



**Dimensions of  
Micro-Entrepreneurship  
Observed in the Women  
Entrepreneurs with SEWA  
Bank**

# Table of Contents

<b>Back Ground</b>	<b>2</b>
<b>SEWA and SEWA Bank</b>	<b>2</b>
<b>Objective</b>	<b>3</b>
Research Question	3
<b>Literature Review</b>	<b>4</b>
<b>Methodology</b>	<b>5</b>
<b>Theoretical Analytical Work</b>	<b>6</b>
Nurturing Finance	6
Key Factors Determining graduation of an enterprise	8
Determinants of Enterprise Graduation	9
<b>Secondary Data Aggregation</b>	<b>12</b>
Data Analysis	13
More with data	21
<b>Next Phase</b>	<b>22</b>
<b>Annexure</b>	<b>24</b>
Process of Sample Selection	24
2. Process of Digitizing loan application (pre-loan) forms	26

## Back Ground

By definition given by the Micro Small and Medium Enterprises Ministry of India, an enterprise which has a ceiling of investment of INR one crore on the plant and machinery is a Micro-Enterprise. A micro enterprise has common characteristics like lower requirements of capital and fewer employees. A large number of micro-enterprises in India aren't registered and thus keep themselves in the category of informal enterprises.

There are 63.34 million micro enterprises in India employing approximately 111 million people and contributes to around 29.7% of the country's GDP. Around 80% of India's employed population (88.2% at the time of writing) are employed through the informal economy. When looking at it from a gender perspective, 81% of the women in the employment force are employed through the informal economy (ILO, 2018). Of the 63.34 million micro enterprises, around 20% enterprises are owned by women. 24% of those employed in the MSMEs are women as compared to 76% employed are men. Being an informal enterprise, access to finance becomes more challenging. These enterprises get the required finance either with great difficulty or by paying a higher amount of interest. Informal micro-enterprises therefore are dependent on exploitative money lenders for small amounts of money charged at exorbitant rates of interest.

## SEWA and SEWA Bank

SEWA is the first registered trade union of its kind. The poor and self employed women workers came together and formed the trade union in 1972. These women earn their living through labour work or their own small business. They do not receive regular salaries, or other welfare benefits like a formally employed employee would receive. They are the unprotected labour force of our country. Soon after the SEWA Movement began in the 1970s, the self-employed women were facing various kinds of exploitation through the money lenders as they were the only source of money/capital which was required to carry out their business because the normal banks then didn't want to loan money to the hardly literate women because they considered these women as un-bankable and risky. These women then thought, "Why can't we build our own Bank!" and thus in 1974 with 4000 members contributing INR 10 each, SEWA Co-operative bank was formed and the bank started to finance the needs of the members. The loans were given for income-generating purposes in the beginning, and then eventually started giving loans for personal use like children's wedding, for buying a house, or to pay off an old debt. Today the bank serves around 5 lakhs members.

## Objective

The purpose of this study is two-fold. From a theoretical point of view, we aim to expand traditional conceptualisations of entrepreneurship as well as understand the role of the concept of nurturing finance in supporting enterprise graduation. Additionally, we hope to identify the socio-economic characteristics of entrepreneurs who are able to scale their businesses as well as determine the best practices to encourage and sustain future entrepreneurs.

## Research Question

We look at entrepreneurs and potential entrepreneurs within the SEWA Bank space to **identify the barriers to aspirational entrepreneurship and propose solutions to resolve them**. This will include all SEWA members who have taken a business loan, and identify their future goals and plans.

Along with studying the entrepreneurs we want to compare the trends of consumptive loans and productive loans taken by the women from the SEWA Bank to understand the question (if there is any) of whether women are taking more loans for consumption or for business purposes. Through this question we would get a clearer idea about the change (if there is any) in major reasons why women are applying for loans with the bank.

1. Who are the women who graduate from their enterprises and what distinguishes them from others who are unable to escalate beyond subsistence businesses?
  - a. Who are the successful women entrepreneurs?
  - b. What is the proxy for success?
2. What are the general consumptive and productive banking trends we see in the SEWA Bank?
  - a. What is the trend of the loans taken by the women for personal use purposes? (The purpose could include loan taken for hospital charges, wedding purpose, pay an old debt off, house renovation, and so on)
  - b. What is the trend of the loans taken by the women to start a business and the loans taken to expand their business? (The purpose includes buying raw materials, stock, machines and even as working capital.)
3. What is the value-added of literacy and training programs within the entrepreneurial space and what needs to be modified?
  - a. What are the training programmes the subjects have attended? Have they been beneficial for them? How?
4. How do we identify and train future entrepreneurs to increase the chances of enterprise graduation within the MSME space?

## Literature Review

SEWA Bank started as a bank giving loans to the self employed women to pay off their old debts with the loan sharks and exploitative money lenders and also incorporated the habit of saving some small amount as and when possible. SEWA Bank, along with giving loans, promoted the concept of savings in the members. The bank then concentrated on savings and as a result, currently there are more savers than borrowers with the bank. The bank from the beginning has been self sufficient and didn't require any donations for a long period of time. Various organisations did impact evaluation studies on the bank to understand the impact of SEWA Bank on its members, on their income, household income, enterprise income, savings habit. The normal banks didn't reach the poor for their savings program because the poor, if they have any at all, have a small amount of savings. This kept them away from the formal access to savings and earning an interest on their savings which could help them sustain economic shocks in their lifetimes. Various studies have shown how the low-income households usually do not have access to formal savings programs with the banks ([Duvendack 2010](#); [Berg 2010](#); [Quinones and Remenyi 2014](#)). A smaller family income has typically resulted in a higher frequency of loans taken in the past; this potentially increases the risk for nonpayment of loans. Family income, then, may have a direct impact on the way a potential entrepreneur interacts with the bank. The size of the loan obtained by an applicant to SEWA Bank can also indicate the potential success of the entrepreneur. A higher amount borrowed from the bank will result in a greater frequency of loans obtained for an applicant's business; in other words, they are more likely to borrow from the bank again for their enterprise. An applicant with a greater loan borrowed is most likely to be an entrepreneur.

Participation in a micro enterprise has increased the income of their households more than that of women who didn't participate in a micro enterprise. Getubig, Gibbons and Remenyi in their case studies concluded that most of the microfinance providers experience that the micro finance provides a boost to the women in their efforts to escape poverty ([Quinones and Remenyi 2014](#)). Microfinance is considered as a cure to poverty and helps in poverty alleviation. For example, the size of the loan obtained from the bank may correlate with the household income; the greater the loan, the greater the income generated for the family. Studies show that microfinance has helped people in escaping poverty. Sharif Mohd in his study on performance of microfinance institutions in India ([Mohd 2018](#)), has concluded that the role of microfinance institutions should not be ignored given the fact that their outreach has been increasing and are bringing access to credit to the poor people who were left out of the reach of the banks. Berg, 2010 shows that how the poor having a formal and secure place to save their money and earn interest even on their lowest amount of savings has a positive social and economic impact. If the poor have access to formal and secure places to save their

small amounts, these savings will help them sustain themselves during the times of economic shocks in their households.

Normal banks consider giving credit to the micro entrepreneurs risky due to various reasons and the fear of non-repayment of the loan given to them being the major factor. Studies have suggested factors like continuous monitoring and auditing, experience in business management, education levels, and household size impact the borrowers' loan repayment rates ([Saad and Duasa 2010](#); [Sternberg and Wennekers 2005](#); [Kevane and Wydick 2001](#)). Education level is believed to be a key indicator of a graduating business. The more educated an entrepreneur is, the more likely their business will graduate, so there may be less risk involved based on education levels. Yet a factor like household size may not bring the same confidence in a potential entrepreneur. A study by WOW has shown that household size may be negatively correlated with family income; a larger household size may result in overall smaller income earned for the household. This yields the question of how an entrepreneur's income is being used outside of their enterprise, and could potentially result in a greater risk for lower repayment rates.

The determinants of a successful micro-enterprises are access to formal credit, entrepreneurial skills, location and magnitude, the condition of human capital, commitment, and the kind of product and services they deal with ([Jasra et al. 2012](#); [Mayoux 1995](#); [de Mel et al. 2009](#); [Duvendack 2010](#); [Monahan et al. 2011](#)). The working paper by the Bank of Indonesia ([Rahmawati and Others 2015](#)) studied the micro enterprises in the country and explored the key success factors of micro enterprise graduation. Their results show that the key factors required for graduation of a micro enterprise are standard operating procedure, technical know-how of information technology, market, infrastructure, and other external supports. Other key factors include the vision of the entrepreneur, business skills and skilled human capital.

## Methodology

This study will be carried out in phases. Developing theoretical analytical work is the first step, where the base of various concepts is built. Data aggregation will be done in the next phase. The data aggregation will happen in sub-phases collating secondary data and collecting the required primary data. This study will use secondary data from the bank as well as collect primary data from the entrepreneurs through questionnaire(s), interviews and focus group discussions. From the secondary data we get from the bank, we will select our sample of existing micro-entrepreneurs to collect primary data.

# Theoretical Analytical Work

## 1. Nurturing Finance

Finance is usually defined within legal and business parameters as the management of money for business purposes. In the development perspective, finance becomes a driver for equitable development, empowerment, and sustainability, if harnessed appropriately. Within the world of women and development for instance, women's economic empowerment often hinges on access to finance, and specifically access that is cognizant of the challenges that women face. Discussions nowadays for instance revolve around reimagining credit assessment tools to account for women's lack of capital.

However, even within this expansive definition of finance, the consequences of finance are still limited to the individual. Women are given loans to empower them. Measures are undertaken to ensure that the loan goes entirely to the woman and only the woman. An increase in women's empowerment is proxied through an increase in her income solely. While some of these measures are necessary given the coercion women face to hand over assets and their limited (if any) financial independence, an individualistic approach to finance and its benefits limits our understanding of how finance can (and does!) transform communities and empower women simultaneously.

The relation between finance and community building, as nurtured by a woman protagonist, was observed by Ela Bhatt (SEWA) while working with women workers in the informal economy. Her observations lead her to coin the term "nurturing finance" - a process by which women use their financing options to "nurture" their communities. What SEWA has observed through its years of working within the informal economy is that the focus on women is in effect a focus on the community. This is in keeping with all the literature we have seen on how investing in a woman implies investment in her children, education, health care, and social welfare. However, what SEWA noted was that this applied to the entrepreneurial world that women workers occupied as well. Beyond their own entrepreneurial ventures, women take loans (at preferential interest rates due to policies aimed at encouraging women's entrepreneurship) to support family economic interests such as a *kirana* store that is owned by the husband but run in collaboration with the wife, or an auto rickshaw that her son will drive and contribute to the family expenses since he lives at home with his wife and children. While traditional narratives of finance and empowerment would argue that this is a woman losing her financial independence and a man exploiting the systems set in place to support and promote women, SEWA has observed more nuance to this story in their decades of learning alongside women workers. Women see it as investing in the community they belong to and exist within, and is therefore in no ways contrary to an act of exercising agency. To analytically isolate a woman from her community is a narrow and reductive approach and not one that is in keeping with a view of human society as being gregarious.

This approach to finance is very resonant with the approach the SEWA movement has taken to developing women's economic identity, empowerment, livelihood generation, and their critical role in the economy (informal and formal). This is reminiscent of the solidarity network that SEWA members are a part of, where that sense of association and being a collective is rooted in their communities and SEWA extends to their economic dimensions. SEWA supports, promotes and celebrates this nurturing collectivization across social entrepreneurship that SEWA members promote – both collective and individual – and is now in the process of identifying how to efficiently support women's entrepreneurial aspirations and needs, while being cognizant of the realities and challenges that do exist.

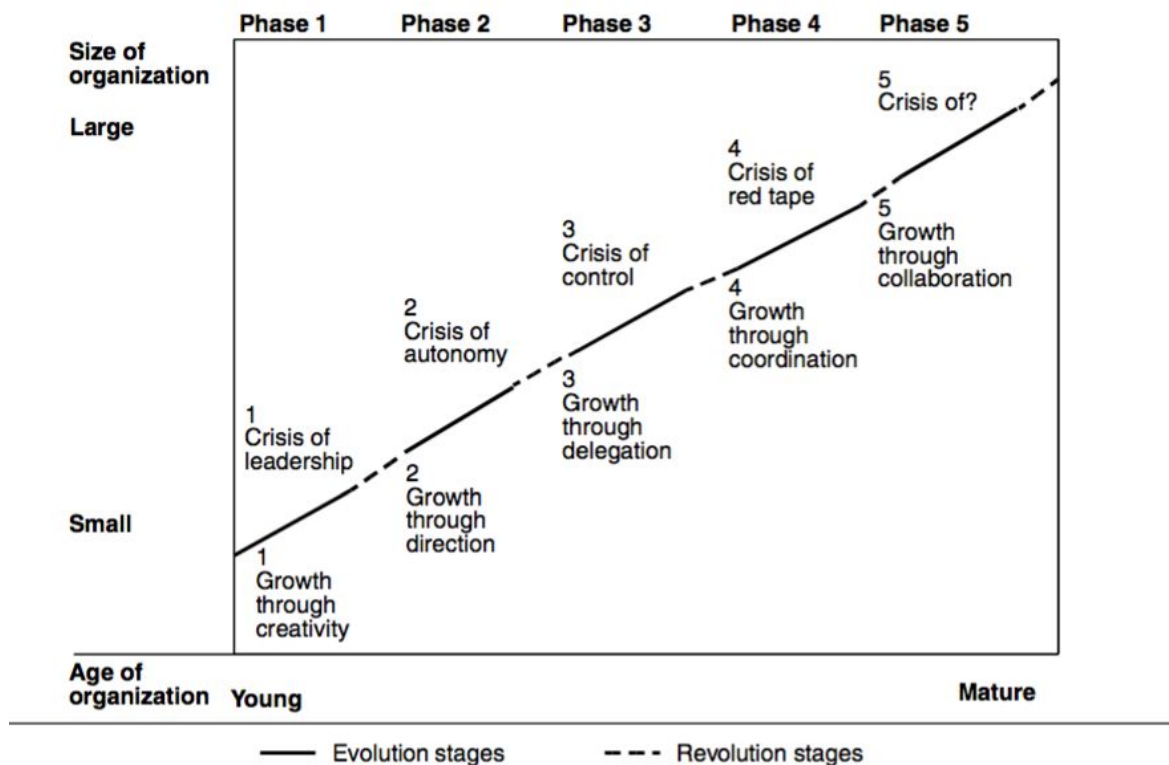
Within finance specifically, it means looking at ways in which we can assess credit and finance access, as well as repayment and refinancing options. One method that has been adopted for instance, to acknowledge women's lived realities and support their decisions on their terms, is not restricting the investment but ensuring that investment acknowledges the woman's central role in knitting the community together and bringing economic benefits to the community. So if a woman takes a loan to buy an auto for her husband to drive and earn, SEWA works to have the auto registered in her name. It allows women to build up their assets for when they must access finance outside the SEWA ecosystem that may not register this level of nuance, and publicly acknowledges the role women play in the familial unit to support the increase in family income and wealth (as defined by asset accumulation). Another means by which SEWA works to acknowledge the entrepreneurial lived realities of women and adjust definitional boundaries is in the graduation of entrepreneurial ventures started by women. Traditional definitions of gradation of enterprises (nano, micro, small, medium) rest on the basis of the number of employees within the enterprise. However, given a nurturance economy, employees in many cases are family members who work alongside the nano/micro-entrepreneur. Including family members who sit at the family stall and help with stock is an important measure that SEWA takes into account when calculating "employees". This stems from a global lack of recognition of women's unpaid work in precisely these situations, where a woman who supports her husband in his business won't be counted as working (by her, her family, or by the economic society at large). Women farmers for instance, who prepare the field, sow seeds and harvest when time comes don't consider themselves as farmers, even though they fully participate in the family entrepreneurial unit. SEWA has worked many years to ensure that these women are acknowledged as workers in their own right. By extension therefore, when a woman leads her own entrepreneurial venture and invests in it, the family that she employs in the venture are, in classic terms, her "employee". Acknowledging that this nano entrepreneur is now a micro, by virtue of her daughter and daughter-in-law supporting her business (by stitching up seams for instance), is an important step in how we redefine who an employee and an employer are, and what an entrepreneurial venture looks like. This also allows us to register the mass amounts of unpaid work that are happening in the world around us, primarily by women, and to begin to tailor other related measures (credit assessment, access to finance and credit, government schemes and services, to name a few) to the realities of the world we live in.



SEWA exists therefore in both worlds simultaneously – it acknowledges the lived realities of patriarchies while simultaneously supporting and celebrating women’s agency and empowerment that manifest in their own unique ways. The goal here is to not be essentialist in our approach to understanding finance and the market, and to acknowledge that an expansion derived from the world view of a woman worker in the informal economy adds complexity and nuance to our understanding of finance and its role as a driver in the global system.

## 2. Key Factors Determining graduation of an enterprise

Before we explore and understand the factors of a graduating business, the stages of growth of a business are explored. Various studies have explored the growth paths of a business and different stages of growth of a business, and have drawn the journey of a new business differently. Fig 1, explains the widely studied phases of growth of a business given by Churchill and Lewis ([Churchill and Lewis 1983](#)).



The figure explains the growth of a business enterprise through different phases they go through during their lifetime. A majority of businesses fail in the period between the first and the second phase. The study even shows the characteristics of an enterprise at each phase and kinds of challenges the enterprise might face in the process to succeed. In the next section, the determinants of these phases or of enterprise graduation will be explored.

### Enterprise Graduation

Graduation of a business is looked at through two lenses, qualitative and quantitative. Qualitative, is further explored through the term upgradation, and quantitative is studied through the numbers the enterprise speaks.

- **Upgradation** is the upward movement in the efficiency, quality, process etc. of a business. Humphrey and Shmitz defined four kinds of upgradation in their study ([Humphrey and Schmitz 2000](#)). Production upgradation, Process upgradation, Functional Upgradation and Intersectoral Upgradation (Humphrey and Schmitz 2000, 3) For the current study, to understand the graduation of the micro enterprise, we study the following upgradations within the enterprise.
  - Production upgradation : Improvements within the product with changing demand
  - Process Upgradation : Changes in the process of working and production process with time for better efficiency, productivity and quality.
  - Market Upgradation : Expansion of the market segment the enterprise caters too with increasing capacity and quality of the product or service of the enterprise.
  - Technological Upgradation : The change or use of newer technology in the production process and organizing the enterprise.
- **Growth in numbers**  
An enterprise is said to be graduated when the enterprise is growing in terms of capital, sales, profit, and employees.

### Determinants of Enterprise Graduation

The question revolving around why do some enterprises improve and gradually graduate themselves to a bigger enterprise have been studied extensively, yet have explored few key indicators required for success of a business enterprise. Very few studies have been studied for such graduation of micro enterprises. The studies which explored the graduation of micro and small enterprises previously studied micro enterprises in Egypt ([Loewe et al. 2013](#)), Philippines ([Hampel-Milagrosa 2014](#)), India ([Reeg 2013](#)) and Indonesia ([Rahmawati and Others 2015](#)). The studies based in Egypt, India and the Philippines was a part of a three-country study on micro enterprises conducted by a German Institute, Institut für Entwicklungspolitik (DIE) (German Development Institute). They used the onion layer method for exploring the key factors of graduating business enterprise.

Reeg (2013) gives their framework as factors subcategorized into i) Entrepreneur level, ii) Firm level, iii) Inter-Firm linkages, iv) Business and Social Networks, and v) Business environment. Rahmawati (2015) categorized the factors into exogenous and endogenous variables.

Inspired from the previous literature the conceptual framework formed for our study can be explained as the following :

Internal Factors	Financial Factors	Infrastructure	Resources	Skills	External Factors
-Socio Economic Background	-Startup Capital -Ease in Availing	-Business Location	-Own Capital -Borrowings	-Production Service /	-Competitors -Suppliers

-Education -Personality Attributes -Prior Experience -Future Vision -Commitment -Product or Service -Production Method -Human Capital -Marketing Strategy -Pricing Policy	Loan -Assets -Liabilities -Credit Sales -Credit Purchases -Profit -Sales turnover	-Technology -Ownership of the Premise -Information Technology -Skills and Knowledge -Bookkeeping Methods	-Assets -Purchase -Stock -Investors -Skilled Human Capital -Suppliers	-Business -Leadership -Communication -Technological	-Consumers -Policy -Taxation -Crime -Bureaucracy -Market Segment -Market Conditions -Demand of product / service
--	---	--	--	--	---

The outcome of all these factors could visibly seen through

- Profit
- Increased market segment
- Increasing sales
- Increasing Employees hired
- Increasing size of the enterprise

For better understanding the factors could be categorized further. The Internal factors are the endogenous elements. This is further sub-categorized into entrepreneur characteristics and enterprise characteristics. The Entrepreneur characteristics and Enterprise characteristics are both endogenous in nature, because we can link each characteristic to the entrepreneur and enterprise, and doing so would give more clarity in determining the factors for enterprise graduation. These factors explain what the business is, what it is made up of, how it functions and why the business exists in the first place.

Previous studies suggest the key determinants of graduation of a business are of two kinds, business characteristics such as the product, their human capital, their marketing strategy, sources of finance, market segment; and the entrepreneur characteristics like their socio-economic background, education, personality attributes like attitude, communication, commitment, and prior experience. These factors play a very important role in determining the success of a business enterprise.

Business characteristics :

1. The Product : The product the enterprise deals in becomes a key indicator in determining the enterprise graduation. It should be considered whether the product is in demand in the market, if the packaging is appealing enough, if the quality of the product is satisfactory or not, etc. These characteristics of the product become important for the graduation of an enterprise.
2. Their Human Capital : How skilled the human capital of the enterprise is, how trustworthy they are, how much they are paid is studied.
3. Market Segment: who are the buyers of the product they deal in, how far do their customers reach, and how far does the enterprise cater to is explored to understand the market segment of the enterprise.

### Entrepreneur Characteristics:

1. Socio-Economic Characteristics: Empirical studies in different countries have suggested socio-economic background as an indicator of the business graduation. Studies assert that the background the enterprise owner comes from affects her business.
2. Education: How much formal education the enterprise owner has, what other different kinds of training has the entrepreneur undertaken to run the enterprise is explored. Skills, education and training taken in the field or scope in which their enterprise deals with is a key indicator of the enterprise graduation, because the entrepreneur excels in activities she is good at or has more and unique knowledge and information about.
3. Personality attributes: Communication and leadership skills of the entrepreneur, how motivated and committed the entrepreneur is towards her enterprise, becomes an indicator because to sell her product or service, she requires good communication skills or someone with good marketing skills. The more motivated and committed the entrepreneur is towards her enterprise, the more she works for it, and the more creative and productive she becomes.
4. The reason for her to begin the enterprise is an important factor and is explored through two perspectives, push factors and pull factors. Did she start the enterprise because she wanted to, because she was good at it, or it was her family business, or the family needed some extra source of income.

Business infrastructure is the set of physical infrastructure the business has access to and which makes the enterprise more efficient. Business location, ownership of the enterprise, the technology the enterprise uses, and the book keeping methods have been empirically studied as factors making the enterprise efficient.

#### Business Infrastructure

1. Business location: The enterprise set up in a prominent location has a good footfall and thus thrives, and businesses in the inner circle of the locality have its own problems of increasing sales. This notion is explored in the section.
2. Ownership: If the premise on which the enterprise runs is rented, that adds to the expenses and has its own limitations of using the space according to their need. A rented premise also means the entrepreneur might have to change location after the time period of rental agreement is over, losing out to the locational benefits created in that particular place. Owning the enterprise allows the entrepreneur to make changes however she wants to and makes the location of the enterprise fixed and keep increasing benefits of the locale.
3. The technology that the enterprise uses in their activities: Machines in the production process, computer and mobile with internet for communications, marketing, accounting. This makes their work more efficient and productive.
4. Bookkeeping methods are important because most of the micro entrepreneurs do not even maintain their daily journals of accounting so they do not know how much profit they have earned or how much loss they are incurring. Having a proper accounting system in-house helps the enterprise owner to understand her financial health and plan accordingly.

## Financial Factors

The financial factors are categorised differently for clearer understanding about the factors which are financial in nature and affect the graduation of the business.

1. **Startup Capital:** The amount and value of the assets that has been invested to start the enterprise is known as startup capital. It is used to understand how much the entrepreneur has invested in the enterprise as initial investment.
2. **Ease in Availing Loan:** To expand the scale of the enterprise, access to credit is very important. Without proper credit, the businesses cannot upgrade themselves. Whether the entrepreneur has access to credit she requires for her enterprise is important to understand.
3. **Assets:** The assets of the enterprise, including the premises, plant, machinery and equipment, stock, raw material, and the skills of the human capital of the enterprise.
4. **Liabilities:** The liabilities include the loan borrowed for the purpose of enterprise, and payments which are yet to be made to the suppliers.
5. **Credit Sales and Purchases** is explored to understand whether the entrepreneur buys or sells on credit, exploring their relationship with suppliers and their clients.
6. **Profit** is the key indicator of telling whether the business or enterprise is running successfully or not. Also it is important to understand why is the profit of the enterprise increasing, is the process sustainable for the enterprise or not, etc.
7. **Sales turnover:** Increasing growth rate in sales is also an important indicator of the growth of the enterprise. This also tells us about the upgradation of the enterprise based on market segment, product, service, business location and efficient working.

Resources of the enterprise's finances are explored to understand the composition of her business finance. This includes how much of the resource is from personal or family savings, how much is borrowed, how much of the profit is reinvested in the business, about the suppliers, what is her stock at any point of time.

External Factors are exogenous in nature and affect the growth of the enterprise. Like the competitors, It is very important to know the behaviour of the competitors, as they affect many enterprise related decisions. Then, policy. Any policy changes that affect their business, for example the implementation of GST, or the street vendors act. Then, the Market segment to which the enterprise caters to.

## Secondary Data Aggregation

In the data aggregation stage, a sample has been drawn from the population of 35000 unsecured loans taken for business purposes. For the study, the active outstanding loans as on 31st October, 2019 are considered. Total active outstanding loans till the date are 35000 loans. From which a sample of 1140 has been selected. To understand the sample better prior to data analysis, the loan application forms were digitized. The process of sample selection has been explained in annexure-1. And the process of digitization of the loan application forms in explained in the annexure-2.

In the sample selection stage, a sample of 1140 had been drawn from the population of 35000 loan accounts. At the end of the digitizing process, 1080 loan accounts were digitized,

with some incomplete information. The rest of the loan accounts were closed when the sample was being digitized in January, 2020. Out of the 1080 forms digitized, 24 women consider themselves to be housewives and are thus included in the non-earning member of the household category.

## Data Analysis

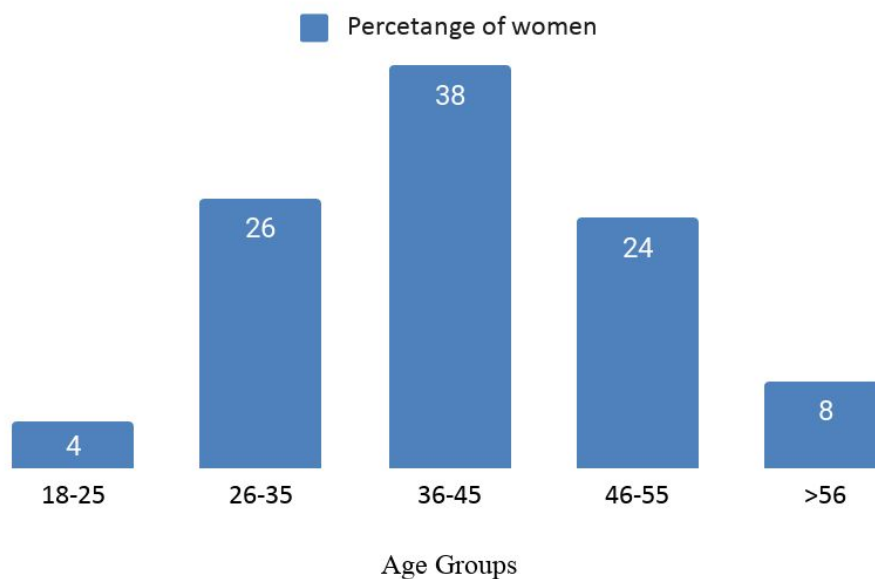
The following basic descriptive statistics of the data talks about 1056 loan accounts digitized, removing the accounts which didn't have the women earning. The loan forms even mention that the loan has been taken for their husband's, brother's or son's businesses or for other non-productive reasons like paying off old debts, home renovations, etc.

From the 1056 loan account forms studied in the process, 413 women are first time borrowers, or there is no information about their previous loans on the pre-loan form.

### 1. Women and their age

In the following graph the women have been classified on the basis of their ages. From the 1056 women, 46 (4%) women are in the 18 years-25 years of age group, and 270 (26%) women are in the 26-35 years of age group. A majority of women in the age group of 36-45, i.e 403 (38%) women. 250 (24%) women are in the 46-55 years age group. 87 (8%) women are older than 56 years of age. The oldest woman in the sample is 70 years of age, and the youngest woman is 18 years of age. A correlation between the age of the woman and her income shows a positive-weak relation between the two.

Women classified based on their ages



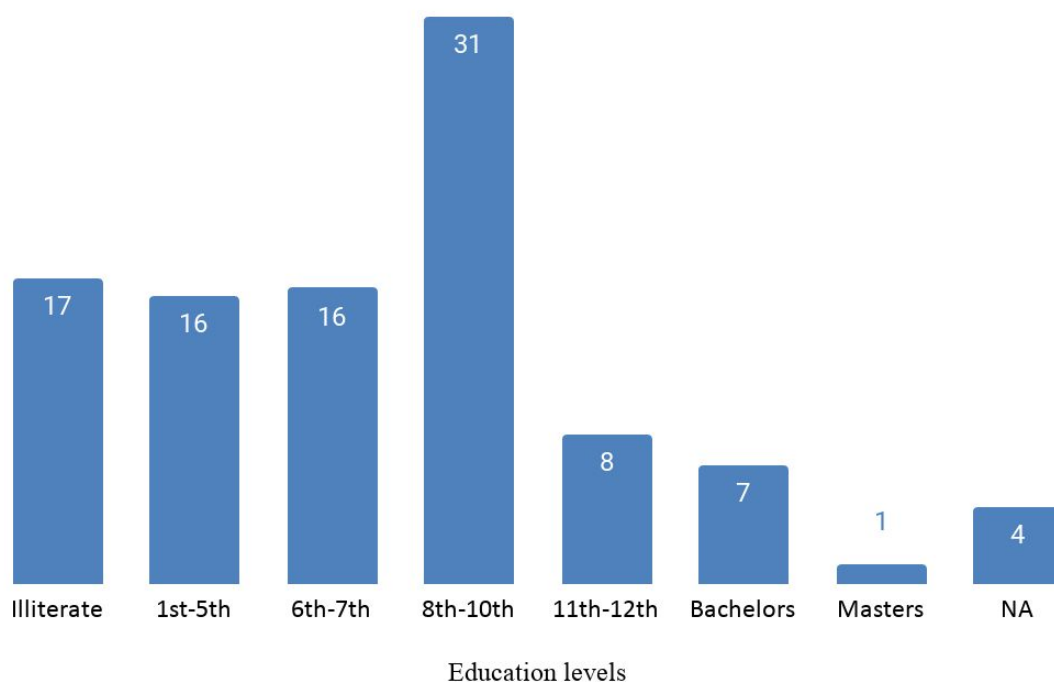
### 2. Classification of the women based on their education levels.

From the 1056 women, 45 women haven't mentioned what formal education they

have undertaken in the form. They didn't have a thumb imprint on the form, and have made signatures, so it cannot be assumed that they could be illiterate. The bank verification report also doesn't tell anything about their education level. So their formal education information isn't available at this stage.

177 women are illiterate, 167 women have studied up to class 5, 171 women have studied 6th and 7th classes, 328 women have studied till 8th-10th classes. 87 women had continued to study higher secondary i.e 11th and 12th class. 69 women have studied up to college and 12 women have completed their masters.

Education levels of women (in percentage)



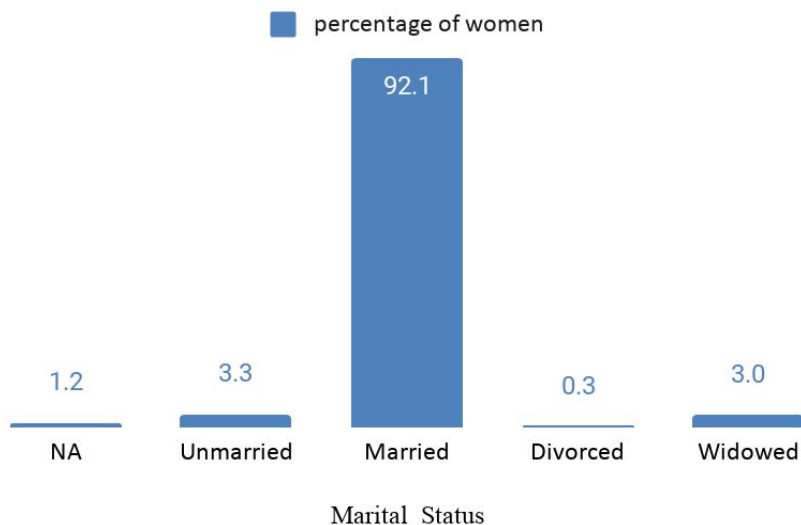
**3. Urban and Rural loanees.**

779 women are from urban areas and 277 from rural areas.

**4. Marital Status of women**

A majority of the women in the sample are married. Only 13 women haven't informed anything about their marital status and the form and bank verification report doesn't inform anything about their marital status.

## Marital Status of women

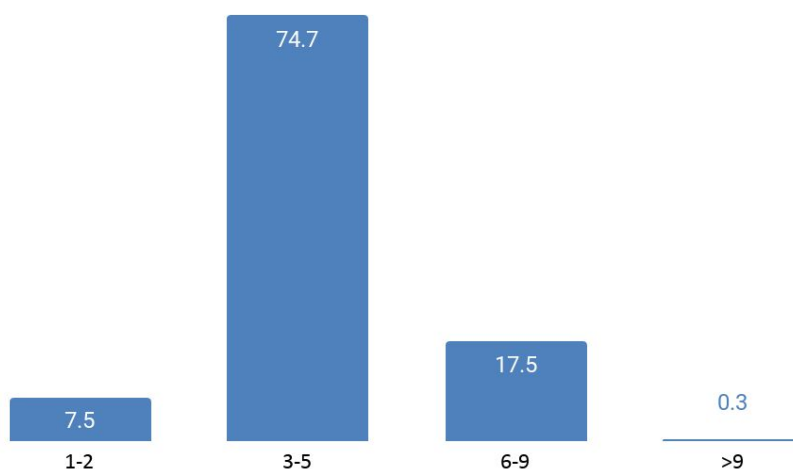


### 5. Classification of the households based on the number of members living in the same household

The households are classified based on the number of members living in the same housing premise. There are households where the women live alone, and the maximum number of members living in a household are 13 members in one household.

3 women live alone, and 79 women live with one other member, either their husband or their son. 789 women live in a household with 3-5 members. 185 women live in a household with 6-9 members. And 3 women live in a household with more than 9 members.

### Classification of the households based on the number of members (in percentage)

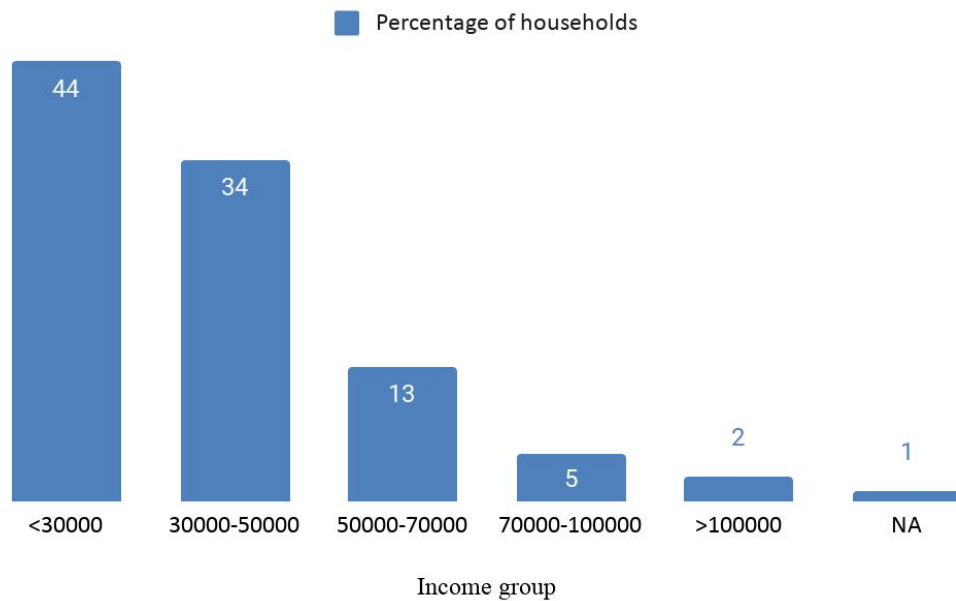




**6. Classification on the basis of the household's income**

The households are classified based on the income of all the earning members in the household. 465 households earn less than INR 30,000. 361 households earn an income between INR 30,000 to 50,000. 142 households earn INR 50,000-70,000. 51 households earn income of between INR 70,000 to 1 lakh. And 26 households earn more than INR 1 lakh. There is no information about the household income of 11 households.

Classification on the basis of the household's income (in percentage)

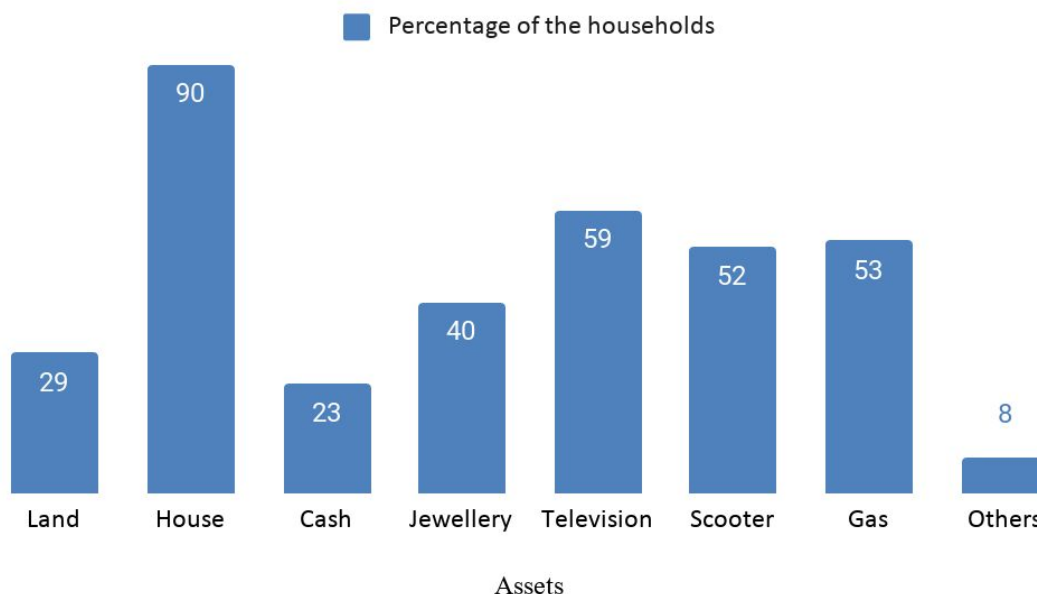


**7. No of assets owned**

The following figure shows us how many households own the following assets - Land, House, Cash, Jewellery, Television, Scooter, Gas, and others. Amongst the others, some of the members have mentioned what in others they own, like an ecco van, machine and computer.

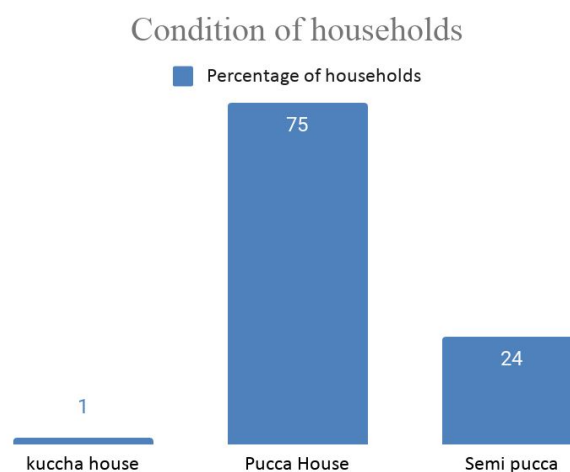
310 out of 1056 members' households own land. 950 out of 1056 members own a house, 241 members have cash, 424 members have jewellery, 628 members have television sets in their homes, 546 members have a scooter, 559 members have gas, and 80 members own other items like cars, computers, and machinery.

## No of households owning the assets



### 8. Condition of the place of residence

Out of the 1056 members, 14 members live in a kuccha house; a house without a fixed ceiling, without any sanitation facilities in house. 249 members live in a semi pucca household with a temporary ceiling made of aluminium sheets, and other substitutes and with basic sanitation facilities. 793 members live in a pucca house, with plastered walls, ceilings and proper sanitation facilities.

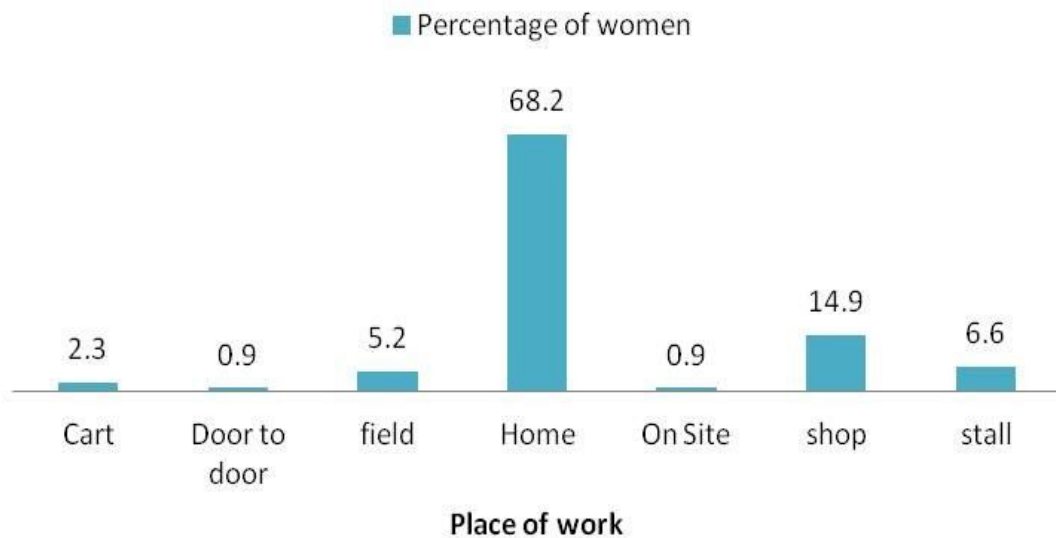


### 9. Women, and their place of work

Given the different kinds of work, the women work in different places. A majority of the women work from home. Reselling activities, tailoring, tiffin services etc can be done from home too. 24 women sell their products in a cart. A cart also means they are on their foot moving on the roads with their carts to sell their products. 55 women work in their fields doing farming activities. 10 women go door-to-door to sell their

items. 10 women are on the job as their primary source of income and do reselling activities from home. 10 women work on site. 7 of them are cooks and 3 of them provide catering services, which requires them to be on the site to work. 157 women have a different place of work to do their work and do not work from home. They work in a shop / workshop. And 70 women work on their stalls, a temporary structure in a fixed place.

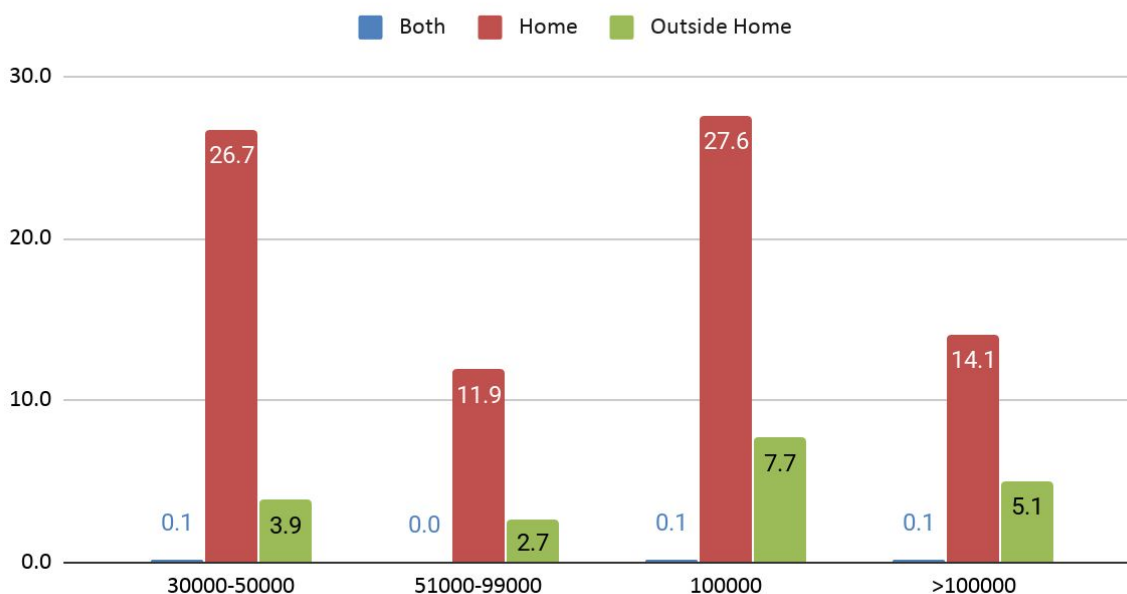
## Place of work



### 10. People working from home take bigger loans than the people who work from outside home.

When we look at the relation between the place of work of the women and the amount of loan taken, one interesting relation is observed. The women who work from home take bigger loans than the women who work outside their home.

## Place of work and Amount of Loan



### 11. Women and the work they do

Out of the 1056 women, 66 women are engaged in more than one kind of employment activity. And 4 women do 3 kinds of activities to make a living. The numbers mentioned in this section will be about the primary employment activity, in the work which they spend more time than the other.

The employment activities the women in the sample engage in are classified as the following-

*Agricultural activities* - Women engaged in agricultural activities, working on their fields sharing labour responsibilities with her family members.

*Animal Husbandry* - Women engaged in animal farming, and taking care of cattle, and selling milk to the local milk co-operative or sometimes directly to the end user.

*Reselling activities and Trade* - Women engaged in reselling, where they buy stock in bulk and sell it to retail users. Women sell various products such as fruits and vegetables, textiles, stationary items, grocery items to accessories, imitation jewellery etc.

Reselling activities are further categorized on the basis of the place where they sell like selling on carts, stalls, home, shop, and door to door.

*Food services* - Women who are engaged in food services like having a food stall, restaurant or running tiffin service from home or mess.

*Manufacturing / making* - women engaged in manufacturing or making items and then selling them. Blacksmith, making bags and purses, handicraft items etc. Women engaged in the job work process are also included in the manufacturing category

considering the scale and use of machines in the process.

Service - Women engaged in activities being a service like tuition classes, beauty parlour, cook etc.

Job - Women who have jobs as a primary source of income.

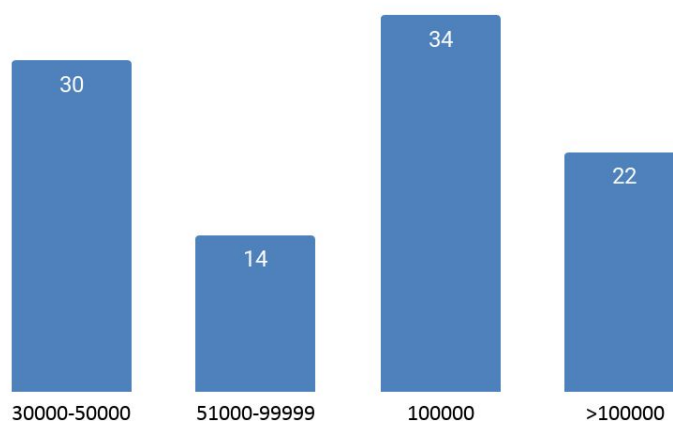
Labour - women engaged in different forms of labour activities like, construction labour, farmer labour etc.

Employment Activities	Percentage of women engaged in them
Agriculture	4.8
Animal Husbandry	14
Reselling/Trade	29.4
Food service	4.5
Manufacturing	6.7
Service	33
Job	5.2
Labour	2

### 12. Loans classified based on the amount of loan given to the women

Majority of the women, i.e, 34% women in the sample have taken a loan of exactly INR one lakh. 30% women have taken a loan in the range of 30,000-50,000. And 22% women have borrowed a loan of more than INR one lakh.

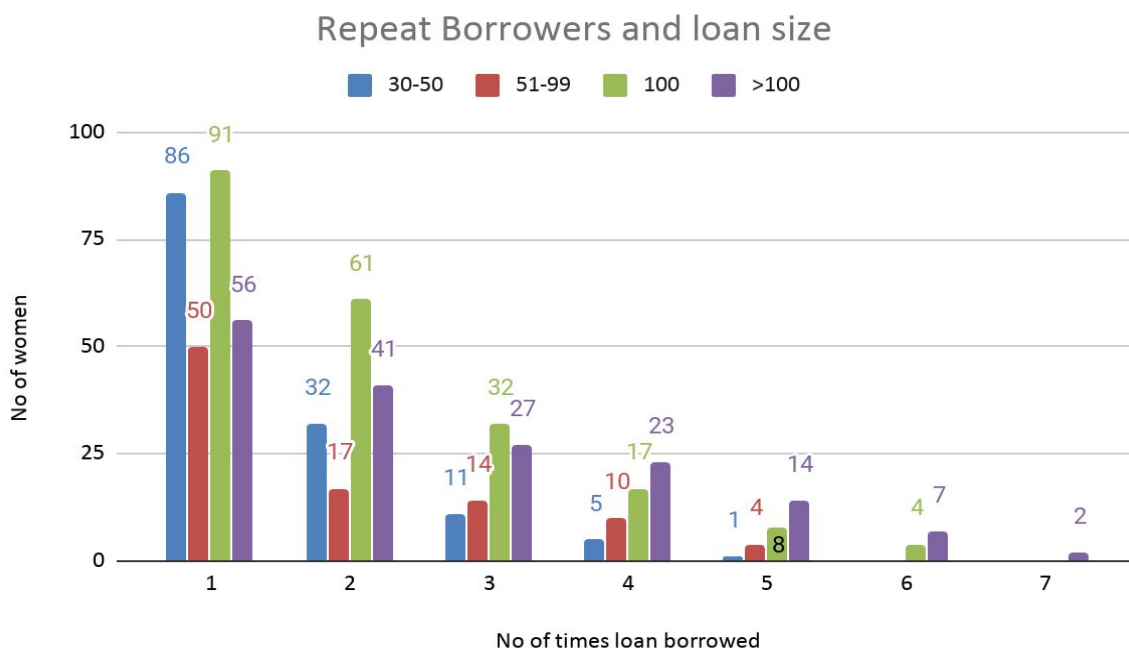
Classification based on the amount of loan (in percentage)



### 13. Repeat borrowers

From the 1056 loan accounts digitized, 413 women had no borrowing history from the bank, which makes it safe to assume that they are first time borrowers from

SEWA Bank. In the repeat borrowers it is evident that women who borrow a loan more than three times tend to borrow more than INR fifty thousand. And when borrowing for the seventh or eighth time, the amount is more than INR one lakh. Women take small steps with smaller loans in the beginning and then take bigger loans. It will be safe to say that these women who are borrowing for the fifth, sixth, seventh and eighth times have graduated their business.



## More with data

To understand the relationship between the factors with current data, a multivariate regression analysis has been done. Amount of the current loan is the dependent variable. The amount of current loan is dependent on various factors like, age, education level of the borrower, income of the borrower, family income of the borrower, place of work, assets owned. To run the regression model, the following model is used :

$$\text{Amount of current loan} = \text{Intercept} + \text{Age}(y1) + \text{Educational Level}(y2) + \text{Marital Status}(y3) + \text{Primary Occupation}(y4) + \text{Income}(y5) + \text{Total Family Income}(y6) + \text{Total Amount of Previous Loans}(y7) + \text{Place of Work}(y8)$$

The results inform us which of the factors play a significant role in deciding the Amount of the current loan. The amount of previous loans has the highest t-value of 9.603 asserting the role the previous loan amount plays in deciding the amount of the current loan. This data asserts that the majority of the loan is dependent on the previous amount of loans.

The next highest t-value is 2.988, earnings. The correlation coefficient of earnings of the borrower and amount of current loan is 0.31 indicating a positive relationship between the two variables. Thus, income of the borrower is the next deciding factor for the current amount of loan.

The next factor which decides the amount of loan is the place of work of the borrower. The t-value for the place of work in the shop is 1.660. The fact that working in a shop or place outside the borrower's housing premise, decides the amount of loan.

The following table shows the output of the analysis.

	Estimate	Std Error	t-value	Pr(> t )
(Intercept)	4.594e+04	4.317e+04	1.064	0.28790
Age	2.376e+01	4.153e+02	0.057	0.95440
Education	6.505e+02	2.837e+03	0.229	0.81873
Marital Status	2.091e+03	8.170e+03	0.256	0.79809
Urban/Rural	-3.165e+03	1.171e+04	-0.270	0.78707
Primary Occupation	6.668e-03	4.669e-01	0.014	0.98861
Earnings	1.634e+00	5.469e-01	2.988	0.00298 **
Previous Loans Taken	4.668e-01	5.151e-02	9.063	< 2e-16 ***
Place of work - shop	4.789e+04	2.885e+04	1.660	0.09775
Place of work - stall	3.672e+04	2.703e+04	1.358	0.17510

## Next Phase

In the first stage of data aggregation, data says that the relation between the woman entrepreneurs' education and her income has a weak but positive correlation. A majority of the women in the sample are in their peak age of productivity i.e, 36-45 years of age. A cross tabulation between age and income also asserts that there is a positive relationship between the age and income of the woman. Women who work from home borrow bigger loans. Literature review asserts that there is a strong positive relationship between a woman's education, socio-economic background and graduation of her business; however, the data aggregation of the first stage says otherwise. One fact that cannot be ignored is that at this stage, we have data about the women doing business and running an enterprise, and the data does not speak of the graduating enterprises.

To assertively find out the graduating enterprises from the sample, a primary survey will be conducted in the second stage of data aggregation. In the next stage we first aim to identify the graduating enterprises. Then we aim to find the relationship between various factors like education of the women entrepreneurs and socio-economic background of the women with the graduation of the enterprise. The relationship between the work of the woman entrepreneur and the work of her family will also be explored. Other various aspects of the woman and the relationship to her enterprise will be understood, where we can know how much of the enterprise does the woman own in a real sense; thus, the entrepreneurial nature of the woman will be understood too. This will help us understand the gaps that could be filled to graduate the enterprises.



# Annexure

## 1. Process of Sample Selection

In the data aggregation stage, a sample has been drawn from the population of 35000 unsecured loans taken for business purposes. To select the sample from the data, the following steps were taken.

For the study, the active outstanding loans as on 31st October, 2019 are considered.

Total active outstanding loans till the date are 35000 loans.

- **Stage one**

The bank gives out loans under various products schemes. So it is necessary to understand which product is more often used for business purposes. In the first stage of filtration, the data of loanees is filtered by the account type. The type of product availed for the loan. From the 56 types of loans given, 8 types of loans are used for business purposes which are 1. Unsecured Loan, 2. Pragati Loan, 3. Rojgar Vikas Loan, 4. Kutch Animal Husbandry Kaushalya Loan, 5. Surat Kaushalya Individual Loan, 6. Baroda Kaushalya Individual Loan, 7. S.Nagar Agri Kaushalya Loan and 8. Kaushalya Individual Loan SEWA Bank.

The data is filtered according to these account types. At his stage we have 14,192 loans

The loans of 1. Kheda Kaushalya SHG Loan, 2. Kutch Agri Kaushalya SHG Loan, 3. Kutch Animal Husbandry SHG Loan, 4. Sukhi Agri Kaushalya SHG Loan, 5. S.Nagar Agri Kaushalya SHG Loan, and 6. SEWA Bank Kaushalya SHG Loan is set aside for a later analysis.

- **Stage two**

In the second stage, we filtered all the loans by the amount that was disbursed. All the loans which are greater than and equal to INR 30,000 are considered. At this stage we have 10,396 loans.

- **Stage three**

In the third stage of data filtration, the purpose of loan is considered. All the loans which were taken for a business purpose are taken into consideration. The list of purposes for which the loan is sanctioned is quite extensive and mentions a list of reasons, from whichever we understand is taken as a business purpose loan. The list of purposes considered are 1. Aanganwadi, 2. Agriculture, 3. Animal Purchase, 4. Beauty Parlour, 5. Bhangar Business, 6. Biscuit, 7. Box Business, 8. Buffalo, 9. Business, 10. Cabin, 11. Canteen, 12. Carpenter, 13. Cloth Business, 14. Cloth Purchase, 15. Colour, 16. Computer, 17. Cooler, 18. Cosmetics, 19. Cutlery, 20. Cycle, 21. Decoration, 22. Electric Business, 23. Embroidery, 24. Farsan (Snacks), 25. Feri, 26. Flour Mill, 27. Flower business, 28. Fruit Business, 29. Footwear, 30. Furniture, 31. Grains, 32. Handicraft, 33. Hosiery, 34. Incense Stick, 35. Interlock, 36. Jewellery, 37. Kariyana, 38. Lari Purchase, 39. Machine, 40. Milk Business, 41. Oil

Business, 42. Pan Parlor, 43. Papad, 44. Paper business, 45. Patang Business, 46. Plastic, 47. Press Business, 48. Provision, 49. Readymade, 50. Saree business, 51. Sewing Machine, 52. Shop Purchase, 53. Soap Business, 54. Stationery Business, 55. Statue business, 56. Vegetable, 57. Vehicle, 58. Welding, 59. Wood Business, 60. Zaveri Business, 61. Xerox, 62. Textile, 63. Chemical, and 64. Crackers.

After the filtration on the basis of loan purpose stage, we have 8750 loans in the population.

- **Stage four**

In the next stage, the loans taken for business purposes were further divided into four classes of amount brackets. 1. INR 30,000 - 50,000, 2. INR 51,000 - 99,000, 3. INR 100,000, and 4. Greater than 100,000.

This classification is done with assumption that the size of the loan has a positive relation with the size of the business.

We get the following data

Amount Class (INR)	No of Loanees
30,000 - 50,000	5232
51,000 - 99,000	725
100,000	1698
> 100,000	1095

- **Stage Five**

In the next stage, samples for population in each of these amount brackets will be selected. The size of the sample selected is 10%.

The Random function in excel will be used for the random selection of the sample.

Amount Class (INR)	No of Loanees	Proportion of Sample
30,000 - 50,000	5232	60
51,000 - 99,000	725	8
100,000	1698	19
> 100,000	1095	13

- In the next stage, the loan forms of the sample selected will be studied and the necessary fields will be digitized at the branch level.

When we select a 10% sample from the population we see that the loan class of 30,000-50,000 has higher representation with a sample size of 523. The possibility of arriving at a distorted finding is higher in this case, so we proportionally increase the proportion of other classes and reduce the sample to the 30,000-50,000 range. And

also, in the pilot work of digitization we realised that 30% of the sample may not have full information, some data discrepancies, and closure of the loan account. So to avoid the problem of reduced sample number at the end of the exercise, the sample has been over-sampled by 30%.

The final numbers of the sample are as follows:

class	no of accounts	Final Proportion	Sample
30-50	5232	30	342
51-99	725	14	160
100	1698	34	388
>100	1095	22	251
	8750	100	1140

## 2. Process of Digitizing loan application (pre-loan) forms

The first stage of data collection starts with digitizing the pre-loan forms.

The forms of the loan accounts selected as samples from the population are digitized. The pre-loan forms have more details about the loanee. These details include age, address, their education level, caste/religion, details about the people in their family or household, how many of them earn, what work the family members do, what is the family income, details about old loans of the applicant from the bank, details about the place of residence, and more details of the business or purpose of why the loan is borrowed, and what would the applicant do with the money loaned.

The following explains the fields that have been digitized and how they are interpreted.

From the Bank MIS we have details like

- Branch Code - The branch code tells us to which SEWA Bank branch does the loan account belong.
- Account Type - The bank gives out various types of loans. Like unsecured loan, secured loan, kaushalya loan, pragati loan, etc. The types that have been selected for the study are Unsecured Loan, Pragati Loan, Rojgar Vikas Loan, Kaushalya Loan, and Kaushalya Individual Loan. These are the types under which most of the loans are taken for business purposes. The Account Type field will tell us under which product has the loan been availed.

- Account Name and Account ID tells the name of the account holder and ID assigned to the account holder by the bank.
- Limit Amount tells the amount of the loan availed by the loanee
- Purpose Name tells us the name of the purpose for which the loan was applied.
- Debit informs how much of the loan has been repaid by the borrower.

From the pre-loan form the following details are being drawn.

**Customer ID** - The customer ID is included in the dataset to anonymize and yet identify the individual from the data for future analysis.

**Date or year the loan was processed** - The year during which the loan was processed is used to understand the duration of the loan's use. This year will also be used to calculate the ages of the members of the family in their household. The ages of members in the household is also recorded. While entering the data, the operator will input the age that is mentioned on the form which may or may not be in the current year.

**Date of Birth or birth year of the applicant** whichever is available. The pre-loan form asks only the age of the applicant. For better accuracy, exact current age is preferable. The identification proof the applicant submits, like voter-id, aadhar card or pan card, has their date of birth or year of birth. The date/year of birth is recorded from the id proof submitted.

**Education** - How much of formal education has the loan applicant received is recorded.

**Marital Status** of the applicant, whether she is unmarried, married, widowed, or divorced.

**Address of the applicant**

The location of the applicant whether it is **urban or rural** in nature

**Community** - which community the applicant belong to

**Savings amount** - Before applying for a loan from the bank, it is necessary for the applicant to make regular savings. How much of savings has the applicant made so far is mentioned on the form.

Details of the **Earning Members in the household.**

The pre-loan form asks the details about the members in the household of the applicant. This includes the name of the members living with the applicant, their age, their relationship with the applicant, their employment status, and how much they earn (members who earn nothing, it is mentioned what they do, like nothing, or studying).

Details about earning members in the family/household					
SI No.	Relationship with the loanee	Age	Details of their employment	Earnings	Total Family Income

The Details are recorded in the above manner. The Names of the household members are not necessary for the study and so the names are not recorded. The relationship of the member with the loanee, what work they do, and how approximately every month they earn are all recorded.

There are chances where the amounts earned by the members, as mentioned by applicants in the form, is different from what is mentioned in the report made by the bank member. At such times, the income amount that is mentioned in the bank report is considered. The report is made by the bank member who has gone to the applicant's place of residence to verify the details given in the form. So, that amount is more reliable.

In the section in which the details about the earnings and employment of members of the household is asked, many times the women do not write about themselves or their earnings. The section before that, though, asks in detail about what work they do and their approximate earnings. That amount is recorded as their approximate earnings. This figure also is compared with the report made by the bank member, and if there is a difference in the numbers, the amount mentioned in the report is recorded.

At times, information about the household members isn't complete, or recorded incorrectly in the form. If that member is one of the guarantors in the loan, their identity card and income related information is given, the incomplete information is extracted from the guarantor details.

**Details of non-earning members in the household** - The relationship with the applicant of the household members and their age of the members who do not earn anything are recorded in the non-earning members section.

**Details of the assets owned** - The applicant is asked to tick mark the assets they own, from a list of Land, House, Cash, Jewellery, Television, Scooter, Gas and others.

Details of Assets owned							
Land	House	Cash	Jewellery	Television	Scooter	Gas	Others

**Condition of the place of their residence** - the applicant is asked in detail: what is the walls of their house made of, roof, flooring, doors and windows, whether their houses have the facilities of toilet, bathroom, sewerage, water and electricity connection. The applicant selects the composition options given.

The section looks something like :

Walls : Bricks and Cement / Bricks and Wood Dust / Bricks and Mud plaster cement / other

Flooring : Tiles / Stones / Pieces of stones / cement plaster / mud / other

Roof : Ceiling / Iron sheets / Cement sheets / Mat / Tarpaulin or tarpaulin like sheets / Wood / no roof / other

Doors and windows : Wood / Wood + Iron shield / Iron door shield / no doors and windows

Facilities : Toilet / Bathroom / Sewage / Water / Electricity

For our study the house condition is categorized in pucca house, semi pucca house and kuccha house.

The houses having ceiling roof, tile flooring, and walls of bricks and cement plaster, with all the facilities of toilet, bathroom, sewage, water and electricity, is pucca house.

The houses having Iron sheet or cement sheets as roof, brick and wood dust or mud plaster walls, stone flooring with windows, and facilities of toilet, bathroom, sewage, water and electricity is semi pucca house.

The houses having mat or tarpaulin sheets as roof, mud walls, no doors or windows, is kuccha house.

**Details about previous loans** - If the applicant has taken any loan previously from SEWA Bank, the loan account details are mentioned. If the account is closed, running is also known. The amount of the loan taken and status of the loan is recorded.

**Purpose of current loan** - for what reasons is the current loan taken is mentioned. How the money lent will be used is asked.

**Place of work** is recorded as where the individual does her activity/work. Whether her work place is based out of her home, a cart, stall, or does she have a different (different - other than house) shop or office or workshop for her work.

**Notes** - while studying the pre loan forms if we come across anything different or something peculiar, or anything that needs to be noted, will be noted in the notes section.

# Acknowledgements

## **Author**

Vaishakhi Shah

vaishakhi@sewabharat.org

## **Co-author**

Paromita Sen

paromita@sewabharat.org

## **Editors**

**email: [search@sewabharat.org](mailto:search@sewabharat.org)**

**Block 7, House 5, First Floor,  
South Patel Nagar,  
New Delhi, Delhi 110008**