# Factors Determining the Financial Product Types and Demand in a Post Disaster Situation Identified by a Pairwise Ranking Approach: A Case Study of a Fishing Community in Hambantota District of Sri Lanka

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# ABSTRACT

The study sought to determine factors to be considered when packaging or designing financial products to clients, particularly to those who have just emerged from disaster situations. It was undertaken in Mawella in the Hambantota District of the Southern Region of Sri Lanka, Mawella being one of the coastal villages and towns which were severely affected by the December 2004 tsunami. By means of purposive sampling technique, three categories of people made up of fishermen, businessmen and boat owners were selected. The rationale behind this selection was that these three categories were observed to form the nucleus of the economic activities in the study village. Within these three categories of people, a snowball sampling technique was employed to select 60 participants for the study. Using the pairwise ranking technique, eight items underlying financial products were ranked. These eight items are the proximity of the service provider to clients, transaction costs, flexibility and speed with which services are provided, simplicity of transactions, customer-friendly approach to clients, wide range of products or services, safety of savings, collateral (guarantee) substitution, of which collateral substitution emerged as the most important determinant. Though collateral substitution was ranked as the most important item by the study participants, it is equally important that Microfinance practitioners for the sake of both financial and operational sustainability be cautious and prudent in granting loans without physical or tangible collateral. This is because a loan secured with a collateral tends to be a better investment option for the lender (microfinance institution) as borrowers may not want to lose their pledged property.

KEYWORDS: Fishing community, Microfinance, Pairwise ranking, Sri Lanka, Tsunami

# Introduction

There is no gainsaying of the fact that extreme natural occurrences or disasters over which man has little or no influence such as droughts, earthquakes, tropical cyclones, floods and pandemics when they occur tend to threaten lives, livelihoods and even entire economies. In the event of such occurrences, the victims' quest for survival there and then and into the future hinges on a well-planned disaster recovery framework.

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Among such recovery a framework is cross-cutting financial intermediation for the victims of which little has been investigated.

Financial intermediation is an important tool of reconstruction of disaster areas, thereby, reaching disaster victims with much needed financial services in order to enable them to operate their own productive economic activities. Financial intermediation for disaster victims has been observed to thrive on the availability of operators and institutions committed to the cause of social development and responses to crisis situations. The activities of such financial institutions and operators engaged in financial intermediation are needed to extend the much needed financial services to disaster victims as a way of restoring their hope and dignity of living (Aidoo-Mensah, 2005).

Taking into consideration the critical issue of lack of proper understanding of the operations of the financial intermediation at the disaster-victim level, particularly among low-income clients who in most instances tend to bear the brunt of disasters (Hallegatte et al., 2018), many financial intermediaries have assumed that costs outweigh the benefits of such financial intermediation. Therefore, it is of no paramount importance to them to promote the much needed financial intermediation among such clients. Consequently, many financial intermediaries particularly those in the formal sector discriminate in extending the needed financial services to victims of disasters.

In order to bridge this crucial gap of helping victims of disasters to access much needed financial services as a way of building back their lives and become less vulnerable to future shocks, operators of microfinance institutions have been observed to develop ingenious ways of financial intermediation in this direction. These ingenious ways of assisting disaster victims are in most cases aimed at low-income entrepreneurs in both urban and rural areas with the underlying premise of achieving financial outreach and sustainability for the microfinance institution. Such financial intermediation from microfinance institutions goes a long way to reduce the gaps and imbalance in livelihood recovery and create opportunities for income generation and skill development aimed at faster reconstruction of livelihoods. A report to this effect concludes that microcredit – small loans ranging from just \$50 to \$400 for entrepreneurial individuals – could have a dramatic impact in restoring hope and economic promise for thousands of families not only in Sri Lanka but also in disaster-prone countries such as Indonesia, India and Thailand.

The majority of microfinance institutions (MFIs), however, face numerous challenges to develop the institutional capacity, client-responsive products, and business models to offer services on a sustainable basis. Rarely is this goal more threatened than in times of upheaval such as natural disasters (Miamidian et al., 2005).

It is therefore not surprising that in most post-disaster situations particularly in developing countries, the victims have been observed to reduce their overall consumption levels, sell their assets and migrate in search of work as coping mechanisms for survival. It is contended that all these coping mechanisms for survival by disaster victims become increasingly necessary when they are faced with little access to financial intermediation, vis-a-vis client-responsive financial products for reconstructing their livelihoods (Parker & Nagarajan, 2000).

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The case of the research area, Sri Lanka, was not anything different from the observed worldwide trend of devastating and catastrophic natural disasters which brought in its trail a situation of worsening economic development bordering on poverty. This was evidenced by the powerful and catastrophic earthquake-tsunami (or tidal waves) which hit this tropical island on December 26, 2004. The tsunami killed about 31,000 people with a considerable number of them reported missing and about half a million displaced. The tsunami devastated local economies and wiped out tiny businesses that had enabled many families to live above the poverty level before this natural disaster. The most affected areas being the northern, eastern and southern coasts of the island. These affected areas account for about 26% of the total population of Sri Lanka – most of them being subsistence fisherman and micro-enterprise operators (Ratwatte, 2005).

# Microfinance as a Strategy in Reconstruction after Disaster

The aftermath of disaster, be natural or caused by the activities of man, may be characterised by local or global heart-warming responses in the form of outpouring of financial resources or other forms of assistance, grant, donation or aid. These financial resources either in cash or kind may be pledged for reconstruction of such facilities as schools, hospitals, public amenities and livelihoods.

Much as these responses serve as welcoming relief to ease the burdens of victims of disasters, it is equally important that a long-term assistance is envisaged which can help the victims to regain their productive potential with ultimate aim of weaning them off donation. This is because the response to disasters in the form of donations is not sustainable and also has the inherent capability of crippling local productive potential.

One such way of helping long-term reconstruction of livelihoods destroyed by disasters is the use of microfinance programmes. Microfinance programmes in most cases have been found to offer a more permanent relief for disaster victims by providing long-term access to sustainable financial services. According to Nagarajan (1998), the success of microfinance services following a disaster depends on a number of factors. Nagarajan (1998) identified some of these factors as: (1) length of time a microfinance institution offers various services, (2) the types of financial products offered (3) ability to coordinate services with other relief organisations (4) loan terms and conditions.

# Length of Time a Microfinance Institution offers Various Services

Nagarajan (1998) surmised that the length of time MFIs particularly established ones providing relief should be brief and followed by unsubsidized loans in the rehabilitation and reconstruction phases. This is because a long period of dependence on grant or donations has been observed to threaten the development of markets, stifle local productive potential and create an undue dependency syndrome.

Not only that but also, a recent report indicates that long-term relief and livelihood grants send mixed signals to clients, thereby threatening credit discipline. Thus in a nutshell, an MFI must aim at using grant in the shortest possible time to prepare victims of disaster for eventual use of financial services.

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# The Types of Financial Products Offered

Advocates of financial intermediation particularly microfinance as a tool of post-disaster reconstruction have often stressed the importance of the use of credit as livelihood recovery tool so as not to undermine existing resource base (Stark, n.d). Moreover, the use of credit has been justified on the grounds that microfinance remains primarily a credit-based industry (Parker & Nagarajan, 2000).

One school of thought however, contends that much as credit is important for reconstructing livelihoods, microfinance should not focus only on credit. This school of thought surmises that microfinance institutions need to design and offer a whole range of services; especially savings and insurance, in addition to loans that help build long term productive assets through micro-leasing, housing finance and other innovative products that are designed to meet the real needs of clients. New tailored products may be needed to better serve in the changed environment.

Nevertheless, a second school of thought categorically argues that MFIs should not initially aim at proving loans for housing purposes. In spite of these opposing schools of thought, it is will more prudent; if an MFI serving disaster victims offer financial products which actually address the financial needs of the clients of which the clients can afford to access.

# Ability to Coordinate Services with other Relief Organizations

In the opinion of Nagarajan (1998), any microfinance activities during the relief stage requires coordination with other relief organisations to ensure quick and accurate flow of information and services from all players. Coordination also helps to prevent the duplication of each other's efforts and in a way helps to channel relief to areas where such relief is needed most.

# Loan Terms and Conditions

According to Brown and Nagarajan (2000), preliminary evidence from Bangladesh and Poland indicated that for disaster loans, the interest rate charged did not appear to have a significant impact on the ability or willingness of households to repay. Evidence obtained from Palli Karma-Sahayak Foundation's partner MFIs suggests near 100 percent repayment on interest-free disaster loans, while at the same time MFIs charging near market rates also report 100 percent repayment. This implies that an MFI serving disaster victims can afford to change near market rates as a way of ensuring some form of financial and operational sustainability.

However, Miamidian et al., (2005), contended that since most people might have lost most or all their business stock, the MFI may have to decide to reschedule the loans of affected old clients. New clients may also have very limited resources to repay loans promptly and in such case, the MFI must be prudent to adopt flexible loan terms and conditions to suit the clients' peculiar situation.

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# Problem Statement

The urgency with which the call was made to help salvage Sri Lanka from imminent social and economic disasters especially in the aftermath of the catastrophic tsunami attracted global heart-warming responses. These responses came in the form of financial and other resources pledged for reconstruction of social infrastructure such as rebuilding of homes, hospitals, schools and the livelihoods of the victims. Much as this social reconstruction was deemed important, it was equally important that economic and financial reconstruction be taken into consideration as a means of reviving local productive capacities in order to nib unforeseen dependency syndrome in the bud. However, due to the discriminatory tendencies of most financial intermediaries particularly formal ones, the expectation of the provision of the much needed financial services to meet the peculiar needs of the victims of this disaster might not be met. To this end, microfinance programmes were deemed critical in providing the much needed financial services needed to rejuvenate the local productive capacities to gradually replace the external social assistance particularly grant, which in itself is not sustainable and also has the inherent tendency to destroy the fragile financial systems.

In the past that microfinance institutions (MFIs) heeded the call to help people with financial services, particularly in post-disaster and post-conflict situations in countries like Uganda, Bosnia-Herzegovina, Liberia, Sierra Leone, India etc., many successes have been chalked in this direction. This is especially true in the case of Bangladesh, a country of recurring disasters caused by disastrous floods where Khandker (1998) reported that moderate poverty fell by around 15% and ultra-poverty by 25% for households who were members of BRAC (a Bangladeshi microfinance institution) for up to 3 years controlling for other factors. From the foregoing, it can be inferred that microfinance can be relied on for reconstruction of livelihoods which hitherto had to depend on social intermediation.

Nonetheless, microfinance activities geared towards reconstruction of livelihoods after a disaster can equally experience dropouts like any other microfinance programme if the financial products offered and factors going into their design do not meet the clients' expectation. This, therefore, according to Meyer (2002) calls for the need to redesign microfinance products to meet clients' demands.

The purpose of this study is to identify the financial products of the study population's choice, determine the reasons that account for the choice of such products and identify and rank the factors that financial product design should take into consideration to make the products attractive and to suit the peculiar needs and demands of the study population.

# Methodology

# Study Area

Sri Lanka is an island of size 62,705 square kilometres. It is located on the south-eastern shores of India about 880 kilometres north of the equator. According to the 2001 census, Sri Lanka has a population of 19.4 million with an average population growth rate of about 1.14% from the period 1984-2001.

The growth rate is below that of most countries in the south Asia region. This relatively low growth rate is mainly contributed to a combination of the high ageing population and the slight improvement in the living conditions of the people that have reduced the fertility rates (Sri Lanka Census, 2001).

Before the tsunami which brought some form of economic setback, Sri-Lanka has been able to achieve a high rate of economic growth after the liberalization policies introduced in 1977. In 2004, the GDP of Sri Lanka grew by 5.4 percent, however, this was somewhat lower than the 6 per cent recorded in 2003 (Central Bank of Sri Lanka, 2004). The financial services account for more about 9.3% of GDP and Sri Lanka is South Asia's most open economy with relatively well developed capital markets (GTZ, 2002).

Generally, Sri Lanka is ahead of most countries with similar economic development standing. Literacy level is about 92.1% and access to basic health care and education are all well above South Asia's averages (GTZ, 2002).

The average annual unemployment rate was around 20 percent (at the time of the study in 2005) with greater percentage of the unemployed being the youth and women. Basically, the economy thrives on the informal and traditional sectors where the majority of the people are employed. The labour force is growing at an annual rate of about 2% whilst the population growth rate is about 1.2% (Peoples' Bank, 2001). Despite all her efforts, the government of Sri Lanka has not been able to provide long-term and sustainable employment and income opportunities for the growing rural labour force (Peoples' Bank, 2001). It is estimated that between 25 and 34 percent of the population live in conditions of poverty, predominantly with rural areas often without access to basic services (GTZ, 2002).

In Sri Lanka, the study was confined to Mawella in the Hambantota District of the Southern Region. Mawella is one of the coastal villages and towns severely affected by the tsunami. The village of Mawella is about 189 kms from the capital city of Sri Lanka, Colombo and 11kms from the nearest town with communication facilities. The village has well developed transportation network with other towns and villages in the districts as well as the country as a whole.

# Sampling Techniques

The sample for the study took into consideration the reconstruction assistance of the Italian NGO Cordinamento di Iniziative Popolari di Soliderieta Internazionale (CIPSI) channelled through the People's Rural Development Association (PRDA). The activities of PRDA were basically aimed at the reconstruction phase of the study area after the tsunami and these activities involved eight main (8) categories of people. These categories of people were as follows: (1) elderly people (above 60 years), (2) women, (3) Businessme (4) Youth (18 to 25 years (5) Boat owners (6) Fish vendors (7) Fishermen (8) Disabled

Purposive sampling technique was employed to select three (3) categories out of the eight main (8) categories of people. The three categories selected were: a. Fishermen b. Businessmen and c. Boat owners.

The rationale behind this selection was that these three categories were observed to form the nucleus of the economic activities in the study village. Within these three categories of people, a snowball sampling technique was employed to select 60 participants for the study. That is, each of the three categories selected - fisherman, business and boat owners produced 20 individuals for the study.

# Analytical Framework

The items for the pairwise ranking and the information relating to the definition of the items were generated by the interaction between the participants of the study and the researcher. This interaction was necessary as it helped both parties, that is, the participants and the researcher developed appropriate image of each other especially of the participants by the researcher. In this way, the participants were made to feel not as passive members of the study but as an active group with vast store of knowledge (indigenous knowledge). Boone (1985) deemed such level of interaction as important especially in participatory research and therefore, defined it as the reciprocal contact or response between individuals or groups. This interaction between the participants and the researcher served as the platform for information exchange between them.

The researcher and the participants of the study set the "hallmarks" (that is, items forming the bases of the pairwise ranking) to underline the financial products that may be demanded by the participants for the reconstruction of their livelihoods. The table below shows these items which formed the bases of the pairwise ranking. These items are duly defined based on the understanding of the participants of the pairwise ranking exercise.

# Pairwise Ranking and its Role in Financial Decision-Making

Making clients of financial institutions, vis-a-vis, financial transactions gain optimum access to information in order to make informed decision is obviously a major goal of any financial institution. Information accessibility functions to help the clients form opinions and make decisions about what financial transactions to engage in. This information may come from professionals possessing the requisite knowledge and skills necessary to help the clients in their financial transactions. One of the identified ways of guiding clients with the requisite information in order for them to take informed financial decisions is the use of pairwise ranking.

Pairwise ranking is a structured method for making, analysing and ranking a list of items – problems, issues, opinions, ideas etc. in the order of priority (Gay et al., 2016). It can be quite a powerful means of representing complex information in a way that makes it clear to all stakeholders. Consideration of the underlying factors in financial decision-making indicates that pairwise ranking makes it possible to be systematic about which financial needs particularly of a group of people (disaster victims) should be promptly addressed and which ones can be addressed later (Harder, 2019). Implicit in this intellection is the understanding that the main goal of pairwise ranking is to help make decisions in a consensus manner based on different people's priorities.

Concepts	Definition of Concepts from Participants' Perspectives	Reference
Proximity of the service provider to the clients	This refers to how far or near the service provider is to the client. This is expected to be positively desired as short distances, it is assumed would cut down transaction costs.	Akaah et al., 1987; Wright, 1999
Transaction costs	This is determined by how much it will cost the clients to access the services of the service provider in terms of transportation cost, service charges, interest rates and inconveniences if the premises or the office of the service provider is not within a walking distance. It is hypothesized that potential clients of MFIs particularly low-income ones are highly sensitive to the transaction costs especially when the distance involved in making small financial transaction is taken into consideration.	Wenner & Proenza, 2003
Flexibility and speed with which services are provided	This refers to how fast the service provider is able to fulfil the financial requirements of clients	
Simplicity of transactions	This refers to the ease with which the clients can access financial services from the service provider in terms of language used in filling transactions and the level or extent of the use of technical financial terms or jargons	Wright, 1999; Robinson, 2001
Customer-friendly approach to clients	This is determined by the caring nature and environment of providing financial services to clients. This is necessary because of the westernised perception of formal institutions by rural folks and therefore the tendency that rural clients would be looked down upon by the staff of the financial institutions	Wright, 1999; Robinson, 2001
Wide range of products or services	This refers to the number of financial products that the service provider can offer to the clients	
Safety (safety of savings, if savings products are offered by the MFI concerned)	This is determined by how secure the savings of the clients are	Klaehn et al., 2002
Collateral (guarantee) substitution	This is determined by the use of different undertaking other than the client's property in order to secure a loan from the service provider This has largely been attributed to requirements for collateral of which most rural households find it difficult to provide.	Bendig <i>et al.</i> , 2009

Table 1: Pairwise Ranking Instru	uments
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Source: Field Survey – (Author)

As a prerequisite to the use of pairwise ranking, it is important that the clients' characteristics such as knowledge, attitudes, skills and more importantly socio-economic systems are taken into consideration when any sort of relationship is to be built between the financial institution and the clients. Once these characteristics of the clients are solicited and subsequently made use of, a unique interaction or relationship is developed which makes use of the combined resources (clients' actual financial demand) and knowledge (professionals' expertise) in order to execute financial transactions in a more fruitful way. However, this would involve internal willingness of the financial organisation (MFI) to relate with the clients to gain a fair insight into the financial demands of the clients and subsequently seek these demands in a more acceptable way.

In using the pairwise ranking, MFIs should avoid ambiguity but relate well with the clients to identify their need for financial products during and after disasters. According to Van den Ban and Hawkins (1988), technical terms must be explained in short and simple sentences using common words, which have concrete meanings. To this end, they therefore suggested that abstract language and 'jargons' should be avoided when dealing with the clients so that they can take informed decisions based on the information passed on to them by financial institution, during the use of the pairwise ranking exercise.

# **Results and Discussion**

# Gender Status of Participants

All the participants of the study were males. This is because the participants were purposively selected. The main rationale behind this was that those purposively sampled were observed to form the nucleus of the economic activities in the study area.

# **Educational Status of Respondents**

Education has been described as the process of acquiring knowledge, values, skills and attitudes in order to enable an individual develop his/her capacities for general wellbeing. It is regarded as one of the important determinants of financial decision-making as it equips one with the required knowledge in the discretional use of one's financial resources (Donkoh et al., 2013).

The highest educational level attained for all the participants was the basic Standard 6, which implied an average of 7 years of schooling including kindergarten. The understanding of finance transactions is often an important prerequisite for clients of any financial institution, be it formal or informal to take appropriate decisions about financial product(s). This understanding in most cases can be enhanced when some basic level of education is obtained. It is therefore assumed that with this level of education, the participants were in a better position to take appropriate financial decisions with minimum assistance.

# Household Responsibility of Participants

Household size has relevant implications for household purchasing and spending behaviour (Jerome & Perreault, 1991), vis-a-vis, financial decision-making.

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All things being equal, it is assumed that households with large family sizes spend more on goods and services than households with small family sizes. Larger family size is therefore found to be associated with greater budget shares devoted to housing and education and this may have the tendency to deprive such households enough resources to save and this in most cases results in cyclical poverty (Arthur, 2005).

From the above discussion, it can be surmised that household responsibility plays a crucial role in determining the demand for any financial product. A large family size which invariably means a relatively larger expenditure may with caution go in for a financial product whose outcome will not adversely affect their household expenditure. The average family size of the participants is 4 which it is assumed to be relatively small so that the idea of being cautious in financial transactions may not necessarily apply.

## Types of Financial Products Requested by Participants

The array of financial products requested by the participants is listed as below: Consumer loans, Savings, Emergency loans, Housing improvement loans, Small enterprise and business loans, Fishery loans (this type of loan covers the purchase of boats, fishing gears like nets and outboard motors; and maintenance of existing fishing gears), Hire purchase and micro leasing, Micro insurance

Consumer loans: it covers the purchase of personal effects like television sets, fans, fridges, furniture, beds etc. According to the participants, this type of loan is important to them because many times when the need arises to purchase such personal effects like TV sets and gas stoves one has no option but to save towards such items. Saving towards the purchase of the item takes quite some time during which period the selling price would have gone up and sometimes one has to use part of his capital in the purchase of personal effects, a practice which does not augur well for smooth running of their business.

Thus, if a microcredit scheme is capable of helping them purchase the aforementioned items at a reasonable interest rate, it will be in their interest. They also declared that in the cases of extreme financial distress such items can be used as some form of collateral to secure short term loans.

Savings: All of the participants declared their intention to save especially towards 'rainy days' like ill-health, tsunamis etc. According to some of them, they had ever operated some form of savings accounts with banks in the nearest town called Tangalle which is about 11km from the study village. However, they had to close their accounts because of the tsunami. In their opinion, savings is good a financial product as it may help them cope up with emergency situations on their own with limited external support.

Emergency loans: It takes care of such crisis situations like sicknesses, tsunamis etc. This type of financial product in their view is important to them as to help them take care of unforeseen negative events in the future which may be beyond their financial capability to handle.

Housing improvement loans: Many of the residents of Mawella (the study village) who were affected by the tsunami received grants in the form of constructed houses and fishing gear and equipment from the government and many NGOs.

Prominent among these NGOs was PRDA which acted as a conduit for funds for houses from CIPSI, the Italian Cooperation and the Regione Lombardia of Italy.

However, the participants of the study argued that housing improvement loan will be an important financial product to supplement the housing grants of the donors and the government. Moreover, they claimed that housing improvement loan will enable them to increase the number of rooms or add to the structural development of the houses being built for them in order to suit individual taste or requirement.

Small enterprise and business loans: Opportunities to generate rural income according to Gonzalez-Vega (2003) depend to a large extent on the degree of accessibility to productive assets. These productive assets invariably include small credit or loans. It was therefore not surprising that the participants of the study emphasised the need to access small loans to enlarge the productive capacity of their small enterprises and businesses.

Fishery loans: The participants reasoned that since about 97% of the village folks are fishing, this type of financial products will go a long way to improve upon the industry and enhance their income generation.

Most fishermen and boat owners who had their crafts, nets and other fishing equipment destroyed by the tsunami, had most of these equipment replaced through grants provided through collaboration between CIPSI and PRDA.

Micro insurance: In the view of the participants, some form of micro insurance should be part of any microcredit scheme to help reduce contingencies such as boat damage and loss of productive capacity due to ill health and accidents.

Hire purchase and micro leasing: According to the participants, hire purchasing of consumer durables such as television sets and other electronic equipment, cars and motor cycles many of which were destroyed by tsunami will be a welcome respite to them. In their opinion, micro leasing of fishing gears will go a long way to overcome some of their financial predicaments.

The array of financial products requested by the participants and the underlining reasons for their choice of these products tend to confirm the hypothesis that disaster victims tend to utilise microfinance services to manage and cope with income losses and to restart economic activities during the reconstruction phase after a disaster.

# Item-by-item Analysis of Pairwise Ranking

The diagram below shows the results of the pairwise ranking exercise of the various factors identified by the participants, which to them are necessary to make the financial products attractive to them. It is worth mentioning that the pairwise ranking exercise was done in August, 2005, that is, eight months after the tsunami. It coincided with the reconstruction phase after the tsunami.

# Proximity to the Service Provider

70.0% (42 of the participants) indicated that proximity to the service provider is the more important to them than transaction cost. On the contrary, 18 (30.0%) of them ranked transaction cost as more important as seen in Table 3.

Items	Proximity	Transaction cost	Flexibility and speed	Simplicity	Customer Friendly approach	Range of products	Safety of savings	Collateral
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		1 = 42	1 = 38	1 = 43	1 = 41	1 = 15	1 = 03	1 = 15
1		2 = 18	3 = 22	4 = 17	5 = 17	6 = 45	7 = 57	8 = 45
2			2 = 40	2 = 18	2 = 22	2 = 18	2 = 11	2 = 13
4			3 = 20	4 = 42	5 = 38	6 = 42	7 = 49	8 = 47
3				3 = 29	3 = 38	3 = 14	3 = 04	3 = 10
5				4 = 31	5 = 22	6 = 46	7 = 56	8 = 50
4					4 = 46	4 = 05	4 = 03	4 = 02
					5 = 14	6 = 55	7 = 57	8 = 58
5						5 = 10	5 = 05	5 = 10
						6 = 50	7 = 55	8 = 50
6							6 = 29	6 = 15
0							7 = 31	8 = 45
7								7 = 28
1								8 = 32
8								

#### Table 2: Pairwise Ranking

Source: Author's Construct

#### Table 3: Proximity versus Transaction Cost

Item	Frequency	Percentage (%)
Proximity	42	70
Transaction cost	18	30
Total	60	100

Source: Field Survey – (Author)

As to why proximity to the service provider was ranked above transaction cost, the participants contended that their community is basically a fishing one which implies paying much attention to their activities as fish is a highly perishable commodity. Thus, undue long absence from their fishing business to engage in bank transaction in faraway places means a possible deterioration of their catch.

Moreover, Wenner and Proenza (2003) surmised that low-income individuals tend to be more sensitive to transaction cost than higher income individuals. Since the average per capita earnings of the village was above the national average of 7119 rupees<sup>1</sup>, it can be inferred that the average person was above the low-income bracket.

 $<sup>^{1}</sup>$  On the average, the exchange rate of the rupee to the dollar was 1 dollar = 130 rupees (2005)

This apparent well-being according to Lovendahl (1997) was brought about by the liberalisation of the economy in 1977 which brought in its wake a host of new social and economic opportunities, literally throwing open the doors for upward mobility in the rural sector of Sri Lanka. The houses inhabited by the rural folks according to Lovendahl are a reflection of their recently acquired wealth. From the foregoing, it can be assumed that the participants will be more particular about proximity than transaction cost.

Not only that but also the participants argued that high transaction cost has been a common thing in the banking system of Sri Lanka (evidenced from Table 4) and that they cannot in any way effect a change. Therefore, they prefer the status quo and effect a change with reference to the proximity in order to suit their fishing activities.

Item	India	Pakistan	Bangladesh	Sri Lanka
1. Interest Income	7.3	4.6	6.4	8.5
2. Interest Expense	4.4	1.6	4.5	4.4
3. Interest Margin (1-2)	2.9	3.0	1.9	4.1
4. Non-Interest Income	2.0	2.1	1.6	2.7
5.Non Interest Expense	2.2	2.5	1.8	4.2
5.1 Staff cost	1.3	1.3	n.a.	1.9
5.2 Others	0.9	1.2	n.a.	2.3

Table 4: Interest Margin in Selected South Asian Countries

Source: Central Bank of Sri Lanka, 2004 Annual Report

From the above table both the interest spread and interest margin showed that financial intermediation cost was higher in Sri Lanka than in the neighbouring South Asian countries most due to high operational costs which invariably reflected on the transaction cost. Similar trends of proximity being ranked others items are observed in Table 5.

Table 5: Proximity versus Flexibility and Speed, Simplicity and Customer-Friendly Approach

Proximity v Flexibility	versus and Speed	1	Proximity Versus Simplicity			Proxin Custon Ap	nity versu ner-Frienc proach	s lly
Item	Freq.	%	Item	Freq.	%	Item	Freq.	%
Proximity	38	63	Proximity	17	28	Proximity	41	68
Flexibility	22	37	Simplicity	43	72	People	19	32
and Speed						Centred		
Total	60	100	Total	60	100	Total	60	100

Source: Field Survey – (Author)

In all instances, proximity was ranked above flexibility and speed, simplicity and customer-friendly approach, which reflects the participants' desire for geographical convenience in their financial transactions as shorter geographical distance to the financial institution or the premises of the financial intermediary is deemed vital in cutting down transaction costs (Akaah et al., 1987; Wright, 1999).

# Proximity versus Range of Products

A wider range of alternative sources of financial products are always deemed better and more preferred than a complete concentration of a household's portfolio in a single product. In this way, a prudential means of increasing financial benefits in terms of returns and liquidity from increased financial transactions and also helping to spread financial risks may be achieved. It was therefore not surprising when the participants ranked range of products above as seen Table 6.

Item	Frequency	Percentage (%)
Proximity	0	0
Range of products	60	100
Total	60	100

## Table 6: Proximity versus Range of Products

Source: Field Survey – (Author)

In their view, they did not only need loan facilities but also, they needed to save towards a 'rainy day' as well as having some form of hire purchase and micro leasing and micro insurance schemes organised for them.

On the service provider's end of the spectrum, Gonzalez-Vega (2003) surmised that rural financial deepening fundamentally depends on innovations and a wider range of financial products possible to reach broader clienteles at a reasonable cost to the service provider, vis-a-vis, to the clients. In this sense, both the service provider and the clients may enjoy some form of economies of scale which eventually leads to cost reduction.

# Proximity versus Safety of Savings

With the destruction caused by the tsunami still fresh in their memory, the participants overwhelmingly ranked safety of their savings above proximity to the service provider as seen in Table 7.

Item	Frequency	Percentage (%)
Proximity	3	5
Safety	57	95
Total	60	100

# Table 7: Proximity versus Safety of Savings

Source: Field Survey – (Author)

The overwhelming ranking of safety of savings was underlined by the concerns raised by the participants to the effect that the total damage caused to property alone by the tsunami in Sri Lanka was estimated to be around one billion U.S dollars (about 4.9 per cent of their GDP) and the reconstruction which was likely to spread over a period of about 3 years, was estimated to cost around 1.8 billion U.S dollars (8 per cent of the GDP) (Central Bank of Sri Lanka, 2004).

# Proximity versus Collateral

A financial contract according to Wenner and Proenza (2003) is an intertemporal promissory claim with uncertain fulfilment between two parties – lender and borrower. Due to the uncertainty underlying the fulfilment of the contract on the part of the borrower, and the need to ensure enforcement of repayment, physical commodities, whether produced or stored or yet to be grown (extracted) or buildings and other property of the borrower as well as titles thereto, had to be pledged as security or source of repayment of repayment in order to obtain loan or commercial financing (Wenner & Proenza, 2003). This pledging of the borrower's property or assets as security in order to obtain loan or commercial financing is generally known as collateral.

In Sri Lanka, the participants concluded that many people have their buildings and other valuable property deeply embedded in collateral which made the future quite uncertain for them in terms of default and subsequent loss of property. In order to avoid similar fate befalling them, the participants decided to rank collateral substitution above proximity. Moreover, the use of collateral substitution had become necessary due to the destruction of landed property as a result of the tsunami making it difficult for most households to provide tangible collateral (Bendig, et al, 2009).

When asked to give collateral substitutes which may be suitable to qualify as security for financial transactions, they listed the following: Good references from neighbours, Permanent residence in the village, Borrowers must have at least one year of experience in their line of businesses, Credit history which can be obtained from other lenders

# **Transaction Costs**

The participants ranked transaction cost above flexibility and speed as seen in Table 8.

Item	Frequency	Percentage (%)
Transaction cost	40	67
Flexibility and Speed	20	33
Total	60	100

## Table 8: Transaction Cost versus Flexibility and Speed

Source: Field Survey – (Author)

In their view, though they could hardly do anything to change the status quo with reference to transaction cost as they had no control over it, they still deemed it important as a sign of some form of protest that any future financial service provider will take the necessary steps to ensure an appreciable change in the transaction cost.

In contrast to transaction cost being ranked above flexibility and speed, all other items were ranked above transaction cost as in Table 9.

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# Flexibility and Speed

From Table 10, flexibility and speed was ranked above simplicity.

,	0			
	Item	Transaction Cost	Simplicity	Total
Trans. cost vs.	Frequency	18	42	60
Simplicity	%	30	70	100
<b>T</b>	Item	Transaction Cost	Custfrien app.	Total
I rans. cost vs.	Frequency	22	38	60
Customer-irrenally app	%	37	63	100
	Item	Transaction Cost	Range of prods.	Total
I rans. cost vs. Kange	Frequency	18	42	60
of prous.	%	30	70	100
	Item	Transaction Cost	Safety	Total
Trans. cost vs. Safety	Frequency	11	49	60
	%	18	82	100
<b>7</b> .	Item	Transaction Cost	Coll.	Total
I rans. cost vs.	Frequency	13	47	60
Conateral	%	22	78	100

Table	9:	Transaction	Cost	Versus	<b>Customer-Friendly</b>	Approach;	Range	of
Produc	cts;	Safety of Savi	ngs ar	nd Colla	teral			

Source: Field Survey – (Author)

Item	Frequency	Percentage (%)
Flexibility and Speed	29	48
Simplicity	31	52
Total	60	100

## Table 10: Flexibility and Speed versus Simplicity

Source: Field Survey – (Author)

Though the participants acknowledged the importance of flexibility and speed on the part of the service provider in financial transactions, they however, asserted that simplicity in terms of easy-to-understand in relation to language usage and/or technical terms was more important to them. Simplicity in financial transactions, in their opinion helped them to understand the financial transaction which in turn enabled them to make the right decisions in terms of what financial products to accept and what not to accept.

In ranking all other items above flexibility and speed apart from customer-friendly approach over which flexibility and speed were ranked as most important, the hypothesis that for reconstruction purposes, disaster victims tend to expect quick and flexible services from MFI was nullified. Similarly, range of products, safety of savings and collateral substitution were all ranked above flexibility and speed as seen in Table 11.

However, the trend of flexibility and speed being ranked below other items was not seen in the ranking of flexibility and speed with customer-friendly approach. In this ranking, flexibility and speed were ranked above customer-friendly approach as seen in Table 12.

Flexibility And Speed Vs. Range Of Products			Flexibility And Speed Vs. Safety			Flexibility And Speed Vs. Collateral		
Item	Freq	%	Item	Freq	%	Item	Freq	%
Flexibility and Speed	14	23	Flexibility and Speed	4	7	Flexibility and Speed	10	17
Range of products	46	77	Safety	56	93	Collateral	50	83
Total	60	100	Total	60	100	Total	60	100
Source Field Surve	ov _ (Autho	nr)						

# Table 11: Flexibility and Speed Versus Range of Products; Safety and Collateral

Source: Field Survey – (Author)

Table 12: Flexibil	ity and Speed	l Versus Cus	stomer-Friendly	Approach

Item	Frequency	Percentage (%)
Flexibility and Speed	38	63
Customer-friendly approach	22	37
Total	60	100

Source: Field Survey – (Author)

Lovendahl (1997) observed that the liberalisation of the economy of Sri Lanka significantly increased the pace and intensity of the assimilation of the rural poor to the middle class and it can therefore be inferred that the participants may see their middle class status as a tool to be accorded the needed assistance and respect from the staff of financial institutions. Moreover, middle class status put them in the same if not sometimes better economic or income bracket than most of the staff of financial institutions, thus, the necessary recognition and respect backed with customer care and assistance were almost always automatically accorded the participants. Hence, the ranking of flexibility and speed above customer-friendly approach.

### Simplicity

The participants ranked simplicity above customer-friendly approach as seen in Table 13.

Item	Frequency	Percentage (%)
Simplicity	46	77
Customer-friendly approach	14	23
Total	60	100

Table 13: Simplicity versus Customer-Friendly Approach

Source: Field Survey – (Author)

In ranking simplicity above customer-friendly approach, the participants re-echoed their demand for simple processes relating to financial transactions. They surmised that simplicity should be underlined by easy-to-understand financial terms and the continual usage of their local language in financial transactions (Wright, 1999; Robinson, 2001). On the contrary, range of products, safety of savings and collateral substitution were all ranked above simplicity as indicated in Table 14.

Simplicity Vs. Range Of Products			Simplicity Vs. Safety of Savings			Simplicity Vs. Collateral Substi.		
Item	Freq	%	Item	Freq	%	Item	Freq	%
Simplicity	15	25	Simplicity	3	5	Simplicity	2	3
Range of products	45	75	Safety of savings	57	95	Collateral Substitution	58	97
Total	60	100	Total	60	100	Total	60	100

Table 14: Simplicity versus Range of Products; Safety of Savings and Collateral Substitution

Source: Field Survey – (Author)

By ranking range of products above simplicity, the participants emphasized that a wider range of financial products offered by the financial institutions, helps to broaden their choice variables of the financial products, thereby, accessing those which better meet their financial needs. Their ranking of safety of savings above simplicity re-affirmed the eroding of their pre-tsunami psyche of 'non-playing safe'. In ranking collateral substitution above simplicity, the participants reiterated their earlier submission of not wanting their property to be held in ransom through unfavorable financial transactions.

## Range of Products

One can with all certainty accept the assertion of Lovendahl (1997) that the newly emerging rural middle class of Sri Lanka is not bound by conservatism and the idea of 'playing safe' as evidenced by the ranking of the range of products above the remaining items – transaction cost, flexibility and speed, simplicity and customer-friendly approach. These rankings may reflect the participants' innate entrepreneurship and their willingness to take risk in the financial landscape in terms of their preference of new and hitherto untried financial products.

However, the devastation caused by the tsunami might had introduced some element of 'playing safe' into the psychic of the participants as seen in Table 15 in which the participants ranked safety of savings above range of products.

Item	Frequency	Percentage (%)		
Range of products	29	48		
Safety of savings	31	52		
Total	60	100		

Table 15:	Range	of Products	Versus	Safety	of Savin	gs
				~		0

Source: Field Survey – (Author)

Not only that but also, the issue of people having their houses and other property deeply steeped in collateral-based financial transactions might have equally introduced some form of 'playing safe' in the financial dealings of the participants. This is evidenced in Table 16.

Item	Frequency	Percentage (%)
Range of Products	15	25
Collateral Substitution	45	75
Total	60	100

Table 16: Range of Products versus Collateral Substitution

Source: Field Survey – (Author)

Nonetheless, range of products was ranked above all other items apart from safety of savings and collateral substitution indicating that the hypothesis that disaster victims may expect a wide range of financial products from an MFI at the reconstruction phase after a disaster is justified.

## Safety of Savings

The creation of a financial system within an enabling economy to ensure the safety of the financial resources of the clients is always a welcoming respite especially to rural folks. This helps the clients to survive into the future of uncertain economic conditions with the assurance that enough savings can be accumulated to cushion them against unforeseen economic hardships and that those savings are secure (Klaehn et al., 2002). It therefore goes without saying that with this in mind the participants of the pairwise ranking in all instances ranked safety of their savings above all other items except collateral substitution.

Item	Frequency	Percentage (%)
Safety of savings	28	47
Collateral substitution	32	53
Total	60	100

Table 17: Safety of Savings versus Collateral Substitution

Source: Field Survey – (Author)

In ranking collateral substitution above safety of savings as seen in Table 17, the participants argued that though safety of their savings was of prime importance to them, it was always better for them to protect their already gotten assets from unhealthy financial transactions.

Table 18 gives a summary of the results of the pairwise ranking, indicating the total scored by each item as well as their individual ranks.

Items	Prox	Trans Cost	Flex. & Speed	Simp	Cust-frien. <sup>0</sup> app.	Range of Prods.	Safety of Savings	Collateral Substi.	Total	Rank
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1		(1)	(1)	(1)	(1)	(6)	(7)	(8)	4	4 <sup>TH</sup>
2			(2)	(4)	(5)	(6)	(7)	(8)	1	$6^{\mathrm{TH}}$
3				(4)	(3)	(6)	(7)	(8)	1	$6^{\mathrm{TH}}$
4					(4)	(6)	(7)	(8)	3	$5^{\text{TH}}$
5						(6)	(7)	(8)	1	$6^{\text{TH}}$
6							(7)	(8)	5	3 <sup>RD</sup>
7								(8)	6	$2^{ND}$
8									7	1 <sup>ST</sup>

#### Table 18: Summary of Pairwise Ranking<sup>2</sup>

Source: Field Survey – (Author)

# **Conclusion and Policy Implications**

The aim of the study was to determine factors to be considered when packaging or designing financial products to clients, particularly to those who have just emerged from disaster situations. One of the important characteristics of the study is the determination of the financial products of the participants' choice by the participants themselves and the subsequent generation of the factors which should underline these financial products in order to make them attractive to the financial needs of the participants. This in the opinion of the participants will help develop appropriate financial system to suit their socio-economic values since their knowledge systems are also harnessed. In this regard, it is recommended that clients' rich sources of information are tapped particularly in reference to what they expect from financial service providers, by involving them in the design of financial products, since they are the ultimate target of the financial system.

There is also the need to determine bottlenecks limiting efforts of financial service providers to collaborate with clients to determine what clients really want and work towards eliminating such bottlenecks.

 $<sup>^2</sup>$  Total: this indicates the number of times an item was ranked above other items. For example, safety of savings was ranked 6 times above other items. Thus, it has a total of 6. Likewise, simplicity was 3 times above other items; therefore, it has a total of 3.

Rank: this indicates the position of an item as a result of the number of times that particular item was ranked above others.

Numbers (1), (2), (3) etc. under the column Items, correspond to the items used for the pairwise ranking. Thus, (1) corresponds to proximity to the service provider, (2) corresponds to transaction cost etc.

Numbers 1, 2, 3, 4 etc. in the cells indicate which item was ranked above another. Thus, (1) under (1) and (2) indicates that item (1) was ranked above (2).

To this end, inherent bottlenecks characteristic of financial service providers and the clients in relation to achieving collaborative goals must be identified and analysed. Efforts then must be channelled to limiting these bottlenecks. Moreover, there is the need for more collaboration between financial service providers and their clients as a means of helping make services offered by such service providers more attractive and accessible to their clients as well as improving upon the quality of such services. Furthermore, it is recommended that conditions under which collaborations could achieve desired objectives be created. In other words, formal and informal contacts necessary to build up mutual trust as a precursor of collaboration must not be impeded by bureaucracy on the part of the financial service providers.

Not only that but also, much as it is suggested by the results of the study particularly in reference to collateral substitution being ranked as the most important item to the participants, it is equally important that Microfinance practitioners for the sake of both financial and operational sustainability be cautious and prudent in granting loans without physical or tangible collateral. This is because a loan secured with a collateral tends to be a better investment option for the lender (microfinance institution) as borrowers may not want to lose their pledged property. Thus, making the borrowers them less likely to default on the loan repayment.

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