IMPACT ASSESSMENT STUDY-2015

Market Research & Product Development Department

Authors: Ommara Raza Ali, Saira Naeem and Sana Illahe

Table of Contents

1. Introduction

1.1 About Kashf Foundation

Kashf Foundation was set up as the first specialized microfinance institution in 1996 with the belief that empowering low-income households, especially women, through access to finance can sustainably reduce poverty, build the capacity of low-income women to take better financial decisions and improve social indicators. Kashf has successfully championed the case for women's financial inclusion, and has over the years shown that women are bankable, women pay back debts, women invest in their households, and women run successful businesses. Kashf's target clientele is women with high household dependency ratios that rely on vulnerable sources of income and lack safety nets and assets. Kashf operates across 41 districts in Pakistan through a network of 183 branches and 27 service centers providing a range of financial and non-financial services to meet the multitude needs of low-income households, especially women. These include loans for existing businesses, loans for new businesses, credit for life insurance, access to formal savings, micro-health insurance, financial literacy and education trainings, gender justice trainings, advocacy interventions such as social theatre performances, and vocational skills trainings. Since its inception, Kashf has cumulatively disbursed over 2.7 million loans, provided life insurance to 5.4 million lives from low-income households, trained over 900,000 women in financial literacy and financial education, trained over 166,000 participants through gender justice trainings and social theatre, and graduated over 10,000 women through the Business Development and Incubation Program. As of June 30, 2015, Kashf Foundation has an outreach of 250,057 active clients, 499,982 active life insurance policy holders and over 592,473 individuals insured through the micro-health insurance program. Kashf Foundation is also Pakistan's first MFI to be certified in Client Protection Practices by the Smart Campaign.

There is a substantial unmet demand for financial services in Pakistan; among a population of around 195 million people with less than 10% of the adults having access to basic formal financial services[1]. Moreover, there is an unequal penetration of financial services across different segments of the population and regions. Some urban areas of Pakistan have achieved significant financial coverage with the advent of MFPs over the past 2 decades; however, large segments of the population, especially in rural areas, still remain underserved or completely untapped. The situation is much worse for women as they have an even higher level of financial exclusion.

---

[1] World Bank.

Therefore, Kashf's goal is to be a one-stop solution for its clients by enhancing value proposition through differentiated, unique and flexible products and services. To achieve this goal, Kashf Foundation became a pioneer in introducing the concept of a Wealth Management Company in Pakistan that strongly believes in and working towards financial inclusion of women belonging to the marginalized segments of the society. Kashf Foundation is offering a comprehensive range of financial solutions including credit facilities, insurance and savings products along with a wide range of non-financial services which are mentioned below.

KASHF FOUNDATION'S OUTREACH (JUNE'15)

Provinces	4
Districts	41
Active Clients	250,057
Women Clients	100%
No. of Loans Disbursed (cumulative)	2,726,225
Amount disbursed (cumulative)	PKR 43,837,247,135
No. of loans outstanding	250,057
Gross Loan Outstanding	PKR 4,608,489,588
No. of individuals insured under health policy (cumulative)	592,473
No. of lives insured under life insurance policy	499,982
No. of Schools disbursed with loan	168
Clients trained in financial literacy (cumulative)	1,063,758
Trained participants on Gender Justice and Empowerment (cumulative)	168,894
No. of branches	183
No. of Service Centers	25
No. of total staff	2,061
No. of female staff	924

KASHF FOUNDATION'S FINANCIAL PRODUCTS AND SERVICES

Product Type	Product Name	Loan Amount Range/Cover	Description
Kashf Business Loan	**Kashf Karobar Karza**	PKR 15, 000 – 60, 000	This is the primary micro loan product offered by Kashf Foundation for investment into existing businesses. The loan provision is based on individual lending methodology.
Kashf Startup Loan	**KashfIbtida-e-Karobar Karza**	PKR 10,000 – 30,000	This product provides capital to aspiring female entrepreneurs who want to start a new business. Women who possess a certain skill or have previous business experience but lack access to capital are eligible for this loan.
Kashf Shariah Compliant Loan/ Islamic Loan	**Kashf Murabaha**	PKR 30,000–60,000	This is Kashf Foundation's first Islamic Microfinance Product specifically tailored to clients in Khyber Pakhtunkhwa. It is a productive loan for low-income households who wish to purchase assets or raw materials for the expansion of their existing businesses.
Kashf Life Insurance	**Kashf Zindagi Bima**	The insurance covers the outstanding loan amount along with a PKR 5,000 funeral benefit paid out to the client in case of death	Kashf Foundation provides a basic life insurance product, Kashf Zindagi Bima, to all its clients. It entails an insurance cover to the client and the spouse. Currently, the Foundation uses an agency model where Kashf Foundation is the agent to an insurance company.
Kashf Health Insurance	**Kashf Sehatmand Zindagi Bima**	All household members are insured up to a limit of PKR 30,000, irrespective of the size of the household	This health insurance product insures every Kashf client as well as her husband and children against health related expenditures including maternity costs. The cover remains for the entire duration of the loan and is renewed once the client enters her next

			loan cycle. The clients have a wide variety of panel hospitals to choose from, depending on their own convenience and location.
Kashf Education Finance Program	**Kashf School Sarmaya**	PKR 60,000 –300,000	This product has been developed for a burgeoning segment of low-cost private schools in Pakistan. The product has two components: (1) a loan product for working capital or infra-structural improvements, and (2) a capacity building component to enhance the management skills of the school owners and to improve the quality of teaching.

KASHF FOUNDATION'S NON-FINANCIAL SERVICES

FINANCIAL EDUCATION PROGRAM
The Financial Education Program has two separate types of trainings targeting different groups of women: Basic Financial Literacy Training and Advanced/Systemized Financial Education Training.

PROGRAM	DESCRIPTION
BASIC FINANCIAL LITERACY	The Basic Financial Literacy training is provided prior to loan disbursement in order to educate clients and non-clients on the basics of borrowing, debt management, savings, client rights and details of the financial agreement that the clients are undertaking with Kashf.
ADVANCED/SYSTEMIZED FINANCIAL EDUCATION	The Advanced/Systemized Financial Education training is delivered to Kashf clients as module-based workshops with certification in four subject areas: Savings, Budgeting, Debt Management and Financial Transactions. They are conducted within the community with groups of 10-15 clients.

BUSINESS INCUBATION LAB	The Business Incubation Lab provides two types of business support services to selected women clients: generic business management training and cluster-specific support services. The cluster-specific support services are provided to Kashf clients engaged in specific business sectors such as textiles and livestock. Clients are being trained on modules of Business Management, Marketing & Networking, and Business Innovation through 38 specialized trainers. The program also focuses on creating market linkages of clients with vendors, existing mentors and among BIL trainees.

GENDER EMPOWERMENT AND SOCIAL ADVOCACY (GESA) ON FINANCIAL SERVICES

This component of the project aims to create awareness about gender discrimination and helps participants and their male family members change the mindsets regarding gender norms in relation to women's participation in the economy and their access to financial services.

Media Campaign for Financial Literacy	The project includes a media campaign including drama series and public service messages based on the themes of entrepreneurship, financial literacy and debt management. The aim of this initiative is to create public awareness regarding gender equality and women empowerment while inspiring women from low-income strata of the society to become entrepreneurs for long-term economic stability.
Gender trainings	These trainings are imparted to women clients along with their male spouses and adolescent sons/brothers from the community to raise awareness regarding gender norms, women's rights and gender equality.
Social Theatre Performances	The Social Theatre Performances, targeting both clients and non-clients, seek to create awareness about gender discrimination and women's rights.
Women Entrepreneurs' Council	This is envisioned as a body of 40 female Kashf clients who meet on quarterly basis to give direct feedback on Kashf's programs, products and operations. It reviews the processes and procedures of the Foundation and makes recommendations to address/mitigate the problems identified. This increases the ownership of the women clients in KF[2].

---

[2] Abbreviation for Kashf Foundation.
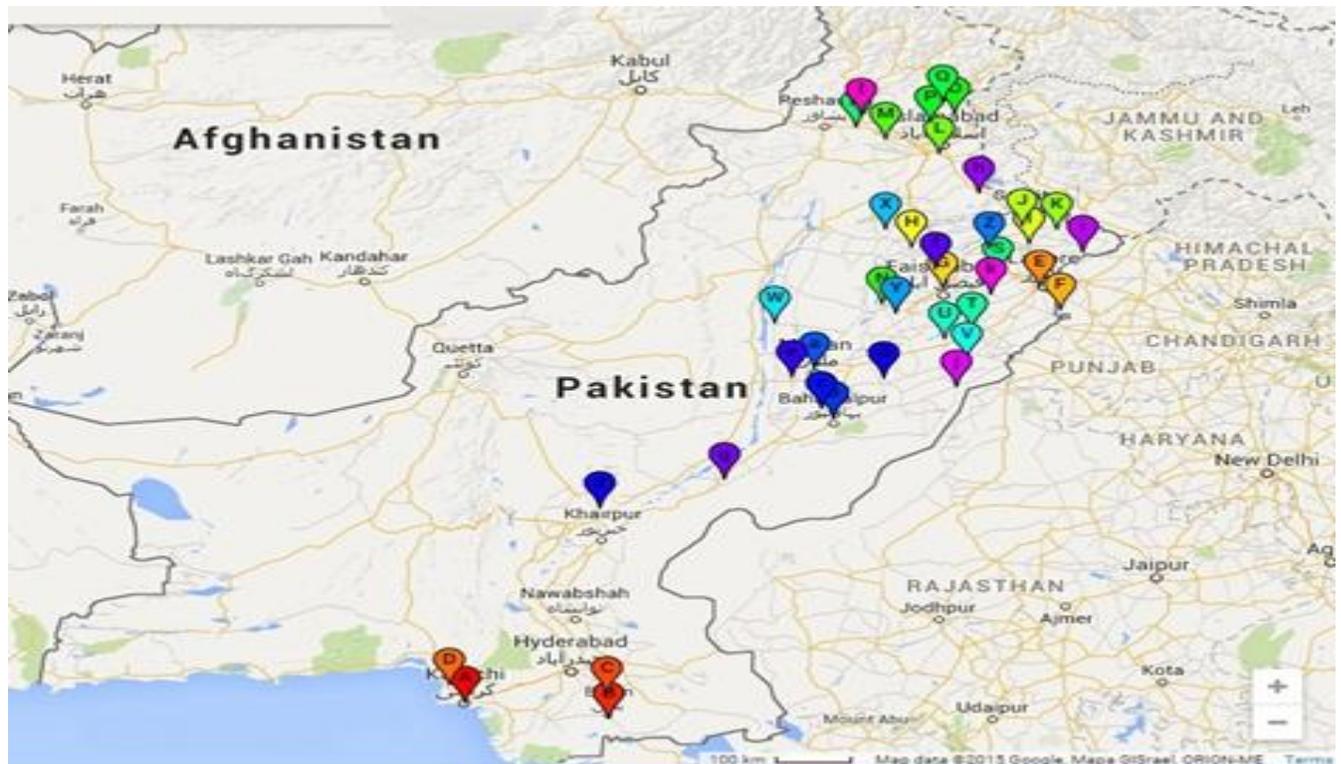
1.2 The Study

This study was undertaken by Kashf Foundation to assess the impact of microcredit on KF borrowers and their households. The study findings aim to inform KF management and all the relevant stakeholders on the ability of the organization to meet its stated mission. This study, along with other impact assessment studies conducted in the past, seeks to strengthen evidence-based decision making within the organization. Furthermore, feedback on its current products and services will enable the organization to meet the evolving customer needs.

1.3 Previous studies

Evaluating the impact of microfinance remains a challenge. Issues regarding methodology and sample selection abound. Richard Rosenberg's focus note on *"Does Microcredit Really Help Poor People?"* [3] determines that the definition of 'microfinance impact' may account for the challenges in measuring the impact of microcredit. Rosenberg suggests that when microfinance impact is defined as the 'change' in clients' lives, it is difficult to measure impact both in terms of determining the right methodology and in terms of spatiality as meaningful change often

---

[3] See Rosenberg, Richard. "Does Microcredit Really Help Poor People?" *CGAP.* January 2010.

takes a long period of time. The focus note further cites findings from another book, *Portfolios of the Poor: How the World's Poor Live on $2 a Day* (Collins, Morduch, Rutherford, and Ruthven 2009), to argue that impact defined merely in terms of change may be a narrow view of the impact of microfinance. Instead, microfinance also helps clients avoid adverse change by being a reliable provider of financial services at times of great need. This allows the borrower to cope with adversity and thus is also an equally valuable impact, in the absence of which the clients may slip into extreme poverty. The fact that clients repeatedly borrow from the MFI may be the most obvious proof of benefit of microfinance. An extensive impact study undertaken by Spandana (a leading microfinance institution in India) used randomized control trials to assess the impact of microfinance. The study compared the 'change' between older and pipeline clients to show that microfinance clients have higher spending on business assets, but found very few changes in the clients' social indicators. Even the economic impact was not observed uniformly as households with low propensity to become business owners see consumption spending increase. Thus, impact defined narrowly cannot be easily measured using even the most sophisticated study techniques.

Kashf Foundation has also undertaken and participated in several impact studies. In 2004, a study of 200 KF clients and non-clients reported significant benefits for Kashf clients including higher income, access to health care facilities and education. The results were very encouraging though they were not tested for statistical significance. Interestingly, clients were found to often drop out of the program because they were unable to cope with bi-weekly repayment installments. Five years later, KF launched Kashf 2.0 where this practice was changed to monthly repayment and this has proven to be extremely popular with the clients. Another impact study conducted in 2007 by Akbar Zaidi reported similar results. Kashf borrowers, both new and mature, were found to be doing better than non-clients with regards to household income and expenditure, and this has also had a positive impact on assets growth and schooling of girls. The study, however, did not find significant impact on empowerment indices related to self-confidence and financial decision-making of women. Another study by Abhijit Banerjee, *"The miracle of Microfinance? Evidence from a randomized evaluation"* (2009) confirms the huge gender barriers that women clients face in Pakistan. The study finds a clear gender divide in the men's/women's roles – men work outside and women work at home, which could be correlated with the results of the Kashf 2007 study as far as empowerment of women is concerned. Another impact assessment study carried out by ShoreBank International on behalf of Kashf Foundation in the year 2010 found that the microfinance services offered by Kashf Foundation have assisted and encouraged low-income households to start new businesses and expand existing economic activities. Moreover, majority of the clients interviewed in that study reported using Kashf loan for productive purposes i.e. to start a new business – some even started multiple new businesses over different loan cycles. These businesses are spread over different segments of economic activity although trade and services tend to dominate. Those

clients who reported using Kashf loan for consumption were also likely to face food insecurity and depletion in savings – indicating that microcredit enabled such households to cope with consumption variability.

1.4 This Report

This impact assessment report is divided into different sections that are drawn from the structure of the questionnaire used for interviewing clients. The next section (Section 2) highlights the research objectives and outlines the methodology employed for data collection. To place any impact assessment study in context, it is useful to understand who the clients are and what their socio-economic status is. Section 3, therefore, presents a socio-economic profile of Kashf clients. This is followed by assessing impact of Kashf Foundation in generating Economic Capital (Section 4), Human Capital (Section 5), Physical Capital (Section 6) and Social capital (Section 7) respectively. Finally, the conclusions and recommendations drawn from this study have been presented in Section 8.

2. Research Design and Methodology
2.1 Research Design

Overall, an Impact assessment is the measurement of both economic and social transformation in the lives of clients. This is important as it determines whether the MFI is aligned with its mission, while simultaneously enabling the organization to make appropriate changes to its programming in order to enhance its long-term impact on the lives of its clients. As is evident in recent debates, there are several methodologies that can be used to document client-level impact and this continues to be an evolving line of study. However, Kashf carried out the research using a combination of external and in-house expertise to study the impact of microfinance on its clients' household's well-being by documenting both the economic and the social impact of microfinance and analysing the gender and empowerment aspects within and outside the household for women. In order to ensure transparency a third party, *IRIS Communications*, was engaged to carry out the field surveys and data tabulation of this impact assessment study so potential data collection biases could be controlled. This study has the following objectives:

1. To assess the overall impact of Kashf's program on clients' lives.
2. To assess the economic, human, physical and social capital generated (if any) as a result of availing financial and non-financial services from Kashf.

In addition to the key research objectives, this research will also help to identify the following:

- Develop a better understanding of the challenges faced by clients.
- Develop a better understanding of clients' financial and non-financial needs.
- Develop a better understanding of the value proposition of the products and services being offered to clients and how the institution can further improve these.

2.2 Research Methodology

This study was undertaken using a hybrid of both qualitative and quantitative research methodologies with both new clients (clients in their first loan cycle who have been with Kashf for 6 months or less) and old (mature) clients (clients who are in their third loan cycle onwards). The quantitative component was carried out through in-depth interviews with 660 clients while the qualitative component of the study was carried out through a total of 10 Focus Group Discussions (FGDs) with new and old (mature) clients. 50% of the sample respondents comprised of new clients and 50% comprised of old (mature) clients. Using a 95% confidence level while taking the margin of error at 0.05 and after adjusting for any survey error, a sample size of 660 was determined to ensure that the results are statistically significant. In order to assess the impact of microfinance, key indicators were compared between mature clients and new clients. As already mentioned, the study was undertaken using an external agency during data collection to control chances of biasness in collecting responses, while the sample selection was based on a random sample of respondents from 16 branches across 4 operational regions.

A household survey using a well-structured comprehensive questionnaire was the primary tool for data collection. The breakdown of the areas from where the clients were selected for personal interview is given below which highlights that 20% sample was taken from each district with 50% respondents comprising of new clients (that is clients who had been with KF for 6 months or less) and 50% of sample respondents belonging to mature clients (that is clients belonging to third loan cycle and onwards):

	New	Mature/Old	Total
Lahore	66	66	132
Attock	66	66	132
Karachi	66	66	132
Bahawalpur	66	66	132
Multan	66	66	132
TOTAL			660

TABLE 1: SAMPLE SELECTION STATISTICS

First part of the questionnaire covered the client's profile, the second explored sources of income and impact on savings, diet and health. The third section looked at the social issues within the household as well as in the community.

2.3 Sample Size and Selection

Step I: Categorization of Kashf's operational districts with respect to their Human Development Index (HDI) and segregating them into four categories of Very High, High, Medium and Low.

Step 2: After categorization of each district according to the HDI indicator, branches were randomly selected from each category.

Step 3: Only those branches were then included which were offering all the Kashf products and services. In case the branch, that was randomly selected, was not offering all the products then another branch was randomly selected from the same district.

Step 4: The clients were then randomly selected from the selected branches according to the given stratification: 50% clients from cycle 1 with a relationship of 6 months and less (categorized as new clients) and 50% from loan cycle three and above (categorized as mature/old clients).

2.4 Data Analysis

For this purpose, we built and analyzed OLS regression models and Logistic Regression models for various indicators under study using a combination of statistical softwares, Stata and Tableau, to analyze the relationships between predictor and response variables and to test the statistical significance of the results.

2.5 Challenges and Research Limitations

Just like any other study, this impact assessment study also has its limitations as highlighted below:

1. One challenge of this impact assessment study was the difficulty faced by the surveyors in locating the randomly selected respondents in the field especially in areas such as Karachi and Attock without involving business development officers.
2. This study assessed the impact of microcredit through comparison of 'old clients' with the 'new clients'. The underlying assumption behind this comparison is that the new clients resemble the status of old clients when they first joined the microcredit program– this assumption may not always hold due to different macroeconomic environment and household conditions of clients who joined Kashf Foundation many years ago as compared to those who joined recently. The differences may also arise due to different client selection

criteria applied by Kashf Foundation (either through a change in population targeted for microcredit, or tightening of credit underwriting policies).

3. It is likely that the borrower may not be able to articulate the full impact of microcredit borrowed over several years in one interview alone. Long term and deeper impact of microfinance can best be researched through a longitudinal study carried out over a period of time.

4. A majority of clients had low literacy levels and some of them did not use the loans themselves, since they were involved in family level micro-enterprises –clients' feedback on Kashf's products collected from interviewing such clients may not be complete without including the perspective of actual users of microcredit (often husbands or other male relatives of the female borrowers).

3. ***Socio-economic Profile of Kashf Clients/Households***

In order to assess the impact of a microfinance institution, a key step is to profile active clients. To develop a better understanding of the socio-economic profile of clients, the following aspects have been classified:

1. Client demographics
2. Loan demographics

3.1 Client Demographics

AGE AND MARITAL STATUS

The statistics captured in Impact Assessment study shows that the average age of Kashf's new clients is 35 years whereas in case of mature/old clients the average age is 39 years. Over ninety percent of Kashf clients are in the age group up to 50 years – this is not surprising since Kashf targets females in this age group (please see table 2). The sample studied shows that 90% of the clients were married women, while 7% were widows and the rest of the 3% were either divorced or unmarried.

Age	New Clients	Mature Clients
Less than 30	28%	9%
Between 30 and 40	49%	56%
Between 40-50	19%	28%
Greater than 50	3%	7%

Marital status	Overall Sample %
Married	90%
Widow	7%
Divorced	1%
Unmarried	2%

TABLE 2: CLIENT PROFILE- AGE AND MARITAL STATUS

HOUSEHOLD SIZE

The average family size across the sample is 6 members. This is closely comparable with the national average of 6.41. The mean dependency ratio (no. of dependents per earner) for the overall sample is 2.5. The dependency ratio of old clients, however, is less than the new clients, implying that there are more economically active members in such households. The graph below shows that in case of old clients, the number of household earners is 4 while the number of household dependents is 2. On the other hand, the number of household earners in case of new clients is 3 while the number of household dependents is 3. The difference in dependency ratio between old and new clients was not found to be statistically significant.
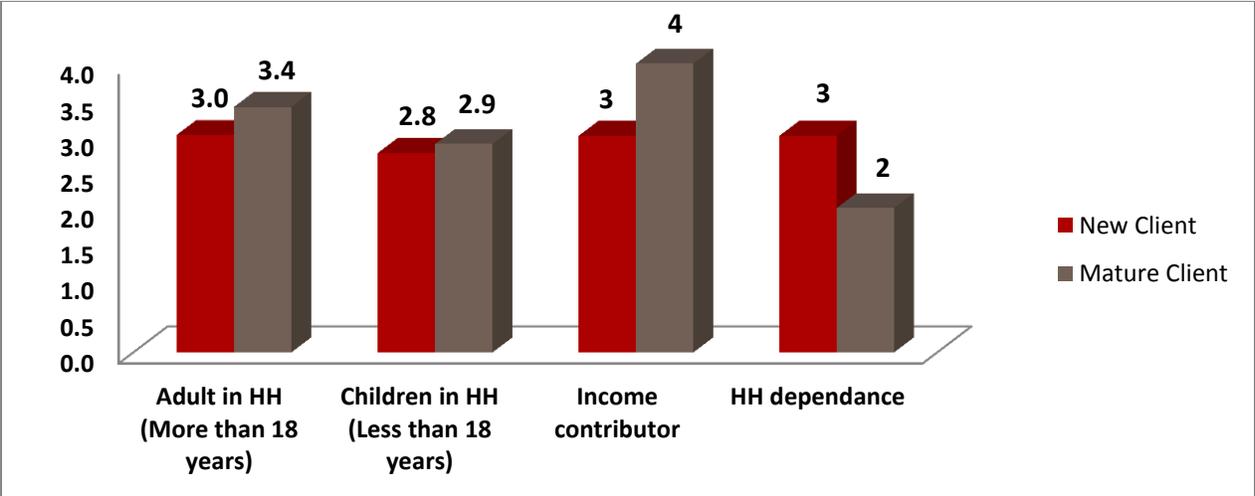

FIGURE 1: CLIENT PROFILE- HOUSEHOLD SIZE

EDUCATION

The Education profile of the clients highlighted in the table below depicts that in all 30% of our clients had not even completed primary level education. Moreover, 83% of our clients had only completed education up to class 8, out of which 39% were mature clients and 44% were new

clients. It appears from the table below that new clients were slightly more educated than mature clients; this may be reflective of the mean age of the two groups.

Level of education	New Clients	Mature Clients
Less than primary	9%	21%
5th to 8th class	44%	39%
Matric/O-level	27%	27%
Intermediate/A-level	10%	6%
Graduate	6%	6%
Post Graduate	4%	1%

TABLE 3: CLIENT PROFILE- EDUCATION

HOUSE OWNERSHIP STATUS

The table below depicts that out of the 330 sample respondents that were new clients, 80% owned a house and 20% were living on rent whereas out of the 330 sample respondents who were mature clients, 86% owned a house and 14% were living on rent. In other words, housing stock and overall residential status was not very different across the two groups.

Base	660	330	330
House ownership	%	New Clients %	Mature Clients %
Rented house	17%	20%	14%
Own house	83%	80%	86%

TABLE 4: CLIENT PROFILE- HOUSEHOLD OWNERSHIP STATUS

LIVELIHOOD PROFILE

About 21% (almost one-fifth) of Kashf clients rely on irregular income sources like daily wages or seasonal businesses as their main income source, while 33% rely on business income and 46% rely on salaried income as their main source of earnings (please see table 5). This percentage of irregular source of income is less in mature clients (19%) as compared to the new clients (23%) but the difference is not statistically significant. The households dependent on irregular income sources are challenged in terms of meeting household expenses during low income periods. About 79% of total sample respondents have a relatively more stable income source – either a regular business or a salaried job. 81% of the mature clients have a relatively more stable source of income as compared to 77% of the new clients; however, this difference is not statistically significant.

HH main income source	Overall	New clients	Old clients	Statistical Significance
Daily wages earners	20%	22%	18%	No Significant Difference
Seasonal business	1%	1%	1%	No Significant Difference
Regular business	33%	30%	36%	No Significant Difference
Regular salaried	46%	47%	45%	No Significant Difference

TABLE 5: CLIENT PROFILE- INCOME SOURCE

In the urban areas, such as Lahore, women are normally engaged in home based embroidery work, sewing, stitching, knitting, grocery shops, hosiery retail, beauty salons, petty trading and merchandizing and other such microenterprises. In Attock and Bahawalpur, a significant percentage of clients are also engaged in the livestock sector. Men, on the other hand, typically work as wage laborers, rickshaw drivers, factory laborers, fruits and vegetables vendors and as entrepreneurs running microenterprises etc. The table below highlights the livelihood profile of the clients' households.

Description	Descripion	Example
Daily wage laborers		Factory workers, Construction-site workers, Rickshaw /cart pullers
Small/Seasonal Business	Usually small shopkeepers; roadside sellers	Food Snack packing and selling, Retail sale of clothes, household items, small grocery shop in neighborhoods/villages, embroidery and handicrafts, small food stalls
Regular Business	Medium-sized shops outside the village /neighborhoods usually in a formal marketplace , livestock sector	Mobile phone & phone card shops, hair salon, fabric materials shop, milk and yogurt shops, auto-rickshaw driver, grocery /food store in a marketplace
Regular salaried	Regular employees in factories /homes usually low/medium salaried	Drivers, Office workers, PCO operators, Government employees, domestic staff

3.2 Loan Demographics

LOAN CYCLE WISE CATEGORIZATION

New clients who comprised of 330 clients i.e. 50% of the sample population had borrowed only once. Out of the 330 (50%) sample population of mature clients, 35% had borrowed thrice, 34% had borrowed 4 times and 31% had borrowed a loan from KF more than four times which actually corroborates with the finding of Rosenberg stated in his focus note on *"Does Microcredit Really Help Poor People?"* (2010) that the very fact that the clients keep on coming back to avail a loan indicates that the impact is significant, as 65% of the KF's mature group sample respondents are in the loan cycle 4 and above. Moreover, 4% of the clients had borrowed more than 8 times. The detailed bifurcation is given below in Table 7. Throughout this report, this particular parameter will be tested to determine its implications for household level impact as a proxy to compare new clients versus old clients.

Loan Cycle for borrowers	New Clients	Mature Clients
Sample size, n	330	330
1st loan cycle	100%	
3rd loan cycle		35%
4th loan cycle		34%
5th loan cycle		13%
6th loan cycle		9%
7th loan cycle		5%
8th loan cycle and above		4%
Total	100%	100%

TABLE 7: CLIENT PROFILE- LOAN CYCLE

LOAN AMOUNT WISE CATEGORIZATION

The average loan size among the first loan cycle clients is PKR 24,956 while the average loan size for mature clients is PKR 38,823. Figure 2 below depicts the average loan amount according to different categories of loan cycle.
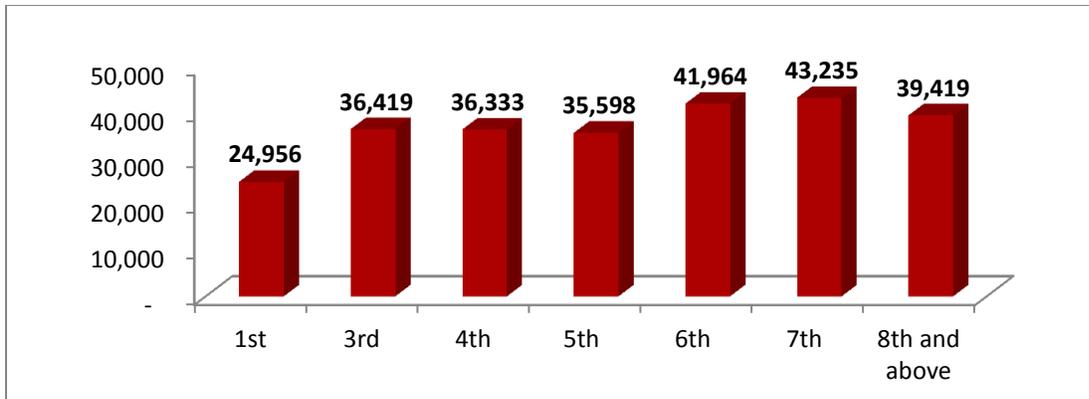
FIGURE 2: CLIENT PROFILE- LOAN AMOUNT

LOAN PURPOSE

Kashf foundation's policy is to lend only for business purposes. There is of course a counter argument to this given the fungibility of money and the difficulty for MFIs to really track where their funds are being spent. That being said, as compared with group lending methodologies, Kashf's current enterprise lending focus allows the organization to map the use of its funds more directly. Clients are asked about the loan purpose at the time of application through a detailed credit and business appraisal process, which is followed through by a loan utilization check post disbursement by the credit officers.

The study verified this information through ex-post questioning of clients in terms of loan utilization. Microcredit from Kashf foundation was mostly reported to be used for working capital investments in different enterprises. Nearly 98% of loans disbursed by Kashf Foundation were reported to be have been used for productive purposes. Approximately 2% of the loan amount was reported to be used for consumption purposes. The high proportion of business utilization is consistent across new and mature clients. Moreover, 68% of total clients used the loan for their existing businesses, while 30 % used it to start a new business. Out of these 30% clients who started new businesses, 52.5% were new clients implying that 3 out of 5 clients who wanted to establish new business were new clients while the remaining 47.5% who wanted to start a new business were mature clients. The remaining 2% used it for purposes such as marriage, home repair, business debt repayment, to purchase household items, etc. Figure 3 below illustrates that larger the loan cycle and loan size, the less likely it is to be used for consumption purposes. This can be directly linked to the fact that as the loan cycle and consequently the loan amount increases the number of earners in the family are also rising, as shown earlier: this ensures that the higher loan amount is used for a productive purpose rather than for consumption.

	1st	2nd	3rd	4th	5th	6th	7th	8th	Above 8th
Productive use	98%	100%	96%	98%	98%	100%	100%	100%	100%
Consumption use	2%	0%	4%	2%	2%	0%	0%	0%	0%
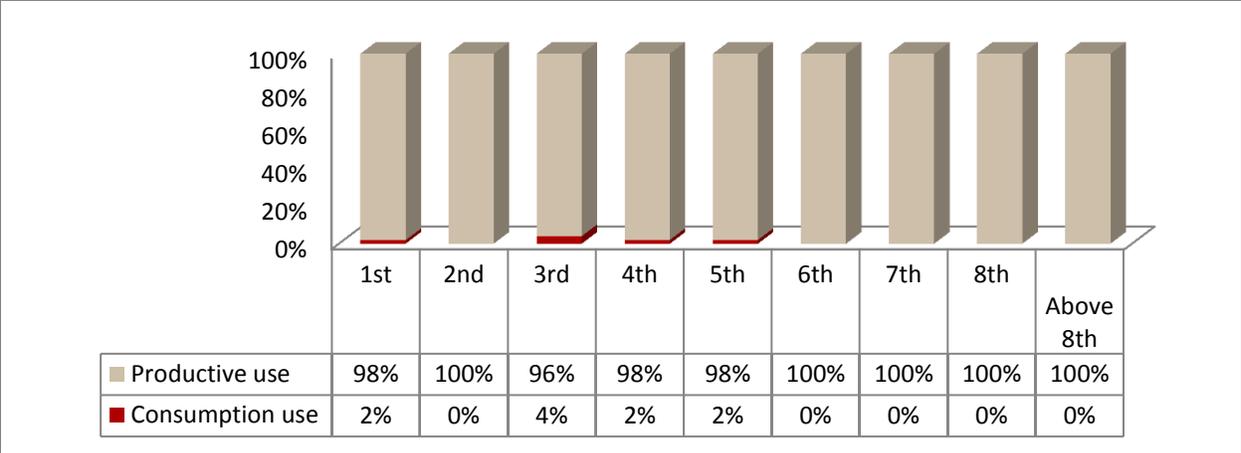
FIGURE 3: CLIENT PROFILE- LOAN PURPOSE

BUSINESS SECTORS WHERE KF LOANS ARE INVESTED

There are several sectors in which the loans are invested. The study shows that the most prominent sector that KF clients invest in is trading and retail as 51% of the overall clients are reported to have invested their loans in these sectors. Another 24% of the clients invest in manufacturing sector businesses (such as embroidery and handicrafts, shoe-making, jewelry manufacturing) while 12% invest in livestock sector and another 11% use their loans in services sector. (Please see Figure 4 below)
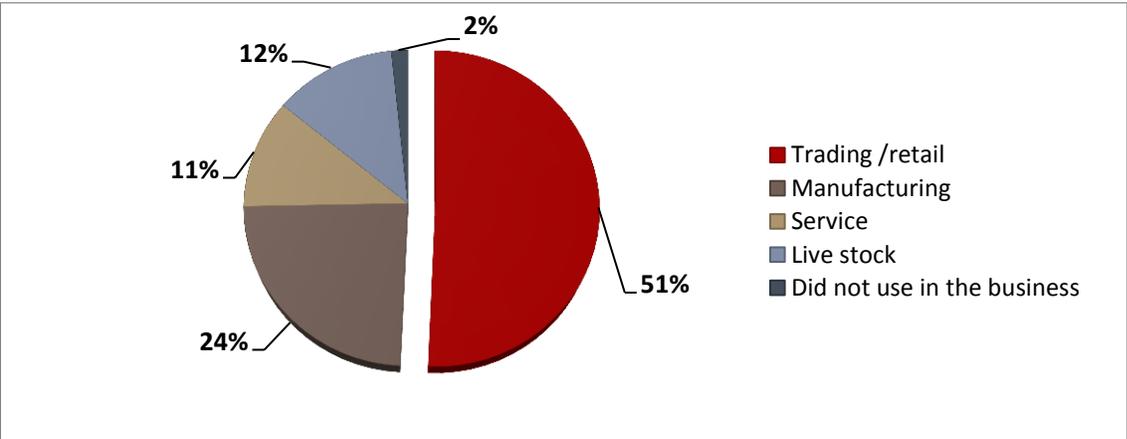
FIGURE 4: CLIENT PROFILE- BUSINESS SECTORS

For further analysis, business sector concentration of KF clients was studied in the context of loan user. For this purpose, cross tabulation was prepared as shown in Figure 5 below.

Loan_User	Loan_Sectors					Total
	Did not u	Live stoc	Manufactu	Service	Trading/r	
Female	4	27	80	23	118	252
	1.59	10.71	31.75	9.13	46.83	100.00
Joint user	7	55	78	51	217	408
	1.72	13.48	19.12	12.50	53.19	100.00
Total	11	82	158	74	335	660
	1.67	12.42	23.94	11.21	50.76	100.00

Pearson chi2(4) = 14.1750   Pr = 0.007

FIGURE 5: CROSS TABULATION- LOAN USER WISE BUSINESS SECTOR CONCENTRATION

The cross tabulation by loan user reveals that out of 252 female run businesses, most of the female loan users i.e. 46.83% are involved in the trading/retail sector. Similarly, 31.75% of the female loan users are running businesses in the manufacturing sector and 10.71% of the female loan users are involved in the livestock sector. In the Joint loan user cohort, out of 408 jointly run businesses, 53.2% of the joint users are in the trading/retail sector whereas 19.1% of the joint users are in the manufacturing sector. Another 13.5% of the joint loan users are involved in the livestock sector. The data reveals that in terms of the type and nature of businesses there is not much difference between women led or family led enterprises, other than manufacturing which primarily includes handicrafts and embroidery.

3.3. Key highlights: Socio economic profile

- The average age of Kashf Foundation's clients is 35 years for new clients and 39 years for mature/old clients. The average family size across the sample is 6 members. This is closely comparable with the national average of 6.41.
- The mean dependency ratio (no. of dependents per earner) for the overall sample is 2.5. The dependency ratio of old clients, however, is less than the new clients, implying that there are more economically active members in such households.
- The study highlights high levels of illiteracy amongst KF clients where 30% of KF clients have not even availed primary level education.
- About 21% (almost one-fifth) of Kashf clients rely on irregular income sources like daily wages or seasonal businesses as their main income source highlighting the deep outreach of Kashf, while 33% rely on business income as the main source thus highlighting Kashf's role as a key investor in micro-enterprises.

- Almost 65% of the sample of mature clients has borrowed more than 4 times, which highlights the importance of access to finance in terms of reducing economic vulnerabilities.
- There seems to be a slight correlation between loan sizes and loan use, where there is greater probability of small loans to be used for consumption purposes.
- In terms of type of micro-enterprises, there is not much difference in terms of women led or family led businesses.

4. *Qualitative Research Findings*

4.1 Research Methodology

Qualitative research for impact assessment was carried out by conducting 10 in-depth focus group discussions across 5 locations including Karachi, Lahore, Bahawalpur, Multan, and Attock. At each branch location, focus group participants were divided into two discussion groups with each group comprising of 8 participants i.e. new clients' group (*clients in their first loan cycle who have been with Kashf for 6 months or less*) and mature clients' group (*clients who are in their third loan cycle onwards).* This segmentation is consistent with the research methodology discussed above.

4.2 Coding of Quotes

All the quotations have been coded as per the following criteria:

- The first symbol in the code differentiates between new and mature clients (N- New, M- Mature).
- The second symbol in the code depicts the branch location (KHI- Karachi, BWP- Bahawalpur, MUL- Multan, ATT- Attock).

4.3 Economic Capital

SAVINGS

All the clients stated that they have the habit of saving a fraction of their monthly income and this fraction varies with the overall income, however, whereas new clients felt that Kashf has not impacted their savings, the mature clients acknowledged that Kashf's financial and non-financial trainings assisted them in inculcating healthy saving habits so much so that the mature clients stated that as a result of non-financial services they learnt to save first and then spend out of their savings when needed.

"Kashf's training helped me in realizing that it is important to save first and then spend. Earlier, I used to spend and then save whatever was left. As a result of this, I now have more monthly savings." (M, LHR)

COPING WITH FINANCIAL DISTRESS

Almost all the clients felt that they are able to cope with financial distress in a much better way after taking the loan. Whereas new clients referred to increase in business income as the reason for improvement in the ability to cope with financial distress, the mature clients referred to the habit of savings developed during their early business years as the source of safety net to meet contingencies.

"The training by Kashf staff benefited me as it inculcated in me the habit of savings; therefore, I have the financial cushion today to tackle unforeseen financial problems."(M, MUL)

4.4 Human Capital

DIET AND NUTRITION

All the clients, new as well as mature, stated that their food consumption has increased or at least stayed the same. It was observed that greater change in food consumption was reported by mature clients who previously could not afford three basic meals a day. Whereas the new clients discussed how their food intake is poor and has improved slightly as a result of increased monthly income, the mature clients could comment on tangible improvement in the consumption pattern over the years.

"Before I had availed this loan facility, providing even one meal to the children was very difficult and I used to have tears in my eyes that how will I provide food to them. At that time, I would sacrifice my own intake of food to ensure that my children do not go hungry. Now, thanks to Kashf, not only am I able to provide three meals per day to the family but we are also able to consume milk and meat products." (M, LHR)

"With increase in household income, I buy better quality milk for my children. Sometimes, I can even afford meat for their proper nourishment." (M, MUL)

"Before taking the loan, my household income was not sufficient enough for me to buy meat, not even once a month. I would save money for buying milk for my children as it was more important than having meat. Now that I have bought a sewing machine from the loan amount and there is an increase in the monthly income, I have started buying meat as well, though in a very small quantity just enough for my two children and only once a month. Hopefully, as the income will increase further, my family's food consumption will improve too." (N, MUL)

All the clients, new and mature, felt that school expenses have increased during the last one year. Whereas new clients felt that the increase in school expenditure was largely a result of inflationary pressures, the mature clients discussed that as their incomes increased they were able to send their children to better quality schools. Some of the mature clients also acknowledged that it was after their businesses grew that they decided to send their children to schools.

"I am able to educate my son but I could not send my daughter to school due to lack of financial resources." (N, BWP)

"My children now go to a tuition academy. Earlier, I used to teach them myself but now that I have financial resources, I can send them to the academy." (M, MUL)

"Previously I could not afford the education of my second child; however, after my income increased I started sending my second child to school as well." (M, BWP)

4.5 Physical Capital

LIVING STANDARDS

All clients, new as well as mature, stated that their living standard improved after taking the loan and expanding their businesses in terms of investing in household level consumables. Whereas new clients referred to small household items such as water cooler, sofa set, child's bicycle etc., the mature clients referred to bigger assets such as rickshaw, television, fridge etc.

"I bought a small water cooler for my house." (N, MUL)

"I am grateful to Kashf for its support enabled me to improve my living standard. With the increase in income, I was able to buy a fridge for my house." (M, KHI)

4.6 Social Capital

SELF-CONFIDENCE

All clients, new and mature, perceived themselves to be much more confident now after taking the loan. Whereas new clients felt that this sense of worth came from taking the loan and investing in the growth of their businesses, mature clients felt that this self-confidence had resulted from a reduced level of economic dependence on the males in their families, along with an enhanced role in decision-making capacity over the years. Moreover, all the clients felt proud that they had been able to demonstrate their mettle by considerably contributing to the overall household income.

"Before starting my own business, I was very shy of interacting with people and did not have a sense of self-worth, however, after attending Kashf's non-financial trainings and after

interacting with so many people for business purposes, I am now much more confident." (M, MUL)

"I wanted to expand my business but I knew that my husband would not give me any money for it. Then I found out about Kashf Foundation and arranged money for my business expansion by taking loan from Kashf. It has definitely increased my self-confidence as I know I can arrange money for my business needs without relying on the men in my family. Also, I am confident as I am managing the business alone, competing with men and yet my business is gradually growing." (N, BWP)

INTER-SPOUSAL RELATIONS AND DOMESTIC VIOLENCE

Most of the clients, whether new or mature, perceived the issue of domestic violence as a personal matter that should not be talked about in a group discussion. Almost all the clients, therefore, were hesitant in discussing domestic violence and simply stated that they had not experienced domestic violence in the last one year. Moreover, most of the clients felt that relation with their husband improved after taking the loan as they have become an income contributor and their decision-making capacity is therefore appreciated by their husbands. Few clients, however, stated that there has been no change in the inter-spousal relationship.

"When a woman shares household responsibility by earning, men start giving her more respect." (N, BWP)

"My husband who used to consider me useless now involves me in important decisions because he knows that I take wise decisions for my business's growth as well." (M, MUL)

SOCIETAL PERCEPTIONS

All the clients felt that their relatives and neighborhood community started giving them greater respect after they took the loan and expanded their businesses. Whereas new clients perceived this to be a result of them being an income contributor in their respective households and thus financially independent women, the mature clients felt that this change in societal perception was due to better decision-making capacity evident through their successful entrepreneurial venture. Moreover, all the clients felt that working women are respected more due to their contribution in terms of bringing economic prosperity to their households.

"I feel financially independent now and I feel that people respect me more now." (M, MUL)

"My relatives used to consider me below their social status and therefore avoided meeting me during family gatherings. Now that they know that I have taken initiative in expanding my business and that I often visit Lahore and Faisalabad to reach bigger markets, they have

changed their attitude towards me. They think I am a progressive woman and therefore I notice that they respect me more in social gatherings." (N, BWP)

Quantitative Research Findings

5. Economic Capital

Under this section we are going to evaluate the impact of Kashf Foundation's financial and non-financial services in building the economic capital of its clients. The indicators studied to analyze the impact on economic capital are as follow:

- Income: household income and business income
- Savings
- Business expansion and generating new businesses
- Employment Generation

5.1 Impact on Income

IMPACT ON HOUSEHOLD INCOME

Household income can be a key driver in increasing the 'economic capital' of an individual or of a household resulting in improving the overall financial reach of the household e.g improving per capita income levels and also ensuring that the household is able to cope with times of financial duress. Responding to the question on the impact of Kashf on income level of the household over the last 12 months, 96% of clients out of a sample of 660 respondents reported an increase in the overall household income. Out of these 96% clients, 85% stated that their household income "increased somewhat" indicating an average increase in income whereas 11% stated that their household income "increased a lot". These results are depicted in Table 8 below:

	New Clients	Mature Clients	Overall
Increased a lot	11%	10%	11%
Increased somewhat	85%	85%	85%
No change	3%	3%	3%
Decreased	1%	2%	1%

TABLE 8: IMPACT ON INCOME

In another question regarding the reason for increase in the income of clients, an overall 68% of the sample respondents stated that they had expanded their existing business with the loan amount which resulted in an increase in the monthly household income. Another 27% of the

total respondents stated that they established new businesses with the loan amount which resulted in increased income. (Please see table 9 below)

	Overall	New	Mature
Base	634	319	315
Reason of increase in income			
Expanded the current business	68%	65%	71%
Established new business	27%	27%	27%
Raw material purchased at low prices	0%	1%	0%
Got a job	0%	1%	0%
Increase in the number of earners	2%	3%	1%
Increase in the earning female members	2%	3%	0%
Don't know	0%	0%	1%

TABLE 9: REASONS FOR INCREASE IN INCOME

However, in order to evaluate the impact of Kashf's financial and non-financial services on income, it is important to understand the significance of the relationship of income with respect to the loan amount, the loan user, the business sector, the participation in financial trainings (BIL, SFE, and BFL), the literacy level of the client, location, the loan cycle and the number of income earners. The statistical model represented in Table 10 below depicts monthly household income as a response variable with predictor variables being locations, loan cycle, loan amount, number of income earners, loan users (female, joint, male), business sectors (livestock, manufacturing, trade, services), education level and participation in financial trainings. The results are analyzed in the matrix below:

Household Income	Household~me	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
Bahawalpur							
Karachi	ILocation_2	782.7214	4060.365	0.19	0.847	-7207.362	8772.805
Lahore	ILocation_3	-2968.031	3635.453	-0.82	0.415	-10121.96	4185.901
Multan	ILocation_4	-4717.904	2472.179	-1.91	0.057	-9582.718	146.9097
Client category	ILocation_5	-5909.76	2692.179	-2.20	0.029	-11207.49	-612.0244
Loan Cycle	IClient_c~2	7668.924	2611.885	2.94	0.004	2529.193	12808.65
Loan Amount	Loan_Cycle	369.4849	583.0904	0.63	0.527	-777.9345	1516.904
Number of Income Earners	Loan_Amount	.3383192	.1120863	3.02	0.003	.1177532	.5588852
Loan User	Number_Of_~s	10711.89	1359.829	7.88	0.000	8035.99	13387.8
Business Sector 1	ILoan_Use~2	1505.574	2378.049	0.63	0.527	-3174.008	6185.156
Business Sector 2	ILoan_Sec~2	649.9889	6860.035	0.09	0.925	-12849.35	14149.33
Business Sector 3	ILoan_Sec~3	-10144.71	4268.302	-2.38	0.018	-18543.98	-1745.446
Business Sector 4	ILoan_Sec~4	-6926.404	4648.88	-1.49	0.137	-16074.58	2221.774
Education: Graduation	ILoan_Sec~5	-10872.9	4241.2	-2.56	0.011	-19218.84	-2526.966
Education: Grade 5-8	IEducatio~2	11907.56	3330.032	3.58	0.000	5354.646	18460.48
Education: Intermediate	IEducatio~3	-1583.839	2446.865	-0.65	0.518	-6398.838	3231.16
Education: Matric	IEducatio~4	1558.125	3104.088	0.50	0.616	-4550.174	7666.425
Education: Post-graduation	IEducatio~5	240.1726	1965.489	0.12	0.903	-3627.563	4107.908
Marital Status	IEducatio~6	10129.31	2907.277	3.48	0.001	4408.304	15850.32
Participation in Financial Trainings	IMarital_~2	-3341.493	2333.281	-1.43	0.153	-7932.98	1249.994
	IMarital_~3	-6595.202	2918.544	-2.26	0.025	-12338.38	-852.0206
	IMarital_~4	4545.814	4714.827	0.96	0.336	-4732.135	13823.76
	INo_Train~2	510.0646	3668.015	0.14	0.889	-6707.943	7728.073
	_cons	4567.889	7064.77	0.65	0.518	-9334.336	18470.11

TABLE 10: REGRESSION TABLE HOUSEHOLD INCOME

Response Variable	Predictor Variable	Analysis	Implication
Monthly Household Income	Loan Cycle	There is positive correlation between loan cycle and household income as with increase in every loan cycle the household income increases by PKR 370 approximately. However, P value is 0.527 which is not statistically significant	The increase in loan cycle also increases loan amount and thus the higher average disbursement size results in a higher household income. However, this model does not take into account the impact of external factors such as business management skills and macro- economic variables such as inflation.
Monthly Household Income	Loan User	The results depict that businesses which are managed jointly by female client and her male counterpart have a statistically significant higher household income as compared to a business where there's no female involvement. The results above show that in the businesses where there are joint users the household income was higher by PKR 1,506 as compared to those businesses which are solely run by women. Moreover, P value is 0.004 hence the results are statistically significant.	As the results are statistically significant, Kashf should ensure a portfolio diversification where the proportion of businesses which are jointly managed, solely run by female and others are allocated. This result also supports Kashf's contention that a family focused financial services program will have greater impact in the long run, especially where there is a huge social restriction to women's economic involvement.
Monthly Household Income	No. of Income Earners	The results show that an increase of one income earner in the household leads to an increase in the household income by PKR10,	Adding one female earner per household would lead to increasing the household income by PKR 10, 712, therefore, as a future strategy Kashf can start

		712. The result is statistically significant with P=0.00	mapping the number of earners it adds to each household and Kashf should also explore the possibility of merging both KIKK and KKK products as 52.5% of the clients who started a new business are new clients. This might enable Kashf to enhance efficiency and productivity. Again this result highlights that access to finance can reduce economic dependency within low income households by increasing the number of direct earners.
Monthly Household Income	Loan Amount	The results show that increase in loan amount results in 33.8% increase in the household income. In this scenario, P value is 0.00 which is statistically significant.	This requires Kashf to revisit its policy of loan amount every six months keeping in view the client's ability to repay. It might be useful to do a further segmentation and profiling of Kashf's clients depending on their cash flow cycle. Furthermore, it seems to imply that repeat loans carry a higher economic value in terms of income increase.
Monthly Household Income	Participated in financial trainings	The results show that the participation in financial trainings lead to an increase of PKR 510 in the household income of the client. In this case, P value is 0.80 which means that the result is not statistically significant.	The results depict that there is positive correlation between participation in the financial trainings and the household income of clients as those who participated in training yielded an increase of PKR 510 in household income per month as compared to those who did not attend. This implies that KF should look at further enriching its financial trainings curriculum.

Monthly Household Income	Location	The household income of the clients in Bahawalpur is higher by PKR782 as compared to the base location, followed by Attock, Karachi, Lahore and Multan. However, P value is 0.8 which means that the results are not statistically significant.	As the results are not statistically significant there are other external location specific factors that are impacting income in a particular location which is beyond the scope of the study.
Monthly Household Income	Education Level	There is a positive correlation between the education level and household income of the client. The clients who have done graduation and above have a household income higher by PKR 11,907 as compared to those who completed only primary education. The P value is 0.00 which is statistically significant. Even the clients who have done matric have a greater household income by PKR 240 as compared to the base (primary education), although P value is 0.12 and the result is not statistically significant.	This actually highlights the importance of imparting financial literacy trainings and education to clients so that they can improve the operational management of their businesses.

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05). Moreover, R squared value of the model is 31% which implies that the model is a good fit.

IMPACT ON BUSINESS INCOME

Similar regression model was constructed to specifically see KF's impact on monthly business income of clients. Table 11 below depicts the impact of key variables of interest on business income of KF clients.

List of Variables:	Business_I~e	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	251.6547	519.405	0.48	0.629	-772.0174	1275.327
Loan Amount	Loan_Amount	.1857227	.0991818	1.87	0.062	-.0097503	.3811956
Bahawalpur	_ILocation_2	440.2125	4178.165	0.11	0.916	-7794.347	8674.772
Karachi	_ILocation_3	-3201.028	2057.775	-1.56	0.121	-7256.604	854.5479
Lahore	_ILocation_4	-5781.433	2213.206	-2.61	0.010	-10143.34	-1419.523
Multan	_ILocation_5	-5865.856	1834.003	-3.20	0.002	-9480.41	-2251.301
Client Category	_IClient_C~2	5368.429	2488.642	2.16	0.032	463.6764	10273.18
Loan User	_ILoan_Use~2	-1153.524	1847.856	-0.62	0.533	-4795.381	2488.333
Livestock	_ILoan_Sec~2	25998.03	10938.38	2.38	0.018	4440.07	47555.99
Manufacturing	_ILoan_Sec~3	2659.022	2074.627	1.28	0.201	-1429.767	6747.812
Service	_ILoan_Sec~4	5220.348	2097.84	2.49	0.014	1085.809	9354.888
Trading	_ILoan_Sec~5	2005.469	1848.934	1.08	0.279	-1638.512	5649.451
Graduate	_IEducatio~2	7332.11	3056.201	2.40	0.017	1308.78	13355.44
Intermediate	_IEducatio~3	-1002.669	2316.071	-0.43	0.666	-5567.31	3561.972
Less than primary education	_IEducatio~4	-1353.644	2770.159	-0.49	0.626	-6813.227	4105.939
Matric	_IEducatio~5	631.7919	1627.008	0.39	0.698	-2574.806	3838.39
Post Graduate	_IEducatio~6	6874.759	2536.837	2.71	0.007	1875.021	11874.5
	_cons	3545.323	3862.636	0.92	0.360	-4067.375	11158.02

Key results of regression model are presented in the table below:

Response Variable	Predictor Variable	Analysis	Implication
Monthly Business Income	Loan Cycle	There is positive correlation between loan cycle and business income as with increase in every loan cycle the business income increases by PKR 252 approximately. However, P value is 0.62 which is not statistically significant	As 98% of the clients used the loan for productive use, the increase in loan cycle also increases loan amount and thus the higher average disbursement size results in a higher business income. However, this model does not take into account the impact of external factors such as business management skills and macro- economic variables such as inflation and change in the cost of production or in terms of access to markets or changes in technology.
Monthly Business Income	Loan User	The results depict that businesses which are managed by females solely have a higher business income as compared to a	This implies that businesses which are solely run by females have a higher business income. This is contrary to the above finding where household income

		business which are jointly run. The results above show that the businesses where there are females only, the business income was higher by PKR1,154 as compared to those businesses which are jointly run. However, P is 0.53 hence the results are not statistically significant.	was higher in case of joint user, however, as the result is statistically not significant, there could be multiple factors behind this result. These factors could include a greater number of income earners in case of joint users, in case of businesses solely run by females a greater portion of earnings reinvested in business, in case of jointly run businesses the female clients may not be fully aware of the total income generated from the business and other external factors that were beyond the scope of this study.
Monthly Business Income	Business Sector	The results yielded depict that those clients who are engaged in livestock sector have the highest monthly business income which is PKR26, 000. It is approximately four times higher than the monthly business income of services sector and five times higher than the monthly business income of manufacturing and trading sector. Moreover, the result is statistically significant as the P value is 0.01.	Kashf should explore offering a sector specific loan product for "livestock" sector. Moreover, with the introduction of livestock insurance scheme and credit guarantee scheme for small and marginalized farmers, the livestock sector offers a lucrative market opportunity to explore
Monthly Business Income	Loan Amount	The results show that an increase of one rupee lent to the client increases business income by 18.5%. P value is	This requires Kashf to revisit its policy of loan amount every six months keeping in view the client's ability to repay. It might

		0.06 hence the result is not statistically significant.	be useful to do further segmentation and profiling of Kashf's clients depending on their cash flow cycle.
Monthly Business Income	Education Level	There is a positive correlation between the education level and business income of the client. The clients who have done graduation and above have a business income higher by PKR 6,875 as compared to those who completed only primary education. The P value is 0.00 which is statistically significant. Even the clients who have done matric have a greater household income by PKR 632 as compared to the base (primary education), although P is 0.69 which is not statistically significant.	This highlights the importance of imparting financial literacy trainings and education to clients so that they can improve the operational management of their businesses.

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

5.2 Impact on Savings

Economic impact of loans may also be seen in terms of increased opportunity for household savings. Clients were asked whether they save in one or more of the following savings instruments: at home, in a committee, at a bank, any other. The two most common savings instruments reported by clients were committees (about 73% of the 660 -total sample respondents) and savings at home (17.5% of the 660-total sample respondents) as depicted in the table below. Incidence of formal savings in a bank account was reported to be as low as 3% across all five cities. This is lower than the reported 10% of the adult population which has a bank account according to the Financial Inclusion Survey of Pakistan conducted by DFID and the

World Bank – indicating that KF reaches households who have limited or no access to formal financial services. This also shows that there's a need to create further awareness amongst clients pertaining to benefits of formal savings in order to motivate the financially excluded clients to open accounts and actively use these accounts for day to day activities. Huge potential is reported in this area from the survey as two-thirds of Kashf's clients save regularly.
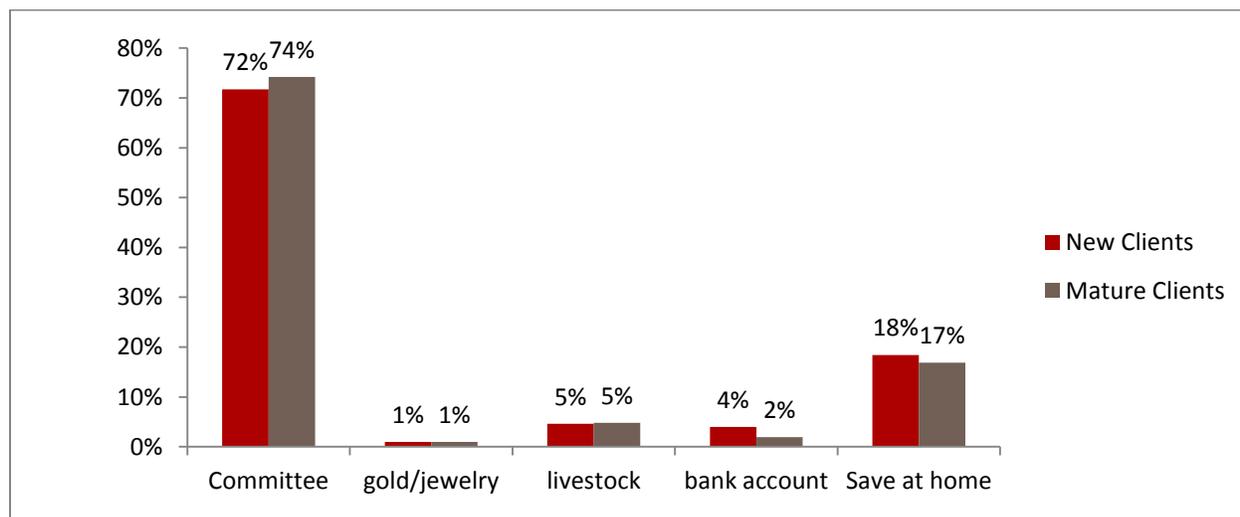
TABLE 12: SAVINGS METHODS

	New Clients	Mature Clients	Overall
Increased a lot	2%	1%	2%
Increased somewhat	88%	92%	90%
No change	6%	5%	6%
Decreased somewhat	1%	0%	0%
Decreased a lot	3%	2%	2%

In all, 92% of the 618 respondents reported an increase in savings over the last 12 months as shown in the table above. Analyzing across new and mature clients, about 93% of 314 old clients and 90% of 304 new clients reported an increase in savings. However, about 8% of the respondents reported either depletion or no effect on their household savings. It is also noteworthy that the average monthly savings of new clients stood at PKR 4,327 whereas that of the mature clients stood at PKR 5,540. In order to evaluate the impact of Kashf's financial and non-financial services on savings, it is important to understand the significance of the relationship of monthly savings with respect to the loan amount, the loan user, participation in financial trainings (BIL, SFE, and BFL), the loan cycle and the number of dependents. Using Stata, we built an OLS regression model which depicted the following results:

Mnthly_Sav~s	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
Business_I~e	.0610076	.0446174	1.37	0.172	-.0266954	.1487106
Household~me	.0200325	.0169282	1.18	0.237	-.0132428	.0533078
Loan_Cycle	224.0062	153.514	1.46	0.145	-77.7515	525.7638
_ILoan_Use~2	-72.75893	436.7697	-0.17	0.868	-931.3036	785.7857
_INo_Train~2	1221.171	503.1212	2.43	0.016	232.2015	2210.141
Loan_Amount	.0330812	.0308489	1.07	0.284	-.0275575	.0937198
number_dep~s	-249.8947	136.3615	-1.83	0.068	-517.9363	18.14683
_ILocation_2	-2024.189	889.4044	-2.28	0.023	-3772.464	-275.9145
_ILocation_3	-2778.661	778.07	-3.57	0.000	-4308.089	-1249.232
_ILocation_4	-1690.914	844.9315	-2.00	0.046	-3351.77	-30.05815
_ILocation_5	-1904.895	737.2827	-2.58	0.010	-3354.149	-455.6413
_cons	2836.673	1184.769	2.39	0.017	507.8086	5165.538

List of Variables

Business Income
Household Income
Loan Cycle
Loan User
Participation in Financial Trainings
Loan Amount
Number of Dependents
Bahawalpur
Karachi
Lahore
Multan

TABLE 13: REGRESSION TABLE- IMPACT ON SAVINGS

The results are highlighted in the matrix below:

Response Variable	Predictor Variable	Analysis	Implication
Monthly Savings	Business Income	There is positive correlation between business income and monthly savings as increase in business income increases the monthly savings by 6.1%. However, P value is 0.17 which is not statistically significant	This result implies that Kashf should continue to ensure productive use of the loan through compliance and loan utilization checks. However, it also highlights that there are other factors in addition to business income that impact monthly savings.
Monthly Savings	Household Income	The results show that increase in household income increases monthly savings by 2%, as P value is 0.23 which is not statistically significant.	This result also corroborates the above finding and indicates that although increase in household income leads to 2% increase in monthly savings but business income increases monthly savings 3 times more than the household income therefore productive use of loan must be ensured.
Monthly Savings	Participation in financial	The results depict that participation in financial	This highlights that Kashf should continue its focus on financial

	Trainings	trainings increases the monthly savings by PKR 1,222. P value is 0.01 which is statistically significant.	literacy training for the clients as it is having a significant impact on increase in monthly savings.
Monthly Savings	Loan Amount	The results show that increase in loan amount results in 3.3% increase in the monthly savings. In this scenario, P is 0.28 which implies that the result is not statistically significant.	This indicates that higher loan amount leads to higher monthly savings however, since the result is statistically insignificant there are other factors impacting monthly savings such as proper utilization of loan that yields a higher monthly savings.
Monthly Savings	Number of dependents	The results show that an increase of one dependent per household decreases monthly savings by PKR 250. The result is not statistically significant with P=0.06	Addition of one dependent per household would lead to decreasing the monthly savings by PKR 250 and annual savings by PKR 3,000; therefore, it is essential for Kashf to continue its focus on adding no of income earners and imparting gender trainings and social theatre on family planning.

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

5.3 Impact on Employment Generation

Unemployment and underemployment lie at the core of poverty. In order for the economy to develop, it is important for microfinance institutions to create opportunities which generate employment. Hence the creation of productive employment opportunities is essential for achieving poverty reduction and sustainable economic and social development.

According to this research, Kashf has had an indirect impact on employment generation in the local communities that it serves. Impact study reveals that out of the sample respondent base of 660, 8.5% of the respondents were able to provide job opportunities to others in their local communities. However, 8.5% of the businesses which did create employment opportunities had on average 3 employees in their business. The table below depicts the impact of 3 jobs being created by 8.5% of the cumulative loans disbursed by KF as of June 30, 2015.

Total Loans disbursed till June 30, 2015	2.7 million
Average Job Creation per loan	3
Total Jobs created due to KF Loans (assumption: 8.5% of total clients are on average creating 3 jobs)	688,500

TABLE 14: EMPLOYMENT GENERATION

However, it is important to see the impact on employment generation according to different loan user categories as well which is highlighted in the table below:

	Female User	Male user	Joint user
Base	**252**	**14**	**394**
No of businesses that did not create employment opportunity	233	0	372
No. of businesses that created at least one employment opportunity	19	0	22

TABLE 15: EMPLOYMENT GENERATION BY LOAN USER

Out of the 252 businesses that were run by females, 7.5% of the businesses created employment opportunities and out of the 394 jointly run businesses, 5.6% created employment opportunities. These results indicate that female run businesses created the most number of employment opportunities followed by jointly run businesses which could also be a result of Kashf's focus on giving loans to females. However, P value is 0.6 which implies that the result is not statistically significant and there are other factors that also impact employment generation.

The above finding is further corroborated with the following qualitative research findings.

"The economic situation of my household has changed. Moreover, we now have 10 or 12 workers while once, we used to have 3 or 4. Our situation has also improved because my husband goes out to work. There are still some financial challenges but with the support of Kashf they will be resolved as well." (Mature client, Lahore)

Similarly another client stated, "I have 15-20 part time employees, I contact as many as I want when there is more work and I pay them per suit. Otherwise, when the work is less then I only employ 5 to 6 women on part time basis."(Mature client, Bahawalpur)

5.4 Role of Kashf in Supporting Businesses Expansion

Out of 660 sample respondents, 27% of the clients report using Kashf's loan to start a new business. These businesses are usually seasonal and may grow to become permanent businesses in some cases. The fact that so many new businesses are started using Kashf loans is a strong indication of the catalytic effect of microcredit at the borrower's household level.

List of Variables	_Ibusiness~2	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	1.078502	.0532842	1.53	0.126	.9789639	1.188161
Household Income	Household~me	.9999989	6.23e-06	-0.18	0.855	.9999867	1.000011
Business Income	Business_I~e	.9999967	.0000133	-0.25	0.804	.9999707	1.000023
Monthly Savings	Mnthly_Sav~s	1.000024	.0000255	0.95	0.341	.9999743	1.000074
Participation in Financial Trainings	_INo_Train~2	1.190845	.3550854	0.59	0.558	.6638109	2.136318
Number of Income Earners	Number_Of_~s	.8073593	.1217716	-1.42	0.156	.6007347	1.085053
Loan User	_ILoan_Use~2	.4736655	.1007852	-3.51	0.000	.3121443	.7187669

To study the impact of KF on business expansion, we built a logistic regression model in Stata. Following table depicts the regression results.

The results are analyzed in the table below.

TABLE 16: REGRESSION TABLE- IMPACT ON BUSINESS EXPANSION

Response Variable	Predictor Variable	Analysis	Implication
Business Expansion	Loan Cycle	The results depict that with increase in every loan cycle the likelihood of business expansion increases by 1.1 times. Business Expansion includes introduction of a new product, opening new business or enhancing the business volume. However, P value is 0.12 which is not statistically significant	Kashf needs to carry out business climate research to analyze the cash flow cycle of different businesses and to identify those specific sectors where more business expansion is taking place e.g. which businesses are introducing new product lines, in which markets is the expansion of that particular business taking place.
Business Expansion	Household income	The results depict that the likelihood of business expansion increases by 100%	Same as above

		if there is increase in household income. P value is 0.85 so the result is not statistically significant	
Business Expansion	Participation in financial trainings	There is positive correlation between participation in financial trainings and business expansion as those who participated in financial trainings there is likelihood for them to expand their business by 1.2 times more than those who do not participate in financial trainings. P value is 0.55 implying that the result is not statistically significant.	This implies that the financial literacy trainings being imparted by Kashf have a positive impact on guiding clients towards business expansion which includes establishing new business, introduction of new product line, expanding existing business volume and building market linkages.
Business Expansion	Loan User	The result depicts that if a business is run by joint user, the likelihood of business expansion is 47.4% greater than those businesses which are run by females only. P value is 0.00 implying that the result is statistically significant.	The results imply that if the business is run by joint users it is more likely to impact business expansion as compared to those who are solely running the business. This corroborates the earlier finding that businesses which are jointly run generate higher income which then leads to greater business expansion as compared to the businesses which are managed solely. Moreover, male involvement in jointly run businesses could enable greater forward linkages resulting in greater business expansion. It could also be related to the fact that as primary care givers in the family many women have to close down their businesses to take

			care of sick family members. Kashf should expand its BIL program so that greater number of female clients are trained in creating forward market linkages which would reduce the dependence on male members of the family.

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

This is further corroborated with qualitative research finding where a client stated, *"Thanks to Kashf, I was able to purchase a shop that is doing well. My husband and I started with selling fruits, but now we sell fruits, vegetables and fish. Adding to the product line enabled us to generate more revenue from the business which enabled us to change our house as we are much better off now. We repaid our debts and are now in a good financial situation. Moreover, now if anyone asks me for some money like 1000 or 3000, I will have the money and I will be able to lend it to them."* (Mature Client, Lahore)

5.5 Key Highlights for Impact on Economic Capital

- **Impact on Income**- The overall results from this section illustrate the following:
  - A business that involves the active participation of women and is a jointly run businesses has a positive correlation with family income by increasing the income by PKR 1,506, which is a statistically significant result. This supports Kashf's contention that investing in the family can have a positive impact on overall results, especially when women face huge barriers in terms of economic participation.
  - A higher loan amount increases the monthly household income by 33.8%, a result that is statistically significant and implies that micro-enterprises have the capacity to absorb higher investments over time. Kashf and other MF practitioners may need to re-think the way credit assessments are conducted and in fact there is a potential for linking loan amounts directly to the absorptive and growth capacity of businesses.
  - The results show that an increase of one income earner in the household leads to an increase in the household income by PKR 10,712. The result is statistically

significant, and implies that access to finance reduces both under and un-employment at the household level, while it also highlights the marginal return for adding women in the micro-business workforce.

- o There is a positive correlation between the education level and household income of the client. The clients who have attained more than 10 years at school have a higher household income, as compared to those who have completed only primary level education. This fact brings out the return on female education, where for every one year of school a female entrepreneur can earn PKR 1,100 additional.

- **Impact on Savings**- The overall results from this section illustrate the following:
  - o There is positive correlation between business income and monthly savings as increase in business income increases the monthly savings by 6.1%. Moreover, business income increases monthly savings by 3 times more than household income thus implying the importance of ensuring productive use of loan.
  - o The result also shows the importance of non-financial services in inculcating the savings habit amongst clients as those clients who participated in financial trainings yield an increase of PKR 1,222 in monthly savings.

- **Impact on employment generation**
  - o 8.5% of the clients were able to generate economic opportunities to 3 individuals on average implying that as of June 30, 2015, Kashf has created 688,500 employment opportunities.

- **Impact on business expansion**- The results depict the following:
  - o The likelihood of business expansion increases by 1.1 times with increase in every loan cycle.
  - o In case of joint user the likelihood of business expansion is 47.4% greater than businesses which are solely run. This result also supports Kashf's contention that a family focused financial services programme will have greater impact in the long run, especially where there is a huge social restriction to women's economic involvement.
  - o There is positive correlation between participation in financial trainings and business expansion as for those who participated in financial trainings the likelihood to expand their business increases by 1.2 times more. Thus, implying that Kashf's non-financial services are enhancing client's ability and skills of business management and creating market linkages.

6. *Human Capital*

Human capital measures the value of a population's skillset and physical wellbeing. In the current, human capital development is assessed in detail through the quantity and quality of the household's diet and nutrition, healthcare, access to education and business skills development.

6.1 Diet and Nutrition

Food insecurity exists when people are undernourished due to unavailability of food as well as inadequate nutritional value of the food intake. Food consumption is another way to assess the level of poverty or to capture household economic security. Moreover, diet directly affects a person's efficiency and working ability. The findings of the survey highlight that 98% of 660 sample respondents are able to provide their families with a meal every day. In various responses to how the food intake patterns had changed in the last one year, almost 78% of the total sample respondents reported having better and wider variety of foods, thus enriching their daily consumption, as depicted in the table below:

Food Security	Overall Clients
Able to have a meal everyday	98%
Improved food consumption pattern	78%
Improvement in kind to consume milk, meat, cheese and eggs	52%
Improvement in kind to buy spices and vegetable with food	13%

In order to study the impact of KF on food consumption, we built a logistic regression model in Stata. Its results are presented in the table below.

List of Variables:	_Inutritio~1	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	.7261982	.0545003	-4.26	0.000	.6268642	.8412728
Household Income	Household~me	.9999977	9.67e-06	-0.24	0.811	.9999787	1.000017
Business Income	Business_I~e	1.000008	.0000196	0.42	0.674	.9999699	1.000047
Monthly Savings	Mnthly_Sav~s	.9999795	.0000288	-0.71	0.477	.999923	1.000036
Participation in Trainings	_INo_Train~2	2.619627	.9419085	2.68	0.007	1.294741	5.300246
Number of Income Earners	Number_Of_~s	1.560553	.3661749	1.90	0.058	.9852553	2.47177
Loan User	_ILoan_Use~2	.3161297	.0984489	-3.70	0.000	.1717057	.5820307
Loan Amount	Loan_Amount	1.000081	.0000204	4.00	0.000	1.000042	1.000121
Business Expansion	_Ibusiness~2	.3642985	.1242118	-2.96	0.003	.186737	.7106969
Number of Dependents	number_dep~s	1.234827	.1149995	2.26	0.024	1.028807	1.482104

TABLE 17: REGRESSION TABLE: FOOD CONSUMPTION

The results of the regression model are analyzed below:

Response Variable	Predictor Variable	Analysis	Implication
Improved Food Consumption	Loan Cycle	The results depict that with increase in loan cycle, the likelihood for better food consumption increases by 73%. Moreover, P is 0.00 so the result is statistically significant.	The results imply that Kashf's access to finance is enabling the client to increase food consumption, which is a key indicator to assess client and household level impact.
Improved Food Consumption	Monthly Savings	The results depict that the likelihood of better consumption pattern implying higher intake of milk, cheese and meat increases by almost 99% with increase in monthly savings. However, P is 0.47 thus the result is not statistically significant.	Increase in monthly savings is one of the factors that leads to better consumption pattern hence it again emphasizes on the role of Kashf in inculcating the habit of monthly savings amongst low income households through savings pilot. However, it seems to imply that clients would require safe and accessible options to save in order to have a significant impact on food patterns.
Improved Food Consumption	Participation in Financial Trainings	The results depict that the likelihood for improvement in food consumption increases by 2.6 times for those clients who participate in trainings as compared to those clients who do not. Moreover, P value is 0.00 which means that the result is statistically significant.	This implies that Kashf's training has a positive impact on client's food consumption pattern which could have resulted from improvements in savings behavior and better budget management as a result of Kashf trainings.
Improved Food Consumption	Loan User	There is positive correlation between a jointly run business and improvement in food consumption as the likelihood of better food consumption is 0.4 times	This again highlights the importance of gender equity in resources within the family, where women's mainstreaming in family led businesses has greater results of impacting on

		more in businesses that are jointly run as compared to those businesses that are solely run. Moreover, P value is statistically significant as it is 0.00.	food security.
Improved Food Consumption	Loan Amount	The result indicates that with increase in loan amount the likelihood that food consumption pattern will improve increases by 100%. As P value is 0.00 so the result is statistically significant.	This result implies that with increase in loan amount, the clients are able to expand business which results in higher business and household income increasing the client's intake of cheese, meat, milk, poultry and other similar products. Overall, this result can also be taken as a proxy of old versus new clients, as mature clients have access to higher loan sizes.

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

The improvements in the food intake are also linked to the overall feeling of wellbeing in the household as a result of stability in work and presence of opportunities. This is further supported by the following qualitative research findings:

 "There was a time when we did not have the additional source of income from the business we started with Kashf; my family sometimes had to go several days without food, but that doesn't happen anymore." (Mature client, Karachi)

*"We are able to buy chicken more often now." (*Mature Client, Bahawalpur)

6.2 Healthcare

Health is an important indicator of a population's prosperity. The study shows that 40% of the 660 sample respondents reported that they did not fall ill even once during the year, with no significant difference across new and old clients. 40% of the clients recalled and reported to have fallen ill between 1-3 times during the year; and 10% of the clients fell ill more than 6 times in the year. Hence the numbers depict the need for continuous provision of Kashf's access to formal healthcare facilities. Furthermore, 50% of the 330 new clients fell ill once or

more during the year, out of which 75% had access to formal healthcare. On the other hand, 56% of the 330 mature clients fell ill once or more during the year, out of which 77% had access to formal healthcare.

Frequency of getting ill in the last year	All Clients	New Clients	Mature Clients	Is the difference statistically significant?[4]
Didn't get ill	41%	44%	38%	No
1 - 3 times	40%	40%	39%	No
4 - 6 times	10%	8%	12%	No
More than 6 times	4%	3%	5%	No
Didn't recall	5%	5%	6%	No

TABLE 18: HEALTH- FREQUENCY OF GETTING ILL

In order to further study the impact of key variables on the accessibility to quality health care services, a logistic regression was run. The result table and analysis is presented below.

Access to Private healthcare	_Ihealthca~2	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Availed health insurance	_Ihealth_i~2	.5185144	.2135911	2.43	0.015	.0998835	.9371452
Business income	Business_I~e	.0000153	9.53e-06	1.61	0.108	-3.38e-06	.000034
Loan user	_ILoan_Use~2	-.2409756	.2034112	-1.18	0.236	-.6396542	.157703
Business expansion	_Ibusiness~2	.29335	.2110524	1.39	0.165	-.1203051	.7070051
Number of dependents	number_dep~s	-.0944612	.0590446	-1.60	0.110	-.2101865	.0212642
Loan cycle	Loan_cycle	.0056077	.0433141	0.13	0.897	-.0792864	.0905017
	_cons	-.5994821	.3063589	-1.96	0.050	-1.199934	.0009702

---

[4] For significance testing we used the "Z-test for Two Proportions" and it was calculated on 95% confidence Interval (1.96). The Z-value is calculated by its formula and if the Z-value is greater than 1.96 or less than -1.96 then there is "Significant Difference" between the two percentages otherwise there is no significant difference.

TABLE 19: REGRESSION- ACCESS TO PRIVATE HEALTHCARE FACILITY

Response Variable	Predictor Variable	Analysis	Implication
Access to Private Health Care facilities	Availed Health Insurance	The results depict that the likelihood of client's access to private hospitals increases by 51.8% for those clients who have availed health insurance. Moreover, P value is 0.01 so the result is statistically significant.	This implies that access to health insurance has increased the likelihood for clients availing better health care facilities as compared to the access they had to health care facilities in case of absence of health insurance. Therefore, Kashf should continue providing access to health insurance to clients. Moreover, the result is statistically significant.
Access to Private Health Care Facility	Loan User	The result shows that incase of female user, the likelihood of access to private health care facility increases by 24%. However, P value 0.23 so the result is not statistically significant.	This implies that if the loan is solely used by female the likelihood of access to private hospitals and better health care facility increases by 23.95%. However, as the result is not statistically significant, there can be other factors leading to these results which are beyond the scope of this study.
Access to Private Health Care Facility	Loan Cycle	The result shows that with the increase in each loan cycle, the likelihood of access to private healthcare facility increases by 0.5% however, P value 0.89 so the result is not statistically significant.	The result implies that access to quality healthcare facility increases with each loan cycle; however, since the result is statistically insignificant, other external factors along with the change in loan cycle influence access to healthcare facility including access to health insurance facility.

*Please note that the P value for the regression model run above is 0.03 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

A client, during the focus group discussions, spoke of Kashf's health insurance in the following words.

"It is extremely advantageous and I recommend it to others as it benefited me during my illness." (New client, Bahawalpur)

6.3 Entrepreneurial Skills/ Enterprise Management Skills

Kashf's clients saw economic growth as out of 660 sample respondents, 74% of the clients report to have expanded their existing enterprises, while as many as 24% of the clients report undertaking a new enterprise. Another 10% of the clients report to have brought in diversification through introduction of new products.
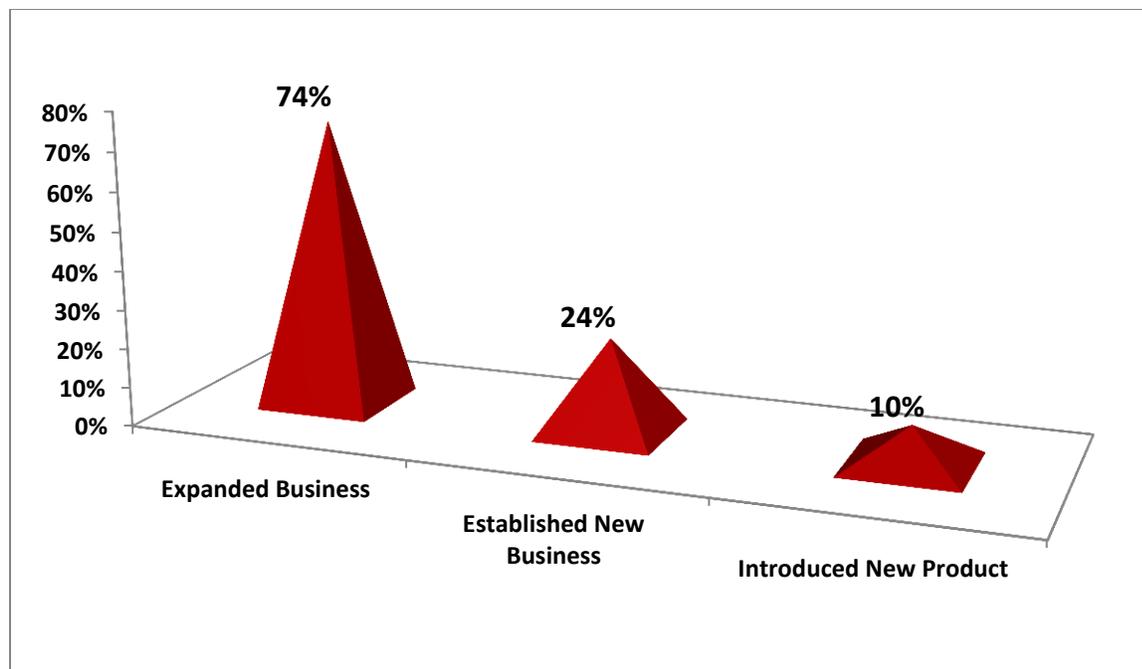
FIGURE 6: BUSINESS DEVELOPMENT OF KF CLIENTS

Clients also demonstrate a certain level of business awareness in their responses while discussing the factors that determine their choice of business. 46% of the clients stated that the selection of a particular business depends on the skill that they possess or their knowledge of the business sector (see table 20). The study indicates that 44% of the mature clients demonstrate awareness of demand and profitability, as compared to 34% of the new clients.

The difference between the two may be indicative of higher incidence of entrepreneurial knowledge among mature clients. This could also be a result of Kashf's financial and non-financial intervention through loans augmented by trainings.

"I have been involved in cloth trading whereas this year I have also introduced bed sheets in the `product line based on my customers' needs which is generating more profit for the business." (Mature client, Attock)

"My 8 years in business have taught me well about understanding customer needs and responding accordingly, as that is the only way to generate sustainable profits."(Mature client, Multan)

Factors considerations for doing a business	All Clients	Mature Clients	New Clients	Is the difference statistically significant?
Business knowledge and expertise	46%	46%	45%	No
Product demand/profitable products	39%	44%	34%	Yes
My family will support me if I do this business	38%	35%	42%	No
Capital requirement	30%	27%	33%	No
The business has the potential to meet all my family expenses	12%	10%	14%	No

TABLE 20: FACTORS CONSIDERED FOR BUSINESS- NEW AND MATURE CLIENTS

The study shows that the factors that the clients consider in selecting a particular business, in order of preference, were knowledge/know-how and seasonality, product demand and profitability, family support and capital requirements. The slight difference in the order of preference for new and mature clients suggest that new clients still depend more on family support in their businesses, as compared to mature clients who rated business profitability and product demand slightly higher in comparison. This may be indicative of the fact that mature clients feel more empowered and independent while the new clients have to depend more on their family members' support in the initial years of their business. Moreover, the above findings are also corroborated with the qualitative research findings.

"The reason behind my selection of cloth business was that my husband supported the initial idea and also helps me in taking the embroidered fabric to the market. In this way, I can work at home and manage the children as well whereas my husband helps me with the outdoor business activities." (M, LHR)

6.4 Education

The literacy rate in Pakistan is 58%, where rural literacy is 49% and urban literacy stands at 75% [1].

Out of the 660 sample respondents, the study shows that 446 (68%) of the clients had children of school going age (4 to 17 years). Out of these respondents, 72% were sending their male children to school while 60% of the clients were sending their female children to school, with an overlap of 43% clients who are sending both male and female children to school. The study further shows that 8% of the respondents were not sending any of their children to school.

The data also reports that 36% of the clients have their male children enrolled in primary schools as compared to 33% of the female children. The disparity increases in higher grades as there is an incidence of 19% clients whose male children attend 6th-8th grade classes as compared to 7% whose female children attend this level of schooling. This appears to be the general trend in Pakistan, where the enrollment and the drop rates of females are higher when compared with boys.

Level of Education	Boys	Girls
Enrolled in schools/ colleges	72%	60%
Primary school	36%	33%
6th to 8th grade	19%	7%
Matric	13%	9%
Intermediate	3%	3%
Graduate	1%	1%
Didn't go to school	9%	10%

TABLE 21: EDUCATION LEVEL OF CLIENTS

Though the data may suggest slight preference towards sending male children to school over female children, the qualitative research reflects clients' wish to send their female children to school as well.

"It is more important for girls to go to school; they need financial independence when they grow older, so they don't have to bear with anyone's moods." (Mature client, Karachi)

"I could not send my daughters to college, but now I have the money to do so." (Mature client, Lahore)

---

[1] Economic Survey of Pakistan 2014-15

"I wish to send my daughter to school; however, I do not currently have the financial space to afford her education. Also, my in-laws are against female education and I do not want to disobey my elders. Parents have to save for girl's marriage as well. " (N, BWP)

FEMALE EDUCATION

Opinions on early female education	Overall (%)	New Clients	Mature Clients	Is the difference Statistically significant?
If I had limited resources I would only educate my son	11%	12%	10%	No
If I had limited resources I would only educate my daughter	5%	3%	6%	No
I would try to educate both my sons and daughters	76%	78%	75%	No
I have no resources to educate my children	8%	8%	8%	No

TABLE 22: FEMALE EDUCATION

The impact study results indicate that out of 660 sample respondents, 76% of Kashf's clients stated that if they had sufficient funds they would educate both sons and daughters alike. While 11% said if they had limited resources they would educate their sons, while 5% said that they would educate their daughters, which seems to imply that in cases of constrained resources low income families are twice as likely to educate their sons rather than their daughters. 6% of the mature clients reported preference towards male education only given limited resources as compared to 3% of the new clients, which implies that new clients were 4 times as likely to educate a son in case of limited resources. As far as the other categories highlighted in the table above are concerned, the percentages are more or less the same among new and mature clients. Moreover, this is further corroborated with the finding that 12% of the new clients stated that if they had limited resources, they would educate their sons only.

6.5 Key Highlights for Impact on Human Capital

Impact on consumption pattern

The results from this section illustrate the following:

- A higher loan amount increases the likelihood of improved food consumption of the family (i.e. leads to inclusion of dairy and meat products in the food consumption) by 100% which is statistically significant therefore highlighting a positive correlation between loan amount and the consumption pattern of a client's family. This implies that

mature clients have a better food intake than new clients as mature clients have a higher loan amount.

- An increase in the monthly savings increases the likelihood of improved food consumption by 99% which illustrates a positive correlation between the amount of monthly savings and improvement in food consumption pattern of the family. This finding confirms the importance of Kashf's savings product offering in inculcating the habit of savings for the greater welfare of its clients.
- The food consumption pattern of a family having a jointly led business is 0.4 times more likely to be better than the food consumption pattern of family whose business is solely run. This result, being statistically significant, implies that in order to have a greater impact it is important that Kashf's financial services support the entire family and not just woman alone as there are various social obstacles in involvement of females.
- Participation in financial trainings has a positive correlation with the food consumption pattern as it more than doubles the likelihood of improved consumption pattern. Being statistically significant, it lays emphasis on the importance of Kashf's financial trainings in improving food consumption by teaching budget management and savings practices.

Impact on access to healthcare

The results from this section illustrate the following:

- Clients who have availed health insurance are 51.8% more likely to have access to private health care facility as compared to those who have not availed health insurance. This depicts the importance of health insurance provision by microfinance institutions in order to enable households meet healthcare expenses and have access to good quality healthcare facility.

7. *Physical Capital*

In a business, physical capital holds the position of one of the primary factors of production. The impact on physical capital of Kashf Foundation's clients, however, is assessed through major business assets as well as minor business assets of the clients.

7.1 Business Asset Growth

The study shows that among smaller business assets worth PKR 1500 to PKR 5000, 90% of the clients own a sewing machine. The above may imply that even if the clients' main business is not cloth stitching, they may still be involved in stitching as a side business or as a hobby.

	Clients
Sewing machine	90%

Among major business assets worth more than PKR 5000, 10% of the mature clients own an auto rickshaw as compared to 6% of the new clients. This suggests that at least on average 8% of clients are earning an income generated through the auto rickshaw business. 2% of mature and new clients respectively own a car, pickup, taxi or van as a business asset, while 1% of each client category owns a tractor.

TABLE 24: MAJOR BUSINESS ASSETS

Major Business Assets		New Clients	Mature Clients
Assets of more than PKR 5000	Auto Rickshaw	6%	10%
	Car/Pick-up/taxi/van	2%	2%
	Tractor	1%	1%

To analyze the impact of KF on the growth of minor business assets of its clients, logistic regression model was constructed on key indicators of interest. Table below shows the results of regression.

List of Variables:	_Ibusine~a_2	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]
Business Income	Business_I~e	.9999805	.0000214	-0.91	0.362	.9999386 1.000022
Household Income	Household~me	1.000007	.0000131	0.53	0.597	.9999813 1.000032
Loan Cycle	Loan_Cycle	.8402158	.0658331	-2.22	0.026	.7206046 .9796811
Loan Amount	Loan_Amount	1.000022	.0000209	1.06	0.288	.9999812 1.000063
Monthly Savings	Mnthly_Sav~s	.9999694	.0000276	-1.11	0.267	.9999153 1.000023
Loan User	_ILoan_Use~2	1.037084	.3379482	0.11	0.911	.5475679 1.964218
Number of Income Earners	Number_Of_~s	.9558738	.2384093	-0.18	0.856	.5862706 1.558486
Business Expansion	_Ibusine~__2	1.235618	.4156895	0.63	0.529	.6390293 2.389172

TABLE 25: REGRESSION TABLE- BUSINESS ASSETS

The findings of regression have been presented in the table below.

Response Variable	Predictor Variable	Analysis	Implication
Minor business assets (assets that are used	Loan Cycle	The results depict that with increase in every loan cycle the likelihood of	This implies that mature clients have more likelihood to purchase minor business assets such as

for productive purposes but cost less than PKR5000)		increase in client's ability to purchase minor business assets increases by 84%. Moreover, P value is 0.026 so the result is statistically significant.	sewing machines as compared to new clients who have been with Kashf for only 6 months or less, which implies that clients are able to build their business assets over time and thus are able to enhance their productivity to some extent.
Minor business assets (assets that are used for productive purposes but cost less than PKR5000)	Household Income	There is positive correlation between household income and likelihood of purchasing minor business assets. The results depict that increase in 1 Rupee in household income increases the likelihood to purchase minor business assets by 1 times more. P value is 0.597 so the result is not statistically significant.	This shows that Kashf's mature clients have a higher purchasing power to purchase minor business assets.

*Please note that the P value for the regression model run above is 0.49 which means that the model using 95% confidence interval is not statistically significant. (The model is statistically significant if P value is less than 0.05).

Furthermore, logistic regression was run to analyze the impact of KF on the growth of major business assets of its clients. Table below depicts the results of logistic regression in the context of major business assets.

List of Variables:	_Ibusiness~2	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Business Income	Business_I~e	1.000017	.0000167	1.04	0.297	.9999846	1.00005
Household Income	Household~me	1.000005	7.98e-06	0.58	0.559	.999989	1.00002
Loan Cycle	Loan_Cycle	1.155997	.0877974	1.91	0.056	.9961127	1.341545
Loan Amount	Loan_Amount	1.000014	.0000198	0.71	0.476	.9999753	1.000053
Monthly Saving	Mnthly_Sav~s	.9999667	.0000376	-0.89	0.375	.999893	1.00004
Loan User	_ILoan_Use~2	.9410077	.3020566	-0.19	0.850	.5016071	1.765317
Number of Income Earners	Number_Of_~s	1.316884	.2654583	1.37	0.172	.887078	1.954939

The findings have been presented in the table below.

Response Variable	Predictor Variable	Analysis	Implication
Major business assets (assets used for productive purposes but cost more than PKR 5,000)	Loan Cycle	The results depict that with increase in every loan cycle, the likelihood of increase in client's ability to purchase major business assets increases by 115.6%. Moreover, P value is 0.05 so the result is statistically significant.	This implies that the mature clients are more likely to purchase major business assets such as rickshaw as compared to new clients who have been with Kashf for only 6 months or less. This again seems to imply the increase in the client's asset base over time through access to regular financial services.
Major business assets	Household Income	There is positive correlation between household income and likelihood of purchasing major business assets. The results depict that an increase in 1 Rupee in household income increases the likelihood to purchase minor business assets by 100%. P value is 0.55 so the result is not statistically significant.	This shows that Kashf's mature clients have a higher purchasing power to purchase major business assets.

*Please note that the P value for the regression model run above is 0.03 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

 "I used my loan to install the gas connection at my home to help expand my husband's business; now I will be cooking more food from home to send to the food stall (dhabba)." (New client, Bahawalpur)

7.2 Key Highlights for Impact on Physical Capital

Impact on minor and major business assets

The results from this section illustrate the following:
- Increase in the loan cycle is positively correlated with the ability of a client to purchase minor and major business assets i.e. the ability of a client to purchase minor asset

increases by 84% with increase in the loan cycle whereas the ability to purchase increases by 115.6% in case of major business assets. Being a statistically significant result, it emphasizes on the important role that microfinance plays in building the productive capacity of micro-enterprises in the long-term. This also in turn bolsters Kashf's belief that micro-enterprises can become self-sustainable ventures in the long-term if their productive capacity is gradually enhanced through asset accumulation.

8. *Social Capital*

Social capital is the expected collective or economic benefit derived from the network of relationships among individuals and groups. It comes from exercising greater agency and inculcating greater voice at all levels. The impact of financial and non-financial services i.e. business trainings, gender trainings and social theatre, and community development programs in building the social capital has been studied on the following three dimensions:

1. *Individual*
   a. *Healthy Financial Habits*
   b. *Self-Confidence and Self-Perception*
   c. *Decision-Making*
   d. *Movement Outside House*
2. *Household*
   a. *Marital Relations*
   b. *Domestic Violence*
   c. *Household Budgeting*
   d. *Female employment and marriage*

3. *Community*
   a. *Social Awareness and Community Development*

8.1 Self- Confidence

	Overall %		Loan User %		New and Mature %	
	Yes	**No**	**Female User %**	**Joint User %**	**New Clients %**	**Mature Clients %**
Increase in Self-Confidence	99%	1%	98%	99%	98%	99%

TABLE 27: SELF- CONFIDENCE

One of the outcomes of socio-economic empowerment of women is the inculcation of self-confidence in women. An overall 99% of total 660 sample respondents report an increase in the self-confidence against a modest 1% which sees no change in self-confidence. (Please see Table

27). Moreover, 99% of 330 mature clients report an increase in self-confidence as compared to 98% of the new clients. In the context of loan user, 98% of the 252 female loan users report increase in self-confidence against 99% of the 408 joint users in the sample. The difference is statistically insignificant; however, logistic regression model was constructed for further analysis with respect to all the key variables impacting self-confidence of a client. The regression results are presented in the table below. (Please see Table 28)

List of Variables:	_Iself_con~2	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	.6510619	.1681395	-1.66	0.097	.3924604	1.080062
Attended Social Trainings	_IGender_T~2	.7056371	1.063608	-0.23	0.817	.036776	13.53937
Household Income	Household~ne	.9999773	.0000123	-1.84	0.065	.9999532	1.000001
Business Income	Business_I~e	1.000387	.0001982	1.95	0.051	.9999982	1.000775
Loan User	_ILoan_Use~2	.5780699	.8729958	-0.36	0.717	.0299574	11.15468
Clients who Save	_Isavings_2	4.320364	6.193587	1.02	0.307	.2601685	71.74404
Relationship with Male Members	_Inale_rel~2	3.264018	4.308105	0.90	0.370	.2456237	43.37452
Clients who Availed School Education	_Ischool_e~2	.5645212	.7352992	-0.44	0.661	.0439516	7.250799
Clients who Reported Training Benefit	_Itraining~2	24.21029	35.34881	2.18	0.029	1.384149	423.4646
Social Awareness	_Isocial_a~2	12.00392	17.90961	1.67	0.096	.6446838	223.5112
Decision Making (Loan Utilization)	_Idecision~2	.8997172	1.298826	-0.07	0.942	.0531272	15.23684
Business Expansion	_Ibusiness~2	.4314724	.6570081	-0.55	0.581	.0218182	8.532725

TABLE 28: REGRESSION TABLE- SELF-CONFIDENCE

The table below analyzes the findings of regression to evaluate the impact of KF on self-confidence of its clients.

Response Variable	Predictor Variable	Analysis	Implication
Self Confidence	Loan Cycle	The results depict that with increase in every loan cycle the likelihood of increase in client's self-confidence increases by 65.1% percent. However, P value is 0.09 which is not statistically significant.	This implies that self-confidence of mature clients is greater than new clients as it is likely to increase 65% percent with every loan cycle. However, there are other factors that lead to increase in likelihood of self-confidence.
Self Confidence	Participated In Gender trainings and social theatre	There is positive correlation between participation in gender trainings and social theatre imparted by Kashf and increase in the likelihood of self-confidence as those clients who attended gender trainings and social theatre are	This shows that Kashf should continue to focus on imparting gender trainings and social theatre. However, a comprehensive TNA should be carried out to understand which areas should be covered in these gender trainings and

		70.5% more likely to have increased self-confidence as compared to those who did not attend. P value is 0.81 so the result is not statistically significant.	social theatre to have a statistically significant impact.
Self Confidence	Business Income	As the business income increases, the self-confidence is likely to increase by 100%. Moreover, the result is statistically significant as P value is 0.05	Business Income is one of the major factors leading to increase in self-confidence, which brings out the fact that investing in women led businesses or supporting women's active participation in the household economy has both economic and social impact.
Self Confidence	Clients who save	There is positive correlation between the habit of saving and self-confidence as the likelihood to have self-confidence increases by 4.3 times for those clients who save. P value is 0.30 so the result is not statistically significant.	This highlights the role of savings in increasing the perceived self-worth and hence the self-confidence in women clients. This implies that Kashf should keep educating its clients on the importance of savings through trainings and the savings pilot.
Self Confidence	Clients who benefitted from training	The result depicts that the likelihood of having self-confidence increases by 24.2 times for those clients who stated that they benefitted from training as compared to those who did not benefit from them. P value is 0.02 so the result is statistically significant.	This highlights that those clients who take trainings seriously and are regular throughout the trainings actually benefit from trainings resulting in increased self-confidence. This also brings out the value of twinning MF with MF plus services in terms of positively contributing to women's empowerment.
Self Confidence	Social awareness	The result shows that the clients who have more social awareness have 12 times greater likelihood to be self-confident as compared to those who lack social awareness. P value is 0.09 so the result is statistically not	This highlights importance of Kashf's role in creating social awareness amongst its clients to enhance self-confidence. Social awareness here refers to a deeper understanding

		significant.	

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

During the Focus Group Discussions, it was evident that increase in self-confidence was experienced by almost every client of Kashf Foundation. A new client stated, *"Although I have a small-scale business, the increase in my self-confidence is immense because I feel I am strong enough to be working alongside men and running my household in a dignified manner through my business income."* Similarly, a mature client reflected, *"I used to be very shy and timid when I first started business, however, professional interactions with so many people have increased my confidence level and I have started believing in my capabilities as a business woman."*

8.2 Decision Making

Decision Maker for Loan Utilization	Overall	New Clients	Mature Clients
Male	7%	7%	7%
Female	20%	19%	20%
Both	73%	74%	73%

TABLE 29: DECISION MAKING FOR LOAN UTILIZATION

Participation of Kashf clients in the decision making regarding loan utilization is an important indicator of social capital. An overall 73% of the 660 sample respondents state that decisions regarding loan utilization are made in consultation with the husband/male partner, however, 20% of the clients state that they themselves take the decision and another 7% state that such decisions regarding loan utilization are made by the male counterpart of the client. Comparative assessment reveals that 19% of the 330 sample respondents who were new clients take loan utilization decisions themselves against 20% of the 330 mature clients who are empowered to take such decisions, however the difference is very slight to draw any conclusions.

Authority to Take Decisions Regarding Spending of Business Income	Overall	New Clients	Mature Clients
Yes	96%	96%	97%
No	4%	4%	3%

TABLE 30: DECISION MAKING FOR SPENDING BUSINESS INCOME

Another component of decision-making i.e. the authority to take decisions regarding business income utilization was also assessed during the impact assessment of Kashf. 96% of the 660 sample respondents state that they can spend their business income according to their own

will. However, 4% state that they cannot make decisions regarding business income utilization. It is noteworthy that although the difference between new clients and mature clients is marginal, however, more mature clients are in a position to take independent decisions regarding business income utilization as compared to the new clients.

For further statistical analysis, logistic regression model was run to see the impact of key variables on the decision making role of KF clients. Table 31 below illustrates the regression results:

List of Variables:	_Idecision~1	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	.9860349	.0449879	-0.31	0.758	.9016877	1.078272
Participation in Financial Trainings	_INo_Train~2	.9819071	.2804839	-0.06	0.949	.5609484	1.718771
Self-Confidence	_Iself_con~2	.6170996	.5263702	-0.57	0.571	.1159584	3.28404
Availed School Education	_Ischool_e~2	.6150607	.1261473	-2.37	0.018	.4114707	.9193844
Loan User	_ILoan_Use~2	1.001114	.2063993	0.01	0.996	.6683306	1.4996
Attended Social theatre	_Iattende~_2	1.489611	.5483695	1.08	0.279	.7239702	3.064962
Attended Gender Trainings	_Iattende~a2	.3778769	.1093139	-3.36	0.001	.2143438	.6661771
Social Awareness	_Isocial_a~2	2.712695	1.502053	1.80	0.072	.9163897	8.030116

TABLE 31: REGRESSION TABLE- DECISION MAKING

The regression results and their implications for Kashf have been discussed in the table below.

Response Variable	Predictor Variable	Analysis	Implication
Involvement in Decision Making	Loan Cycle	The results depict that with increase in every loan cycle the likelihood of increase in client's involvement in decision making increases by 98.6%. However, P value is 0.75 so the result is not statistically significant.	This implies that decision making involvement for mature clients is greater than new clients as it is likely to increase by 98.6% with every loan cycle. However, there are other factors that lead to increase in likelihood of more involvement in decision making.
Involvement in Decision Making	Participated In Gender trainings and social theatre	There is positive correlation between participation in gender trainings imparted by Kashf and increase in the likelihood of involvement in decision making as the likelihood for those who	This shows that Kashf should continue to focus on imparting gender trainings and social theatre as it increases the involvement of women in decision making by transforming the mind-set of men towards

		attended gender trainings and social theatre increases by 37.7% as compared to those who did not attend. P value is 0.00 so the result is statistically significant.	women participation in the economy and the society in general. This result again highlights the importance of investing in the mindset change of both men and women, which is an important pillar of Kashf's overall strategy.
Involvement in Decision making	Availed School Education	The likelihood of involvement in decision-making increases by 61.5% for those clients who had had school education as compared to those clients who had not attended school. Moreover, the result is statistically significant as P value is 0.01%.	This implies that clients who availed education are more involved in decision-making in the household as compared to those who did not go to school thus laying emphasis on the importance of trainings for the clients who had not attended formal schooling. Moreover, Kashf should also encourage female education through its Kashf School Sarmaya program.

*Please note that the P value for the regression model run above is 0.00 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

During the Focus Group Discussions, clients often stated, *"I run my own business, I got the loan myself, so I can also decide how the income generated from this business is spent." (Mature Client, Multan)*

8.3 Business and Household Budget Management

One of the cornerstones of social and human capital is the inculcation of healthy financial habits. A key indicator for assessing financial responsibility is the habit of regularly mapping business and household budgets. Through household and business budgeting, women start to monitor their income and expenses which has the potential of increasing savings and reducing economic vulnerability. 92% of the 660 sample respondents state that they keep business income separate from household expenses. (See Table 32) Moreover, 59% of those respondents state that they have developed this habit after taking Kashf's trainings, which highlights the importance of Kashf's MF plus program.

	Yes	No
Percentage of Clients keeping business income separate from household expenses	92%	8%
Percentage of Clients who started practicing separate business and household budgeting after Kashf's trainings	59%	41%

TABLE 32: BUDGET MANAGEMENT

For further analysis in the context of loan cycle and participation in financial trainings, logistic regression model was built. The result of the regression model for household and business budgeting is presented in Table 33.

List of Variables	_Ibusiness~2	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	1.068536	.1145374	0.62	0.536	.8660599	1.318348
Loan User	_ILoan_Use~2	.6955236	.3112448	-0.81	0.417	.2893354	1.671946
Business Income	Business_I~e	.9999887	.0000155	-0.73	0.464	.9999583	1.000019
Household Income	Household~ne	.9999957	8.89e-06	-0.49	0.626	.9999782	1.000013
Participation in Financial Trainings	_INo_Train~2	3.479304	1.689007	2.57	0.010	1.343636	9.009548
Self-Confidence	_Iself_con~2	1.372058	1.747311	0.25	0.804	.1130761	16.64847
Availed School Education	_Ischool_e~2	1.194589	.5273124	0.40	0.687	.5029023	2.837616
Social Awareness	_Isocial_a~2	5.269624	2.82108	3.10	0.002	1.845402	15.04763

TABLE 33: REGRESSION TABLE- HOUSEHOLD AND BUSINESS BUDGETING

The findings of regression model have been analyzed in the table below.

Response Variable	Predictor Variable	Analysis	Implication
Business and Household Budget Management	Loan Cycle	The results depict that with increase in every loan cycle, the likelihood of client's capacity in maintaining household and business budgets increase by 106%. However, P value is 0.53 so the result is not statistically significant.	This implies that there is a positive impact of Kashf's microfinance program on client's ability to manage their business and household budgeting in a more effective manner and is enhanced with every loan cycle. However, there are other factors that impact the maintenance of household and business budget management.

| Business and Household Budget Management | Participated In Financial Trainings | There is positive correlation between participation in financial trainings imparted by Kashf and increase in the likelihood of better management of business and household management as those who attended financial training are 3.5 times more likely to be practicing household and business budgeting as compared to those who did not attend. P value is 0.01 so the result is statistically significant. | This shows that Kashf should continue to focus on imparting financial trainings as it is enabling clients to manage their budgets better. |

*Please note that the P value for the regression model run above is 0.01 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

8.4 Mobility

	Overall	New Clients	Mature Clients
Increased Mobility	59%	56%	62%
Decreased Mobility	4%	5%	2%
No Change	37%	39%	35%

TABLE 34: MOBILITY

Social capital among women clients of Kashf can only be achieved if women attain freedom to fulfill their aspirations for which they need freedom to go outside the 'four walls of homes'. Whereas conventionally women's movement outside the house is restricted and strictly monitored by the male counterparts, the impact study revealed that after taking Kashf's gender trainings and social theatre and participating in its women empowerment programs, 59% of the total 660 sample respondents acknowledge increased freedom to go outside their homes. 37% of the total respondents, however, do not see any change in their mobility. This is indicative of the potential change that Kashf can bring about by creating further awareness on women's freedom. However, during the Focus Group Discussions it was observed that clients who stated no change are already allowed by their families to go for business trips. To delve further into this indicator of social capital, a logistic regression model was run, as presented in Table 35, and its findings were analyzed to study the impact of KF on mobility of its clients.

```
List of Variables:        _Imobility_1   Odds Ratio   Std. Err.      z     P>|z|    [95% Conf. Interval]

Loan Cycle                 Loan_Cycle     1.064063    .0485543    1.36    0.174    .9730295    1.163613
Attended Social Theatre    _Iattende~_2   2.654138    .8936957    2.90    0.004    1.371856    5.134974
Attended Gender Training    _Iattende~a2   .4572267    .1104628   -3.24    0.001    .2847655    .734135
Social Awareness           _Isocial_a~2    .98982     .4140373   -0.02    0.980    .4360159    2.247036
Decision-Making (Loan Utilization)  _Idecision~2   .6337382   .1719628   -1.68    0.093    .3723395    1.07865
Relationship with Male Member   _Imale_rel~2   1.096887   .3934183    0.26    0.797    .5430793    2.215444
Self-Confidence            _Iself_con~2   10.86512    12.40076    2.09    0.037    1.160185    101.7517
Clients who Availed School Education   _Ischool_e~2   .6098376   .1226436   -2.46    0.014    .4111784    .9044783
Business Expansion         _Ibusiness~2   1.418894    .2958969    1.68    0.093    .9428445    2.135306
Business Income            Business_I~e    .9999857   .0000115   -1.24    0.214    .9999631    1.000008
Household Income           Household~me    1.000003   5.67e-06    0.60    0.551    .9999923    1.000014
```

The findings have been analyzed in the table below.

TABLE 35: REGRESSION TABLE- MOBILITY

Response Variable	Predictor Variable	Analysis	Implication
Mobility	Loan Cycle	The results depict that with increase in every loan cycle, the likelihood of client's mobility increases by 106%. However, P value is 0.17 so the result is not statistically significant.	This implies that the mobility of mature clients is greater than the new clients as it is likely to increase by 106% with every loan cycle. However, there are other factors that lead to increase in likelihood of mobility.
Mobility	Attended theatre and male members of the family participated in Gender trainings and social theatre	There is positive correlation between participation in gender trainings and social theatre imparted by Kashf and the increase in the likelihood of mobility as those who attended gender trainings and social theatre are 2.6 times more likely to have increased mobility as compared to those who did not attend it. In case of attending gender trainings	This shows that Kashf should continue to focus on imparting gender trainings and social theatre for both, the clients and the male members of the family.

		and social theatre, the likelihood of increased mobility for the participants increases by 45.7% as compared to those who did not attend. P value is 0.004 and 0.001 respectively so the results are statistically significant.	
Mobility	Self Confidence	With increase in self-confidence, the likelihood of increase in mobility is 10 times more. Moreover, the result is statistically significant as P value is 0.03.	Corroborating this finding with findings of impact of Kashf's microfinance program on self-confidence depicts that Kashf's financial and non-financial services are resulting in greater likelihood of clients' being self-confident which in turn increases the likelihood of clients' mobility.

*Please note that the P value for the regression model run above is 0.01 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

8.5 Impact of Trainings on Inter-Spousal Relations

Husband Got Training	Overall	New Clients	Mature Clients
Yes	15%	16%	14%
No	85%	84%	86%

TABLE 36: GENDER TRAININGS STATISTICS

Husband's Thinking Changed	Overall	New Clients	Mature Clients
Yes	66%	69%	62%
No	34%	31%	38%

TABLE 37: CHANGE IN HUSBAND'S THINKING

Overall 15% of the 660 sample respondents' husbands had attended Kashf's gender trainings out of which, 66% of the attendees acknowledged that the thinking /behavior of their husbands has changed after attending the training. Whereas 69% of the 330 new clients report a change in their husband's thinking, 62% of the mature clients report the same. This is indicative of the fact that freshly trained clients and their husbands retained the training discussions, however,

the impact of trainings diminish over time. This can be inferred from the Focus Group Discussion where the new clients could immediately recall the recently attended Kashf trainings and how it changed the relationship with their husbands but the mature clients could not immediately recall attending trainings.

A new client in Multan stated, *"My husband and I attended the training. It helped my husband realize that I am a working woman now whom he should respect. He started respecting me and involving me in important decisions." (New client, Multan)* Similarly, an old client stated, *"I have attended many trainings of Kashf so I must have attended this training too but I can't recall it now. It has been many years in business now; relationship keeps changing as we grow old." (Mature client, Bahawalpur)* It is for this reason that refresher trainings may be required to have a long-lasting impact on improving inter-spousal relations.

Type of Change in Husband	Overall	New Clients	Mature Clients
Discusses with me before taking any decision	11%	12%	09%
Respects me	18%	21%	15%
Fulfill my needs	8%	9%	6%
Gives more Importance	5%	6%	3%
Refuse to answer	22%	21%	24%

TABLE 38: CHANGE IN HUSBAND'S THINKING

When asked about the type of behavioral change experienced by clients in their husbands, 22% of the respondents who have attended trainings refused to comment on it which indicates that a certain segment of clients is still hesitant in discussing such matters therefore measuring change on such indicators has its limitations. During the Focus Group Discussions, however, clients openly stated that their husbands now respect them more as they appreciate their wives who are managing their businesses independently and sharing the household expenditures with them.

A client stated, *"A woman who brings home money is always respected. My husband used to consider me worthless but now that I am contributing to household income, he respects me and makes sure that he should consult me before making any important household decision." (Mature Client, Bahawalpur)* The survey corroborates these findings as the major changes observed in husbands' behavior include greater respect for women (18%), mutual consultation in decision-making (11%), giving more importance to the wife (5%) and fulfillment of needs (8%).

8.6 Female Marriage and Employment

Opinions on early female marriage	Overall	New Clients	Mature Clients
Girls should marry at the age of 13	3%	4%	3%
Girls should not marry at an early age	34%	31%	37%
Girls should marry when they are mentally mature	63%	65%	60%

TABLE 39: FEMALE MARRIAGE

During the impact assessment, clients were asked about their opinions on female marriages and how these opinions have been transformed over the years. Overall 63% of the 660 sample respondents state that their opinions have changed over the past few years and now they believe that girls should be married once they are mature enough to understand the institution of marriage. Another 34% of the respondents state that girls should not be married at an early age. This indicates that Kashf's trainings have been successfully changing the mindset of its clients on social issues and therefore it should continue to raise awareness on gender equality and women's rights through trainings and media campaigns.

Opinions on early female employment	Overall Responses (%)
Our girls can work outside of the house	33%
Our girls cannot work outside of the house	32%
I send my daughters outside house for work	35%

TABLE 40: FEMALE EMPLOYMENT

Another indicator assessed during the impact study included the impact on the perception of female employment. 35% of the 660 respondents state that their views on this issue have changed over the years and now they allow their daughters to pursue a formal career. Likewise, 33% responded that they support female employment.

Overall, 68% of the 660 respondents state that they have no reservations now regarding sending their daughters for work, however, 32% of the respondents still maintain that their daughters cannot leave house to do a job. When analyzed in absolute terms, this 32% makes a large portion of the total clientele thus implying that Kashf should continue to impart gender trainings and social theatre and raising awareness through media campaigns to encourage working women and to change the mindset of the society to create a healthier environment for working women.

8.7 Domestic Violence

	Overall %		Loan User %		New vs. Mature %		Age Wise %		
Incidence of Domestic Violence in the last 12 months	**Yes**	**No**	**Female User %**	**Both User %**	**New Clients %**	**Mature Clients %**	**Less than 25 yrs**	**25-45 yrs**	**Above 45 yrs**
	3%	**97%**	**2%**	**2%**	**4%**	**2%**	**3%**	**3%**	**1%**

TABLE 41: DOMESTIC VIOLENCE

Out of total 660 sample respondents, 97% report that there has been no such incidence in the last 12 months. However, 3% report experiencing domestic violence in the last 12 months. (See Table 41) Furthermore, survey revealed that 98% of the 330 mature clients have not experienced domestic violence in the last 12 months as compared to 96% of the new clients. This shows that the incidence of domestic violence for mature clients is less as compared to the new clients. However, during the focus group discussions it was observed that clients hesitated in discussing the issue of domestic violence and did not report any incidence of domestic violence due to reluctance in discussing it publicly. In order to carry out a deeper analysis, incidence of domestic violence has also been studied in the context of age of the clients. It is observed that age plays an important role in reducing domestic violence as only 1% of the clients in the age group of 'above 45 years' report incidence of domestic violence in the last 12 months as compared to 3% of the clients falling in the age group of 25 to 45 years. Since the overall percentage of reported domestic violence is very low in the respondents sample, it is not possible to carry out a statistical analysis to study the impact of each variable separately, however, Table above shows that domestic violence reduces in cases where females are the primary users of loan, domestic violence reduces as the loan cycle increases and domestic violence also reduces as the age of the client increases.

To delve further into the causes of domestic violence, Kashf clients were enquired of the reasons behind domestic violence in the last 12 months. The survey revealed that the chief cause of domestic violence is financial instability. 70% of the respondents believe that an insufficient income of their households leads to domestic violence and another 40% respondents report personal problems as the cause of domestic violence.

Interestingly, Focus Group Discussion revealed that working women are less likely to be a victim of domestic violence as they are not dependent on the income of their male counterparts and some of the clients also elaborated on it by saying that, *"I am a working woman and I know that working women do not have the time to get involved in household arguments and they also have enough sense of self-worth to not let the men abuse them." (Mature Client, Multan)*
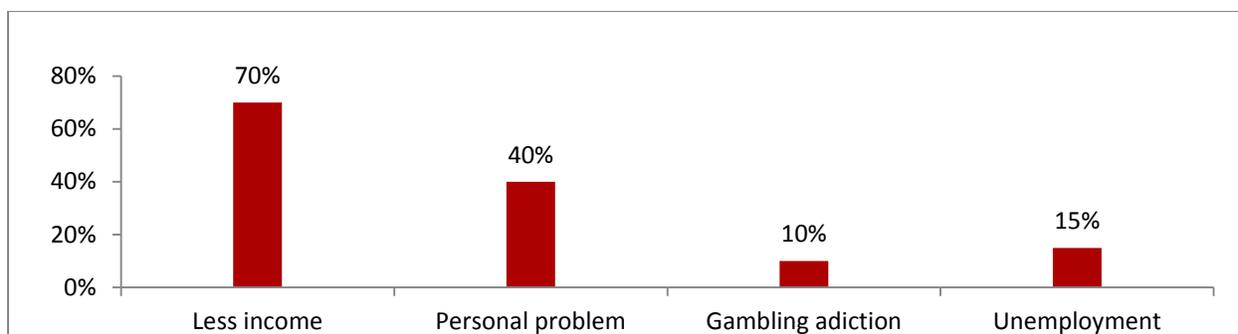
FIGURE 7: CAUSES OF DOMESTIC VIOLENCE

8.8 Social Awareness

	Yes	No
Increased awareness of Social Issues	94%	6%

TABLE 42: SOCIAL AWARENESS

Kashf Foundation's non-financial initiatives seek to create social awareness among its clients regarding pressing social issues including women's role in society, gender equality, economic empowerment of women, child marriages, female education etc. through theatre performances, gender trainings and social theatre and media. When enquired regarding increase in social awareness, 94% of the 660 sample respondents agree that they feel that their social awareness has increased in the last 12 months. This is indicative of the change that Kashf can bring in the social realm if such social awareness programs are further expanded and enriched. Focus Group Discussions revealed that these issues are not spoken of publicly due to cultural biases and religious reservations.

For a deeper analysis, logistic regression model was built. Its results are presented in Table 43.

List of Variables:	_Isocial_a~2	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]	
Loan Cycle	Loan_Cycle	1.214138	.1334941	1.76	0.078	.9787661	1.506113
Social Trainings	_IGender_T~2	1.458803	.6758226	0.82	0.415	.5883812	3.616883
Household Income	Household~me	.9999823	6.83e-06	-2.59	0.010	.9999689	.9999957
Business Income	Business_I~e	1.000007	.0000181	0.37	0.713	.9999711	1.000042
Loan User	_ILoan_Use~2	.5153994	.2211266	-1.54	0.122	.2223028	1.194931
School Education	_Ischool_e~2	1.569172	.647068	1.09	0.275	.699305	3.521067
Training Benefit	_Itraining~2	12.71026	5.998277	5.39	0.000	5.040249	32.05213
Decision-Making	_Idecision~2	.4536627	.2891145	-1.24	0.215	.1300982	1.581958
Mobility	_Imobility_2	.7714466	.3125507	-0.64	0.522	.3486925	1.706747
Business Expansion	_Ibusiness~2	.5725788	.2509561	-1.27	0.203	.2425277	1.35179
Financial Trainings	_INo_Train~2	1.420173	.7814718	0.64	0.524	.4830086	4.175686

TABLE 43: REGRESSION TABLE- SOCIAL AWARENESS

The findings of regression have been analyzed in the table below.

Response Variable	Predictor Variable	Analysis	Implication
Social Awareness	Loan Cycle	The results show that with increase in every loan cycle the likelihood of increase in client's social awareness is higher by 1.2 times. However, P value is 0.07 so the result is not statistically significant.	This implies that in the absence of Kashf's financial and non-financial services there will be lack of social awareness amongst low income household communities. However, there are other factors that lead to increase in likelihood of social awareness.
Social Awareness	Participated In Gender trainings and social theatre	There is positive correlation between participation in gender trainings and social theatre imparted by Kashf and increase in likelihood of social awareness as the likelihood for those who attended gender trainings and social theatre increases by 145% as compared to those who did not attend. P value is 0.415 so the result is not statistically significant.	This shows that Kashf should continue to focus on imparting gender trainings and social theatre. However, a comprehensive TNA should be carried out to understand which areas should be covered in these gender trainings and social theatre to have a statistically significant impact.
Social Awareness	Household Income	With increase in household income the likelihood of increase in social awareness is 1 times more. Moreover, the result is statistically significant is P =0.010	Household Income does lead to increase in the likelihood of being more socially aware.
Social Awareness	Loan User	The results depict that if it is a jointly run business the likelihood of social	The result is not statistically significant so it implies that there are other factors impacting social

		awareness is increased by 51%. P is 0.122 hence the result is not statistically significant.	awareness.
Social Awareness	Clients who benefitted from training	The result depicts that clients who stated that they benefitted from training their likelihood of being more socially aware increased by 12.7 times more as compared to those who did not benefit from them. P value is 0.000 so the result is statistically significant.	This highlights that those clients who take trainings seriously and are regular throughout the training actually benefit from training resulting in increased social awareness.

*Please note that the P value for the regression model run above is 0.01 which means that the model using 95% confidence interval is statistically significant. (The model is statistically significant if P value is less than 0.05).

8.9 Key Highlights for Impact on Social Capital

Impact on self-confidence

The results from this section illustrate the following:

- Increase in business income leads to increase in the self-confidence of clients. Being statistically significant, this implies that the impact of microfinance is not limited to economic gains but also indirectly spills into the social gains such as empowerment of women.
- A mature client is more likely to be self-confident than a new client as the result shows that the likelihood of self-confidence is positively correlated with the loan cycle. This implies that economic empowerment of women through twining of financial and non-financial services is a viable route towards women empowerment as with increase in each loan cycle, the business income also increases and woman gains self-confidence in addition to economic strength.
- The clients who save are 4.3 times more likely to be self-confident that those clients who do not save. This reinforces Kashf's vision behind the introduction of savings product for its clients as savings tend to not only provide financial cushion to women from low-income households but also augments self-confidence in them.

- Clients who attend gender trainings and social theatre are 70.5% more likely to be self-confident than those who do not. Also, the clients who state that they benefit from such trainings are 24.2% more likely to be self-confident as compared to those who do not see benefit of these trainings. Being statistically significant, it has important implications for MF practitioners as it illustrates the importance of combining financial services with non-financial services in order to augment the impact.

Impact on involvement in decision-making

The results from this section illustrate the following:

- Participation in gender trainings and social theatre is positively correlated with the involvement of women in decision-making at the household level. It is seen that the involvement in decision-making increases by 37.7% for those clients whose male members of the family attended gender trainings and social theatre imparted by Kashf and the result is also statistically significant. This finding serves to highlight the importance of Kashf's strategy towards changing the mind set of men in the society in order to promote gender equality.
- Involvement in decision-making increases with increase in the loan cycle which implies that mature clients are more involved in decision-making processes of the household as compared to new clients (involvement in decision-making increases by 98.6% with increase in every loan cycle). It reveals that the mature clients with greater exposure to financial and non-financial services than that of the new clients are more actively involved in making decision on important household and business matters.

Impact on business and household budget management

The results from this section illustrate the following:

- There is a positive correlation between loan cycle and the ability of a client to manage business and household budget. The mature clients are 106% more likely to be better at business and household budget management as compared to the new clients.
- Furthermore, the clients who have attended financial trainings are 3.5 times more likely to be practising effective business and household budget management. As the result is statistically significant, it serves to substantiate Kashf's contention that twinning financial services with non-financial services better equips women entrepreneurs to manage their finances and maximize utility of their loans.

Impact on mobility and social awareness

The results from this section illustrate the following:

- There is a positive correlation between participation in the gender trainings and social theatre and increase in the mobility of clients as well as their social awareness. Participation in gender trainings and social theatre is seen to increase the likely mobility

of clients by 45.7% and the likelihood of social awareness by 12.7 times. Since both the results are statistically significant, they serve to emphasize on the importance of non-financial services in addition to the financial services offered by MF institutions in promoting the cause of gender equality while simultaneously alleviating poverty of women from low-income households.

9. **Conclusion**

Microfinance services offered by Kashf Foundation have helped in providing options to low income households to start new businesses and expand existing economic activities. A majority of the clients interviewed stated utilization of Kashf's loan for productive purposes to expand an existing business or to start a new business. These businesses are spread over different segments of economic activity though manufacturing, trade and livestock tend to dominate. Ninety eight percent of the microcredit lent by Kashf Foundation is reported to be used for productive purposes. This goes to show that client profiling and selection criteria are consistent across the organization. By offering credit to unbanked households, Kashf Foundation has helped in not only stimulating the economy at the lowest levels but has also promoted financial inclusion in the process. In order to conclude the key findings, the impact of both Kashf's financial and non-financial services has been evaluated separately as per the key research findings and its implications given below:

IMPACT OF FINANCIAL SERVICES

- **Impact on Economic Capital**
  The overall results from this section illustrate the following:
  o A business that involves the active participation of women and is a jointly run businesses has a positive correlation with family income by increasing the income by PKR 1,506, which is a statistically significant result. This supports Kashf's contention that investing in the family can have a positive impact on overall results, especially when women face huge barriers in terms of economic participation.
  o A higher loan amount increases the monthly household income by 33.8%, a result that is statistically significant and implies that micro-enterprises have the capacity to absorb higher investments over time thus the credit assessment criteria needs to be revisited. This also shows cases that continuous access to micro loans has the potential to impact positively on household income.
  o The results show that an increase of one income earner in the household leads to an increase in the household income by PKR10,712. The result is statistically significant, and implies that access to finance reduces both under and un-employment at the household level, while it also highlights the marginal return for adding women in the micro-business workforce.

- There is positive correlation between business income and monthly savings as increase in business income increases the monthly savings by 6.1%. Moreover, business income increases monthly savings by 3 times more than household income thus implying the importance of ensuring productive use of loan, and also supporting women led businesses, as in low income households it is women who actively save.
- 8.5% of the clients were able to generate economic opportunities for up to 3 individuals on average implying that as of June 30, 2015, Kashf has created 688,500 employment opportunities.
- There is a positive correlation between business expansion and loan cycle i.e. with increase in every loan cycle, the likelihood of business expansion increases thus implying that Kashf's microfinance program build its clients' capacity to expand business over time.
- In case of joint user the likelihood of business expansion is 47.4% greater than businesses which are solely run by women thus supporting Kashf's contention that a family focused financial services programme will have a greater impact in the long run, especially where there are huge social barriers to economic involvement of women. This also highlights the odds women face when it comes to running businesses single handedly, as they are usually the primary caretakers in their families. In order to counter this, Kashf has introduced several interventions, that is, the business management trainings for successful female entrepreneurs and health insurance facilities.

- **Impact on Human Capital**
  The results from this section illustrate the following:
  - A higher loan amount increases the likelihood of improved food consumption by 100% leading to inclusion of more dairy and meat products in the food consumption. This implies that mature clients have a better food intake than new clients as mature clients have a higher loan amount.
  - An increase in the monthly savings increases the likelihood of improved food consumption by 99%, which illustrates a positive correlation between the amount of monthly savings and improvement in the food consumption pattern of the family. This finding confirms the importance of Kashf's savings product offering to enable households to combat food insecurity.
  - Clients who have availed health insurance are 51.8% more likely to have access to private health care facility as compared to those who have not availed health insurance thus highlighting that health insurance is an important ingredient in improving health care.

- **Impact on Physical Capital**

  The results from this section illustrate the following:

  o Increase in the loan cycle is positively correlated with the ability of a client to purchase minor and major business assets emphasizing on the importance of Kashf's role in supporting micro-enterprises to become self-sustainable ventures in the long-term by enhancing their productive capacity through asset accumulation.

- **Impact on Social Capital**

  The results from this section illustrate the following:

  o A mature client is more likely to be self-confident than a new client. This implies that economic empowerment of women through twining of financial and non-financial services is a viable route towards women empowerment as with increase in each loan cycle, the business income also increases and clients are able to improve their self-confidence in addition to their economic strength.

  o Clients who save are 4.3 times more likely to be self-confident that those clients who do not save. This reinforces Kashf's vision behind the introduction of savings product for its clients as savings tend to not only provide financial cushion to women from low-income households but also augments their self-confidence.

  o Mature clients are more involved in decision-making processes of the household as compared to new clients implying that mature clients with greater exposure to financial and non-financial services than that of the new clients are more actively involved in making decisions on important household and business matters.

  o There is a positive correlation between the loan cycle and the ability of a client to manage business and household budget. The mature clients are 106% more likely to better manage their business and household budgets as compared to new clients.

  o There is a positive correlation between participation in gender trainings and social theatre and increase in the mobility of clients as well as their social awareness. Since both the results are statistically significant, they serve to emphasize the importance of non-financial services in addition to the financial services offered by MF institutions in promoting women's empowerment, while simultaneously improving the living standards of the household.

IMPACT OF NON-FINANCIAL SERVICES

- **Impact on Economic Capital**

  The results from this section illustrate the following:

- Kashf should continue to focus on expanding its financial literacy training programs and enriching its curriculum as there is positive correlation between participation in financial training and monthly household income.
- The result also shows the importance of non-financial services in inculcating savings habit amongst clients as those clients who participated in financial trainings are saving PKR 1,222 more in monthly savings.
- Jointly run businesses are 47.4% more likely to expand as compared to solely led businesses. The result being statistically significant indicates the importance of male member's involvement in the business for creating forward linkages. For greater impact, Kashf should expand its BIL program so that a greater number of female clients are trained in creating forward market linkages which would reduce the dependence on male members of the family.
- There is positive correlation between participation in financial trainings and business expansion as for those who participated in financial trainings the likelihood to expand their business increases by 1.2 times. Thus, implying that Kashf's non-financial services are enhancing client's ability and skills in business management and creating market linkages, while also improving their self- confidence.

- **Impact on Social Capital**
  The results from this section illustrate the following:
  - Clients who attend capacity building trainings are more likely to be self-confident as compared to those clients who do not attend these trainings. Being statistically significant, the finding has important implications for MF practitioners as it illustrates the importance of combining financial services with non-financial services in order to augment the impact. This implies that Kashf should continue to focus on expanding its gender trainings and social theatre program and also to carry out a TNA to understand the specific needs of its clients pertaining to capacity building.
  - Furthermore, the clients who have attended financial trainings are 3.5 times more likely to be practicing effective business and household budget management. As the result is statistically significant, it serves to substantiate Kashf's contention that twinning financial services with non-financial services better equips women entrepreneurs to manage their finances and maximize utility of their loans.

Kashf is stimulating the economy at the lowest levels and is also promoting gender based financial inclusion in the process. There is a demand for health insurance and education loans highlighted in the survey. This study can be a source for developing new need-based products in the untapped markets such as specialized product catering to the needs of livestock sector. To sum up the above findings, a scorecard has been developed to highlight impact of Kashf's

financial and non-financial services in generating economic, human, physical and social capital with every section highlighting the key indicators. The overall score is divided into 5 categories assigning scores from 1 to 5 to each indicator with 1 indicating extremely low impact and 5 indicating extremely high impact. Please find below the scorecard and cobweb depicting the overall impact of Kashf's financial and non-financial services on economic, human, physical and social capital:

INDICATOR	Percentage	Extremely Low Impact	Low Impact 2 (21%-40%)	Moderate Impact 3 (41%-60%)	High Impact 4 (61%-80%)	Extremely High Impact
		1(< 20%)				5 (> 80%)
Economic Capital						
Impact on increase in income (sum of "increased somewhat" and "increased too much"	96%					5
Impact on Employment generation	3 employees			3		
None=extremely low						
Between 1 and 3=low						
Equal to 3 employees (industry benchmark)=moderate						
Greater than 3 employees=high						
Greater than 5 employees=extremely high						
Coping with financial distress	95%					5
Percentage of people stating "yes"						
Score achieved =13	86%					5
Max Score=15						
Impact on Generating Human Capital						

INDICATOR	Percentage	Extremely Low Impact	Low Impact 2 (21%-40%)	Moderate Impact 3 (41%-60%)	High Impact 4 (61%-80%)	Extremely High Impact
Diet and Nutrition (Avg score of sub categories I and 2)	4.5					
i. Able to have a meal everyday	98%					**5**
ii. Improved food consumption pattern	78%				4	
Health (avg score=iii+iv)	2.5					
iii. Access to private hospitals	22%		2			
iv. Access to government hospitals	56%			3		
Education (avg score=v-vii)	4.33					
v. Increase in expense on education	51%			3		
vi. Percentage of school aged children going to school	96%					5
vii. Positive perception of female education	81%					5
Score Achieved=11.33 Max Score=15	75.53%				4	
Impact on Generating Physical Capital						
viii. Increase in investment in major business assets	78%				4	
ix. Increase in investment in minor business assets	77%				4	
Score Achieved=8 Max Score=10	80%				4	
Impact on Generating Social Capital						

Impact on increase in social awareness	94%					5
Increase in self confidence	99%					5
Impact on respondent's mobility after training	59%			3		
percentage of clients who are letting their girl child work outside the house	68%				4	
Percentage of clients who understand that girl child should not get married at an age <18 years	63%				4	
Score achieved=21 **Max score=25**	84%					5

Section	No. of indicators	Score	Percentage score	Remarks
Economic Capital	3	0.86	86%	Extremely High Impact
Human Capital	3	0.76	76%	High Impact
Physical Capital	2	0.80	80%	High Impact
Social Capital	5	0.84	84%	Extremely High Impact
Average impact			**82%**	Extremely High Impact

As highlighted in the table and cobweb below, the overall impact of Kashf's financial and non-financial services was high in case of Economic capital (86%), human capital (76%) and physical capital (80%) and extremely high in case of social capital (84%) thus resulting in the overall impact of Kashf's program being high. The major drivers behind this were impact on increase in household income, business income, monthly savings, change in consumption pattern highlighting increased and improved consumption pattern of clients, business expansion which includes both introduction of new product lines and establishing new businesses.

Impact Assessment