital is the most powerful asset because it can increase other assets that are required to achieve sustainable livelihoods (Meikle, Ramasut et al. 2001). However, it is the rarest asset and hardest to access by the poor. To obtain this asset, the poor need to transform other available assets in their community into this asset. For example, they could transform their skills, capabilities, and abilities to undertake labour as a means to earn a living. In the group discussion, I realized that the participants and their community possessed plenty of livelihood assets as follows.

Financial Capital

I found that the participants and their community possessed an abundance of Financial Capital. Even though the participants received a pension of approximately 500 bahts (AUD$20) every month from the local government, they were not poor because they earned income from the fortnightly commission for distributing lottery tickets for the Government Lottery Office of Thailand. Some of them worked as full-time staff members of the SDPA and some others were casual workers of the SDPA producing hand-made items as requested.

Even though the participants did not have any credit from financial institutions such as the banks, they still could get a loan for setting up their own business in the community of approximately 40,000 bahts (AUD$1,600) from the Ministry of Social Development and Human Security of Thailand. To get a small business loan, the participants were required to have a promising business, and someone to co-sign the loan. This could be, for example, one of their relatives who worked for a government organization or a committee member of the SDPA; the co-signer would assure the agency that the loan would be repaid.

Their community possessed substantial financial capital from every fortnightly commission from selling the lottery tickets. This asset was managed by the president and committee members of the SDPA and could be accessed through the committee members. The SDPA is a Profit Organization so they generally support promising income-generating activities that could bring benefits to their members and their organization.
In their community, there was also other financial capital available from different organizations, which the participants and their community had legitimate access to, such as small business loans and financial support for a short training course from the Ministry of Social Development and Human Security of the Samut Prakran province. To access these differing types of financial support, the participants and their community were required to submit formal proposals through the organization which represented their group or community. This organization was required to provide the training for groups of fifteen people; sufficient facilities and equipment; and a training program which was different from the programs provided by the government vocational training centre in the community.

**Human Capital**

*Human Capital* in this community was also abundant. Based on results from the survey and a group meeting, it was clear the participants and their community possessed various capabilities, skill-sets, and abilities to undertake labour. Some of them possessed skill-sets in sewing because they had completed the vocational training program at the government vocational training centre. Some possessed skill-sets in making hand-made items such as hand-woven mats and mops from textile remnants, artificial flowers, and resin souvenirs, as a result of various organizations having provided them with a short training course. In addition, their community had many members who were able to work and were waiting to be recruited and join them in the production team.

**Social Capital**

The participants and their community also had a lot of *Social Capital*. This was because the committee members of the SDPA and the SDPA president had a lot of connections and networks in both government and non-government organizations, as well as private sector organizations. In addition, the SDPA president was also a committee member of local government organizations and The Association of the Physically Handicapped of Thailand. This helped the participants and their community to possess *Information Capital* as well. This information asset was essential because it gave them an opportunity to access other available resources in time.

**Physical Capital**

*Physical Capital* in this community was adequate. Because the community is located in a semi-urban area of Thailand, the participants and their community had full access to public health care facilities, the government vocational training centre, formal education institutions, public transportation, electricity, telephone, clean air and water, food and other basic necessities. The SDPA facility had sufficient space and equipment for the participants and other members to work as a community and develop income-generating activities together. The participants also pointed out that the SDPA president planned to buy more land and expand their facilities to accommodate the SDPA members who would work for the SDPA in the future. This was part of their long-term plan.

**Natural Capital**

This community is located in a semi-urban area of Thailand. They did not rely on natural resources such as forest or land for agricultural activities in order to make a living like a rural community. However, *Natural Capital* was still essential for their health and living conditions. As their community was classified as a green area of the Samut Prakran Province, there were some restrictions that they needed to abide by. For example, their new income generating activities should be able to use their existing workshop. As they planned to expand their facilities to provide accommodation for the SDPA members who would work with them as full time employees in the future, they needed to
buy more land and build long buildings because they were not allowed by the city to build tall buildings on small plots of land.

This information made it clear that the participants and their community possessed plenty of community assets. In order to understand how they could access these assets in their community, I guided the participants to clarify the *Transforming Structures and Processes* of their community.

**Transforming Structure and Processes**

This community was established as a local organization of people with disabilities in Samut Prakran province. It possessed various available assets which were managed by the committee members of the SDPA and the leader of the community. To access the SDPA assets, the participants were required to obtain the permission of the president of the SDPA and the committee members of the SDPA. Fortunately, the participants were the committee members, staff and members of the SDPA. They were fully aware of the processes and procedures to access the SDPA assets as well as having the authority to access the SDPA resources. As the SDPA was a self-built and for-profit organization, they generally provided financial support for setting up promising income-generating activities which could generate more jobs for a group of the SDPA members and bring profits back to the organization. However, they did not provide small business loans for individuals. To access other available resources from local government organizations, such as financial support for a training workshop or using public space in their community, the participants were required to submit a formal request through the organization which represented their community, such as the SDPA. Thus the participants were aware that they were required to work together as a collective group of the SDPA in order to access various livelihood assets in both the SDPA and the government organizations in their community. This also became part of their *Livelihood Strategies* to develop sustainable livelihood as a community.

**Livelihood strategies**

Working together as a collective group and part of the SDPA was the most effective aspect of the *Livelihood Strategies* of this community because it could enable the participants to gain access to various available assets in both the SDPA and other government organizations. Since the SDPA already had the structures and processes in place, this research project was not required to generate new ones. However, working together as part of the SDPA might have had some weaknesses because not all of the participants had equal power and authority to make decisions. Despite this, the participants were encouraged to work together in order to generate ideas and make decisions together as a community.

**Livelihood outcomes**

*Livelihood Outcomes* for these participants was to have an alternative livelihood which could provide them not only secure and sufficient income every month all year round, but also increase well-being and reduce their vulnerability.

Even though the participants and their community were not poor, they still needed to have sufficient income every month all year as a safety net for themselves and their families and to ensure that they could continue living independently, supporting themselves and their families. Many of them were still in the middle of repaying loans to the government, and therefore needed an alternative livelihood that could continue supporting them in their repayments.
Many of them were required to have a means to make a living that they could develop into a promising business; this would allow them to apply for a small business loan from the government to start the business. This was their ultimate goal because being able to get a loan from the government and start their own business could give them a sense of accomplishment and self-fulfilment, as well as dignity. This was one way that they could contribute to supporting their families.

Some of the participants wanted to increase their well-being because they were afraid of wandering around the community selling lottery tickets by themselves. They preferred to use their skills and work at home or in a work-safe environment rather than working outside alone. As they reasoned, even though selling lottery tickets could provide a lot of income, it could not ensure their safety in their livelihood and property.

Their mutual goal of seeking an alternative livelihood was to reduce the impact of their vulnerability in the community both at that time and in the future. In order to achieve this goal, the participants needed to transform their community livelihood assets into livelihood outcomes. Applying the SLF approach through this project uncovered not only the vulnerability but also the available assets and potential strategies for them to reduce their vulnerability. In addition, it enabled the participants to understand that to achieve livelihood outcomes, they were required to use their available assets. As SLF exposed that the participants and their community were not poor, they realized that they had various opportunities to create an alternative livelihood and achieve sustainable livelihoods. To enable the participants to recognize their available choices, I employed a group analysis as the following activity. The visual concept of the livelihood of people with disabilities as a community in the Samut Prakran province is illustrated in Figure 4.8.

The group analysis was part of the second session of this workshop. My main goal was to enable the participants to identify the current state of their livelihood as a community before the research existing in the community and recognize open opportunities for them to generate new income generating activities. This group analysis was simple and visualized so that the participants could understand and do it themselves.

According to the previous section, the participants agreed that their community possessed plenty of Human and Financial Capital. They also knew that they had a lot of Social and Information Capital because the SDPA president and the committee members were also committee members of other organizations in different provinces. This capital enabled them to access available resources in different organizations. Their Physical Capital was as well equipped as other communities in the urban area. They could access health care, educational institutions, electricity, telecommunication, and public transportation. Even though their livelihood did not rely on the Natural Capital like a rural community, they were well aware and concerned about their environment.

In this group discussion, the participants were guided to create a new income generating activity based on their strengths and available livelihood assets. As this community is located in a semi-urban area, their livelihood did not depend on Natural Capital because they did not have enough land or natural resources to generate new income-generating activities. In addition, they did not have any particular knowledge or skills to transform any natural resources into income. Therefore, the participants did not consider this asset to be one of their potential choices.

However, Human Capital was the key asset for them to generate sustainable livelihoods. This was because they had a lot of community members who possessed various skills and abilities to undertake labour. This was considered to be the ultimate solution and strategy for this community if they could
transform one of their vulnerabilities into positive outcomes. The majority of the participants who sought to have an alternative livelihood possessed abilities to labour through skill-sets in 1) making artificial flowers; 2) making resin souvenirs; 3) making hand-woven mats and mops from textile remnants; 4) making miniature Thai houses; 5) sewing; 6) producing tie-dye fabric. However, the participants did not include papier mache as one of their potential choices because they had only a few people in the community who possessed this skill. Most importantly they had never had a market for this item. Consequently, only these six choices became the main focus of this analysis.

Figure 4.8. The visual concept of the livelihood of people with disabilities as a community
The first opportunity identified by the participants who had existing skills was making artificial jasmine flowers for Mother’s Day in Thailand; this was because they had equipment to produce the whole process. This production process used little electricity or other internal resources (see Figure 4.9). However, their only existing client was a commission for a local government once a year. It was decided that this was not a viable market for them, as it was a product for a particular event and was not going to provide income year round. In addition, other craft industries produced the same products in the marketplace. They could not compete with them on price and quantity, even if they were to save production time by buying completed parts in the markets and assembling them to make the final items.

![Image](image_url)

Figure 4.9 The production process of making artificial flowers

During the discussion, Kaureaun, who had been working on this commission for almost a year, mentioned, “I would not mind doing this kind of job because it just keeps me busy and I feel safe to work here at the SDPA facilities. I earned about 1,500-3,000 bahts ($100) per month. It’s enough for me to be independently”. Pikuntong also added that “I cannot work really fast like everyone else, so making part for artificial flower was OK for me because I can work on my own pace. I get paid by amount of my work that I made anyway”. “This is truth, we paid the casual workers by amount on their work but not by hours, so they could take their time to produce items for us,” said Benjawan as she shared her insight as an SDPA staff member. Pakong also had experience in making artificial flowers. He argued that “We cannot rely on this casual work. There was enough income for us all year around. We need to find something else better”. Based on this discussion, the participants agreed that making artificial flowers was good for some people, but this activity was a time-consuming
production with a low profit margin. As a result, the majority decided not to select this as an alternative means to make a living. The strengths, weaknesses, opportunities and threats of this opportunity are illustrated in Figure 4.10

![SWOT of Producing Artificial Flower](image)

Figure 4.10 The first choice

The second choice was to make resin souvenirs and miniature Thai house souvenirs (see Figure 4.11). As the participants explained, only a few of the community people could produce resin souvenirs and miniature Thai house souvenirs and they did not have the relevant product development skills. At the time, only Pakong and Kaunchai could produce these items. As Pakong said, speaking from his experience, “I can pour resin in the mould and duplicate the existing products in the market, but I cannot create a new item to keep up with the change in the market”. Even though they could distribute these through a souvenir shop in the City Hall of the Samut Prakran province, they did not have any certainty about the amount of sales and income. A lot of craft industries could change their new items to meet the markets’ needs while they could not. They confessed that they had bought new products from other craft industries in order to keep up with the changes in the market, but they could not make enough of a living from doing that. Eventually they stopped doing this because these skill-sets were hard for them to develop and only a few of them knew how to do this. The majority decided not to select this as an alternative means to make a living even though some participants proposed that they had some opportunities if they could distribute these products to other outlets that had no similar products.
The third choice was making hand-woven mats and mops from textile manufacture remnants. This was the most recent product in their community which was developed by the local authorities. This activity had been introduced into their community before my research project commenced. The authorities provided a training workshop for the community members as well as agreeing to distribute their end products for them (see Figure 4.12). At the time, they were still in the middle of implementing this project in six communities in the Samut Prakran province. Singkome explained that “This project was introduced in this community by the authorities. This project was fully supported by the local government. We planned to train 30 people in each community in the Samut Prakran. We just started this training program. After training, we expected to have 180 people who were ready to produce these items for us to distribute, but the authorities who created this idea had relocated elsewhere. We are not sure what we should to do now.” The participants asked me, “Can you help us find the market for these items?” At the time, I had to admit that I did not know how to and helping to solve a problem was not part of my research. This rejection was hard for me to do and for them too to accept because of their cultural context which will be explained in more detail later in this chapter. I explained to them that this research study aimed to enable them to create their own solutions. Consequently, the participants were uncertain about this choice.
Figure 4.12 The third choice: producing hand-woven mats and mops

The fourth choice was for them to utilize their sewing skill-sets (see Figure 4.13). Based on their strengths and existing skills in their community, this was the most promising choice for them because some of the participants and the majority of community members possessed sewing skill-sets as they had completed a two year training course at the government training centre in their community. Their community had sufficient facilities and equipment which they had used to produce shirts for a local market in the past. At the time, the participants pointed out that there were a lot of textile manufacturers in their community. They did not know how they could compete with them. Thus, I suggested the participants consider making custom-made items instead of mass production.

As some participants who had had working experience with me in the previous research projects possessed tie-dyed fabric skills (see Figure 4.14), I proposed that they consider combining these skill-sets in order to create new items. Using tie-dyed fabric as their raw material instead of industrial fabric could create product differentiation and unique selling points. I also ensured that together we would find out the market’s needs and develop unique items. Even though most of the participants were uncertain about this choice at the time, they agreed to develop this idea with me as their pilot project because this was the most appropriate choice of all.
As a result, the participants agreed to use their skill-sets in sewing and making tie-dyed fabric and using the SDPA facility and equipment as their key assets to generate a new income generating activity. The following action was undertaken in order to transform this idea into action. According to their Transforming Structures and Processes and Livelihood Strategies, the participants planned to develop new items as product samples so that they could use these samples to negotiate and discuss
potential opportunities and access some particular new markets, for example, a supermarket, a shopping mall, or souvenir shops in different hotels in their community. Thus, they agreed that their next action was to develop new items from tie-dyed fabric.

Developing new items would require financial support to enable them to purchase raw material for making the tie-dyed fabric. However, this research project did not provide financial support for them as the previous research projects we had undertaken had. Because this was a pilot project, which may or may not be a success, the participants proposed that the group request financial support from the local government. The government provides financial support for training workshops to improve such communities’ capabilities, and also covers the cost of raw material used during the training and other accommodation for the groups of disabled people who take part in the training. At the time, there were a few of the participants who knew how to use a sewing machine and produce tie-dyed fabric but they had never utilized these skill-sets to make a living. Consequently, the participants decided that their priority action was to request financial support from their local government.

After they received the financial support, their next action would be to establish training workshops for themselves and other community members who intended to join them as a production team in the future. The main goal of this training was not only to develop their skills and create new items as product samples that they could use to propose potential markets, but also to recruit more community members to join them as a production team in the future. Figure 4.15 is a concept map which I created following this group discussion in order to transcribe and show how the participants plan their actions.

![Figure 4.15 A livelihood analysis for planning and designing a project.](image-url)
As the local government provided financial support for organizations that represented a group of people with disabilities only, the participants were required to process their formal request through the SDPA. The majority of the participants were committee members and staff of the SDPA and they understood the procedures and knew how to write a formal request. Therefore, they agreed to take this action. As this process took approximately two months to get a result, the participants and I agreed to resume in two months’ time.

After the group discussion, I decided to employ observation as the final method in order to enable me to see the participants’ livelihood and how they worked together as a community in their own environment.

**Observation: Participants’ Livelihoods**

Observation was employed as a means of gathering the data of the participants in their own environment, through direct observation of their daily activities and how they worked together as a community with other organizations and residents in their community. The tools for collecting evidence were a camera and camcorder. I conducted observations from a distance and direct observation at the SDPA facilities and in the community for approximately two months. The observation demonstrated vital information as follows:

**Cultural Context of Disabilities**

In Thai society, people with disabilities are invisible. Many of the people who have had disabilities since birth or childhood are often rejected by formal education institutions. As a result, they have had little formal education as well as a lack of confidence and social skills. Consequently, they isolate themselves from the society.

According to statistics compiled by the National Statistical Office in 2007, out of the Thai population of 65.6 million, 1.9 million were disabled persons. The majority of them have a physical impairment and live in a rural area. However, only 200,874 are registered as people with disabilities (2002; 2009). In 2009, the government encouraged disabled people to register with the Ministry of Social Development and Human Security, so that they could access social welfare and receive a 500-Baht monthly allowance (approximately AUD$17 a month).

The Samut Prakran community is the most visible community of people with disabilities in Thailand because there are different government organizations and facilities available in this province for these people. In 1941, the Thai government established the Phrapradaeng Home for the Disabled People. This centre provides health care, accommodation, and shelters for homeless disabled people aged above 18 years old. In 1968, the Thai government established the Phrapradaeng Vocational Rehabilitation Centre for the Disabled Person (PVRC) in order to assist in the rehabilitation of disabled people by reviving their physical abilities. At first, this was aided by the United Nations (UN) which provided experts to advise on the rehabilitation of disabled people. This centre is a unit of the Department of Social Development and Welfare, Ministry of Social Development and Human Security of Thailand. It offers five occupational training courses for people with physical disabilities as follows: 1) leather work, 2) tailoring and dressmaking, 3) electronics repairing, 4) computer usage, and 5) art and handicrafts. These courses are provided for people with physical disabilities aged 14-40 years old who have a suitable minimum education background (Peters 2009). After training, some of the community members have opportunities to work in the manufacturing sector. Many are still working in informal sector jobs in their community. However, many do not have opportunities to work. As a result, they live in poverty. Self-employment is the only available opportunity for them.
In 1982, a group of former trainees of the PVRC established an organization for people with disabilities in the Samut Prakran province, named the Samutprakran Disabled Person Association (SDPA). The organization comprises representatives of disabled people who negotiate with local government and access available resources from different organizations. As explained previously, the organization was formed in order to create income generating activities for disabled people who lived in the Samut Prakran province. The main source of their income was to distribute lottery tickets for the Government Lottery Office of Thailand every fortnight. To be entitled to be members of the SDPA and have a legitimate ability to buy lottery tickets from the SDPA and access available resources in the local government, a lot of people moved into this community. At the time of this study, there were 3500 members of the SDPA.

In Thai culture, people with disabilities are seen as weak, incapable and unable to do things for themselves. According to the Country Profile on Disabilities in Thailand by the Japan International Cooperation Agency, Planning and Evaluation Development (2002:7),

More than 90% of Thais are Buddhist. In the teaching of Buddhism, disability is an outcome of a vice that a person had in his/her previous life. On the other hand, Buddhism teaches to have mercy on the weak. Because of this, Thais prefer to give money to disabled beggers or to make donations to charities. Though this might be regarded as a good social characteristic promoting the support of people with disabilities it can also be viewed as preventing people with disabilities from joining society on an equal footing (2002).

The ways of thinking and behaviour of the society had disempowering effects on people with disabilities. As a result, some of them accept the position as recipients of the charity of others.

In reality, many people with disabilities, especially those with physical impairments, have had a high level of formal education and possess knowledge and skills because their disability is not hereditary, congenital or acquired in childhood. Their disability resulted from active duty as soldiers, or from workplace and road accidents. Therefore, they were able to do things for themselves and others as ‘normal’ people would but with some physical limitations.

As the general perception of Thai culture was that the disabled were in fact uneducated and incapable, this actually provided more advantages than harm; consequently they kept the ‘incapable’ image. The Samut Prakran community was one of these examples. The perception of Thai culture had also opened various opportunities for them to access available resources from different government organizations, non-government organizations and the private sector. Hence, they utilized this as their livelihood strategies.

This observation helped me realize that I had had a misperception about the cultural context of disability in the Samut Prakran community in my previous research studies. I also acknowledged that there were some differences in the ways of thinking and the behaviour of people with disabilities. Even though I am Thai and have the same set of customs and traditions, I understood there was a lot for me to learn about this community.

Livelihood of the participants as a community

Based on observing the participants working together on their first action, I found that they shared responsibilities in this project without being assigned to them. In this action, the participants who were the SDPA staff drafted their formal request and then presented it to the participants who were the committee members and the SDPA president for approval. After that, they processed their formal request to the local government by using the available resources of the SDPA such as the SDPA messenger. At this stage the participants who were the members of the SDPA were not involved in this process. As agreed in the group discussion, the participants would follow up the result of this action and notify the researcher.
Through the observation, I found that every fortnight at a particular event, the participants who were committee members of the SDPA would come together and work as a community at the SDPA facility. Only the participants who staff the SDPA and the members who worked as casual workers for the SDPA came regularly to work at the SDPA facility. Occasionally, the participants who were committee members and the SDPA president had to attend meetings and seminars with other organizations in different provinces as representatives of their community. Some of them were committee members of other organizations for people with disabilities. For example, the president of the SDPA was a committee member of the Association of the Physically Handicapped of Thailand in Nonthaburi province. As the participants who were the staff of the SDPA knew the schedule of the committee members and the SDPA president, I generally organized a schedule for this project with them.

The livelihood of the participants and their community evolved from the commission of distributing lottery tickets for the Government Lottery Office. They earned income every fortnight from this commission so, as individuals, the majority of the participants were not poor. They also had their own businesses in the community as well as the income from the lottery tickets. They had their own cars which had been custom-made or modified and many could drive themselves. Some of them were financially supported by their family. They chose to work so that they could continue to live independently.

Roles of the participants in the Samut Prakran province

The participants and the SDPA had vital roles and responsibilities not only in the SDPA but also in the whole community of people with disabilities. The SDPA president and the committee members of the SDPA were appointed by the Governor of the Samut Prakran province to host a meeting and organize activities for the International Day of People with Disabilities with other local government organizations in the Samut Prakran province (see Figure 4.16). This confirmed that they had a lot more Social Capital in their community than they had discussed.

Figure 4.16 Observation of the role of the participants in the Samut Prakran province
In summary, the data from observations confirmed that the participants as a community had a lot more access to *Financial, Human and Social Capital* than they had described in the group discussion. In addition, the participants’ roles and responsibilities in the SDPA were essential not only in the SDPA but also in the whole community because their organization was appointed by the Governor of the Samut Prakan province as the government’s liaison with people with disabilities. They were also the role models for the younger generation who had disabilities in their community.

**Group Discussion: Reflection and Planning for the next action**

This final group discussion was designed to follow up on the last actions as identified in the earlier workshops. My main goal was to find out the result of their request for financial support from the local government and to discuss the following action with them. The group discussion took place at the SDPA facility for approximately one hour. Only three participants who were staff and members of the SDPA could take part because most of the participants who were the committee members of the SDPA had a meeting in a different province. However, the other participants who were members of the SDPA decided not to continue with this project for two main reasons. Firstly, they felt that the decision from the group analysis was not theirs. At the time they had no other choices to propose. They felt that the choice that they made did not suit them and their impairment. However, they accepted the option because of the majority vote.

Secondly, in the following two months, there were both political and economic crises in Thailand, when one million people lost their jobs before New Year’s Day. Thai people put a lot of hope and faith in winning the lottery at that time of the year, so there was a lot of demand for lottery tickets. After the study participants re-evaluated their situation, they decided to continue selling lottery tickets instead. They also were unsure about the outcome of this project, so they decided not to continue with it.

During the group discussion, I found that the participants had not received any notification from the local government because of the political crisis in Thailand at that time. The participants were not sure when they would know the progress of their requests. At that time, I was willing to provide them with financial support if they agreed to proceed. After I consulted with the participants, I found that they did not really want to develop their new item from tie-dyed fabric because it was a time-consuming process and they could not do it by themselves because of their physical impairment.

I was very disappointed; however, their decision provided me with the opportunity to reflect on my previous actions. I realized that in the group analysis I had limited their choices and had attempted to persuade them to accept only the choices that I believed were best for them. I also utilized a majority vote system which forced them to accept the decision but I ignored the significance of the silence of the minority voters in my eagerness to improve their situation. The group discussion enabled me to consciously shift my mindset. Instead of trying to come up with new ideas for them, I just asked them “What should we do about it?”

In this group discussion, the participants were quiet because they did not know what they were going to do next. Therefore, I proposed that I would leave and only return to the community when they had received financial support from the government or had decided what they wanted to do. The participants expressed that there was no certainty about financial support from the government at that stage because of Thailand’s current political situation which included no Prime Minister. They would like me to continue working with them because they had never had any other scholars or authorities
accept their invitation to work voluntarily for their community. They were well aware that I had to travel from overseas in order to work with them but they did not want me to leave their community without giving a return date. Therefore, they decided not to wait for the financial support but to adjust their plans and actions so they could start the process of developing a new means to gain a living.

At the time, there was a new community member who was invited to take part in the meeting by the participants. This community member agreed to take part in their research, but refused to sign the consent form; therefore, I was unable to collect or report on the personal data of this community member. The new community member suggested that they could continue using their sewing skills to develop new items from fabric scraps that are available in their community. As the new member articulated, there was local fabric available which was unique and inexpensive and readily obtainable in their community. Based on the professional experience of this community member, making new items from fabric scraps or textile remnants was quite popular among young people and tourists in some particular markets, for example, the weekend market in the community and the Jatu Jat or JJ weekend market in Bangkok.

After this community member shared this experience, the rest of the group decided to start developing their new items without waiting for the financial support from the government. Since the group included me, they were excited about the new material, and the new community member offered to provide some fabric scraps for the group. As soon as the group saw the material, they agreed to create new items together right after this group discussion (see Figure 4.17). Therefore, their next action was developing new items, which is called Starting From Scraps.

Figure 4.17 A group discussion for reflection and adjusting a plan for the new action
Observation: Group’s Action - Starting from Scraps

This activity was determined by the participants in the group discussion. Their main goal was to develop new items from the fabric scraps. This action commenced following the two-hour group discussion at the SDPA facility. In this action, I worked side by side with the participants in order to demonstrate how to develop an idea into a prototype because some of them could not articulate or draw their own ideas (see Figure 4.18).

According to my observation, only one participant could use a sewing machine at the time. The new community member had experience in using a sewing machine and making products from this material so she guided others in using the sewing machine and stitching the material together (see Figure 4.18).

Figure 4.18 Showing the participants how to make their own prototype
While making a prototype, the participants discovered that they needed to have better equipment to stitch particular parts and patch small pieces together faster. Some of them felt that they needed to improve their sewing skills. Subsequently, I proposed that they discuss these findings with the other participants in the next group discussion.

**Reflection on Workshop Two**

*Reflection on the Research Activities*

Through my own reflection, I discovered that the latter group discussion was the turning point of this research project and the shift in my practice as a researcher, based on the following factors. The first factor was the arrival of the new community member. This new member possessed skill-sets, local knowledge and professional experience that was different to my skills. In addition, this new member was an actual resident of this community, so she knew the various available resources in the community better than the other participants.

The second factor was the participants’ liberation. In this group discussion, the participants who were concerned about their low rank in the organization, such as staff and members of the SDPA, had the opportunity to express their views and discuss their ideas with me openly because there were no other participants involved in the process, such as committee members of the SDPA and the leader of the community.

The third factor was the participants who had not participated in my previous projects were not influenced by my way of thinking and behaviour and they helped me realize that my preconceptions about the community, and my ambition to solve the problems for the community, was not the best outcome in this case. A researcher such as myself might possess skill-sets which are absent in a community which they can offer when they are needed in such projects. However, the impact of this can be limited as the external agent or researcher’s knowledge might affect choices made by the community that are not appropriate for them. Therefore, it is essential that the researcher should not overlook local knowledge and wisdom when working with communities.

The fourth factor was that the participants who initially had shown considerable interest in taking part
in my research decided not to continue with this project. This factor struck me the most both personally and professionally. However, it enabled me to realize that my ways of thinking and behaviour and my ambition to improve their situation could have seriously affected the project. It blinded me from seeing their silence which was a clear message in my own culture of disagreement.

The last factor was that I realized the participants valued my contribution to their community. This was also vital evidence of how my ways of thinking and behaviour as a facilitator had influence on the ways of thinking and behaviour of the participants. They also had led the participants to make their decisions in the latter group discussion.

**Reflection on Research Methods and Approaches**

Using integrated methods, such as surveys, group meetings and group discussions for data collection was an effective means to understand the livelihoods of the people in this community. After employment of the SLF approach, I found that it was a useful tool for data collection. Each component of the SLF guided me in generating particular questions. It enabled both the participants and me as the researcher to have a better understanding of their livelihood as a community. This tool also revealed that the participants and their community possessed various available resources and assets that they could use to pursue sustainable livelihoods than they had initially told me. Moreover, this also opened up various possibilities for the participants and their community to choose and develop their own project to implement in their community in the future.

Generally SLF is used to help us to understand the livelihood of the poor better as individuals or households in rural and urban areas. Instead, this tool revealed that the participants were not permanent residents of the Samut Prakran province. This was a big challenge because not all of the participants lived and worked in Amphone Phrapradaeng. However, they came together because of their common interest in creating income generating activities in their semi-urban area of Thailand. Subsequently, the population of the participants was very dynamic and yet also unstable. Since some participants lived in a different province, this could open more possibilities for the participants to overcome their vulnerability.

**Reflection on Methodology**

PAR was the most appropriate approach to use in this community because the participants lacked confidence in their capabilities. They needed someone to work alongside them and show them how to do things first. Then, they could try it themselves. They also needed support and encouragement to ensure that they had a safety net to get them through this exploration. However, PAR could have disempowering effects on participants if the researcher tries to persuade them to accept their ideas. The researcher should not lead the participants towards particular choices that have been created by the researcher, but rather open up the possibilities for them and show them how to generate their own ideas as well. They can make their own decisions because they know their capabilities and priorities better than the researcher.

This reflection was significant in enabling me to realize that my role in this workshop should not be the same as the role in my previous research projects. In order to generate empowering effects with the participants and their community, I needed to consciously change my role and mindset. In the next chapter, I will focus on the transformation of my role.
Chapter Five
Implementation of a New Idea

This chapter discusses Workshop Three of this research study. It will explain the transition in my role throughout the research activities in the workshop. The chapter is composed of two main parts. The first concentrates on the activities in Workshop Three which was designed to enable the community to create their own sustainable livelihood. The main goals were to 1) enable the participants to deal with key tasks and issues so they could understand what they had to do to improve their situation and why, and 2) to empower them to create and implement their own ideas, so they could have a sense of ownership in their plans and actions in order to become more self-reliant. In the second part of the chapter, I reflect on my own role and the activities in the workshop in order to plan the next action in Workshop Four. The activities in this workshop were multiple cyclical processes as shown in Figure 5.1.

![Timeline of research activities in the third phase](image)

Figure 5.1 Timeline of research activities in the third phase

Activities in Workshop Three

This workshop was called *Try It Yourselves*. It is a simple statement and one that articulates the main goal of the workshop and the next phase of the research. The activities of this workshop were intentionally designed to provide an opportunity for the participants themselves to deal with key tasks and issues, understand what they had to do to improve their situation and why so they could become more self-reliant. In this workshop, the participants were encouraged to create their own ideas and make decisions for themselves as a community.

The activities in the workshop involved a cyclical process. It was composed of a group discussion for reflection on previous action and planning for the next, taking action, observation, and then another group discussion for reflection and further planning. In this workshop, there were multiple cyclical processes that allowed the participants to adjust their plan and action after learning from their
experiences. The number of cyclical processes, length of time, and the action of the participants in each cyclical process could not be pre-determined as they would emerge through the process as developed by the community. All I could do as a researcher was to observe the process and developments as they occurred according to the rhythm of the participants; therefore on site observation was the major tool in this workshop.

The workshop was conducted mainly at the SDPA facility. The number of participants could be described as an unstable population because some could take part in every activity and some could not. In addition, new community members joined in the activities at various stages of development. Even though they did not sign consent forms, they wanted their voices included as part of the community. The following articulates the activities in each cyclical process as well as the transition of my role throughout these processes as illustrated in Figure 5.2.

Figure 5.2 Activities in Workshop Three
First Cyclical Process - Enabling for change

In the first cyclical process, there were three main activities. The first activity was a group discussion that was used for reflection and planning the next action. It was designed to facilitate the participants’ ability to follow up their own actions in the previous workshop; therefore, it commenced after the participants completed making their new items from fabric scraps. The second activity was to observe the participants as they planned and undertook their own actions throughout the workshop. The last activity of this cyclical process involved another group discussion which involved reflection on their actions to date in the project, and planning or replanning for the next action. The latter group discussion was also the activity of the following process.

Group Discussion: Reflection, Brainstorming, and Planning for the Next Action

This group discussion aimed to facilitate the participants' reflections on their previous actions and identify their progress, as well as problematic issues through that experience, so that they could continue the process of resolving such issues on their own. In this group discussion, there were two sessions. The first was a reflection on their previous action. The second session was planning for the next action. In the group discussion, six people took part because they were residents of Amphoe Phrapradaeng and lived near the facilities. Four of them were actual research participants and the others were community members who participated in this section. I consciously played the role of a facilitator (see Figure 5.3)

Figure 5.3 Group discussion with the participants on January 6th, 2009

The first session involved a reflection on their action in Workshop Two. The participants who volunteered to make new items in the last action of Workshop Two were asked to share their experience with others as not all of those present had participated in the previous action
or had made new items. They were encouraged to use their new items as physical evidence to describe their progress and problems to others. In this session, the participants identified essential information as follows: 1) skills which they needed to improve, 2) new resources in their community, 3) new ideas to develop an alternative livelihood.

The first realization was that they needed to improve their sewing skills. They discovered this through their own experience. They also recognized that they were able to utilize their sewing skills to transform fabric scraps into various functional items such as coin purses and tote bags (see Figure 5.4 and 5.5). Some of the group members were confident that they would develop into marketable items in the future because their sewing skills were improved through practice. However, some of the others disagreed because they had not utilized their sewing skills for a long time, so they lacked confidence in their skills. They were also required to learn different sewing techniques to speed up the production time. The participants also pointed out that they would need to have sufficient equipment, such as electronic sewing machines, in order to lessen the burden of their physical impairments and reduce the production time when required to produce large quantities of a particular item. New equipment would require training, so they believed that a short training course was essential.

Figure 5.4 coin purses

Figure 5.5 Tote bag
Secondly, the participants discovered textile remnants from a textile manufacturer as a new resource in the community (see Figure 5.6). This material was introduced to the group by a community member who was a resident of Amphoe Phrapradaeng and who had professional experience in using this material for making clothing for local markets. Through making new items, they realized that stitching together small pieces of fabric scraps was time consuming and required particular equipment such as an electronic sewing machine. Since they did not have such equipment, this problem was solved by creating new items from larger pieces of material called “textile remnants” in order to reduce the stitching time and processes. The participants also discovered this material was readily available in their community and, because it was a waste product from the textile factory, it was inexpensive. Hence, they agreed that this material could become the basis of a unique selling point in a particular market which is concerned about reducing environmental impact.

Figure 5.6 Textile remnants

Finally, the participants recognized that making new items from fabric scraps and textile remnants could be a solution for their situation because it was truly shaped by the strengths and available resources of their community. They believed that this could become an alternative livelihood and generate more jobs and income for them and for others in their community in the future provided there was an existing market for the new items. At the time, the participants also acknowledged the limitations of this potential solution. This activity might not be suitable for everyone as not all of the participants possessed sewing skills and some of them were hindered by physical impairment. However, they confirmed they would continue advancing this potential solution before a final evaluation.
The second session of the group discussion was planning for the next action. The participants confirmed that finding a potential market for their new items was their priority. Based on the participants’ experience, they were convinced they needed to have a marketable sample of their new items before they approached any potential markets. As they did not have existing markets and did not know which items they should develop, they asked me for design assistance. I explained to the participants that I did not have the answer for them because I was not their target market. However, I suggested that they could involve their customers in the decision and develop the new items with them directly. At that time, the participants agreed with my suggestion. However, they still did not know who their customers were which became another problem to solve.

During the group discussion, the participants who were the leaders of the community proposed their ideas to the group and also asked me for suggestions. At the time, I did not have the answer for them either. The participants who were staff and members were silent because they were excluded from the discussion and decision-making. This situation is normal when superiors or people of a higher rank take part in a group meeting with people of lower ranks. Even though this group discussion was not a meeting of the SDPA organization, the people who took part felt they were in a dependent relationship with the SDPA president. This idea was generated by the members and staff of their community although I wanted all of them to participate equally. In addition, I had learnt from my own mistake in Workshop Two that ignoring silence did not end well and I did not want this situation to drive innovative people away from this project. It was still part of my research project and I still had the authority to facilitate and enable them to generate a solution together as a community. I felt that it was my responsibility to provide an opportunity for everyone to be equally involved in my project; therefore, I proposed they use a brainstorming process to resolve these problematic issues together. As a result, the group agreed to take part in this process.

This brainstorming activity was also part of the group discussion (see Figure 5.7 and 5.8). At the beginning of the brainstorming session, I appointed one of the participants to record information that was flowing during the session. While brainstorming with the group, I created a concept map in order to make their ideas visible and easy to understand. After that, I asked them to critique the choices that they proposed. This process was very unusual for them; however, they felt a loosening of the tense atmosphere because I used dialogue for the sharing of views and experience. The participants, especially the SDPA staff, had considerable insight about each market because part of their responsibility was dealing with these markets. After the concept mapping was visible to them, they realized that they had four potential solutions.
Figure 5.7A brainstorming activity in the group discussion

Figure 5.8 Potential solutions from the brainstorming
The first potential solution that the participants proposed was the weekend market in their community. This weekend market was called Tarad Nam Bang Nampong. It is near the SDPA facility and, based on their previous experience, this target market was generally made up of local people and tourists. The SDPA organization previously occupied a space for their point of sale display for locally produced handicrafts but because the SDPA members who produced handicrafts had given up this livelihood, the space had been abandoned. However, the participants were confident that the local authorities would provide them with a new space if they sent a formal request to them.

The second potential solution was the souvenir shop at the City Hall of the Samut Prakran province. The SDPA members still distributed some handicrafts to this shop. However, the participants did not know the customers of this market because they were not involved in the selling of the products. They worked as representatives of the SDPA members and only delivered the handicrafts to the store manager when stocks were low. The main handicrafts that the SDPA members distributed to this shop were resin souvenirs and as sales did not provide sufficient income they were no longer producing this product. To maintain a point of sale for the SDPA members in this shop, the participants who were the SDPA staff confessed that they bought handicrafts from the crafts industry in order to distribute to this shop. If the group of the participants agreed that this shop would be their potential market, they could distribute their new items without requesting further permission from the shop as they already had an ongoing relationship.

The third potential solution was the souvenir shop at the SDPA facility. The participants explained that the SDPA used to negotiate with tour companies for their tourist groups to visit the shop at the SDPA facility and support their members by buying their handicrafts. Since the SDPA members did not have craft production activities at the SDPA facility, tour companies were no longer bringing tourist groups to visit the SDPA facilities. Only the SDPA members came every fortnight in order to buy lottery tickets. These groups were not actually their target market.

The final potential solution was to establish a link with local organizations. This was a niche market which could be accessed through the SDPA connections and networks only. Since the participants had existing connections with different local authorities and private sector organizations in their community, they could access this target market. Based on the previous working experience of the participants, they knew that their customers were the local authorities in each organization. They were generally required to produce made-to-order items for these organizations for a particular occasion on a commission basis. Subsequently, they were fully aware of some of the requirements and understood the procedure to access this market.
After the brainstorming session, the participants expressed a belief that working with and for the local authorities in government organizations was the preferred choice for them because of the following main reasons. First of all, they knew that their customers were the local authorities in various organizations. Secondly, they were confident that they were able to access this market because they had existing connections and networks with the local authorities. In addition, they were familiar with the procedures, requirements, and working conditions in this market. Finally, the participants were comfortable working on a commission basis for the local organizations because they could control production time and the amount of work. Most importantly, they knew how much income they would earn after the commission was completed.

This target market was generated mainly through collaboration with the local authorities, so it was essential to consult with them. Since the participants who were the committee members and staff of SDPA would have an opportunity to meet different organizations in their community at a New Year Greeting Season event to be held three days after the brainstorming session, the group decided to use this opportunity to request further support from them. Consequently, their next action was to have a consultation meeting with those organizations. I was also invited to take part in their next action as their consultant, so my next action was to observe the participants’ action directly.

**Observation: The Group’s Action**

This group’s action was meeting with different organizations in the community. The participants’ main goal was to introduce their new project to the local authorities, consult with them about potential collaboration, and request further support in the future. In this action, I took part in their action as part of the group. My role was to observe their action and support their idea as their consultant. Participant Observation (OP) was employed as a method to gather information. In this meeting, I contributed my visual communication design to create charts for them to use in the meeting (see Figure 5.9).

Based on the observation, the participants had consultation meetings with four different organizations. These meetings took place separately at the offices of the organizations over one day (see Figure 5.10). The first meeting was with the Governor of Samut Prakran province at the City Hall of Samut Prakran province for approximately one hour. The second meeting was with the Head of Government Officers of the Ministry of Social Development and Human Security of Samut Pakran province at the main office at the City Hall of Samut Prakran province, again for approximately one hour. The third meeting was with a former senator of Samut Prakran province. At the time, he was one of the most successful business owners in the province. The meeting took place at his main office and went for approximately one hour. The last meeting was with branch managers of a supermarket which was a large organization and visible in the community. The meeting was at the branch office in Amphoe Bangpoo, Samut Prakran province, and also went for approximately one hour.
Figure 5.9 Visual communication charts which I created for the participants

Figure 5.10 Consultation meetings with different organizations in the Samut Prakran province
Each organization provided the group with different suggestions as follows. Firstly, the Governor of the Samut Prakan province fully supported their idea and proposed activities. He also suggested the group create a catalogue of their handicrafts and other new items so that he could help them to promote the new items commercially in his organizations. This advice helped the participants to realize that visual communication was essential for generating potential new markets and advertising for their handicrafts outside their community.

Next, the government officers of the Ministry of Social Development and Human Security fully supported financial assistance for their future training workshops. However, their previous request was pending at the time because of the political crisis in Thailand at that time. He also suggested that they seek an alternative source of funding, for example, the National Office of Empowerment of Persons with Disabilities of Thailand (NEP), which was a new organization of the Ministry of Social Development and Human Security.

The former senator suggested that they should identify their market and market needs before producing any items which would ensure that their products met the market needs. However, he did not offer any further advice on the practicalities of discovering potential markets or exploring market needs.

Finally, the branch managers of the supermarket in Amphoe Bangpoo expressed their full support of the group’s ideas and activities. In this meeting, I recognized a great opportunity for the participants to become potential business partners with this company but at the time, none of the participants consulted with them about this potential. Therefore, I proposed they consider collaborating with this local community group in order to develop new items, such as shopping bags, for distributing in their supermarket.

This action was not premeditated, but rather it was sparked by my own ambition to connect the participants and their community with a local organization which had the capacity to continue supporting them in the long term, that is, after the completion of my research and my withdrawal from the community. My proposal and the response gave hope and expectation to the participants that a change in direction could actually occur. Upon reflection through reviewing the literature, I discovered that this was the natural action of a catalyst, where Anne Toomey (2009) explains that a catalyst tends to work in indirect ways. The role of a catalyst is often unintentional, with the origin of the new idea or action often forgotten as others have to take responsibility to follow through on determined action.

As a result, the managers of the supermarket agreed that the proposal was a good idea; however, they were not authorized to stock new items in their supermarket without permission from their main branch. To obtain this permission the participants would need to send a formal request including samples to their main branch. The group were very excited about the potential of this new opportunity, so they agreed that their next action would be to create samples of tote bags which could be used as shopping bags and to send these bags with their formal request to the main branch of this company in Bangkok.
Second Cyclical Process - Incentive and Ownership

Group Discussion for Reflection and Planning for the Next Action

This group discussion was not only the last activity of the first cyclical process but also the beginning of the second cyclical process. The latter group discussion was designed for the group to reflect on their progress and problems as well as to plan the next action. In this group discussion, nineteen people took part because they wanted a say in the decision making and the designing of a new project which would be implemented in their community in the near future.

Through the group reflection, they confirmed that this was going to be the new income-generating activity in their community. If they had an opportunity to make shopping bags for this company, they believed that this would become an alternative livelihood for many people in their community.

In order to achieve the goal of selling the bags to the supermarket, the group realised that numerous actions and critical decisions had to be made that would inform their ability to progress with the project, for example, accessing labour and facilities. Therefore the group agreed to a series of actions as follows. 1) to set up sufficient facilities and equipment for their production team, 2) to recruit community members with competent skill-sets in sewing to join the production team, 3) to develop the tote bag as a shopping bag, so it could be used as a marketing tool, 4) to request financial support for improving their capabilities from the government organization because training people with different physical impairments to sew required an experienced trainer, time and financial support before they were able to produce marketable items and 5) to request donations for equipment, such as electronic sewing machines, from different organizations because the government would not provide financial support for equipment and such purchases were an investment beyond their means at that stage (see Figure 5.11).
Figure 5.11 Mapping out a plan

The group recognized that making sample shopping bags was their priority. The sample bags were needed to accompany their request to the main branch of the supermarket for approval to distribute them in one of the supermarket branches in Amphoe Bangpoo. However, the shopping bag that I proposed at the meeting was not familiar to the participants so the process could not commence. To enable the participants to see what the shopping bag looked like, I used an internet search engine to display images of existing shopping bags (see Figure 5.9). After they viewed the images of green shopping bags on the internet, they had confidence that they could make them. I explained to the participants that the shopping bags did not have to be the color green. They could be any color. The word ‘green’ was created to describe reusable bags that would assist in reducing the burden on the environment. To create a green shopping bag, the participants should use material sourced in their community. I agreed to send them some examples of shopping bags so that they could take measurements from an actual prototype. Consequently, the participants agreed to start making their prototypes after they received the examples from me.
Figure 5.12 Examples of existing shopping bags online

While they were waiting for the examples, they confirmed that they would commence other actions. After receiving the examples of the bags the group would process the rest of the action and notify me of their results. Consequently, the group and I agreed to resume after they had received a response from the company. My next action was to observe from a distance how the participants dealt with these tasks. In order to be able to follow up their progress, before I left their community. I helped the participants who were the staff of the SDPA to set up their own email account and showed them how to send me e-mail.
Observation: Participants dealt with the tasks and issues

My observations of this process were undertaken on site and from a distance throughout. My main goal was to observe how they dealt with the tasks and issues by themselves. I observed the participants’ activities for three months from February to April 2009. As I remained at a distance I requested that the participants who were the SDPA staff collect physical artefacts, such as photographs and video, because they knew how to use such tools and it was part of their responsibilities in their organizations.

Acquiring video footage was crucial for this research because it was the first time that the participants took action without my presence in their community. My intention was to use this opportunity to step back from the community to enable the participants and their community to form their own ideas and become more confident at decision-making without my influence. At the time, I had confidence and trust in their capabilities that they would be able to handle this themselves.

After I returned to the community, I noticed a lot of changes (see Figure 5.13). Firstly, the SDPA facility, especially the working area, was well organized with approximately fifteen electronic sewing machines that looked like they were ready to be operated. Secondly, the SDPA facility was expanding. There was a new building next to the current work area. This new building was going to be a new workshop. It had sufficient space for thirty people. They also planned to move all of their equipment to the new building in the near future. Finally, there was a large amount of material available to make the new items in the work area and the main office of the SDPA. Other community members were working alongside the participants at the SDPA facility making a lot of bags. Their sewing techniques were very different from my previous visit to the community.

Based on this evidence, I concluded that their action plan had been implemented. It was also evidence that they were committed to changing their situation and had incentive and ownership in their action. This was a significant point in this research project because it was a seamless transition placing these people and their community at the centre of development as well as giving them authority to design their own future. I acknowledged that Participatory Action Research provided an opportunity for me to shift power to the local people. It also enabled me to have a deeper understanding of a people-centred approach which is one of the core concepts of the Sustainable Livelihoods Approach.
Figure 5.13 Physical evidence of my observation
Third Cyclical Process - True Knowledge Transfer and Empowerment

Group discussion: Reflection, Making a Decision, and Planning for the Next action

This group discussion commenced after I returned to the community. It took place at the SDPA facility for approximately one hour (see Figure 5.14). At this group discussion I was informed that the activities in the community had been progressing well over the previous two months without my presence. The group had accomplished a number of things and reached many of the touchstones in their project.

Figure 5.14 Group discussion for reflection, making a decision, and planning the next action
Firstly, the group had finally found their alternative livelihood. This decision was made after they completed the 550 bags for their first customer. They found their first customer while their request for collaboration with the main branch of the supermarket was pending. There was only silence from this company after they sent their formal request and the shopping bag sample. At the time, they already had marketable items, and an adequate production team, so they decided to seek potential customers in other organizations with whom they had existing connections. As a result, they had an order for 550 tote bags from one of the other organizations for the disabled in Thailand. This happened because one of the project participants was also a committee member of the client organization.

Though this experience, the project participants acknowledged that producing the tote bags could become an alternative livelihood for their community. To advance this potential, they needed to improve not only their sewing but also screen-printing skills. In the first production process, they had to print particular information on the bags. As they did not have screen printing skills nor sufficient equipment, so they solved this problem by having the bags printed at a local print shop. As a result, this print shop became part of their business network.

Secondly, this action confirmed that the group had incentive and were able to act as well as being committed to change their situation. The group confirmed that this project was fully funded by the SDPA because it was a promising income-generating activity of their community. It also provided more work and income for their community, again confirming that the group had ownership of their ideas and actions.

Thirdly, their project had a spin off in that two new people joined the production team, bringing the total to four. One of them was hired as a full-time employee of the SDPA to work as head of the production team because he was competent in pattern design and sewing as well as having significant experience in textile manufacture. He was also appointed as one of the committee members of the SDPA. These people shared their experiences and helped the group to develop their sewing skills over the previous two months.

Finally, their project was supported by other organizations through a donation of five electronic sewing machines and irons from one of the private sector organizations in their community, so they had a total of fifteen sewing machines ready for the production team and a training workshop in the future. This explained why more sewing was being done in the SDPA work area.

To continue nurturing this project, the group planned to find more work for their production team. They had already planned to have a meeting with the Secretary of the National Office of Empowerment of Persons with Disabilities of Thailand (NEP) in the Ministry of Social Development and Human Security in order to introduce their project and request further support. However, they had already processed their new request for financial support for a short course training project from the Ministry of Social Development and Human Security. They planned to follow up this request at this meeting.
I suggested that I participate in their next meeting at the office of the NEP in Bangkok so that I could observe the group in action with this organization and gather first hand data.

*Observation: the participants’ implementation of their ideas*

In this action, non-participant observation was employed as the method for data collection. I observed the meeting at the main office of the NEP in Bangkok which went for approximately one hour. The participants who attended the meeting comprised the leader of the community and the SDPA staff (see Figure 5.15). Their main goal was to introduce their project and new items, as well as request future support from this organization. The following is what I observed during this process.

Firstly, the group and their community were highly likely to have long term support from the NEP, which has various resources available to support long term development after completion of the project. The Secretary of the NEP fully supported the group’s project and was impressed with it and its contribution to the community. The Secretary of the NEP agreed to follow up their formal request for a training workshop.

Secondly, the group had more confidence now in their direction and were proud of their project and that other organizations acknowledged their effort. They were also confident that they could develop new items requested by their customers. In this meeting, they discovered that if they produced new items for the NEP, they were required to use only cotton as their main material because this was an internal requirement of this organization. This information helped them realize that they needed to provide various choices of material for their future customers.

After the meeting the group confirmed that they would continue developing their capabilities and seeking more work for their production team. This proved to me that the group was committed to improving their situation and that it was time for me to withdraw from the community and commence the last workshop of this research project.
Reflection on Activities in Workshop Three

Through my own reflection, I discovered that my role and mindset in Workshop Three had considerable impact on the participants’ way of thinking and behaviour. I also found that creating a series of actions could help the group and their community learn to develop their own ideas through their own experience.
I found that facilitating group discussions was very useful when I worked with the group because I made each person feel that their view was as important as any person’s views. This facilitating process also released me from the responsibility of being the only one providing a solution to their issues. Instead, this participatory approach gave everyone an equal share in what was happening and allowed them to contribute. The brainstorming process was a useful tool for facilitating this and an effective way to demonstrate how to create potential solutions and make choices as a community. The literature review and discussion with other researchers at international conferences confirmed to me that facilitation has empowering effects on the people and communities who are involved in the process (Toomey 2009). Moreover, facilitating fundamental change in social, cultural, economic, and political structures cannot occur in a short period of time. To bring about sustainable change, Castelloe and Watson emphasize that

> We need to create a new way of working with grassroots group over the long haul. We need to help grassroots groups develop sustainable organizations for building the power to implement development projects and influence policy information. This is the goal of the Participatory Change Process. This is designed to empower grassroots groups to assess and analysis community issues, design and implement projects to address those issues, and develop the capacities needed to form as independent organizations (in order to continue to addressing community issues)...The Participatory Change Process is based on the priorities of community members (rather than outside ‘expert’), and the project that result from the model are initiated, planned, implemented, and evaluated by community members themselves (Castelloe and Watson 2000).

Working with this community helped me to have a deeper understanding of the theoretical frameworks from other disciplines, such as the Participatory Change Process and the core concepts of the Sustainable Livelihoods Approach. A full explanation of this approach is in Chapter Two. It also enabled me to truly understand that this research project was not about making artefacts for sale but rather about establishing a design process that supports people in achieving their own livelihood goals.

Through this experience, I realized my social status enabled me to work effectively as a facilitator in this community. This is because I am a native Thai speaker who used their language and they also understood my sense of humour during the group discussion. This generated a friendly environment when we worked as a group. However, I am still considered an outsider because I do not have a physical impairment. I am a government officer working at the local university as an assistant professor and conducting research in their community. I therefore had a different position in the community and had the power to challenge the local authorities about providing equal opportunities for everyone to share their views, create their own choices and make decisions as a community.

The other significant shift in my role that effected a change in this community was during the group meeting with the supermarket managers in Amphoe Bangpoo. I acted as a catalyst and
intervened by proposing this company consider collaboration with the group and their community in order to create new items. This action created a series of actions for the group to follow up. However, this also gave the group the opportunity to deal with key tasks and issues if given effective direction. As a result, the group members had the incentive to contribute ideas and actions, and were committed to changing their situation. In the last group discussion, I recognized that the group were able to evaluate and reflect on their own actions in order to plan the next action effectively. This showed that there was true knowledge transfer to the group throughout this workshop.

In this workshop, I also discovered that there are particularly strong links between the sustainable livelihoods approach and Participatory Action Research (PAR). As the core concepts of the sustainable livelihoods approach are to put people at the centre of development and build up sustainable livelihoods on their strength (DFID 1999), PAR enabled the concepts to take shape by gradually moving people to the centre of development and building up their self-confidence and self-esteem. Through multiple cyclical processes of PAR, the participants were enabled and facilitated to learn from change and to explicitly recognize each change which had an effect on their livelihoods. This was also an essential process for the participants and their community to monitor and learn as they moved forward. However, the sustainable livelihoods approach will not be effective unless utilized in a participatory manner with a researcher who fully involves and respects the views of the locals who share an overall commitment to sustainable change.
Chapter Six
Effectiveness Evaluation of the Implementation

This chapter discusses Workshop Four, which was the last phase of this research project. The activities in this final phase concentrated on evaluating the effectiveness of the research project within the parameters of the real life context of the participating community. Participatory Monitoring and Evaluation (PM&E) was the method that was employed in this evaluation process by the participants because this is the standard method for evaluating sustainable livelihoods outcomes (IISD 2011). The research participants and I did the evaluation together; however, we had different expectations of this evaluation. As such, two different methods for evaluation were used. Consequently, this chapter is divided into three parts. Parts one and two focus on the research activities in Workshop Four and the subsequent findings. Part three of this chapter is an overall discussion and reflection on activities in this workshop as shown in Figure 6.1.

![Timeline of activities in Workshop Four](image)

Figure 6.1 Timeline of activities in Workshop Four

**Participatory Monitoring and Evaluation**

PM&E is a method used to evaluate the impact of an SLF project intervention, and the changes that occur as a result of project initiatives. This method evolved from conventional monitoring and evaluation approaches and focuses on making the evaluation process more participatory and effective. This involved a shift away from externally controlled data-seeking evaluations, towards a recognition of locally relevant or local people-based processes for gathering, analysing, and using information (IISD 1999; Estrella, Blauet et al. 2000).

PM&E can also serve as a tool for self-assessment by both local people and external agents who generate change within a particular context. The method strives to be an internal learning process that enables people to reflect on past experience, examine present realities, revisit project objectives, and define future strategies. In so doing the process recognizes the different needs of people who are involved in change processes and negotiates their diverse claims and interests. PM&E is a flexible and
adaptive process that is able to work with local contexts and the constantly changing circumstances and concerns of these local people. The process aims to promote self-reliance in decision making and problem solving; and therefore strengthening people’s capacities to take action and promote change is essential (Estrella, Blauert et al. 2000).

Consequently, PM&E was employed in this phase of the research study so that the participants and I could observe our own progress by comparing the situation before and after this project intervention as it exists in their community. This process of evaluation is a sensitive and complex procedure because there are many factors which can affect a change. Precise instruments are essential for the measurement of outcomes both before and after an intervention. In addition, the participants’ insights are useful data because they contribute to the fine-tuning of the assessment and direct the interpretation for results (Chen 2005). In the next section I will explain the evaluation methods and procedures that the participants and I undertook in this workshop.

**Activities in Workshop Four**

This workshop was named *It’s All Yours* because it was designed to give the participants autonomy in organizing their project, and to create and implement their own ideas. In this workshop, the main objective for the participants and me was to discover whether or not the participants had achieved their livelihood outcomes. The focus was on the participants’ evaluation of whether or not the project that they developed with me in this research study could become an alternative livelihood for their community members. However, at the same time, my personal focus in this evaluation was to identify whether or not the implementation of my research had enabled sustainable change in this community. Subsequently, the participants and I utilized different methods and tools for data collection whilst evaluating the effectiveness of this implementation together.

This workshop took place at the SDPA facility over a period of approximately six months, during which time I was absent from the community. In this workshop, the participants facilitated the whole process themselves without me being present in the community during the process of planning, taking action, observation and subsequent evaluation of their own progress. During this phase of the project I monitored the participants and their community activities from a distance, without intrusion, for six months.

After I visited the community, I gathered data and evidence from various sources in order to follow up the participants’ progress and evaluate the effectiveness of the research project. For example, there were the monthly records of the SDPA, a full report of the first short training course conducted by the SDPA for the National Office of Empowerment of Persons with Disabilities of Thailand (NEP) and the physical evidence that was collected by the participants such as photographs and videos.

After six months, I went back to visit the community to gather further data and evidence for an evaluation of the effectiveness and implementation of my research project. I employed three integrated methods for data collection: on site observation, casual conversation, and a group meeting with the participants. Each method provided data and evidence to support my findings as follows.
Monthly Record of the SDPA

The monthly record was generated by the participants. The participants used this data to help them to monitor their own progress and undertake self-evaluation. The participants started keeping their monthly record after they completed making 550 bags for their first customer in April 2009. This record documented the names of their customers, amount of work done, and the income generated from making tote bags between May to November 2009 as shown in Table 6.1.

After I visited the community, the participants presented me with this evidence. I found that their monthly record was very useful because it helped me to see their progress. The record also informed me that the participants still continued working together on the project which had developed in this research even though I was absent from the community. This was a significant achievement to know that they had become more autonomous and self-reliant.

According to the record, most of their customers were local organizations such as government agencies and associations of or for people with disabilities, local hospitals, and universities. These organizations are located in the Samut Prakan province and other provinces nearby such as Bangkok and Nonthaburi province. This was a significant market for them to explore because there are many similar existing organizations for people with disabilities in the central region of Thailand.

Each month, the group had various amounts of work and income because they did not rely on only one particular organization to provide them with a commission. In some months, they had only one customer; however, that customer ordered large volumes of bags. In other months, the group had several different customers requesting only small numbers of bags (see Figure 6.2). When they added them all together, the group discovered that they had had large amounts of work and income for their group. For example, in August 2009, they had only one organization, but the order was for 800 bags. In September 2009, seven different organizations ordered more than 2,000 bags. This was evidence to me that, unlike my previous research where my absence had resulted in no action being taken by the community, this community was self-motivated and reliant in contracting and doing new work for clients.
Table 6.1 Monthly Record of the SDPA from May to November 2009

<table>
<thead>
<tr>
<th>Date</th>
<th>Customers</th>
<th>Number of bags</th>
<th>Amount (AUD$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2009</td>
<td>The Association of the Physically Handicapped of Thailand</td>
<td>550 ($0.80)</td>
<td>$440.00</td>
</tr>
<tr>
<td>June 2009</td>
<td>The government organization for people with disabilities</td>
<td>70 ($2.60)</td>
<td>$182.00</td>
</tr>
<tr>
<td>July 2009</td>
<td>The government organization for people with disabilities</td>
<td>85 ($1.52)</td>
<td>$129.20</td>
</tr>
<tr>
<td></td>
<td>The government organization for people with disabilities</td>
<td>200 ($1.60)</td>
<td>$320.00</td>
</tr>
<tr>
<td>August 2009</td>
<td>The local government organization, Samut Prakran province</td>
<td>800 ($1.74)</td>
<td>$1,424.00</td>
</tr>
<tr>
<td>Sep 2009</td>
<td>Thamasad University, Bangkok</td>
<td>1,700 ($1.88)</td>
<td>$3,196.00</td>
</tr>
<tr>
<td></td>
<td>The government organization for people with disabilities</td>
<td>120 ($1.72)</td>
<td>$206.40</td>
</tr>
<tr>
<td></td>
<td>The government organization for people with disabilities</td>
<td>50 ($1.72)</td>
<td>$86.00</td>
</tr>
<tr>
<td></td>
<td>The government organization for people with disabilities</td>
<td>120 ($2.60)</td>
<td>$312.00</td>
</tr>
<tr>
<td></td>
<td>The government organization for people with disabilities</td>
<td>50 ($2.00)</td>
<td>$100.00</td>
</tr>
<tr>
<td></td>
<td>The government organization for people with disabilities</td>
<td>60 ($1.96)</td>
<td>$117.60</td>
</tr>
<tr>
<td></td>
<td>Thailand Association of the Deaf and Hard of Hearing</td>
<td>120 ($2.00)</td>
<td>$240.00</td>
</tr>
<tr>
<td>October 2009</td>
<td>The government organization for people with disabilities</td>
<td>200 ($2.00)</td>
<td>$400.00</td>
</tr>
<tr>
<td></td>
<td>Hospital of Samut Prakran</td>
<td>100 ($1.80)</td>
<td>$180.00</td>
</tr>
<tr>
<td></td>
<td>Hospital of Amphoe Bang Boe</td>
<td>60 ($1.80)</td>
<td>$108.00</td>
</tr>
<tr>
<td></td>
<td>The local government organization, Samut Prakran province</td>
<td>120 ($1.92)</td>
<td>$230.40</td>
</tr>
<tr>
<td>November 2009</td>
<td>The local government organization, Samut Prakran province</td>
<td>414 ($2.32)</td>
<td>$960.48</td>
</tr>
<tr>
<td></td>
<td>The local government organization, Samut Prakran province</td>
<td>200 ($1.80)</td>
<td>$360.00</td>
</tr>
<tr>
<td></td>
<td>The local government organization, Samut Prakran province</td>
<td>100 ($1.00)</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

Based on this evidence, I concluded that the implementation of the project had progressed well over the last six months of my absence. They seemed to be progressing well in their search for an alternative livelihood.

As their monthly record helped me to perceive their progress, I was very interested in continuing to monitor their progress without intrusion after the completion of my research project and using their monthly record as evidence to help me determine whether or not the participants’ project was sustainable. At the time I was not sure how long I should monitor their project. As this was part of my PhD study, I planned to continue monitoring their project until I had an exhibition and examination.

**Reports of the SDPA**

The SDPA report was the evidence to inform me that the participants have received the financial support for a short training course from the National Office of Empowerment of Persons with Disabilities of Thailand. The report also contained photographs of their activities during the workshop (see Figure 6.3) and a brief amount of information about their activities in the workshop. This helped me to understand that the participants and other community members had continued to improve their capabilities and skills. This included such things as learning how to operate the industrial sewing machines, creating their own designs and sewing their own patterns, as well as screen printing on the tote bags. This confirmed for me that the participants were identifying the skills they required and also developing strategies for achieving them so they could reach the potential to achieve sustainable livelihoods.
In the report I found that some research participants’ names and photographs were listed as the production team of SDPA, for example, Ms. Kaureaun Yamsee and the community member who suggested the group use fabric scraps in the community in Workshop Two. According to this evidence, I noticed that some participants who did not participate at all in Workshops Two and Three of my research project had undertaken the training workshop. One of them was also listed as the SDPA production team. I was very interested to interview them as well to find out why they had done this and what impact it had had on them.

Figure 6.3 The first short training course at the SDPA facility on October 13-27, 2009.
Source: Photographed by the SDPA staff, 2009
Physical Evidence

In this evaluation we also drew on a series of physical evidence collected by the community, which comprised photographs, videos, and items that they made for their clients. They were collected by the participants between May and November 2009. Based on this evidence, I found the following vital information.

First of all, the participants had continued to work on this new project as a community. There were a lot of items that they had produced for their clients from May-October 2009 (see Figure 6.4). The evidence showed that they had to use not only sewing skills but also graphic and type setting and screen printing skills. According to the data collection about the Human Capital, there was no human resource in graphic design or screen printing in this community. Therefore, I was interested in interviewing the participants to see how they had handled this printing task.

Secondly, the participants provided a short training course for a group of people with disabilities in October 2009. The SDPA documentation of the opening ceremony for this training demonstrated that the participants and their community were fully supported by the Secretary of the NEP and the local authorities. This confirmed that they had received financial support from the NEP (see Figure 6.5).
As I sorted through the evidence it also became apparent that the participants who generated the product concept in Workshop Two were still taking part in this project (see Figure 6.6). To find out whether or not they achieved their livelihood outcomes, I intended to have a group meeting with them.
In order to find out whether or not the participants had achieved their livelihood outcomes, and to discover if this research project had enabled sustainable livelihoods in this community, I facilitated a group discussion with the participants following the six-month monitoring. In order to ensure the effectiveness of the evaluation of the implementation, I required a precise tool that could track a change in this community and demonstrate the change before and after the project existed in the community. I used the Sustainable Livelihoods Framework as a tool for this evaluation as a means to obtain greater details for my evaluation. I also used on site observations and casual conversations with the participants to gain more information.

A group discussion

This group discussion took place at the SDPA facility over approximately one hour. The main goal was to follow up the progress and evaluate the effectiveness of the implementation with the participants. The Sustainable Livelihoods Framework (SLF) was used as a tool for this evaluation because it enabled the participants to compare their livelihoods before and after this research project existed in the community. The group meeting demonstrated vital information.

The participants confirmed that they had achieved the livelihood goals that they desired. They had also devised a complementary income-generating activity which enabled them to continue to improve their capabilities, earn income and reinforce their value in their community. This livelihood was a most satisfactory solution for their situation because it helped their community to reduce the impact from the technology trends which was a future vulnerability. Moreover, it helped some community members to avoid the impact of vulnerability in their community by transforming the population trend into human assets of their community as explained in Table 6.2.

The participants also pointed out that the population trend would not threaten this livelihood again in the future because this livelihood was established as a community. It had its own strengths in their market. Moreover, this market was a niche market because it was only available to communities that worked together as an organization, not individuals. Most importantly, this livelihood provided more job opportunities and sufficient income not only for the members who had disabilities and their families but also other residents in their community. As their community still could not do their own screen printing, a local print shop had an opportunity to support them by doing the printing part for them with minimal waste and time.

<table>
<thead>
<tr>
<th>The livelihood of the participants as a community</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerability Context</td>
<td>Population trend: - 3,500 members gained a living from distributing lottery tickets for the Government Lottery Office; however, there</td>
<td>Population trend - This no longer threatened the livelihood of this community because the more people who joined the SDPA production team the more orders they</td>
</tr>
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</table>
were enough tickets for only 500 members. could take.

<table>
<thead>
<tr>
<th>Technology trend:</th>
<th>Technology trend:</th>
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</thead>
<tbody>
<tr>
<td>- The main source of income was from distributing lottery tickets for the government.</td>
<td>- Some members reduced the impact of this vulnerability for the future by choosing a new means to make a living by using their skills.</td>
</tr>
<tr>
<td>- The livelihood of the whole community was threatened because the government planned to implement e-tickets.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Livelihood assets</th>
<th>1) Human Capital</th>
<th>1) Human Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Only a few participants could use a sewing machine</td>
<td>More participants could use the sewing machine with more confidence</td>
</tr>
<tr>
<td></td>
<td>None of the participants knew how to create new patterns as requested.</td>
<td>More participants could create new patterns as clients requested.</td>
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<thead>
<tr>
<th>2) Financial Capital</th>
<th>2) Financial Capital</th>
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<tbody>
<tr>
<td>- Main source of the community’s income was from distributing lottery tickets.</td>
<td>- Main source of the community’s income was not only from distributing lottery tickets but also producing custom-made items for their clients.</td>
</tr>
<tr>
<td>- Financial support for income generating activities from the SDPA.</td>
<td>- Financial support for income generating activities from the SDPA.</td>
</tr>
<tr>
<td>- Financial support from the local government for enhancing their capabilities.</td>
<td>- Financial support from the local government for enhancing their capabilities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3) Social Capital</th>
<th>3) Social Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>- There were connections with local government, non-government organizations, and private sector.</td>
<td>- The local government organization became their new partner to continue supporting the long-term development project of the community.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4) Physical Capital</th>
<th>4) Physical Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The SDPA facility had only building and work area for 10-15 people.</td>
<td>- The SDPA facility had expanded building and work area for 30 people.</td>
</tr>
<tr>
<td>- There was no building for accommodation for</td>
<td>- The SDPA bought more property to build a new</td>
</tr>
<tr>
<td>5) <strong>Natural Capital</strong></td>
<td>5) <strong>Natural Capital</strong></td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>- Limited land and property.</td>
<td>- The SDPA bought more property to expand their facilities.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>6) <strong>Information Capital</strong></th>
<th>6) <strong>Information Capital</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Unable to access information in different organizations because the committee members were the members.</td>
<td>- Unable to access information through internet and the authorities as the new partners directly.</td>
</tr>
</tbody>
</table>

### Livelihood Outcomes

<table>
<thead>
<tr>
<th>The mutual goal of the participating community was to have an alternative income generating activity which could provide them:</th>
<th>The participating community stated that they had achieved the livelihood goals that they desired. They also devised a complementary income-generating activity which enabled them to continue to improve their capabilities, earn income and reinforce their value in their community and reduce their vulnerability.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Income</td>
<td>- Income</td>
</tr>
<tr>
<td>- Increased well-being</td>
<td>- Increased well-being</td>
</tr>
<tr>
<td>- Reduced vulnerability</td>
<td>- Reduced vulnerability</td>
</tr>
</tbody>
</table>

Source: Collected by Siriporn Peters

This livelihood was acknowledged by local authorities and other community members as the best solution at the time. This community continued to flourish and create more jobs and sufficient income for their community members even during the political and economic crises in the country. Therefore, the authorities suggested that the leader of the community write a long-term development project so that they could prepare the budget to support their community for the next four years. The committee members of the SDPA also advised that they had already submitted their new plan to the authorities. This confirmed that the participants and their local authority had become new partners for long-term plans and actions.

Mr. Singkom Mameechansuk, the leader of the community and the SDPA president, mentioned that we completed one short training course. We had five more people on our production team. We aimed to have 30 people because we planned to expand our markets. We would hold two more short training courses for 60 more people with physical impairment soon, so we could recruit more people.” Therefore he stated that they needed to expand their property and facilities for their production team. At the time the SDPA facilities and equipment were limited for their production team, so they resolved this issue by allowing their production team to work at home with their family instead of working at the SDPA facility. They could get paid per piece of work instead of by the hour. When they were unwell their family could help them with the work as well. Mr. Singkom also mentioned that “the SDPA bought more property next to the SDPA facility so we could build a new facility to
provide accommodation for our production team who could not commute every day.” This information indicated that the participants had incentive and ownership in their plans and actions.

This data informed me that the livelihood assets of their community had increased tremendously. This research project could not claim that this change was generated by this research project only. However, the participants confirmed that the implementation of this research project was effective because it enabled them to generate sustainable change in their community. The participants had empowered themselves to become more self-reliant and have more self-confidence in their capabilities because they were able to create and implement their own ideas in their community; most importantly this process enabled them to develop new items successfully for their customers. Even though the participants could not claim that this livelihood was sustainable, there was a promising sign for them to continue working toward their given direction.

In the group discussion, Mr. Booton Aunsuwan, the vice president of the SDPA, stated that “Now we know which we are going now. Thank you very much. We could not have done this without you.” This statement acknowledged that they devised a complementary income generating activity which enabled them to continue to improve their capabilities, earn income and reinforce their value in the community. However, this did not confirm that they had attained a sustainable livelihood. I was very interested in continuing to monitor their project after the completion of my research and have made plans to do so.

**On Site Observation and Casual Conversation**

Throughout this research process, I discovered that on site observation and casual conversation enabled me to obtain more detailed information and insights about the participants’ everyday experiences. While I was visiting the site and observing the community’s activities and having casual conversations with the participants, I found that many changes had occurred in their community as demonstrated in Figure 6.8.

First of all, the participants and their community had planned to expand their property and facilities for a long time. They stated that this research project had given them confidence to move forward. They decided to buy more property. By the time I arrived they had already started their new plans and action. The new building that I had seen in the previous month was complete and fully operational. It was set up as a work area for the SDPA production team. They had bought more land next to the SDPA facility in order to erect more buildings to provide accommodation for people who worked in the SDPA production team. This demonstrated to me that they had increased the physical assets of their community.
Secondly, many new community members worked side by side with the initial project participants as a production team. Some of them worked in a full-time position and many worked as casual workers because they still distributed lottery tickets every fortnight. This time, they had more choices of income generation. If the government introduced electronic tickets, they knew that they still had this livelihood as an alternative. After the training workshop in October 2009, there were a lot of people who wanted to work at the SDPA facility. This was evidence that the community had acknowledged this as an alternative livelihood that could provide them self-fulfilment and prosperity in the future.

Thirdly, the participants who had lacked confidence in their sewing skills or did not possess sewing skills during the earlier workshops, affirmed that they had now gained more confidence in their sewing skills after the training. One of them said, “I am not afraid of using the sewing machine any more.” I also had an opportunity to ask one of the participants who did not take part at all in Workshops Two and Three of my research project to explain why he had come back to participate in the training workshop and subsequently work at the SDPA facilities. He replied that he came back to join the group because the leader of the community invited him and his wife to take part in the training workshop even though his wife was not disabled. They learnt to use a sewing machine together and now both of them worked as a pioneer production team. They felt that they were privileged to work as the SDPA production team because a lot of community members wanted to join them as a production employee. However, they had to wait until the SDPA completed two more training workshops for another sixty people, after which their application would be considered. The positions were limited because of the restrictions of the SDPA facilities and equipment. However, the SDPA president and the committee members of the SDPA gave priority to the participants of this research project and other community members who generated and advanced this concept from the beginning. Moreover, they had exceptional skills because they had learnt to improve their skills through making tote bags for many months (April-September 2009) before the training workshop took place.

Finally, I also noticed that the participants and community members were very happy with their situation because they did not have to go outside to sell lottery tickets in their community any more. They had sufficient income and had a sense of security when they produced tote bags at the SDPA facility. They were also very proud of their accomplishments in the previous six months even though some of them still distributed lottery tickets in their community every fortnight. This livelihood could provide them and their family an extra wage while they were not selling lottery tickets.

This data revealed that the research project had enabled some of the participants and other community members to reduce or avoid the impact of vulnerability in their community because the participants and community members who chose to use their sewing skills to make a living, and work as full time workers of the SDPA, would not be affected by either population trends in their community or new technology when the government introduced an electronic ticketing system in the future. This also helped me to conclude that the participants had reduced their vulnerability context.
Reflection on Activities in Workshop Four

According to the data collection and tangible and intangible evidence, I concluded that the implementation of the Sustainable Livelihoods Framework and this research project was effective. After the completion of this research study, the community members have continued working on their project and improving their capabilities to reach their full potential to achieve sustainable livelihoods in their community in the future. This data informed me that this research project had generated an effective and sustainable change in this community.

Based on my observation, I discovered that there was some knowledge transfer to the participants throughout the research process. For example, they discovered how to create their own ideas, make their own choices, and reflect on their own action in order to plan the next action effectively. They also learnt how to develop new items for their customers by designing and making a prototype.

In the group discussion with the participants, they presented their written plan. They explained that they had already submitted their long-term plan to the local government in order to ensure that their project and activities in the next four years would have financial support. This evidence convinced me that the participants and their community had become more self-reliant through this research study. They shaped their ideas to meet their own needs and priorities; therefore they felt that they owned the ideas. They stated in the group discussion that they had planned to expand their facilities...
and implement their ideas by buying more property and had a new building in order to provide accommodation for the members of their production team who could not commute. As a result, the participants and their community had incentive and ownership in their ideas and actions.

Upon reflection, I also discovered three key factors which influenced the effectiveness of this implementation: 1) a new way of thinking and behaviour for the participants and researcher 2) the people themselves and their community, 3) a research tool, and 4) research approaches, such as the people-centred approach and participatory approach.

**New ways of thinking and behaviour**

My initial reflections on my previous research projects and approaches in Workshop One, as well as the discoveries in Workshop Two of this research study, enabled me to consciously shift my mindset. I designed this new project in a manner that would provide more space and opportunities for the participants to make their own choices and decisions and deal with key tasks themselves so they could understand what they had to do and why, and learn from their own experience. Changing my mindset was not easy; however, it was rewarding because it not only had positive outcomes but also reduced the burden on me. I was no longer the one who was at the centre of the project and had to come up with a list of potential solutions for them. After I shifted the power to the participants and enabled them to take this responsibility, they were moved to the centre of this development process. Later on, I realized that it was also getting easier for the participants because they were the ones in control of their own direction. As a result they had more self-reliance throughout the process; additionally I had more time to observe how things changed and reflect on my implementation strategy more thoroughly.

**People and their community**

The people and the community who participated in this research project were the key factors which generated this sustainable change. Their knowledge and experience helped me to understand how to design this research project. They had different views and local knowledge to create more suitable solutions than an external agent such as myself could. They also knew how to access the various available resources in their own community more effectively.

**Research Tools**

The SLF was a useful tool for data collection because it enabled the participants and myself to have a greater understanding of their livelihood as a community and to evaluate the effectiveness of implementation in their community. However, this tool can be used to evaluate only tangible livelihood outcomes and not intangible outcomes such as self-confidence in people or the sense of security or accomplishment in their actions. To obtain valid information, employment of multiple tools were required, such as observation, casual conversation, and group meetings.

**Research Approach**

In this research project, the people-centred and participatory research approaches were essential because the research focused on working with people rather than them being the ‘subject’ of an
investigation. This enabled them to have an opportunity to take part in a process or project which would be implemented in their community. These approaches are commonly used for developing sustainable livelihoods because they give the authority to the research community at the heart of the investigation and the ability to take control of their own situation whilst undertaking the research process. This continues on through the implementation into their community. This is what marked a significant shift in my approach to undertaking such projects as outlined in Workshop One. No longer is the research approach one of the researcher delivering an outcome that they hope will continue when they leave; this new approach ensures that the community has the ability to reach outcomes because they have been actively engaged from the beginning.
Chapter Seven
Conclusion

The endeavours undertaken for this study helped me to understand the research strategies and tools that are needed for both researchers and study participants when undertaking a collaborative investigation and how these strategies and tools are used to achieve research objectives. This study also provided me with a deeper understanding of the contribution of communication designers as researchers in not only enabling a community to attain a sustainable livelihood but also discerning what was needed for that community to continue flourishing after the completion of the project. In this chapter, I will discuss the outcomes of the research study. This includes suggestions for future research.

Research Outcomes

This research study had four main outcomes. Firstly, the participants who were also community representatives stated that they had achieved the livelihood goals that they desired. They also devised a complementary income-generating activity which enabled them to continue to improve their capabilities, earn income, reinforce their value in their community, and reduce their vulnerability.

From the researcher’s perspective, Participatory Action Research integrated with Human-Centred Design and combined with a Sustainable Livelihood Approach were shown to be effective strategies and approaches as they facilitated the transfer of knowledge to the community participants and gave them incentive and ownership in their ideas and actions. Finally, this research demonstrated the benefits of the reorientation of the designers’ role from that of a solution provider to that of an agent of sustainable change. A sustainable change agent should be mindful of, work responsively to, and support community participants to attain their goals.

The results revealed that Participatory Action Research (PAR) was an appropriate research strategy for this investigation as it gave the participants an opportunity to investigate their own situation with assistance from the researcher. PAR facilitated them to develop their problem-solving skills, create their own ideas that could enable them to transform their existing situation into a desired one, and pursue their own solutions. PAR was a multiple cyclical process which allowed the participants and the researcher to adjust their plans and actions after they had learnt from their own experience (McTaggart 1997). PAR also enabled a seamless shift of power to the participants because it allowed for gradual movement of the researcher away from the centre of the development. As a result, the participants had incentive and ownership in their ideas and actions.

The Sustainable Livelihood Framework (SLF) was a useful tool for participatory data collection. SLF enabled not only the researcher to have a deeper understanding of the livelihoods available to a community but also a greater knowledge of the participants themselves. In this research, SLF was used to facilitate the participants in clarifying their current situation as a community and identifying available livelihood assets to them in the community. This helped the participants to recognize open opportunities for them to pursue a sustainable livelihood. In this research, SLF was also used as a tool for effectiveness evaluation of the implementation. SLF enabled the participants to compare the livelihoods that existed before the research project with those that existed in their community after the completion of the project. As a result, the participants could clarify whether or not they achieved their goals. However, SLF could not explain how the participants transformed their available livelihood
assets into positive outcomes. Therefore, this research employed multiple integrated methods and tools.

Firstly, participatory observation was employed, mainly in the workshop named *I’ll Show You How*, because I worked side by side with the participants as part of their group in order to show them how to do things for themselves. In this workshop, a camcorder was used as a tool for data collection during a group discussion and activities. Even though the participants gave their permission, they were uncomfortable with discussing and expressing their views openly in front of the camcorder. As a result, use of the camcorder was discontinued and I relied on myself as the tool for data collection during participant observation; in the circumstances I deemed this to be sufficient.

Secondly, non-participatory observation and hidden observation were used in the workshop called *Try It Yourselves*. According to Guthrie (2010: 109), non-participant observation requires the researcher to be present, but not to take part in group actions. However, hidden observation occurs when the observer is out of sight or where the role has not been revealed to the group being observed (Guthrie 2010). In this workshop, the participants generally interacted with other community members who were not research participants. It was appropriate for me to just take notes during these observations. Sometimes the participants continued pursuing their solution even though I was not present in their community. This was achieved through requests for participants to gather visual data such as photographs and videos for the researcher provided they knew how to use such tools.

Thirdly, a group discussion for reflection was employed to follow up the participants’ progress. Reflection-on-action was employed as a tool in a group discussion because it enabled both participants and me to adjust our plans and actions after we learnt from our own experience. The researcher’s visual communication skills were also useful because they could not only help the study participants but they provided assistance to the new participants or community members who joined during the research process; these people needed to understand complex situations, be able to follow up on decisions made and contribute their views as equally as those who had been in the group from the beginning of the project.

These strategies and tools are not new. They have been used throughout the last century by community development activists who aim to create a positive change in communities in different parts of the world. They are just strategies and tools, but it is how they are used that is more significant. Through this study, I found that these strategies and tools would not work effectively unless they were operated by researchers who had the mindset and behaviour of an agent of sustainable change. For the purposes of this research study, a sustainable change agent must have the intention of effecting a sustainable change in a community’s way of thinking and behaviour by facilitating them to create and implement their own ideas and enabling them to pursue their own solutions. Therefore, a sustainable change agent should be mindful of, and work responsively to, support local people, especially disabled people, to attain their goals.

This study enabled me to have a deeper understanding of the contribution of communication designers as researchers. First of all, researchers can contribute their visual communication skills to facilitate a group of people who are not designers and who have different experience to work together in order to achieve the same goal; this can be achieved by making complex procedures visible and easy to understand. They can also use these skill-sets to help participants and other community members to perceive their own ideas and those of others during a group discussion or a brainstorming process.

Secondly, researchers who are trained as graphic designers or communication designers generally possess problem-solving skills. They can share these skills with participants and their community by facilitating them to create and implement their own ideas and pursue their own solutions. Working
with participants this way can enable them to develop their problem-solving skills and be independent problem solvers through the research process.

Thirdly, researchers can contribute their communication skills in order to generate a sustainable change in participants by providing them with information that can help them make an informed decision; persuade them to accept the idea of creating their own solutions; and inspire them to take action that can enable them to transform their current situation into a desired one. Researchers can also contribute their skill-sets to support a community by disseminating the community’s activities and persuading local government and other organizations to consider collaborating with them and supporting their activities. These organizations possess various resources, so they are able to continue to support the community to enable it to flourish long after the research project is over. A conclusion from this study is that these contributions are essential for enabling a community to attain a sustainable livelihood.

Suggestions for Future Research

Based on the outcomes of this research, I recommend future research should consider three areas. First of all, I recommend future research studies should consider adapting the research methodology, approaches, methods, and tools that I used in this research to other situations which need to find solutions to problems created by disability, poverty, and the search for a better livelihood. The research procedures followed in this study were shown to be effective in enabling a community that already had all structures in place. Therefore, the second area for further research is to advance the development of this research model into use for non-structured communities. The third area for future research to consider is to include non-intrusive long-term monitoring of a community’s activities after the research project is over but as part of the research procedures. It is essential for evaluation sustainability in community development.

The first recommendation

The research methodology, approaches, methods, and tools that I used in this research were shown to be effective in enabling a community to attain a sustainable livelihood. This research had four main procedures which were what was needed for a community to continue flourishing after the completion of the research project. These might be adaptable to other situations which need to find solutions to problems created by disability, poverty, and the search for a sustainable livelihood.

The first procedure is recruiting participants. Participants should go through a consultation meeting in order to ensure that community members who seek to improve their situation and who are concerned about the development process in the community, have an opportunity to investigate their own situation. In this procedure, researchers should work as facilitators in order to provide an equal opportunity to those who are marginalized such as women or people in the lower ranks of an organization, to ensure they take part in the planning and decision-making relating to ideas and projects which may be implemented in their community or organization.

The second procedure is data collection. Data collection consists of individual and group data. Interviews or surveys should be employed for individual data collection. Interviews are recommended for a small group of participants (approximately 3-9 people). Surveys are suitable for a large group of approximately 10-20 people. The individual data will provide researchers with valuable information on individual knowledge, capabilities, strengths, experience, limitations, and expectations from the research. As this research focuses on building up a community’s strengths, group data collection is
also required. A focus group is recommended because it can help researchers to clarify the community’s current situation. After that, a group discussion is appropriate for enabling participants to use the Sustainable Livelihood Framework (SLF) as a tool to gather their own data and do their own analysis with the assistance of researchers. This tool can help both researchers and participants to have a better understanding of their livelihood as a community. It enables participants to identify their vulnerability context, livelihood assets, transforming institutions and processes, and livelihood strategies that can enable them to attain livelihood outcomes that they desire (this tool was described in more detail in Chapter Two). In this procedure, researchers should work as enablers to show participants how to use this tool to gather their own data and guide them in analysing their own livelihood and setting mutual goals (see Figure 7.1).

Figure 7.1 Recommended research procedures, methods and tools

The following procedures concentrated on facilitating and enabling participants to take their own action. These procedures are composed of three main workshops. Each workshop has multiple cyclical processes which are composed of a group discussion for reflection and planning for the next action, taking action, and then a group discussion again for reflection and planning for the next action. The main goal is to enable participants and researchers to adjust their plans and actions after they learn from their own experience (McTaggart 1997).

The first workshop is called I’ll Show You How because it aims to facilitate participants to think and do things for themselves. In this workshop, researchers should work side by side with participants as part of the group in order to guide them in knowing how to do things for themselves and to show them
how to do self-reflection and self-evaluation. Researchers should work as facilitators to provide participants with opportunities to share their views equally as well as take part in planning and decision-making on an idea and project that will be implemented in the community. Working this way can help participants to develop their problem solving skills and build up their self-confidence in their capacity. Participant observation is an effective method for researchers to gather data during a group discussion.

The second workshop is named *Try It Yourselves*. In this workshop, researchers should provide an opportunity for participants to deal with key tasks and issues so that they can become more self-reliant. Even though researchers are still present in the community, they should not take part in the participants’ activities. They should work as an innovator to generate an opportunity for participants to create and implement their own idea and pursue their own solutions. They should also encourage participants to collaborate with local government, other organizations, and residents in the community, so that they can continue to support participants and their community long after the research project is over. Working this way can give researchers an opportunity to shift power to participants and gradually move themselves away from the centre of the development process. Non-participant observation and hidden observation are suitable methods for data collection so that researchers can have a better understanding of their progress and how they transform their existing situation into a desired one. When participants are comfortable in operating the whole process by themselves, it is time for the researchers to commence the third workshop.

The third workshop is called *It’s All Yours*. In this workshop, researchers should withdraw from the community and monitor participants’ activities from a distance without intrusion for approximately six months. The main goal is to give participants space to operate the whole process by themselves so that they can develop their problem-solving skills and be independent problem solvers. Researchers should ask participants to keep their own records of their progress. After monitoring, researchers should re-visit the community and facilitate participants to do participatory evaluation by using SLF to compare the livelihoods that existed in the community before and after the research.

**The second recommendation**

The second area for future research is to advance the development of this research model for non-structured communities. The research procedures worked effectively in a community which already had all structures in place. They had all their basic needs, such as food, water, health care, shelter, transportation, telecommunication, and electricity, educational institutions, and facilities for them to work together as a community. They also had set up their community as an organization to work as their representatives to negotiate with local government and other organizations and to deal with paperwork and formal documents on their behalf.

**The third recommendation**

The third area for future research is to consider including non-intrusive long-term monitoring after the completion of the research project. The main goal is to evaluate sustainability in community development and identify whether or not participants can continue to pursue their own solutions after the conclusion of the research project. This is not a traditional research procedure. Generally it is not covered by the research funding agency. However, it is recommended that future research studies consider including this as part of the research procedures.

To summarise, the design process for enabling a community to attain a sustainable livelihood is a new area for design research and practice. It is not about making things for people or providing solutions
for them, but rather facilitating and enabling them to create and implement their own solutions. Although this is not a new concept for community development in general, it is a new approach in the area of design research. The critical element is that such a research process must be guided by researchers who intend to affect a sustainable change in a community’s way of thinking and behaviour. Such intentions must in turn be cemented in strong ethical safeguards.
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Dunbar, M. (2009). Beyond skin deep exploring the contribution of communication design within interaction design project. School of Media and Communication. Melbourne, RMIT University PhD.


Appendix

Appendix A-1: Guiding questions for interview/ survey
Appendix A-2: Individual data from survey (fifteen participants)
Appendix A-3: Individual data from survey (four additional participants)
Appendix B: Guiding questions for group interview
Appendix C: Livelihoods analysis
Appendix D: Overcome challenges
Appendix E: Monthly record of the SDPA between 2009 and 2011
Appendix F: Exhibition of the research project
Appendix A-1: Guiding questions for interview / survey

Section One: Identification and contact details
1. What is your full name?
2. What are your contact details?

Section Two: Individual data
3. What skills do you have?
4. What are your strengths?
5. What are your weaknesses?
6. How can I compensate for your weakness?
7. Are you employed? If yes, what kind of employment do you have?
8. How do you get to work?
9. What is your role in your community?
10. What are the barriers you have encountered in your community?
11. What are the capabilities that you need or are required to develop for a sustainable livelihood?
12. What is your expectation of this investigation?
## Appendix A-2: Individual data from survey (fifteen participants)

<table>
<thead>
<tr>
<th>Section 1: Name and Contact Details</th>
<th>Section 2: Individual Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
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<tr>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
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<tr>
<td>Q5: Weaknesses</td>
<td>Q6: Compensate for weaknesses</td>
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<tr>
<td>Q7: Employment</td>
<td>Q8: How to get to work</td>
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<tr>
<td>Q9: Roles in the community</td>
<td>Q10: Barriers</td>
</tr>
<tr>
<td>Q11: Required capabilities to attain a sustainable livelihood</td>
<td>Q12: Expectation from this investigation</td>
</tr>
</tbody>
</table>

**1. Mr. Singkom Maneechan-suk**
- Prakrit, Samut Prakan province.
- Management
- Has formal education in management and completed a vocational training program in sewing
- Has some physical limitations
- Self-employed: the owner of a convenience store in the community
- Drives a car
- The leader of the disabled community and the president of the SDPA
- Has physical impairment
- Requires more information about market and consumer needs
- Expects that the investigation will lead the community to better solutions and livelihoods

**2. Mr. Somboon Wongmoon**
- Prakret, Nonthaburi province.
- Able to use and fix a sewing machine
- Able to fix a sewing machine
- Poor health and limited mobility because of physical impairments - Has no financial support - Has little formal education
- Try to set the group meetings on the same day as the SDPA meeting schedule
- Self-employed: selling lottery tickets in Nonthaburi province
- Public transportation such as taxi (travelling to the SDPA facilities twice a month)
- An SDPA committee member
- The vice president of the SDPA
- Poor health and limited mobility because of physical impairments
- Needs financial support
- Expects that the investigation to generate alternative income generating activities
<table>
<thead>
<tr>
<th>Q1: Full name</th>
<th>Q2: Contact details</th>
<th>Q3: Skills</th>
<th>Q4: Strengths</th>
<th>Q5: Weaknesses</th>
<th>Q6: Compensate for weaknesses</th>
<th>Q7: Employment</th>
<th>Q8: How to get to work</th>
<th>Q9: Roles in the community</th>
<th>Q10: Barriers</th>
<th>Q11: Required capabilities to attain a sustainable livelihood</th>
<th>Q12: Expectation from this investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Boonton Aunsuwan</td>
<td>Samut Prakran province</td>
<td>Driving a car, truck, and large trucks</td>
<td>Good social skills</td>
<td>Does not have enough knowledge or know how to improve the current situation</td>
<td>-</td>
<td>Self-employed: selling lottery tickets at Lotus supermarket in Amphoe Bangpooh in Samut Prakran</td>
<td>Drives a car</td>
<td>An SDPA committee member</td>
<td>The vice president of the SDPA</td>
<td>Does not have a secure job which provides sufficient income all year round</td>
<td>Be able to get more information to help to make an informed decision</td>
</tr>
<tr>
<td>Mr. Panya Petkom</td>
<td>Changlai province</td>
<td>Used to be able to use a sewing machine 30 years ago.</td>
<td>Completed a vocational training program a long time ago</td>
<td>-</td>
<td>-</td>
<td>Self-employed: selling lottery tickets at Top’s supermarket in Pracha Autid Branch, Samutprakan province with an assistant</td>
<td>Drives a car</td>
<td>An SDPA committee member</td>
<td>The SDPA accountant</td>
<td>Not sure because has never used sewing skills to make a living</td>
<td>Hopes that the investigation can provide opportunities for other members to have an alternative means to make a living in the future</td>
</tr>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
<td>Q5: Weaknesses</td>
<td>Q6: Compensate for weaknesses</td>
<td>Q7: Employmen t</td>
<td>Q8: How to get to work</td>
<td>Q9: Roles in the community</td>
<td>Q10: Barriers</td>
<td>Q11: Required capabilities to attain a sustainable livelihood</td>
<td>Q12: Expectation from this investigation</td>
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<tr>
<td>5. Mr. Nakon Suknang</td>
<td>Samut Prakan province</td>
<td>Has communication and social skills.</td>
<td>Has good health and good communication skills</td>
<td>Has a little formal education</td>
<td>Self-employed: selling lottery tickets in the fresh market in the community</td>
<td>Drives a car</td>
<td>An SDPA committee member Sport coach for members of the SDPA</td>
<td>-</td>
<td>-</td>
<td>Develop skills, knowledge, and have good health</td>
<td>This investigation might bring good things or bad things into the disabled community. We have to wait and see.</td>
</tr>
<tr>
<td>6. Mr. Kai ComeWanna</td>
<td>Samut Prakan province</td>
<td>Has some ideas skills to plan and analyse for the short-term project, but not a long-term project</td>
<td>Has ideas and skills to plan and analyse for the short-term project</td>
<td>Always has various ideas, but never takes any action. Has some ideas and skills to plan and analyse for the short-term, but not the long term. Has no financial support for the long-term projects</td>
<td>Self-employed: selling lottery tickets in BIG C supermarket in Ratchaburi province</td>
<td>Drives a car</td>
<td>The SDPA committee member responsible for generating activities for members and networking among the disabled, local governmental organization and private sector in the community.</td>
<td>Physical limitations</td>
<td>-</td>
<td>Leadership and management skills and wide vision, so the disabled can solve their own problems and overcome their own barriers and problems. Needs financial support for the long-term projects</td>
<td>The investigation can lead the disabled community to the enabling solutions and help the disabled people to overcome their barriers and problems.</td>
</tr>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
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<td>Q11: Required capabilities to attain a sustainable livelihood</td>
<td>Q12: Expectation from this investigation</td>
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<td>7. Mr. Tong Cometong</td>
<td>1/8 Moo 5 Tambon Bangkraorb Amphor Phrapradang, Samut Prakran province</td>
<td>Can use a computer, type documents, and fix a cell phone</td>
<td>Can use a computer, type documents, and fix a cell phone</td>
<td>Has a little formal education</td>
<td>Self-employed: selling lottery tickets at a rented space at the front of the super-market in the community.</td>
<td>Drives a car</td>
<td>An SDPA committee member The secretary of the SDPA</td>
<td>Has a little formal education</td>
<td>Update skills, knowledge and get formal education</td>
<td>The investigation can show the disabled people new views and different views to deal with any difficult situations and problems.</td>
<td></td>
</tr>
<tr>
<td>8. Mr. Rungchai Chan Nguah</td>
<td>Samut Prakran province</td>
<td>Has good communication skills</td>
<td>Good communication skills</td>
<td>Has some physical disabilities</td>
<td>Self-employed: selling lottery tickets at the front of the house.</td>
<td>Drives a car</td>
<td>An SDPA committee member - Health care and facilities</td>
<td>Has some physical and mobility limitation</td>
<td>Have equal opportunities to get a job in the society.</td>
<td>The investigation can develop the disabled skills, so they can find a way to make a sufficient income in the future. Even though, it might help a little bit, but we can use all the help we can get.</td>
<td></td>
</tr>
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<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q 3: Skills</td>
<td>Q:4 Strengths</td>
<td>Q 5: Weaknesses</td>
<td>Q6: Compensate for weaknesses</td>
<td>Q7: Employment</td>
<td>Q8: How to get to work</td>
<td>Q9: Roles in the community</td>
<td>Q10: Barriers</td>
<td>Q11: required capabilities to attain a sustainable livelihood</td>
<td>Q:12 Expectation from this investigation</td>
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<tr>
<td>9. Mr. Sommee In-Terng Samut Prakran province</td>
<td></td>
<td>Can weld, work on a metal, and drive a car</td>
<td>Can weld, work on a metal, and drive a car</td>
<td>Lack of self esteem</td>
<td>-</td>
<td>Self-employed: selling lottery tickets in the front the Tesco-Lotus supermarket in Rayong Province.</td>
<td>Driving a car</td>
<td>The SDPA committee member - Health care and facilities</td>
<td>Has physical limitation because of physical impairments</td>
<td>Knowledge and skills to meet need of the market</td>
<td>The investigation can bring knowledge from other research into the disabled community and help them to have a secure job and income, so the disabled can have savings for their old age.</td>
</tr>
<tr>
<td>10. Mr. Narong Subson Samut Prakran province.</td>
<td>Social and communication skills</td>
<td>Has a lot of connection in the community</td>
<td>Has a little formal education</td>
<td>-</td>
<td>Self-employed: selling lottery tickets in the Somrong community in Samut Prakran province.</td>
<td>Drives a car</td>
<td>An SDPA committee member - Public Relations</td>
<td>Has physical limitation because of physical impairments</td>
<td>Develop skills and capabilities based on interest and prior skills.</td>
<td>The investigation might improve the livelihoods of the disabled people and help them to have a secure job and income in the future.</td>
<td></td>
</tr>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
<td>Q5: Weaknesses</td>
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<tr>
<td>11. Mr. Wichien Meeban</td>
<td>1/8 Moo 5 Tambon Bangkrasorb, Amphor Phrapradaeng, Samut Prakran province, 10130.</td>
<td>Well organized</td>
<td>Well organized</td>
<td>Lack of self-confidence and communication skills.</td>
<td>A full time employee of the SDPA as the head of the SDPA staff and an administrator</td>
<td>Drives a car</td>
<td>An SDPA staff member to work and support the members</td>
<td>Lack of social skills</td>
<td>Build up self-confidence to do things for themselves</td>
<td>The investigator is a person who has knowledge and education, so this investigation can provide good advice and lead the community to have better livelihoods.</td>
<td></td>
</tr>
<tr>
<td>12. Ms. Banjawan Nutna</td>
<td>Samut Prakran province,</td>
<td>Use different computer Microsoft office software and e-mail. Good communication skills.</td>
<td>Marketing</td>
<td>Lack of self-esteem and confidence</td>
<td>Lack of management experience</td>
<td>A full time employee of the SDPA as an accountant, product development and marketing</td>
<td>Drives a car</td>
<td>AnSDPA staff member to work and support the members</td>
<td>Lack of self-esteem and confidence</td>
<td>Build up self-confidence and social skills</td>
<td>This investigation can enable the disabled people to have better livelihoods, so they can be independent in the future.</td>
</tr>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
<td>Q5: Weaknesses</td>
<td>Q6: Compensate for weaknesses</td>
<td>Q7: Employment</td>
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<td>Q9: Roles in the community</td>
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<td>Q11: Required capabilities to attain a sustainable livelihood</td>
<td>Q12: Expectation from this investigation</td>
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<tr>
<td>Ms. Wanna Sangwiman</td>
<td>Bangkok province,</td>
<td>Use different computer Microsoft office software</td>
<td>- Use different computer Microsoft office software and e-mail.</td>
<td>Cannot speak English</td>
<td>- A full time employee of the SDPA as the secretary of the president of the SDPA</td>
<td>Public transportation: bus and motorcycle taxi</td>
<td>An SDPA staff member to work and support the members in five perspectives as follows: 1) Education 2) Health 3) Social 4) Occupation 5) Networking with local government and private sector.</td>
<td>Does not have self-confidence</td>
<td>Able to speak English</td>
<td>The investigator is a person who has knowledge and education, so this investigation can provide good advice and lead the community to better livelihoods.</td>
<td></td>
</tr>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
<td>Q5: Weaknesses</td>
<td>Q6: Compensate for weaknesses</td>
<td>Q7: Employment</td>
<td>Q8: How to get to work</td>
<td>Q9: Roles in the community</td>
<td>Q10: Barriers</td>
<td>Q11: Required capabilities to attain a sustainable livelihood</td>
<td>Q12: Expectation from this investigation</td>
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<tr>
<td>14. Mr. Boonwa Boothawat</td>
<td>1/8 Moo 5 Soi 2, Tambon Bangkasorb, Amphor Phrapradaeng, Samut Prakan province.</td>
<td>Make dyed textiles</td>
<td>Make mat and mop from fabric remnants</td>
<td>- Lack of design skills. - Cannot make the same pattern again. - Cannot design different pattern and products.</td>
<td>-</td>
<td>A casual worker of the SDPA</td>
<td>Rides a motor tricycle</td>
<td>A member of the SDPA.</td>
<td>Hasmobility limitations</td>
<td>Develop their skills based on their prior skills, so they can make a living.</td>
<td>This investigation can help to develop the capabilities to create secure jobs and sufficient income for everybody in the community.</td>
</tr>
<tr>
<td>Q1: Full name</td>
<td>Q2: Contact details</td>
<td>Q3: Skills</td>
<td>Q4: Strengths</td>
<td>Q5: Weaknesses</td>
<td>Q6: Compensate for weaknesses</td>
<td>Q7: Employment</td>
<td>Q8: How to get to work</td>
<td>Q9: Roles in the community</td>
<td>Q10: Barriers</td>
<td>Q11: Required capabilities to attain a sustainable livelihood</td>
<td>Q12: Expectation from this investigation</td>
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<td>15. Mr. Pakong MeeSin</td>
<td>1/8 Moo 5 Soi 2, Tambon Bangkasorb, Amphor Phrapradaeng, Samut Prakan province.</td>
<td>Making handicrafts such as 1) resin souvenirs 2) artificial flowers 3) mops and mats of fabric remnants 4) tie dye fabric, 5) papier mache</td>
<td>Making handicrafts such as 1) resin souvenirs 2) artificial flowers 3) mops and mats of fabric remnants 4) tie dye fabric, 5) papier mache</td>
<td>- Cannot design and develop different products from the current markets  - Has no design knowledge and skills</td>
<td>-</td>
<td>A casual worker of the SDPA</td>
<td>Rides a motor tricycle</td>
<td>A member of the SDPA</td>
<td>Has mobility limitations</td>
<td>Develop any skills that can produce products that meet the market needs</td>
<td>The investigation can create income generating activities that can provide sufficient income</td>
</tr>
</tbody>
</table>
### Appendix A-3: Individual data from survey (four additional participants)

<table>
<thead>
<tr>
<th>Q1: Full name</th>
<th>Q2: Contact details</th>
<th>Q3: Skills</th>
<th>Q4: Strengths</th>
<th>Q5: Weaknesses</th>
<th>Q6: Compensate for weaknesses</th>
<th>Q7: Employment</th>
<th>Q8: How to get to work</th>
<th>Q9: Roles in the community</th>
<th>Q10: Barriers</th>
<th>Q11: Required capabilities to attain a sustainable livelihood</th>
<th>Q12: Expectation from this investigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Ms. Pikuntong Songwein</td>
<td>1/8 Moo 5 Soi 2, Tambon Bangkasorb, Amphor Phrapradaeng, Samut Prakan province.</td>
<td>Making handicrafts such as 1) artificial flowers 2) tie dye fabric</td>
<td>Making handicrafts such as 1) artificial flowers 2) tie dye fabric</td>
<td>Physical limitation because can use only one arm</td>
<td>-</td>
<td>- A casual worker of the SDPA</td>
<td>Walk</td>
<td>A member of the SDPA</td>
<td>Having physical limitations because can use only one arm</td>
<td>Develop any skills that can produce products that meet the market needs</td>
<td>The investigation can create income generating activities that can provide sufficient income</td>
</tr>
<tr>
<td>17. Ms. Supanee Ngam Kom</td>
<td>Samut Prakan province.</td>
<td>- Use different computer Microsoft office software and e-mail. - Has experience as a social worker</td>
<td>- Use different computer Microsoft office software and e-mail. - Has experience as a social worker</td>
<td>Lack of self-esteem</td>
<td>-</td>
<td>A full time employee of the SDPA</td>
<td>Public Transportation</td>
<td>An SDPA staff member to work for supporting the members to build up their strength so they can develop their skills to have better means of living.</td>
<td>-</td>
<td>Does not know</td>
<td>This investigation can enable the SDPA members to have better livelihoods.</td>
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<td>Section 1: Name and Contact Details</td>
<td>Section 2: Individual Data</td>
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<tr>
<td><strong>Q1: Full name</strong></td>
<td><strong>18. Ms. Kaureaun Yamsee</strong></td>
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<tr>
<td><strong>Q2: Contact details</strong></td>
<td>1/8 Moo 5 Soi 2, Tambon Bangkasorb, Amphor Phrapradaeng, Samut Prakran province.</td>
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<td><strong>Q3: Skills</strong></td>
<td>Making handicrafts such as 1) artificial flowers 2) mops and mats of fabric remnants 3) tie dye fabric 4) sewing</td>
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<td><strong>Q4: Strengths</strong></td>
<td>Making handicrafts such as 1) artificial flowers 2) mops and mats of fabric remnants 3) tie dye fabric 4) sewing</td>
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<td><strong>Q5: Weaknesses</strong></td>
<td>Lack of confidence in prior skills and knowledge</td>
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<td><strong>Q6: Compensate for weaknesses</strong></td>
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<td><strong>Q7: Employment</strong></td>
<td>A casual worker of the SDPA</td>
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<td><strong>Q8: How to get to work</strong></td>
<td>Rides a motor tricycle</td>
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<td><strong>Q9: Roles in the community</strong></td>
<td>A member of the SDPA</td>
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<td><strong>Q10: Barriers</strong></td>
<td>Lack of self-confidence</td>
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<td><strong>Q11: Required capabilities to attain a sustainable livelihood</strong></td>
<td>Develop any skills that can produce products that meet the market needs</td>
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<td><strong>Q12: Expectation from this investigation</strong></td>
<td>The investigation can create income generating activities that can provide income and be at home working instead of going outside alone</td>
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<td><strong>Q1: Full name</strong></td>
<td><strong>Q2: Contact details</strong></td>
<td><strong>Q3: Skills</strong></td>
<td><strong>Q4: Strengths</strong></td>
<td><strong>Q5: Weaknesses</strong></td>
<td><strong>Q6: Compensation for weaknesses</strong></td>
<td><strong>Q7: Employment</strong></td>
<td><strong>Q8: How to get to work</strong></td>
<td><strong>Q9: Roles in the community</strong></td>
<td><strong>Q10: Barriers</strong></td>
<td><strong>Q11: Required capabilities to attain a sustainable livelihood</strong></td>
<td><strong>Q12: Expectation from this investigation</strong></td>
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<td>19. Mr. Kaunchai Yodtiwong</td>
<td>Samut Prakan province.</td>
<td>Making handicrafts such as 1) Thai house miniature 2) resin souvenirs 3) artificial flowers 4) mops and mats of fabric remnants 5) tie dye fabric 6) <em>papier mache'</em></td>
<td>Making handicrafts such as 1) Thai house miniature 2) resin souvenirs 3) artificial flowers 4) mops and mats of fabric remnants 5) tie dye fabric, 6) <em>papier mache'</em></td>
<td>Has mobility limitations</td>
<td>-</td>
<td>A casual worker of the SDPA</td>
<td>Rides a motor tricycle</td>
<td>A member of the SDPA.</td>
<td>Has mobility limitations</td>
<td>Need to develop skills to make products that can sell all year</td>
<td>The investigation can create income generating activities that can provide income all year</td>
</tr>
</tbody>
</table>
Appendix B: Guiding Questions for group interview

1. Would you please introduce yourself, your employment, and your role in this community?

2. If you are self-employed, please clarify your job description.

3. Are you residents of this community?

4. If you are not residents what brought you together?

5. How did you work together as a community?

6. What is your current situation in the community?
Appendix C: Livelihood Analysis

Sample group interview questions:

1) What was the livelihood of your community prior to the project and following the project?
2) Tell me about the vulnerability context of your community prior to the project and following the project?
3) Tell me about the human capital of your community prior to the project and following the project?
4) Tell me about the social capital of your community prior to the project and following the project?
5) Tell me about the financial capital of your community prior to the project and following the project?
6) Tell me about the physical capital of your community prior to the project and following the project?
7) Tell me about the information capital of your community prior to the project and following the project?
8) Tell me about the natural capital of your community prior to the project and following the project?
9) Have you achieved your goals/livelihood outcomes?
10) Have you attained a sustainable livelihood? If not what is your next plan?
Appendix D: Livelihood Analysis

This data was transcribed from a group discussion with research participants after monitoring without intrusion for six month. The main goals were to evaluate the effectiveness of this research and enable the participants to do self-evaluation. This group discussion took place at the meeting room at the facilities of the SDPA, approximately one hour. Nine participants participated because some of them were no longer part of the committee members of the SDPA after the community election in February 2009. However, there were new committee members took part in the meeting because they would like their voices to be included as a community.

Me: What was the livelihood of your community prior to the project and following the project?

Singkom: Our main source of income is still from distributing lottery tickets for the Government Lottery Office. But after the project, we also have some income from using our sewing skills to make custom-made items.

Me: So far, how many people chose this means to make a living?

Benjawan: “Right now, we have seven people”.

Me: Can you tell who they are?

Benjawan: Pi’Kaureaun,Pi’ Prakron and his wife, and Pa porn (a nick name of a community member who helped the group develop this idea in Workshop Two), two new community members who joined us after our short training course last month, and one committee member who hired as a full-time employee of the SDPA and worked as the head of the production team. We have not recruited the production team yet. Actually, these are people that worked with us before the training.

Me: How many people do you plan to recruit as a production team?

Singkom: We plan to recruit 30 people to work as a full-time employee.

Me: When do you plan to recruit a production team?

Singkom: There are a lot of people want to work and stay with us after the first training course, but we have to wait after we complete our entire short training courses.

Me: How many short training courses do you have?

Singkom: We have only one course, but we plan to provide the same course to 90 people because the
National Office of Empowerment people with Disabilities of Thailand encouraged us to do so and provide us full financial support. Because of the limitation of our facility and equipment, we divided them into three groups.

Me: To be fair for everyone, I suggested that you should ask them to send the application after all three training courses are completed and then you should select the best 30 people to work as a full-time employee.

Singkom: I think that is a good idea. We’ll do that.

Me: When do the next training courses commence?

Singkom: the next one is next month, December. The last one is in January. By the time we complete the training, we should have a new building to provide accommodation for our production team. After the meeting I will show you.

Me: Thank you. I’d like that. Now, tell me about the vulnerability context of your community prior to the project and following the project.

Singkom: There are the same ones, but they are so bad anymore because many people started to consider using their skills to gain a living instead. Many want join us as the production team in the near future. There won’t be so much people need lottery tickets in the future so the impact from the government launches the e-tickets will not be as severe as I thought. Maybe this alternative means could become the main source of our income in the near future. The e-tickets would not threaten our community anymore.

Me: How about other members who still sell lottery tickets?

Singkom: Their way of life is uncertain but we plan to improve other skills of our members about 1,000 people in the next four years. This is a long-term development that we had already discussed with the local authorities. We were advised to submit our plan to the authorities to ensure that we have financial support our ideas in the next four years. We recently submitted our proposal because we have a new committee member who had experience in writing a proposal to help use to do this. This is …… (the name of the new committee member)

Me: Hello, it’s nice to meet you.

The new committee member: This is our four years plan that I wrote.

After I looked through their plan, I asked them to tell me how you find out about this information.

One of the committee members: We (the SDPA committee members) were suggested by the local authorities to do this when they attended the opening ceremony of our first training course last month.
Me: So when do you know about the response from the government.

The new committee member: The authorities will inform us when the plan is approved and every the beginning of a financial year, we should be able to access these funds.

Me: Tell me the future plan of this community?

Singkom: We plan to provide training to 1000 members and build up our production team so we can take more order.

Me: Do you have enough facilities?

Singkom: No, but we plan to build a new building in this December. We plan to provide accommodation for 100 people. Some have to work from home and we will pick up the work from them.

Me: Is the budget for a new building from the authorities?

Singkom: No, It is the SDPA saving from a distributing lottery tickets commission. We just bought property next to our facility.

Me: Tell me about the physical and natural capital of your community prior to the project and following the project?

Singkom: Yes. Now we have a one building behind the SDPA main facility. It is fully operated as our new workshop now. We will build a new building on our new property. When this one is completed, it is for accommodations our production team.

Me: I would like to see that after the meeting. Have you achieved your goals/livelihood outcomes?

Kaureaun: I think we have. I do not have to go outside by myself to sell lottery tickets anymore. I just stay at the SDPA facility and work here with other people. I also feel much more confidence in my sewing skills now after the training.

Me: That is good.

One of community members who joined the SDPA production team: this activity at the SDPA is really good. It helped me to have income every month since I joined them.

Me: Tell me if your community have attained a sustainable livelihood or not. If not what is your next plan?

Singkom: I cannot really say right now whether this is sustainable or not, but everything starts coming together now. We have tried so many things in the past. Nothing works. This time it is working.

Me: I am glad to hear that.
Boonton: Now we can see our path and which way we are going. We could not do this without you.

Me: So what is the next plan?

Singkom: Our next plan is to continue improving our skills and nurturing this project because it helps us to pursue a sustainable livelihood.

Me: Thank you for much for your time.

Based on these data, I concluded that the participants and their community have achieved their livelihood outcomes. Even though they have not attained a sustainable livelihood yet, they intended to continue pursuing it. This group discussion revealed important information as follows.

**Vulnerability Context**

The vulnerability context of this community has been reduced because some of the community members started to use their sewing skills to make a living instead of selling lottery ticket. The participants and their community had transformed their population trend in to human capital. They also intended to continue increasing their human capital by providing a short training course. They also provided work and accommodation for the community members who joined them as the production team. Working this way both population and technology trend could not threaten the livelihood of their community again.

**Livelihood assets**

**Human Capital**

Prior to the project the participants had various skills, but only a few participants knew how to use the sewing machine. After the project, the participants confirmed that sewing skills had become the key asset for them and their community to pursue a sustainable livelihood. At the time, there were seven more people joined the group as the production team. They intended to recruited more people with sewing skills. They also provided a short course training skills for 30 community members, so this group could join them as a production team after the participants and their community provided a short training course. This activity was full supported by the National Office of Empowerment of People with Disabilities of Thailand. In the near future, they planned to provide a short training course for 60 people. *In the next four years, they intended to continue improving skills of 1,000 community members because the participants informed that these activities were supported by the local government.*

**Financial Capital**

Prior to the project the participants and their community had access to the SDPA and local government in the Samut Prakran province mainly. After the project, they found that they could
access other government organization such as the National Office of Empowerment of People with Disabilities of Thailand. Since their activities have been recognized local authorities, their community were suggested to write a long-term development project and budgets that they needed. This way the participants and their community would have financial support their project for the next four years. *This information informed that the local government had committed to continue to support the activities of this community.*

**Social Capital**

Prior to the project, the participants identified that they had existing connections with local government and other non-government organizations and private sector in the Samut Prakran province. After the project, they informed that they had more connection with government organizations both inside and outside the community because of their new committee members that the leader of the community appointed recently also had their own networks and experience to build up more connections and networks. The participants also had worked with local business such as a small screen printing shop in their area in order to help them on the printing job that they did not have human resources or equipment to do so. Through my own observation, I realized that the family of the participants and other community members had a lot of support from their family to improve their skills. *This informed that the participants and their community had extensive social networks, connections and supports them to obtain information, access available resources in different organizations in time, to improve their skills and pursue a sustainable livelihood.*

**Physical Capital**

The participants and their community could access health care facility, public transportation, electricity, telecommunication and educational institutions because they lived in the semi-urban area of Thailand. They also possessed their own facilities which were known as the SDPA facilities. Prior to the project, the SDPA facility was built for distributing lottery tickets for its members mainly. It also had a workshop for the SPDA members who worked for a commission for the SDPA such as making artificial flowers. The workshop area was suitable only for 10-15 people. After the project, the SDPA committee members who were also the participants of this research decided to build a new workshop behind the main facility of the SDPA. After the monitoring the participants without intrusion for 6 months, I found that the new workshop was completed and ready to be operated. Furthermore, prior to the project there were 10 sewing machines at the SDPA facility which were piled up in one corner of their workshop. Following the project, 15 sewing machines were set up full their workshop area and ready to be operated. *This information informed that their physical capital has been increased tremendously. Even though this project did not help them to create this plan and action, it had informed them to make their own decision.*
A facility of the Samutprakran Disabled Persons Association (SDPA) and their plan prior to the project

A workshop of the SDPA facility and their equipment prior to the project

A new workshop which was built behind the SDPA facility following the project during April 2009
A new workshop which was built behind the SDPA facility following the project during November 2009

*Natural Capital*

The livelihood of the participants and their community had not relied on natural resources because they lived in a semi-urban area. Prior to the project, this community possessed enough land to build a facility to facilitate their member activities such as distributing lottery tickets and making handicrafts. After the project, the participants and their community decided to buy more property next to their facility in order to build a new building for providing accommodation. As I mentioned in the previous section, this project did not help them to create their plan and action, but it had informed them to make a decision on an idea and a project which would be implemented in their community.

The leader of the community identified their new property that they just bought, April 2009
A new building was built on the property which was bought in April 2009
Appendix D: Overcome challenges

In this research project, I faced three challenges. The first challenge for me was to overcome the history of the Samutprakran Disabled Persons Association (SDPA). The second challenge was to confront my own practice, habits, and concerns that I had for this community. The third challenge was my own preconceptions and assumptions that the research community was like a client group.

The first challenge was to overcome the history of the SDPA. This community had a long history in making handicrafts and selling lottery tickets through the SDPA. However, the main source of their income was commission from the fortnightly distribution of lottery tickets for the Government Lottery Office of Thailand. This was a big challenge for this project because this community evolved around this livelihood. It was not an easy task to inspire them to accept a new idea. Even though this community was fully aware that selling lottery tickets was not a sustainable livelihood, it was hard for them to accept change. This project took a lot of courage and time to shape the idea with the community and encourage them to join the quest for a better livelihood. This research study would not have been possible without local people who were innovative and believed in what the project could bring to their community. This was a real example of true participation and collaboration with a community.

The second challenge was to confront my own practice, habits, and concerns that I had for this community. My previous practice focused on making artefacts at a client’s request. In addition, I had previous working experience making things for the disabled people in this community, so it was hard for me to change my habits from a design ‘saviour’ to a facilitator who enabled other people to create solutions for themselves. Through this experience, I found that it was hard to break my own habits as a solution provider because I had empathy for their disabilities and ambition to help them find solutions; however, this emotive response almost collapsed my own project until I changed my mindset and began a new way of thinking and behaving. I learnt this valuable lesson in Workshop Two which was described in Chapter Four.

Moreover, I had to confront my own practice as a graphic designer in that my research might not be accepted as professional practice in my own field because the outcomes of the research were intangible. The research project was not all about creating artefacts for people as traditional design projects. Rather, it was design for enabling disabled people to attain a sustainable livelihood, more self-confidence, self-esteem, and pride in their accomplishments, and the goal of them living relatively prosperous lives. The outcomes of my research are displayed in the disabled people in this
community themselves and in myself. We are all the living outcomes of this case study. I strongly believe that this is the greatest design service that a designer could ever provide for a community and society.

The third challenge was my own preconceptions and assumptions about the research community being like a client group. In Thai society, a community of people with disabilities are perceived as poor and incapable. As this perception did more good than harm, the disabled people kept this image for their community for 30 years. After I employed SLF as a tool for data collection, as described in Chapter Three, I realized that my preconceptions and assumptions about this community were wrong. This community was not poor or incapable. In fact, they were rich and resourceful physically able people because local government organizations were pouring substantial support into their community, both financial and in-kind, in order to the group as a whole to improve their capabilities, as well as giving small business loans to individuals. Moreover, this community possessed abundant livelihood assets and earned a handsome income every fortnight from distributing lottery tickets for the Government Lottery Office of Thailand. As a result, I had to reposition my research project as this was not a project for poverty reduction as I had anticipated, but rather a project to enable them to have an alternative livelihood.

The fourth challenge was enabling community representatives to generate an alternative livelihood before their current livelihood collapse. After data collection following SLF methods, I discovered that the vulnerability of this community was much more serious than I anticipated because they faced both population and technology trend. The entire community members relied solely on distributing lottery ticket for the Government Lottery Office of Thailand. This livelihood could collapse at any time following the government implemented electronic lottery tickets in Thai society. The livelihood of 3500 community members would not have a means to gain a living. At the time, no one knew when the government would implement this technology in Thai society and the community could attain a sustainable and satisfying livelihood. Enable community representatives to create an alternative livelihood before their current livelihood collapsed was also the challenge of this research project.
Appendix E: Monthly record of the SDPA between 2009 and 2011
Appendix E: Monthly record of the SDPA between 2009 and 2011