



USAID
FROM THE AMERICAN PEOPLE



EVALUATION

Impact Evaluation of Nepal's Business Literacy Program

August 2020

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Alan de Brauw, Siddhartha Baral, and Susana Constenla of the International Food Policy Institute, with collaboration from Shiva Adhikari and Subas Risal.

Acknowledgement: The writing team at the International Food Policy Research Institute acknowledges collaboration and helpful suggestions from DEPROSC Nepal, New ERA, Maneka Gurung, Anita Mahat, Tanguy Bernard, and extremely helpful guidance from Lesley Perlman. We thank New ERA for allowing the use of the cover photo.

IMPACT EVALUATION OF NEPAL'S BUSINESS LITERACY PROGRAM

24 August 2020

USAID| Nepal Cooperative Agreement no. 720367191O0001

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

CONTENTS

Executive Summary	vi
Evaluation Purpose & Evaluation Questions.....	I
Evaluation Purpose.....	1
Evaluation Questions	1
Project Background.....	3
Evaluation methods & limitations.....	6
Impact Evaluation Design	6
Time Frame	7
Outcome Indicators.....	9
Quantitative Sample Frame	12
Baseline Sample	13
Qualitative Endline Sample	14
Qualitative Field Guides	14
Quantitative Endline Survey.....	15
Field Procedures	15
Questionnaire	15
Fieldwork	16
Endline Sample	17
Analysis.....	17
Further Limitations.....	17
Measurement	17
Overlap with KISAN	18
Findings, conclusions & Recommendations	19
Findings	19
Descriptive Statistics, Endline Sample	19
BLP Experience.....	26
Outputs: Descriptive Results and Impact Estimates	29
Proximate Outcomes: Description and Impact Estimates	33
Descriptive Statistics and Impact Estimates, Entrepreneurial KSAs	39
Summary, Proximate Outcomes	42
Intermediate Outcomes.....	43
Final Outcomes	53

Life Skills	57
Further Qualitative Results	62
Impact Heterogeneity	64
Conclusions	72
Evaluation Questions	73
Results Chain.....	74
Recommendations	75
Using the Business Literacy Program	75
Recommendations Related to Evaluation.....	76
Annex I: Evaluation Statement of Work	79
Annex II: Evaluation Methods and Limitations.....	86
Quantitative Evaluation Methods	86
Matching Methodology	86
Propensity Score Weighting.....	87
Propensity Score Weighted Impact Estimates.....	89
Estimating the Propensity Scores	90
Attrition.....	94
Annex III: Data Collection Instruments	97
FGD TOPIC GUIDE FOR BOTH BL AND NON-BL PARTICIPANTS.....	97
KEY INFORMANT INTERVIEWS WITH COMMUNITY TRAINERS	101
Quantitative Survey.....	104
Annex IV: Sources of Information	158
Annex V: Disclosure of any Conflicts of Interest	160

ACRONYMS

ATT	Average Impact of the Treatment on the Treated
BFS	Bureau of Food Security
BLP	Business Literacy Program
DEC	Development Experience Clearinghouse
DEPROSC	Development Project Service Center
EA	Enumeration Area
FTF	Feed the Future
ID	Identification
IE	Impact Evaluation
IFPRI	International Food Policy Research Institute
KIIs	Key Informant Interviews
KISAN	Knowledge-Based Integrated Sustainable Agriculture and Nutrition
KSAs	Knowledge, Skills, and Attitudes
LASSO	Least Absolute Shrinkage and Selection Operator
SOW	Statement of Work
USAID	U.S. Agency for International Development
VDC	Village Development Committee

EXECUTIVE SUMMARY

EVALUATION PURPOSE AND EVALUATION QUESTIONS

Stakeholders from Feed the Future (FTF) FEEDBACK, Bureau for Food Security (BFS), and USAID/Nepal collaborated in 2014-2015 to develop an impact evaluation related to the Business Literacy Program (BLP), which targeted beneficiaries of the Knowledge-Based Integrated Sustainable Agriculture and Nutrition (KISAN) project. Stakeholders were most interested in identifying what elements of BLP led to adoption of targeted Knowledge, Skills, and Attitudes (KSAs) and behavior change, and the persistence or observed sustainability of those changes. As a result, the BLP Impact Evaluation (IE) was designed to attempt to identify the differential impacts of the BLP intervention on participants' intentions, decision processes, and behavior change.

The research questions underlying the evaluation are the following:

1. To what extent and under what conditions does program exposure change individual (or household) knowledge, skills, and attitudes (KSAs) and behaviors toward increased engagement in community and market-oriented decisions and market-oriented behaviors?
2. To what extent and under what conditions are impacts sustained or persistent over time, two years following completion of the course?

A main goal of the endline evaluation is to measure outcomes along the results chain that was established for the project. The first question effectively serves as the “final” outcome in the project theory of change. Since outcomes are measured for each step along the results chain, the evaluation can help illuminate where the theory of change is strongest, and at which points it might require more thought. To try to understand how this outcome could have taken place, the evaluation is designed to study questions at earlier points in the theory of change as well. Therefore a secondary goal of the endline is to attempt to validate the theory of change.

PROJECT BACKGROUND

This project is what can be described as a medium term impact evaluation of USAID's Business Literacy Program (BLP), which operated between 2014 and 2017 alongside the USAID Knowledge-Based Integrated Sustainable Agriculture and Nutrition (KISAN) Project.

KISAN's goal was to increase agricultural productivity and income, improve nutritional status of women and children under 5 years old, and increase income diversity in vulnerable communities and households. Within the framework of KISAN, the BLP aimed to reach the most marginalized among KISAN households with a year-long training program designed to build or strengthen literacy and numeracy, plus specific market or entrepreneurial knowledge and capabilities. BLP recruitment took place among KISAN households, targeting household members who were either illiterate or with low literacy, and who were aged 15 years and up. Additional criteria were being members of disadvantaged castes or ethnicities, women, or youth.

The BLP training was designed to operate within and expand success through KISAN, and its training materials were designed to reinforce and broaden or deepen the program's nutrition, farm production, and market-oriented messages. The BLP trainings were implemented in each district over a 48 week period, and trainings took place two hours a day, six days a week; participants had to be willing to commit to the course. Community trainers went through a 14 day training and were provided with guide books to assist them on teaching the five modules worth of material. A hallmark of the BLP was

also community engagement from the beginning; it established Class Management Committees within communities to engender local ownership in the BLP, with representation on the committees from local social workers.

EVALUATION DESIGN, METHODS AND LIMITATIONS

The evaluation of the BLP was designed as an impact evaluation with quantitative evaluation taking place using matching methods augmented by qualitative data. The evaluation was initially designed by Westat (2017). In the endline, the qualitative data collection included focus groups among BLP participants and non-participants in 9 communities also included in the quantitative survey, and 29 key informant interviews. The quantitative data collection strove to find 1308 households for which complete data was collected in the baseline; the survey was successful in surveying 1257 households, of which 608 were originally included in the BLP participant group in the baseline.

For the quantitative data, the evaluation used a method called propensity score weighting to attempt to estimate low bias treatment effects on the treated. Propensity scores were used as weights within the comparison group; intuitively, the method works by assigning higher weights to comparison group respondents that appear more like BLP participants, and lower weights to those who share fewer similarities with BLP participants. The main regressions studying impacts also again control for the variables—all measured at baseline—included in the propensity scores. The propensity scores are estimated using a machine learning technique (LASSO). Where possible, outcomes are measured both at endline and in a difference-in-difference format; the latter is normally preferable as they can control for baseline differences.

The baseline survey took place in 2016 and was conducted by Feed the Future FEEDBACK; the endline qualitative and quantitative surveys were overseen by researchers from the International Food Policy Research Institute (IFPRI). Because the endline took place in 2019, a bit more than two years after the project ended, the evaluation studies what participants continue to either know, recall, or use from what they learned during the BLP two years later, relative to a comparison group. The evaluation took place in four of the 20 districts in which the BLP operated, all in the Western Region: Arghakhanchi, Gulmi, Kapilvastu, and Palpa.

There are three main limitations to the evaluation. First, the baseline took place after the BLP had already begun, so it is not always clear whether the difference-in-difference measurements would actually measure changes attributable to the program, as some of those changes might have already occurred, or begun to occur, by the baseline. Second, a related concern is the timing of the endline; it took place more than two years after the BLP ended, which means some of the lessons may have been forgotten by participants. This concern further complicates the interpretation of difference-in-difference estimates, as the timing plus this decay could actually lead to negative estimates even if the true effects were positive. Therefore, difference-in-difference estimates need to be thought about carefully. Third, the program had substantial overlap with KISAN beneficiaries, so it is difficult to disentangle some of the impacts from impacts of KISAN.

FINDINGS AND CONCLUSIONS

The report measures quantitative impacts on a large number of indicators that are related to the outputs, proximate outcomes, intermediate outcomes, and final outcomes along the project results chain. Figure 1 depicts the strength of evidence found for each of the outputs and outcome classes along the chain. Each class of outcomes is coded as either blue, for those that were clearly attained, grey, for those that were partially attained, or white, when evidence was not found. The clearest findings

associated with the results chain are on individual literacy and numeracy, and on attempting to access formal financial products such as savings and insurance. In general, the impact evaluation finds at least some evidence that nearly all the steps along the result chain occurred, but the evidence is nuanced, in part because of the limitations discussed above. One example are impacts on sustained engagement in microenterprises; the evaluation finds some evidence of agricultural microenterprise expansion, but not non-agricultural microenterprises, nor impacts on livestock herd size, which would be indicative of larger sales of livestock or animal by-products. There is weak, but positive, evidence of improved incomes from agricultural microenterprises as well.

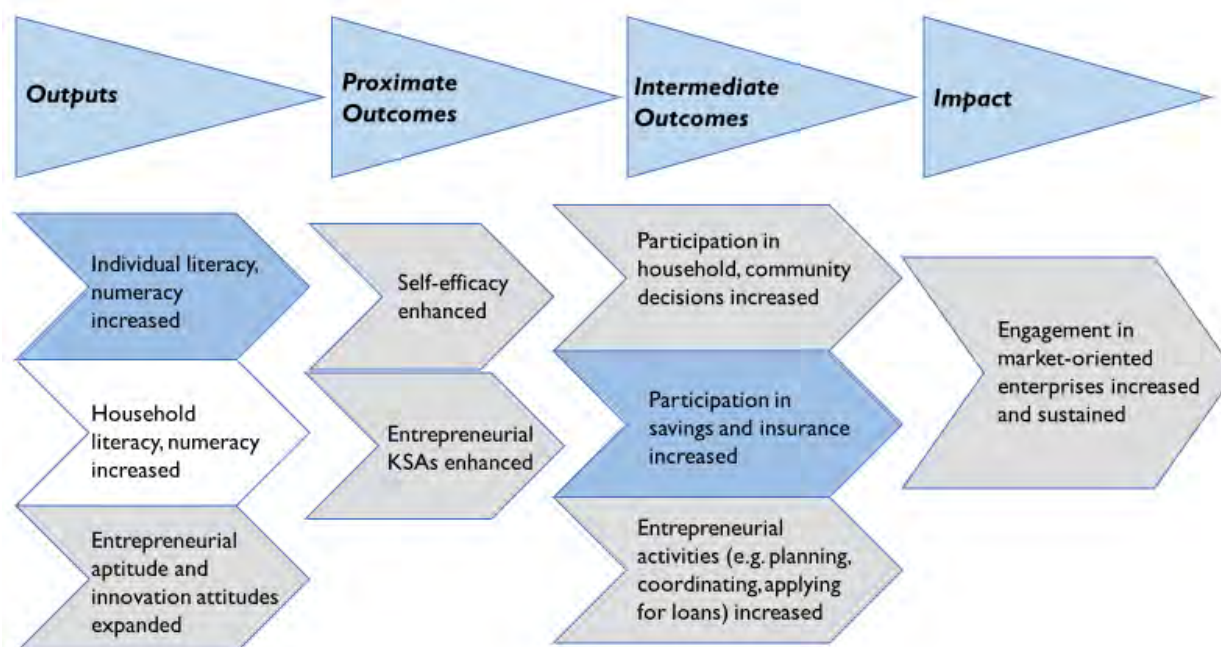
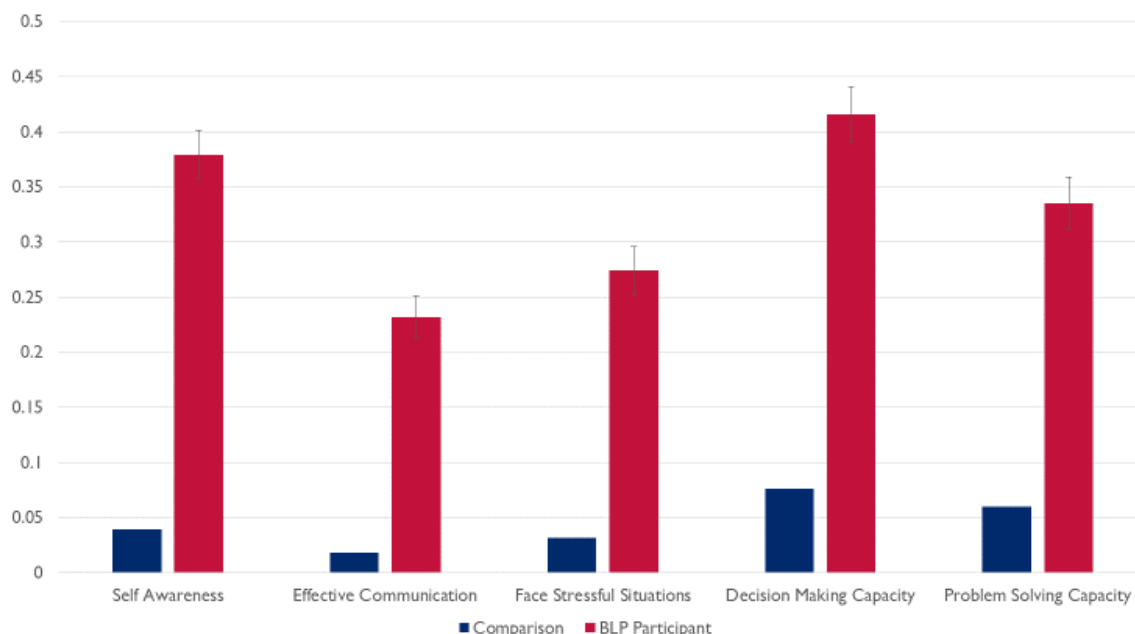


Figure 1. The BLP Results Chain (adapted from Westat, 2017)

The report finds several impacts worth noting that are not on the results chain. The strongest impacts are on improvements in knowledge of life skills (Figure 2). The survey asked a set of questions about knowledge of five of the ten life skills that were taught by the project; impacts on those stating improvements in those life skills over the past two years were between 21 and 34 percentage points. The qualitative evaluation also picked up that the nutrition education module was quite popular, changed the information set about what types of foods are healthy, and could have changed diets within participant households. As the nutrition education module was expanded in KISAN 2, it would be particularly interesting to know whether it is having impacts.



While the report clearly demonstrates increased community engagement among BLP participants, the evidence is less clear that participants are engaged in more market-oriented behaviors and decisions. They do appear to link more to the formal financial sector, as they are more likely to apply for loans or attempt to buy insurance, and they are slightly more likely to run agricultural microenterprises. The heterogeneity analysis also clearly shows that the benefits of the BLP accrue somewhat more to the young and outside the *terai* as well; the latter might deserve further study in the current iteration of the BLP as part of KISAN II.

The evaluation also clearly shows some persistent impacts over time. Many of the main impact estimates—on literacy and numeracy, entrepreneurial KSAs, life skills, and community involvement—clearly had to persist to be present two years later. It is not as clear for some other concepts, such as self-efficacy, where large differences were already measured at baseline between the BLP and comparison groups.

In sum, even two years after the fact this impact evaluation shows some clear qualitative and quantitative impacts of the BLP. It would be worth revisiting the theory of change or the results chain in the present BLP to better account for positive changes thought to be realistic as a consequence of the program, and it would be valuable to think about whether there are ways to improve targeting towards the young who appear to have larger benefits from participation.

EVALUATION PURPOSE & EVALUATION QUESTIONS

Evaluation Purpose

Stakeholders from Feed the Future (FTF) FEEDBACK, Bureau for Food Security (BFS), and USAID/Nepal collaborated to develop an impact evaluation related to the Business Literacy Program (BLP), which targeted beneficiaries of the Knowledge-Based Integrated Sustainable Agriculture and Nutrition (KISAN) project. Stakeholders were most interested in identifying what elements of BLP led to adoption of targeted Knowledge, Skills, and Attitudes (KSAs) and behavior change, and the persistence or observed sustainability of those changes. As a result, the BLP Impact Evaluation (IE) was designed to identify the impacts of the BLP intervention on participants' intentions, decision processes, and behavior change across target group variations including location, community, household, and individual characteristics. The IE focuses on learning during and after program implementation, through measured change in intentions or perceptions and behavior of trainees across different populations.

The Impact Evaluation intended to determine whether participation in intensive literacy, numeracy and entrepreneurial skills trainings catalyzes income generation among farmers of disadvantaged groups. The result of the IE is valuable information on the project's impact on self-efficacy; empowerment of women and other disadvantaged groups through increased participation in household or community decisions; and adoption of new risk reduction strategies such as diversified livelihoods, income generation activities or accessing financial services, all of which are related to resilience. This information can be used to guide future investments, contribute to learning and implementation of activities around enterprise development, women's empowerment and resilience.

Evaluation Questions

The research questions underlying the evaluation are the following:

1. To what extent and under what conditions does program exposure change individual (or household) KSAs and behaviors toward increased engagement in community and market-oriented decisions and market-oriented behaviors?
2. To what extent and under what conditions are impacts sustained or persistent over time, two years following completion of the course?

The first question effectively serves as the "final" outcome in the project theory of change. To try to understand how this outcome could have taken place, the evaluation is designed to study questions at earlier points in the theory of change as well. Therefore a secondary goal of the endline is to attempt to validate the theory of change.

Results from the IE will also help shape implementation of future GFSS activities and supports the following Feed the Future Learning Agenda Questions:

Under the Gender Theme, question 1:

What factors substantially contribute to the gender gap in the application of agricultural technologies and practices? What are the most effective approaches and interventions that result in improved women's application of agricultural technologies and practices? What are the leverage points and tipping points at which approaches and activities will have lasting (over time)

and far-reaching (over space) impacts for women in our target populations?

Specifically, this IE will help build knowledge about whether the BLP style approach is an effective way to improve women's application of specific types of agricultural practices.

Second, under the Market Systems Theme, the IE will help address question 3:

Which cross-market functions (e.g., extension services, input suppliers) are key for strengthening market systems? In what context?

Whereas the IE of the BLP does not specifically address a market systems intervention, the BLP itself can be thought of as a "cross-market function" and whether it is effective at improving outcomes can help provide evidence that it could also help strengthen market systems.

PROJECT BACKGROUND

This project is what can be described as a medium term impact evaluation of USAID/Nepal's Business Literacy Program (BLP), which operated between 2014 and 2017 alongside the USAID/Nepal Feed the Future flagship, the Knowledge-Based Integrated Sustainable Agriculture and Nutrition (KISAN) Project.

The BLP was designed to address FTF output #9: increased resilience of vulnerable communities and households through skills development. The primary objective of BLP was to increase the resilience of vulnerable households and communities through enhanced literacy, numeracy, and business/entrepreneurial skills.

The BLP operated in the same 20 districts where KISAN was operational that comprise the Feed the Future Zone of Influence (ZOI). These regions and districts include:

Far-Western Region (6 Districts)—Achham, Baitadi, Dadeldhura, Doti, Kailali, and Kanchanpur.

Mid-Western Region (10 Districts)—Banke, Bardiya, Dailekh, Dang, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan, and Surkhet.

Western Region (4 Districts)—Arghakhanchi, Gulmi, Kapilvastu, and Palpa.¹

KISAN's goal was to increase agricultural productivity and income, improve nutritional status of women and children under 5 years old, and increase income diversity in vulnerable communities and households. KISAN had a beneficiary target of 100,000 households in the FTF (ZOI) comprised of 20 districts in the Western, Mid-Western, and Far-Western regions of Nepal. KISAN had five specific outcomes:

Outcome 1: Increased access to improved quality inputs

Outcome 2: Improved capacity of agriculture extension workers, service providers, and farmers

Outcome 3: Improved and sustainable agriculture production and post-harvest technologies and practices adopted at the farm level

Outcome 4: Improved market efficiency

Outcome 5: Increased capacity of local agribusinesses and GON

KISAN sought to attain its five specific outcomes first by following an outreach strategy, in which the project formed farmer groups and worked with them on increasing awareness of market opportunities, improving access to more capital intensive investment such as irrigation and mechanization, linking groups to agrovets (input dealers) so they could attain inputs, and forming savings and credit groups (Winrock, 2017). Following that approach for two years, the second phase of the project pivoted to use a market systems approach, which works on strengthening value chain relationships with private sector actors to improve the way the market system works for all (including the poor). Farmer trainings, for example, in the latter approach were largely taken over by local service providers or even private

¹ The Government of Nepal initiated a reorganization of administrative districts in 2016 resulting in the creation of new provinces, while the use of development regions was discontinued. Since the baseline was carried out before the reorganization, this report uses the older classifications, of development regions. Note that district names for the most part, remained the same.

enterprise.²

The BLP, aimed to reach the most marginalized among KISAN households with a year-long training program designed to build or strengthen literacy and numeracy, plus specific market or entrepreneurial knowledge and capabilities. Strengthening in all these areas is expected to help people in these households gain greater benefits more effectively from KISAN's agricultural initiatives and other development programs.

Several KISAN interventions and outcomes relate closely to the BLP. First, in the project's first phase, KISAN helped farmer groups organize savings and credit groups. In the second phase, it worked with agrovets to improve services they provided to farmers, including offering credit to farmers in input purchases. KISAN also worked on ensuring women participated in specific programs that helped them build skills, such as a tractor maintenance and service course; its monitoring surveys also show a shift towards joint decision making from male dominated decision making with regards to agriculture (Winrock, 2017). It should be noted there was no impact evaluation of KISAN and as such the latter finding should not be considered causal.

The BLP training was designed to operate within and expand success through KISAN, and its training materials were designed to reinforce and broaden or deepen the program's nutrition, farm production, and market-oriented messages.³ For instance, vocabulary and scenarios used for lessons in the Literacy and Numeracy module cover topics such as nutritious food crops and how to prepare them correctly. Other modules described issues such as the benefits of working with agricultural extension agents.

BLP recruitment for participation began with KISAN households. The goal was to recruit household members who were either illiterate or with low literacy, and who were aged 15 years and up. Additional criteria were being members of disadvantaged castes or ethnicities, women, or youth, and being willing to commit to a 12-month course to build skills relevant to diversifying their household's income-generating activities. In general, though, the BL did not turn away willing participants who did not fit within these categories.

The BLP was implemented in each district over a 48 week period, and trainings took place two hours a day, six days a week (DEPROSC Nepal, 2017). Community trainers, who implemented the trainings, went through a 14 day training-of-trainers program, and were provided with guide books to assist them on teaching the five modules worth of material. Master trainers provided some monitoring as well, and supported the community trainers with mentoring to improve the trainings as they went along. A hallmark of the BLP was also community engagement from the beginning; it established Class Management Committees within communities to engender local ownership in the BLP, with representation on the committees from local social workers.

According to the BLP final program report (DEPROSC Nepal, 2017), key outcomes included almost 97 percent of beneficiaries successfully completing a literacy and numeracy exam; 67 percent of beneficiaries also improving their dietary diversity (at the household level); improved life self-efficacy among close to 75 percent of female beneficiaries, and 65 percent of beneficiaries having increased awareness that males and females should have equal access to opportunities. The report also suggests

² To examine differences in outcomes from trainings provided in a more standard way versus using a market systems approach in a Bangladesh FTF activity, see de Brauw et al. (2017).

³ This description borrows heavily from the BLP impact evaluation baseline report (Westat, 2017).

that about 73 percent of BLP graduates initiated new enterprises or expanded old ones. These statistics suggest that the program may have been very successful in meeting the goals of the theory of change illustrated in Figure 1.

However, it is worth noting that these statistics are not based against a counterfactual; they are largely measured close to the project's end. As a result, one does not know, for example, how many non-participants also improved their dietary diversity, or initiated or expanded what can be called their businesses or microenterprises. Had non-participants in the same areas also been improving targeted outcomes at the same rate as BLP participants, then the reported improvements would not reflect gains attributable to the BLP, but instead general changes taking place in rural areas of the Western Region of Nepal. To be able to attribute benefits to the BLP, it is necessary to construct an appropriate counterfactual for those who benefited from the program.

EVALUATION METHODS & LIMITATIONS

To address the need for a counterfactual to attribute benefits to the BLP, this section outlines the methods used in conducting an impact evaluation of the BLP. The BLP impact evaluation was initially designed by Westat (2017) as part of the Feed the Future FEEDBACK (FTF FEEDBACK) activity, and Westat also collected a baseline quantitative and qualitative survey. The endline, which also included quantitative and qualitative components, was carried out by researchers from the International Food Policy Research Institute (IFPRI). The endline took place in 2019, a bit more than two years after the project ended, so the evaluation examines what participants continue to either know, recall, or use from what they learned during the BLP two years later, relative to a comparison group. The section first outlines the impact evaluation design, the evaluation time frame, and describes outcome indicators. Next, it describes the quantitative sample frame, which was inherited from the Westat (2017) baseline. The following subsections describe the qualitative and quantitative endline samples and survey, and the final subsection describes limitations of the evaluation.

Impact Evaluation Design

The BLP impact evaluation was initially designed by Westat (2017). The stated goal of the impact evaluation was to “investigate initial and longer-term or persistent impacts of the training experience on targeted aspects of beneficiaries’ knowledge, skills, and attitudes (KSA), and behaviors.” In collaboration with stakeholders and USAID, the initial evaluation team designed the following results chain for the BLP (Figure I).

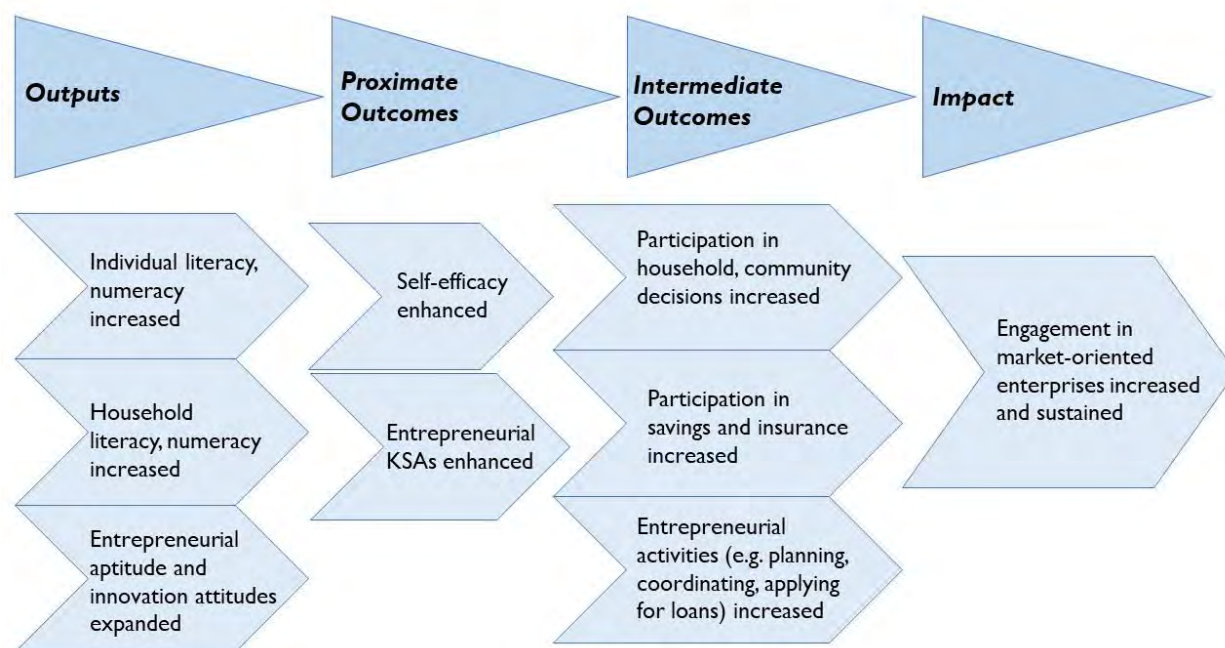


Figure I. Business Literacy Program Results Chain (from Westat, 2017)

The results chain first suggests that as individual and household numeracy and literacy increase, and entrepreneurial attitudes expand, then two proximate outcomes would occur: first, self-efficacy would be enhanced, as would entrepreneurial KSAs. Note that self-efficacy could also be an independent output of the trainings; it could be that there are no measurable changes in literacy, but the process of going through the trainings improves self-efficacy.

Assuming there are changes in proximate outcomes, then changes in intermediate outcomes are also possible. First, BLP participants may increase their participation in household and community level decisions. Second, they may increase their participation in savings and insurance, and third, they may increase entrepreneurial activities, such as planning, coordination, or applying for loans. The overall impact of the BLP would be to increase and sustain engagement in market-oriented enterprises.

Time Frame

A key issue that requires additional discussion is the timing of both the baseline and endline surveys. According to the baseline report, the original impact evaluation (IE) design covered both the first and second training cohorts across all 20 districts. However, the April 2015 earthquake in Nepal shifted donor attention to higher priorities: to ensure aid and assistance funding and operations focused all available resources to the most urgent needs in earthquake-affected areas. This interruption in planning and designing the IE and its data collection made it impossible to include both the Phase I and Phase II cohorts in the IE. Once the IE was relaunched later in 2015, stakeholders worked together to adjust the strategy to make the best use of the new timing and budget constraints. The final IE design, which is presented in more detail in the following section, focuses on the four districts in the Western Region, all of which entered the BLP in Cohort II.

Data collection for the baseline phase of the impact evaluation got into the field in the spring of 2016. At that time, Cohort II had already begun BLP trainings, and in fact, two of the five learning modules had been completed in many of the EAs. Consequently, some of the knowledge changes within the BLP participant group may have already taken place. As a result, difference-in-difference impact estimates might not be possible particularly for some of the topics covered in those two modules, as knowledge might not have increased further for those topics and the baseline was potentially capturing knowledge changes that took place during the program. Consequently, difference-in-difference estimates might not measure any change in the BLP participant group relative to the comparison group among those topics.

A second timing issue is that the endline took place a bit over two years after the program ended (Figure 2). Ideally, the baseline would have taken place just before the program began and the endline just after, to measure how outcomes changed in the treatment group relative to the control group. If, as one would surmise, some of the knowledge gained during the BLP trainings is lost between the end of the program and the survey, the estimates from the quantitative work on the endline alone will underestimate the “true” impact of the program. Alternatively, it could be that some of the outcomes were reinforced by changes in behavior that took place; as a consequence it could be that the estimates reflect actual impacts even better than a measure immediately after the program ended, as they incorporate outcomes that took time to develop (see, for example, Behrman and King, 2009). The evaluation timing, therefore, must be considered when interpreting the results.

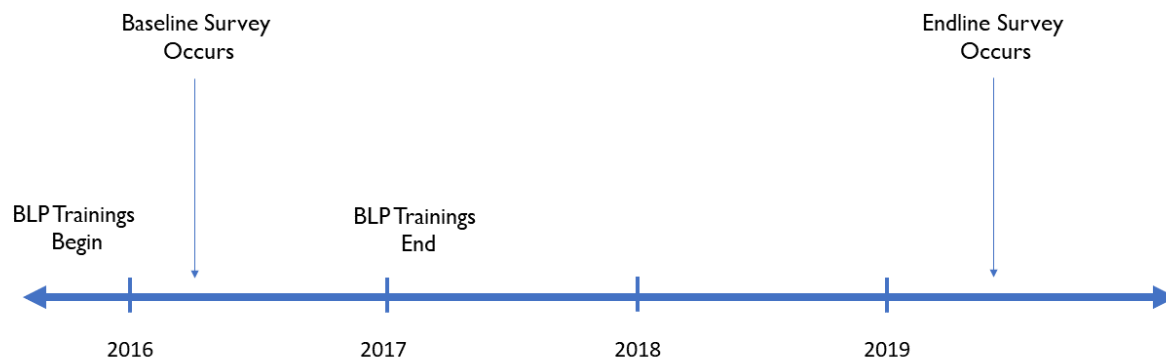


Figure 2. Timing of Project and Impact Evaluation Surveys, BLP in Nepal

A key component of an impact evaluation is a counterfactual. The goal is to understand precisely what impact participation in the project or intervention, or the offer of participation, has on the outcomes of those who participate (or are offered participation). To measure that impact, ideally one could observe outcomes among the same set of individuals who both participate and do not participate in a project or intervention. If both “states of nature” could be observed, one could be absolutely sure that benefits to those individuals occurred as a result of the BLP (or any other program). Obviously, it is not possible to observe people in both states of nature (both with and without the BLP). Hence, it is important to compare BLP participants with another group of non-participants who are as comparable as possible to those who participate.

In this context, the problem with comparing participants to non-participants is that there are both observable and unobservable differences between them. While it is not difficult to control for observable differences, the unobservable differences are more challenging. Abstracting temporarily from the BLP itself, consider a program that is targeted towards villages that are near a main road, leaving out villages that are farther from that main road. The economy of the villages is certainly affected by the distance from the road, so using members of villages from the more distant villages as a comparison group or the counterfactual for the program will almost certainly mix up impacts of the program with factors related to the distance to that road. Therefore even trying to measure average benefits to a program becomes problematic in that type of situation.

To overcome this concern, in the past 20 years there has been a movement to allocate programs, at least initially, by randomizing access to them. The logic is as follows—if access to the program is randomized, then an analyst can expect that on average, the unobservable factors will be the same between the group offered participation and those that are not. As a result, any estimate of the average outcomes from the program, among those offered the program, would be certainly attributable to the program. In 2019, the Nobel Prize in Economics was given to Esther Duflo, Michael Kremer, and Abhijit Banerjee for their roles in promoting and developing methodologies related to randomization of benefits

and the now large body of evidence that has been developed around randomized control trials.

However, access to the BLP was not randomized, so a non-randomized control group must be constructed in order to measure average benefits to those who chose to participate in the BLP. In this impact evaluation, as discussed in the next section, data were collected among both participants and non-participants within the same communities. The goal is to use what are known as matching methods to ensure that observable characteristics among the non-participants are similar to those among participants. However, it is not possible to completely control for underlying reasons for the choice not to participate, as those reasons are unobservable to the quantitative analyst.

Outcome Indicators

A number of the outputs and outcomes within the theory of change are not easy to define quantitatively. The evaluation attempts to measure outcomes along the theory of change developed for the project through indicators related to each of the components in Figure 1. Therefore, an issue of key importance is how the outcome indicators are measured. As noted before, many of the outcome indicators will be measured using questions that were developed during the baseline survey, though some indicators were added to the endline survey. A summary of all outcome measures, linked to the theory of change, is in Table 1.⁴

We take each of these categories sequentially. The main outputs listed in the theory of change are individual level literacy and numeracy, household literacy and numeracy, and the expansion of entrepreneurial aptitude and innovation attitudes. Self-reported indicator variables are used to measure individual literacy and numeracy; to also measure numeracy objectively, a group of eight simple math questions were also asked of respondents. Household literacy is measured as the proportion of household members who are reported to be literate.

There are two proximate outcomes: whether an individual's self-efficacy is enhanced, and whether entrepreneurial KSAs are enhanced. Self-efficacy is difficult to measure; here, it is measured using four different sets of questions.⁵ The first set measures self-efficacy in basic judgment and decisions; the second measures self-efficacy in basic business planning. The third set of questions discusses how individuals deal with adversity, and the fourth set is on self-efficacy related to compromise negotiation.

Entrepreneurial KSAs are measured as follows. First, the questionnaire asked if respondents had ever heard of entrepreneurial skills. Second, the questionnaire asked a few questions about two specific types of entrepreneurial KSAs. The first type is profit and loss calculations; the outcome measures are whether respondents had heard of them, whether respondents had used them in the past twelve months; and whether respondents were at least somewhat comfortable performing them. The second type is principal and interest calculations. The same three indicators are developed around principal and interest calculations.

The three types of intermediate outcomes relate to participation in household and community decision making, participation in savings and insurance (or alternatively, formal financial products), and

⁴ The actual questions underlying each of the outcome measures appear in the descriptive results sub-section, and in the quantitative survey form in Annex C.

⁵ The questions used to measure self-efficacy come directly from the baseline survey; they were based on Bandura (1986; 1997), who developed self-efficacy as a construct in the context of social learning and adaptation.

participation in entrepreneurial activities. The first set of outcomes is measured using the same zero to 10 scale as the self-efficacy measures; the sets of questions measure participation in household decisions about household management; decisions about household conflict resolution; and the engagement of others in problem resolution. Participation in savings and insurance, or more broadly formal finance, is measured using variables measuring whether households have formal savings accounts, have applied for loans, and have applied for either crop or livestock insurance.⁶ Finally, the third outcome is measured through indicator variables measuring whether or not respondents reported doing any cash cropping, having any livestock business, or had any type of non-farm enterprise, all of which are thought of as entrepreneurial activities.

Finally, the impact outcome is whether engagement in market-oriented enterprises is increased and sustained. It is unclear how this concept would have been measured using the baseline survey. Moreover, it is important to account for the way the BLP was actually implemented. The endline asked specifically about net income from microenterprises that the household was running; this measure depends, of course, on the household (or the respondent) perceiving that they are running an enterprise. This measure is disaggregated by farm and non-farm income. Additionally, according to conversations with DEPROSC the way that “entrepreneurship” was thought of during the BLP was owning another goat, or animal. As a consequence, a second set of measures are the number of cows, buffalo, and goats each household owns.

⁶ Note that savings, either through accounts or through savings and credit cooperatives, was a focus of KISAN, so this outcome might be influenced by KISAN involvement.

Table 1. Outcome Measures included in Analysis

Category	Description of Measurement	Form of Variable
Outputs	Individual Literacy, Self Reported	Discrete
	Individual Numeracy, Self Reported	Discrete
	Simple Math Questions	Number of Questions Correct (0-8)
	Proportion of household literate (self-reported)	Proportion of Household Members
Proximate Outcomes (Self-Efficacy)	Average of seven questions about basic judgment and decisions	Questions are all on 0-10 basis (see notes)
	Average of six questions on basic business planning	Questions are all on 0-10 basis
	Average of seven questions on adversity	Questions are all on 0-10 basis
	Average of seven questions on compromise negotiation	Questions are all on 0-10 basis
Proximate Outcomes (Entrepreneurial Knowledge, Skills, and Attitudes)	Whether heard of entrepreneurial skills	Discrete variable
	Whether heard of profit-loss calculations	Discrete Variable
	Comfortable in understanding profit-loss calculations	Discrete Variable
	Have used profit/loss calculations	Discrete Variable
	At least somewhat confident in conducting profit/loss calculations	Discrete Variable
	Whether heard of interest on loans	Discrete Variable
	Comfortable in understanding of interest on loans	Discrete Variable
	At least somewhat confident in calculating interest on loans	Discrete Variable
Intermediate Outcomes (Decision Making)	Household and community level compromise and negotiation, average of 8 questions	Questions on a 0-10 scale
	Household and community level relationships, average of 6 questions	Questions on a 0-10 scale
	Communication Skills within Household and Community, average of 4 questions	Questions on a 0-10 scale
	Number of community groups household is involved in	Number
Intermediate Outcomes (Finance)	Have a formal savings account?	Discrete
	Have tried to enroll in crop or livestock insurance	Discrete
	Have applied for formal loan	Discrete
Intermediate Outcomes (Entrepreneurial Activity)	Cash Cropping	Discrete
	Livestock Business	Discrete
	Any non-farm Enterprise?	Discrete
Final Outcomes	Net Income, Farm Microenterprises	Average income (zero for many households who do not run enterprises)
	Net Income, Non-Farm Microenterprises	
	Number of Animals (Buffalo, Cows, Goats) owned	Number; zero for households with none

Notes: The questions that were asked on a 0-10 scale mirror the ones that were used in the baseline. Generally, respondents were asked the level to which they agreed to a statement; if they totally disagreed the answer was coded as 0, and if they completely agreed the answer was coded as 10. This scale is slightly different from a Likert scale. For specific questions, see the survey form in Annex B.

Finally, a goal of the BLP is to improve life skills. While life skills are related to self-efficacy, the types of life skills promoted by the BLP go beyond the self-efficacy concepts listed above to more complex and empowering levels (Westat, 2017). As such, the research team re-designed the survey module that had been asked in the baseline, and used the revised survey module to construct eleven simple measures related to life skills (Table 2).⁷ These measures specifically measure whether or not respondents have specifically heard of life skills, then whether they have heard of the five of the life skills promoted by the project or not, and finally their perception of whether that skill has improved in the past two years.

Table 2. Outcome Measures related to Life Skills (All Discrete)

Number	Question
1	Ever heard of life skills?
2	Ever heard of Self Awareness?
3	Ever heard of Effective Communication?
4	Ever heard of Capacity to Face Stressful Situations?
5	Ever heard of Decision Making Capacity?
6	Ever heard of Capacity to Solve Problems?
7	Improved or somewhat improved Self Awareness
8	Improved or somewhat improved Effective Communication
9	Improved or somewhat improved Capacity to Face Stressful Situations
10	Improved or somewhat improved Decision Making Capacity
11	Improved or somewhat improved Capacity to Solve Problems

Quantitative Sample Frame

The sampling frame for the quantitative data collection was generated at baseline. The sample was selected from the four districts in the Western region (Arghakhanchi, Gulmi, Kapilvastu, and Palpa) using a two stage sampling framework.⁸ The target sample size to have 800 treatment (or BLP participant) and 800 control (or non-participant) households. A decision was made early on to only target female participants for the impact evaluation, as around 13 percent of participants in those four districts were male, and gender disaggregated results would therefore be nearly impossible to generate.

To generate the target sample, in the first sampling stage, 50 enumeration areas (EAs) were selected randomly among wards within BLP village development committees (VDCs) with at least one BLP training course.⁹ In other words, wards could be selected within the sample frame so long as one BLP training course was taking place in that ward. For the second stage, BLP participants were selected from class listings. After identifying female participants among lists, 16 women were randomly selected in each EA for the sample. To find non-participants in the same communities, the research team first conducted a listing exercise in each of the 50 EAs, attempting to find women who matched the targeted group for the BLP- women aged 15 to 59 years, with low levels of

⁷ The design protocol also included measures of autonomy which were adapted from other IFPRI surveys and included in this survey. However, answers to the questions asked in the autonomy module were somewhat contradictory within groups of questions, and as such they are dropped from analysis for this report.

⁸ Note that as a result of the requirement to sample from these districts, the results should not be taken as representative of the BLP as a whole, but it should reflect how it was implemented in the Western region.

⁹ In 2015, when the sample was designed, districts in Nepal were broken up into VDCs, which were a relatively small administrative unit; VDCs were composed of wards. In 2017, the VDCs were replaced by rural municipalities, which are typically aggregates of several VDCs.

literacy (e.g. less than 5 years). If more than one person in a household met these criteria, one of them was randomly selected to be the comparison to participants. A total of between 24 and 33 women were targeted for the control group in each of the EAs, to attempt to find 800 women (and their households) for the control group, after eliminating those who did not meet the criteria.

Baseline Sample

The baseline survey took place in 2022 households. While the enumeration team was in the field, it was determined that not enough eligible households were being found among the control group, so additional households were targeted to attempt to find more eligible women for the control group. Moreover, a number of the BLP participants had been mistakenly identified as female, but were actually male, so they had to be removed from the analysis. Of the 2022 households that appear in the baseline data, the baseline survey included 1307 households that included eligible respondents, which are defined as females for the BLP group and females aged 15 to 59 years and with fewer than 5 years of education for the control group (Table 3). In other words, analysis in the baseline report takes place among 1307 households, with a total of 637 BLP participants in the treatment group and 670 respondents in the control group.

Table 3. Baseline Sample, BLP Impact Evaluation

	Business Literacy Group	Comparison Group
Households Selected	750	1334
Households in Baseline Data	710	1312
Eligible Respondents according to Baseline Report	637	670
Eligible Respondents Targeted for Endline Sample	637	671

Notes: Rows 1 and 3 are from Westat (2017); row 2 was constructed using data provided by Westat; row 4 from authors.

In checking the data prior to developing a strategy for finding the baseline households to include in the endline, it was noted that the BLP participants include several women with more education than non-participants, who all have less than 5 years of education (Table 4). However, the comparison group had been developed using the strict inclusion criteria for the BLP, none of the women in the comparison group had as many as four years of education. Therefore, three non-BLP women who completed the baseline in surveys but were not included in the baseline analysis are included in the sample frame, taking the total possible households to 1310 households. After matching household numbers with files obtained from Westat, the final sample frame for the endline includes 1308 households, of which 637 are BLP households and 671 control households.¹⁰

¹⁰ Two of the 1310 households that were included in the baseline analysis could not be adequately identified in the data provided to us, so they were dropped from the endline sample frame.

Table 4. Education Level of Respondents in the Baseline Sample, BLP Impact Evaluation

	Business Literacy Group	Comparison Group
Less than 4 years of schooling	504	670
4-5 years of schooling	59	2
6-10 years of schooling	72	1
11-12 years of schooling	1	0
>12 years of schooling	1	0
Number of Obs.	637	673

Notes: Authors' calculation using baseline data. Women in comparison group with either 4-5 years of education or 6-10 years of education were excluded from analysis in Westat (2017) but were included in endline sample frame because full data were available.

Qualitative Endline Sample

The quantitative data collection was preceded by a set of focus group discussions and key informant interviews within communities that were visited for later quantitative data collection. The EAs used were a subset of the 50 EAs in which the quantitative data collection took place. To ensure that analysis could be conducted in concert with one another, the two data collection efforts were planned to take place relatively close to one another; however, the qualitative work preceded the quantitative work by approximately six weeks, and the qualitative team met with the quantitative team briefly just before the fieldwork to ensure that the questionnaire was not missing any clearly important information. The quantitative team conducted 9 focus groups with BLP participants and 9 focus groups with non-participants (Table 5). In the same communities, key informant interviews (KIIs) were carried out with community trainers and master trainers when they were available; 29 total interviews were conducted.

Table 5. List of Locations for Focus Group Discussions, by Participation Level

District	VDC	Wards	Focus Groups with Business Literacy Participants	Focus Groups with Control
Arghakhanchi	Thulapokhara	3,6,8	Yes	Yes
	Thada	2	Yes	Yes
Gulmi	Birbas	9	Yes	Yes
	Thanapati	8	Yes	Yes
	Kopawa	4,9	Yes	Yes
Kapilvastu	Niglihawa	8,9	Yes	Yes
	Gotihawa	6	Yes	Yes
	Khasyoli	3	Yes	Yes
Palpa	Rampur	9	Yes	Yes

Qualitative Field Guides

The qualitative field guides were developed by New ERA in collaboration with IFPRI researchers and USAID. Separate guides were developed for focus groups held among the BLP participants and among non-participants. A third set of guides were developed for KIIs. The guides, in Annex C, were developed to specifically help measure outcomes along the theory of change discussed above.

Quantitative Endline Survey

Field Procedures

Information about the households in the baseline sample provided to IFPRI was incomplete, so a protocol had to be developed to identify those households in the field. Information available about all households included the geographic location and address of the household, and the name of the household head, so those two pieces of information could be used for all households. For BLP households, names of BL participants are also known. So the BL participants could be initially identified by name in the field for interview. If they could not be identified by name, the numbered procedure below was followed to attempt to find the right person to interview. Note though that this procedure was only followed if the identity was unclear and not if the individual was present.

Since the baseline data did not include names of non-BL interviewees, a procedure was required to attempt to identify exactly the woman who was interviewed at baseline. To attempt to do so, first note that within households, the respondent identification (ID) code is available in most households. Enumerators were therefore provided with the marital status and the approximate age of the woman who should be interviewed when the respondent ID was available. In the few cases in which the respondent ID was not available for the non-BL households, the following procedure was used:

1. The female adult in the household with the least education should be interviewed (e.g. less than 4 years); if all females have less than 4 years of education (and there are more than one female adult present in the household), then;
2. The youngest female adult over 18 years of age should be interviewed (as she would have been eligible in the previous survey).

In BLP households, if the woman who participated in the BLP is no longer present, then she was tracked to a different household if known to be in the village, or if not more than a village away. Tracking also occurred if women were now residing in the district capital. Similarly, if non-BLP households had moved, they were tracked so long as they were not far away or could be found in the district capital. If the targeted woman in the control group was temporarily not at home, enumerators asked to set a time for an interview when she would be home. If the woman lived too far away or refused to participate, then the reason for not interviewing anyone from that specific household was recorded.

Questionnaire

The endline questionnaire was developed by adapting from the baseline questionnaire. The endline questionnaire largely included similar sections as the baseline questionnaire, though some sections and subsections were redesigned; where they were similar, the numbering from the baseline was followed. All partners collaborated on revisions to refine, then finalize, questionnaire modules based on observations and discussions during training, beta testing, and the pilot test. The questionnaire included the following eight sections:

- A. Front Page (Introduction)
- B. Informed Consent
- C. Household Demographics
- D. Program Participation, and Related Skills
- E. Life Skills, Entrepreneurship, and Financial Access
- F. Household Microenterprises and Livelihoods
- G. Autonomy

H. Labor Use

There were three main changes, other than the addition of some questions on autonomy and labor, from the baseline survey. First, in testing some parts of the questionnaire, largely related to self-efficacy measures in section D, were found to be very difficult to answer. These measures were largely used in outcomes, as discussed below, and the questions were based on rating scales. The baseline data were analyzed in detail, and questions were dropped using the following procedure. First, they were flagged if two questions had answers that were correlated with a coefficient above 0.75. If the average within the baseline for all the questions asked within a specific class of outcomes, and the average without one of the two correlated questions were correlated at above 0.99, then one of the two questions was dropped, as the correlation implied no real information was lost. As the ratings are somewhat difficult to do for some respondents, dropping these questions or ratings are done as the information loss is minimal, while there are resulting time savings. The section was therefore streamlined by dropping one of pairs of questions with high correlations. Second, the life skills questions were redesigned in section E, to add questions about one life skill, to better ask about material included in trainings, and to again reduce confusion among respondents. Third, the microenterprise questionnaire was streamlined to shorten the questionnaire and to ensure it asked about any returns to microenterprise activity.

The questionnaire was initially written in English, and translated into Nepali by IFPRI personnel native to Nepal.¹¹ The translations were checked by New ERA, who collected the data. Programming took place in Survey CTO, which is a program derived from Open Data Kit, used in the baseline survey. Survey CTO has several advantages over Open Data Kit. First, it works with its own server, allowing greater access to New ERA than during the baseline; as a result, their well trained supervisors were able to complete more direct updates when any problems were found after uploads. Second, Survey CTO allows remote monitoring of survey progress, so both IFPRI and New ERA managers (those in Kathmandu) were able to monitor data collection in near real time. Third, some basic data checks were programmed to ensure that any problems enumerators had with some of the key outcomes could be identified early on in data collection; although not all outcomes were checked, the ongoing checks ensured the data collection managers that the survey was going as planned.

Fieldwork

The quantitative fieldwork took place between August 26 and October 1, 2019. The enumeration staff were broken up into 8 teams, each of which was led by a supervisor. Each enumeration team was issued a mobile hotspot router, to enable them to upload data to the secure project server, which was carried out by supervisors each evening following the conclusion of surveying for the day. Only two individuals at New ERA and two individuals at IFPRI, all of whom had ethics training, had access to the full data set including respondent names, to ensure privacy of respondents.

Supervisors completed tracking sheets daily in Microsoft Excel throughout data collection, which was shared with IFPRI using a secure file-sharing service. The tracking sheet thus provided an up to date report of survey progress which could be compared to server submissions to ensure consistency. During the fieldwork, some simple, automated data checks were also implemented, both to ensure that interviews were not taking too long and to make sure that data coming in were high quality.

¹¹ As with the baseline, no other language met a standard of being spoken by 10 percent or more of the population in targeted areas to justify the time and expense of translating into additional languages.

Endline Sample

The endline was generally very successful at locating baseline sample households. The team was able to reach 1257 of the 1308 targeted households, or just over 96 percent of targeted households (Table 5). A main reason for the success in locating participants and households was the effort to trace households that had moved; several households were interviewed outside of the original EAs. Among the 1257 households with complete surveys at endline, 608 households are in the BLP participant group and 649 are in the control group, so attrition was about even across the two groups. However, more of the women reached in the control group did not appear to match the women interviewed in the first round; specifically, there were 48 interviews that took place among women who did not appear to be measured at baseline. Of those, 43 took place within the control group. For most of the analysis, the entire sample of 1257 is maintained, since the sample size is not large overall, and much of the analysis takes place using both baseline household level outcomes (which should be valid for the women not measured at baseline) and with endline outcomes (which are clearly valid).

As soon as data collection was complete, the data were cleaned in a relatively standard way; data cleaning done in practice was fairly minimal because the survey programming included a series of checks to limit clearly incorrect responses that necessitate more substantial cleaning. First, the data were inspected for missing values or clear outliers. After a series of checks were conducted, New ERA were given a list of observations to check (through phone calls back to the field). A small number of updates were then recorded in main databases for the project. Finally, outcomes were constructed with the cleaned data.

Table 6. Endline Sample, BLP Impact Evaluation

	BLP Group	Comparison Group
Households Targeted from Baseline Data	637	671
Households Found in Endline	608	649
Households with Different Respondent than Baseline	5	43

Analysis

Succinctly, in this evaluation a technique called propensity score weighting is used to make the comparison group match the treated group, at least in terms of average observable characteristics. The assumption is that if the observable characteristics are not statistically different from one another, unobservable characteristics should not be statistically different from one another on average, or if they do any such differences are minimized. In this context, to abstract from researcher decisions, a machine learning procedure called a LASSO is used to generate the propensity scores using baseline data; the propensity scores are then used to weight the comparison group to make it more comparable to the BLP participant group. No statistical differences in observables were found once the propensity scores are applied; more details can be found in Annex A.

Further Limitations

Measurement

An important question is whether outcomes should be measured as changes between the baseline and endline, or simply at endline, measuring the difference between outcome measures between the BLP participants and the comparison group. Some of the measures are only available at endline; for those, it is impossible to measure in a difference-in-difference framework. For those that are available, there is

one pertinent concern with measuring differences-in-differences rather than just comparing endline outcomes. First, as discussed some of the modules within the BLP had been conducted already by the time the baseline occurred. So a difference-in-difference measurement would measure impacts between a time when some learning had already taken place through to a time when some knowledge decay (or forgetting) might have taken place; as a result, the impact estimate could in fact be negative. A second, more minor concern, is that theoretically difference-in-difference estimates are lower bias but more variable than comparisons of weighted means; the challenge then becomes the sample size. However, note that all control variables used in constructing propensity scores for weighting have been generated from the baseline data.

Overlap with KISAN

The BLP obviously took place within wards in which KISAN was also taking place, implying there is overlap between those participating in KISAN and those participating in the BLP. Note that by the time the BLP started, KISAN had pivoted to conducting much of its work through the indirect, market systems approach. As KISAN first evaluated the formed farmer groups and classified them based on level of commercialization, some groups within the sample may have had more support from KISAN as they continued to offer trainings to such farmers. This training could affect outcomes such as the types of calculations that households can do in the context of profits and losses, or potentially the types of microenterprises they run. Other indirect KISAN interventions, such as irrigation investment or improved products offered by agrovets, might not have been reported as “participation” by respondents in the endline. Still, among households interviewed at endline, the baseline data suggest 74.6 percent of the BLP participant group also participated in KISAN, whereas only 12.5 percent of the comparison group did so. As a result, impact estimates in the report are subject to the caveat that they somewhat reflect benefits to participation in both KISAN and the BLP. Therefore some outcomes may be more affected than others by the overlap between the two programs; they will be noted in the description of results.

FINDINGS, CONCLUSIONS & RECOMMENDATIONS

Findings

The findings are organized as follows. The first sub-section describes the endline sample, including household demographics, differences between BLP participants and the comparison group, and the level of participation in the BLP among these respondents. The second through sixth subsections sequentially describe and then estimate impacts on measures of outputs, proximate outcomes, intermediate outcomes, final outcomes, and then outcomes related to life skills, which do not fit the results chain well. The seventh subsection describes heterogeneity for a selection of the positive results, and the eighth subsection describes further qualitative results that did not fit well into the results chain.

The impact estimate tables are formatted as follows. The first column includes the raw difference between BLP participants and the comparison group, along with a standard error for the difference in parentheses. The second column controls for all variables in the propensity score model, but does not weight the control group according to the propensity scores. The third column presents the coefficient estimate that weights the comparison group, using propensity score weights, as discussed in Section 3. Therefore, this column represents the primary impact estimate using the endline alone.¹² The last column presents the average value of the variable among the control group, for comparison purposes.

For a subset of variables, a difference-in-difference estimate is presented in columns 4 through 6. These three columns also parallel the impact estimates just using the endline; the fourth column is the pure difference-in-difference estimate, while the fifth column adds the control variables, and the sixth column provides the weighted impact estimate in the difference-in-difference framework.

Descriptive Statistics, Endline Sample

In this sub-section, many of the descriptive tables from the baseline survey are replicated, to show how households have evolved over time. The section starts with considering the demographics of the sample, then considers asset holdings, before beginning to discuss variables associated with the outcomes of interest.

Household Demographics

The first module in the survey considered individual characteristics (Table 7). Overall, households in the sample are slightly more female than male, though children are more likely to be male than female. About 58 percent of adults in sample households are female; this point likely reflects increasing international migration for labor from Nepal. The comparison households have more children in them than the BLP households; however, in both children are more likely to be male than female. This may reflect a preference for sons among households; however, it may also be random. About 53 percent of children in sample households are male.

¹² This impact estimate is based on the weighted regression, including control variables, as in equation (A.4) in Annex A.

Table 7. Gender Composition of Sample, by BLP Participation

Characteristic	Business Literacy households	Comparison households	All surveyed households
All Household Members (%)			
Gender			
Male, aged 15 and up	42.5	41.7	42.1
Female, aged 15 and up	57.5	58.3	57.9
n	2,134	2,160	4,294
Male, children 0-14	53.5	53.5	53.5
Female, children 0-14	46.5	46.5	46.5
n	840	1040	1,880

Next, the distribution of ages, marital status, and education among women in sample households is examined (Table 8). Note that this table includes all adult women, not just the women eligible for BLP participation. Women in the control group appear to be slightly younger, overall, than women in the BLP participant group. Just over 10 percent of women can be considered elderly (over 60). Slightly over 70 percent of adult women are married, with another 10 percent widowed; there are small differences again between groups, with the control group slightly more likely to be married.

Table 8. Distribution of Age, Education, and Marital Status among Women in Sample Households, by BLP Participation

Characteristic	BLP households	Comparison households	All Households
Age			
15-29	37.7	39.4	38.6
30-44	22.8	22.7	22.8
45-60	28.4	27.9	28.1
61+	11.1	10.1	10.6
Marital Status			
Married	71.3	72.5	71.9
Never Married	17.4	15.7	16.5
Single	1.0	1.2	1.1
Widowed	10.4	10.6	10.5
Highest Education Completed			
Class < 4	56.6	63.4	60.0
Class 4-5	9.9	7.9	8.9
Class 6-10	24.1	21.3	22.7
Class 11-12	7.2	6.0	6.6
Class > 12	2.3	1.3	1.8
Ethnic Group (%)			
Brahmin	21.4	12.8	17.0
Chhetri	9.9	8.8	9.4
Dalit	17.1	17.8	17.5
Janajati	21.0	20.3	20.7
Newar	0.2	0.3	0.3
Muslim	5.9	12.8	9.4
Other	24.4	27.2	25.8
Geographic Area (%)			
From Hills	59.5	51.7	55.5
From Terai	34.3	35.2	34.8
Neither Hill nor Terai	6.2	13.1	9.7
n	1,227	1,260	2,487

Given findings in the baseline report (Westat, 2017), it is not surprising that women in the control group are notably less educated than the BLP participant group. Potential BLP participants were not turned away, even if they were more educated; hence, fewer of them meet the education criteria that were strictly followed for the control group. Hence, women in the control group are less educated, on average. Clearly, this is an important difference to keep in mind through impact estimation, even though all women are studied here and not just the primary respondents.

Men in the sample are more likely to be elderly than women (Table 9). About 17.5 percent of male residents are elderly, whereas only 10.6 percent of women are elderly. Men are just about as likely to be married, though more never married males are in households; these may reflect younger men waiting to either find a spouse or migrate abroad. Men are also much more educated than women in general, with most adult men in households having completed between class 6 and class 10; some assortative matching also seems apparent, as more men in the control group have a low level of completed schooling.

Finally, we note that there are fairly substantial differences in ethnic group. More Brahmins clearly participated in the BLP, while fewer muslims participated, at least within the sample. This finding could

relate to the requirement that KISAN (and therefore BLP) beneficiaries were land owners, which would be concentrated among higher caste ethnicities.

Table 9. Distribution of Age, Education, and Marital Status among Men in Sample Households

Characteristic	BLP households	Comparison households	All surveyed households
Male Household Members (%)			
Age			
15-29	35.8	34.0	34.9
30-44	19.3	21.8	20.5
45-60	27.1	27.0	27.1
61+	17.8	17.2	17.5
Marital Status			
Married	68.6	73.0	70.8
Never Married	26.6	22.2	24.4
Single	1.0	1.2	1.1
Widowed	3.9	3.6	3.7
Total	100.0	100.0	100.0
Highest Education Completed			
Class < 4	29.5	35.4	32.5
Class 4-5	13.0	13.4	13.2
Class 6-10	44.4	42.2	43.3
Class 11-12	8.5	7.1	7.8
Class > 12	4.5	1.8	3.2
Ethnic Group (%)			
Brahmin	19.0	12.1	15.6
Chhetri	8.6	6.3	7.5
Dalit	15.2	15.9	15.6
Janajati	19.0	18.7	18.8
Newar	0.2	0.2	0.2
Muslim	6.7	13.2	10.0
Other	31.3	33.6	32.4
Geographic Area (%)			
From Hills	50.2	43.9	47.0
From Terai	42.9	42.7	42.8
Neither Hill nor Terai	6.9	13.4	10.2
n	907	900	1,807

Households in the endline sample are in general smaller than in the baseline (Table 10). The average household size in general is 4.9, down from 6.3 in total in the baseline survey. Though rosters from the baseline were not available to the survey team, the questionnaire asked if people had moved out of the household in the past 3 years, and the average number reported was 1.7. Since far fewer people were

listed as joining households in the meantime (e.g. there are only 345 children under 3 years old), these figures are roughly consistent with one another. In both the BLP participant group and the control group, just over 20 percent of households only have female adults in them.

Table 10. Description of Household Type and Size, BLP Impact Evaluation Endline Data

Characteristic	BLP households	Comparison households	All surveyed households
Gendered Household Type (%)			
Both male and female adults	78.6	78.9	78.8
Female adults only	21.4	21.1	21.2
Total	100.0	100.0	100.0
Household size (mean)			
Both male and female adults	5.5	5.4	5.4
Female adults only	2.8	3.2	3.0
All	4.9	4.9	4.9
n	608	649	1,257

An important insinuation above is that migration may be important to the livelihoods of a large proportion of households. Whereas the survey did not ask detailed questions about migration, it did ask a few questions about remittances, as they could affect whether households desire starting or expanding microenterprises. About 42 percent of households received remittances in the previous 12 months, without a large difference between groups (Table 11). Two follow up questions were asked about remittances, related to whether they help households meet daily needs or in emergencies. In both cases, just over half of households receiving remittances reported that they are extremely helpful in either meeting daily or emergency needs. Households were slightly less likely to state that remittances helped somewhat or only a little in meeting daily or emergency needs.

Table 11. Receipt of Remittances, by BLP Participation Status

Variable	Business Literacy households	Comparison households
Received remittances from family in the previous year (%)	42.1	42.8
N	608	649
Among households that received remittances:		
How helpful were they for meeting daily household needs (%)		
Do not really help	4.3	4.7
Help a little	19.9	16.9
Help a fair amount	23.4	25.9
Extremely helpful	52.3	52.5
How helpful for meeting special or emergency household needs (%)		
Do not really help	9.8	7.9
Help a little	12.5	18.3
Help a fair amount	22.7	21.2
Extremely helpful	54.7	52.5
n	256	278

Next, similar to the baseline report the proportion of households with specific types of assets are summarized, again by treatment group (Table 12), as well as the amount of land to which they have access. Almost all households have both electricity and mobile phones; though BLP households are a bit more likely to have electricity than control group households. About one fourth of households have a scooter or a motorcycle, and about 15 percent have a refrigerator. Among productive assets, there are a couple of clear differences between the groups; BLP participants are more likely to have radios and computers, laptops or tablets; they are less likely to own bicycles.

Table 12. Asset Ownership by Households, by BLP Participant Status

Assets owned by households	Business Literacy households		Comparison households	
	Baseline	Endline	Baseline	Endline
Household productive assets (%)				
Electricity	91.8	96.9	85.2	93.4
Landline telephone	1.6	0.3	2.2	0.3
Refrigerator	6.7	15.5	7.9	14.8
Tractor	2.5	4.4	3.1	4.0
Irrigation pump	15.3	16.4	15.6	18.5
Radio	37.2	32.4	31.4	23.6
Mobile telephone	98.2	97.9	94.8	97.1
Computer/laptop or tablet	9.2	10.0	7.2	7.4
Bicycle	36.0	35.7	40.8	41.3
Scooter/motorcycle	16.1	24.8	14.9	25.1
Car/taxi/truck/bus	0.5	1.2	0.5	1.1
Buffalo	68.6	63.3	51.8	50.1
Cattle	42.4	30.8	41.0	25.6
Goats	72.0	67.4	62.2	63.5
Sheep	0.8	0.8	0.9	0.5
Chicken	43.1	39.1	43.8	37.1
Ducks	2.0	1.5	1.7	1.5
Swine/pigs	7.6	7.7	5.7	6.0
Farm land (owned or used) (%)				
Owned by family (average ha)	0.6	0.5	0.6	0.5
Used for farming (average ha)	0.7	0.5	0.7	0.5
Family owns plot (%)	100.0	94.9	100.0	90.9
n	608	608	649	649

The main type of livestock holdings are goats and buffalo; BLP participants are more likely to have both than the control group. They are also more likely to have cattle. These differences may reflect higher well-being among BLP participants, which could be a result of the program, but it could also be a result of higher participation among wealthier households. Indeed, the BLP households appear to have more

access to farmland either owned or used by the household.

BLP Participants and Comparison Individuals

The above statistics generally discussed either all individuals or household level variables; however, the important individual from the perspective of the impact evaluation is the woman who in theory would have participated in the program. The first table in this subsection repeats the information in Table 7 and expands upon it (Table 13). It shows that the BL participants tend to be a little older than women in the comparison group.¹³ Furthermore, women who were in either of these groups are more likely to be married than adult women in general, as shown in Table 7 (87 percent versus 70 percent); there is no obvious difference for marital status between the two groups.

Table 13. Individual Characteristics of BL Participants versus Comparison, Impact Evaluation Sample

Characteristic	Business Literacy	Comparison	All respondents
Age Group (%)			
15-29	8.4	15.1	11.9
30-44	33.2	32.8	33.0
45-60	51.2	46.1	48.5
61+	7.2	6.0	6.6
Marital Status (%)			
Married	87.0	87.2	87.1
Never Married	2.3	1.7	2.0
Divorced	1.2	1.4	1.3
Widowed	9.5	9.7	9.6
Highest Education (%)			
Class < 4	77.6	85.2	81.5
Class 4-5	10.9	6.0	8.4
Class 6-10	11.0	7.2	9.1
Class 11-12	0.2	1.2	0.7
Class > 12	0.3	0.3	0.3
Ethnic Group (%)			
Brahmin	25.2	14.3	19.6
Chhetri	11.0	9.6	10.3
Dalit	18.1	20.2	19.2
Janajati	21.9	22.2	22.0
Newar	0.3	0.3	0.3
Muslim	4.9	9.4	7.2
Other	18.6	24.0	21.4
Geographic Area (%)			
From Hills	68.4	58.6	63.3
From Terai	26.3	31.7	29.1
Neither Hill or Terai	5.3	9.7	7.6

¹³ Note that a few women are older than 60 by the endline survey; presumably many of them were under 60 at the time of enrollment, and all the women in the comparison group were.

n	608	649	1,257
---	-----	-----	-------

The statistics on educational attainment are both consistent with the baseline report (Westat, 2017) and Table 7 (Table 13). Targeted Women in the BLP participant group clearly have more education than women in the comparison group. Women in the BLP group also are more likely to report being in the Brahmin ethnic group, while comparison group women tend to be from groups typically residing in *terai* (all the “other” ethnic groups are also located in the *terai*). The former point suggests that the analysis will need to control for these educational differences.

BLP Experience

Before beginning to generate impact estimates, it is important to consider the experience of BLP participants. Both the qualitative and quantitative surveys asked specifically about participation in the BLP. To begin, some of the focus groups covered reasons that individuals decided to participate in the first place. Members of focus groups in both Palpa and Arghakanchi suggested they were interested in participating to learn how to either improve their vegetable farming or start a business, specifically. Others, in Kapilvastu, Gulmi and Palpa, suggested that they wanted to learn to write their names and use mobile phones.

One underlying reason that BLP participants participated while the control group did not participate is that they heard about the program in the first place or recall hearing about it (Table 14). Whereas nearly the entire participant group recalls hearing of the BLP, only 24.2 percent of the comparison group reported having heard of the BLP. Meanwhile, even two years later almost all of the treatment group recalled having enrolled in the BLP, while only 1.4 percent of the comparison group stated the same.¹⁴ These figures suggest the program was both memorable and the evaluation data collection did a good job of identifying both participants and non-participants.

¹⁴ The small percentage of women in the comparison group (representing 9 individuals) who suggest having enrolled in the BLP could slightly bias results downward if they really participated; however, they may have also misremembered or answered incorrectly. Moreover, all but 2 of them suggested they did not attend very often

Table 14. Awareness of and Participation in the BLP, by Treatment Status

Question	BLP	Comparison
Awareness of the Business Literacy Program (%)		
Heard about the business literacy program	99.5	24.2
Enrolled in the business literacy program	99.0	1.4
n	608	649
Among those aware, factors influencing TOWARD learning more about the BLP or enrolling, multiple responses allowed (%)		
Suggested by spouse, parent, friend/neighbor/other relative	45.0	27.4
Wanted to start a business	7.6	1.9
Wanted to learn new skills or continue adult literacy education	46.4	42.0
Thought would improve personal/household situation	31.7	16.6
Among those aware, main reason(s) they did not try to learn more about the BLP, multiple responses allowed (frequency)		
Discouraged by spouse, parent, friend/neighbor/other relative	0.8	16.6
Too many responsibilities (lack of time/energy)	25.3	68.8
Thought it would not be useful	1.7	5.7
Course had already started/missed deadline to enroll	0.5	7.0
Other	1.7	6.4

Among those that had heard of the BLP, the survey asked what factors led them to want to learn more about the BLP in advance of enrolling, or influenced them against learning more. For factors toward learning more, three answers were common, which were that someone close suggested it would be a good idea, that it would be good to learn new skills, or potentially improve the individual's personal or household status. Answers related to factors that influenced people against learning more were dominated—particularly in the comparison group—by those who stated they lacked time or had too many responsibilities.

It is also helpful to know why people report not enrolling in the BLP (Table 15).¹⁵ Among those answering, by far the most common answer is that they did not hear about the BLP; the only other common answer is that they had too many responsibilities. Other answers were only given by a small proportion of respondents. It is interesting that such an intense program as the BLP was unknown by such a large number of women within wards; however, this point may be related to participation in KISAN; as described above, 75 percent of BLP participants were also participating in KISAN at baseline, whereas only 12 percent of the control group was participating in KISAN.

¹⁵ Only three respondents in the treatment group suggested they had not enrolled in the BLP, so nearly all these answers come from the comparison group.

Table 15. Reasons for not enrolling in the BLP, among non-enrollees, BLP Impact Evaluation data

Reasons for not enrolling	Total
Main reason for not enrolling in Business Literacy training, multiple responses allowed (%)	
Did not hear about Business Literacy program	76.9
Other people's opinions	0.6
Too many responsibilities/Lack of time or energy	17.0
Not a convenient time or place	6.7
Illness or injury of myself or family member	2.0
Someone else from the family attended	0.3
Other	4.2
n	640

A more obvious challenge with the BLP is that it was quite intensive, and so even among the treatment group the median participant went to about half the lessons (Table 16). Only 12 percent of participants suggested they attended nearly all the lessons, whereas nearly half of respondents suggested they attended less than half or very few of the overall lessons. Therefore, about half of the sample suggested they attended either less than half of lessons or very few of them.

Table 16. BLP Participation Intensity, Self-Reported

Participant Reported Attending:	Percentage
Almost All Lessons	12
Most Lessons	22.9
About Half of Lessons	15.2
Less than Half of Lessons	23.0
Very Few Lessons	26.8
n	582
Of those who missed sessions, reasons for missing training sessions, multiple responses allowed (%)	
Husband/wife/parent did not want me to go	1.6
Needed to care for children, no childcare	22.9
Had other family/housework to do	84.3
Had paid work to do	6.1
Personal illness or injury	44.0
Visits to parental family	14.3
Needed to attend religious/cultural festivals	27.4
Other	7.2
n	573

It is worth discussing the difference between the participation in the BLP reported by DEPROSC and the sample reported here. DEPROSC suggests that about 80 percent of participants attended in half of lessons or more. However, it is not clear they are using the same denominator as is used here; it could be that they eliminated women who, for example, went to a few lessons and then effectively dropped

out early on from their lists of participants. Second, participation could have been lower in the Western region than in other regions. Third, memories of participation could have faded by the endline, and women are systematically underreporting their participation above.

The qualitative work, particularly the KIs, suggest that some women had a hard time with the literacy and numeracy lessons, and that might have reduced their motivation to continue to attend, particularly as lessons were cumulative. Other trainers suggested that there was heterogeneity in participant performance based on age; they said, for example, that younger farmers could better pick up the literacy and numeracy skills required, as well as business ideas. Still others suggested some of the older individuals in the BLP participation group were more difficult to train, and some suggested that mothers had a hard time, at least sometimes, finding time to attend, based on the time that needed to be allocated to their other household duties. In fact, more than one trainer in KIs suggested that the heavy work load at home meant that some of their participants would want to leave early.

These answers are only somewhat consistent with the endline data, which either means that the trainers misperceived why some individuals missed class. The main reason given in the quantitative data is present among the treated households; family responsibilities sometimes dominated the desire to go to the classes. A second reason, that did not come up in the KIs, was personal illness, suggesting trainers did not perceive illness as a main reason that some women missed classes.

Despite the fact that the median respondent only attended half the classes, responses about the BLP from participants were positive in both data sources. Almost 97 percent of respondents stated that the trainings were “very relevant” or “somewhat relevant” to their situations; and 85 percent of them rated the trainings as very good or good, with most of the remainder calling them acceptable. Answers in the focus groups about why they liked the BLP were varied, but focused a lot on topics such as writing one’s own name, using cell phones, which was not possible before the training, and reading simple things like the number on a bus, so that one knew where the bus was going. To provide a concrete example, one focus group respondent in Arghakanchi said, “We can call each other up on the mobile (phone) now,” suggesting this was not possible before the BLP.

Outputs: Descriptive Results and Impact Estimates

The next few sections are dedicated to outcome measures. Each section is structured as follows. Before examining impact evaluation results, it is worth exploring outcome variables in raw comparisons, to understand whether one should expect impacts or not. In technical terms, the BLP participation group is called positively selected, implying that there are individual and household attributes that are likely to be positively correlated with positive outcomes of the BLP program. As such, the impact estimates are likely to be smaller than raw differences in averages between groups. The impact estimates for each set of outcomes follows the descriptive findings, and then consequences of the impact estimates are summarized.

The first set of results relates to outputs, which include individual level literacy and numeracy, household literacy and numeracy, and entrepreneurial aptitudes. Individual level literacy and numeracy can be studied both descriptively and with impact estimates; on the other hand, there are no obvious quantitative measures of entrepreneurial aptitudes, so they are studied with the qualitative data.

The first table explores literacy and numeracy (Table 17). The descriptive statistics at least hint at some decays and underscore why endline comparisons alone may be useful in this context. Whereas literacy and numeracy both appear to fall between surveys among BLP participants, literacy or the lack thereof appears to stay constant among the comparison group, and self-reported numeracy appears to fall.

Difference-in-difference estimates might, in this context, lead to misleading negative results, particularly for literacy, as the BLP participants were likely receiving training in reading prior to the baseline survey due to timing of baseline data collection as mentioned above.

Table 17. Individual Literacy and Numeracy Measures, BLP and Comparison Groups, BLP Impact Evaluation Baseline and Endline Surveys

Characteristic	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
Ability to read Nepali sentence on printed card (%)				
Not able to read at all	36.2	43.9	68.1	65.6
Able to read part	12.2	13.8	8.6	9.2
Able to read whole sentence	51.6	42.3	23.3	25.1
Self-reported numeracy (%)				
Yes, can add/subtract	95.1	88.0	90.1	79.2
No, cannot add/subtract	4.9	12.0	9.9	20.8
n	608	608	649	649

Another measure of numeracy in the sample are the eight simple math questions that were asked at endline (Table 18). These questions were not asked of those who reported they could not add or subtract, so all answers for those individuals are coded as zeroes. As can be observed, the questions increased slightly in difficulty throughout the exercise, although apparently the seventh question was the most difficult. In all cases, the BLP participants had more correct answers than the control group, confirming their numeracy skills are better than those in the comparison group.

Table 18. Percent Responding Correctly to Simple Addition and Subtraction Questions, BLP Impact Evaluation Endline

Characteristic	Business Literacy	Comparison
Performance in numeracy - from those who reported positive numeracy - correct answer (%)		
4 + 5 = ?	85.0	75.8
4 - 2 = ?	83.7	74.6
3 + ? = 9	67.6	55.9
10 - ? = 3	71.4	60.9
12 + 6 = ?	74.0	62.2
16 + 8 = ?	70.4	56.2
19 - 8 = ?	38.5	31.3
12 - 3 = ?	75.3	61.8
n	608	649

Note: When respondents stated they could not add or subtract, answers were coded as zero.

Table 19 reports impact estimates on the three variables described above, as well as the share of the household that reported they were literate. Without controlling for any differences between

characteristics between the BLP participant group and the comparison group, the participant group has higher scores on all four variables (Table 19, column 1). In other words, they are more likely to be literate and numerate than the comparison group; this finding is not surprising as the inclusion criteria for the BLP were actually followed more stringently for finding a control group than for the BLP participants themselves. When the control variables are added, all four differences decline, and only the individual numeracy variables and the share of literate individuals within households remain statistically significant (column 2). The impact estimates, however, are largely not different than zero (column 3); they are also not different than zero for the two outcomes for which difference-in-difference estimates are possible. The exception is the average score on the eight math questions; for that measure, the estimate suggest that the impact is a 3.5 percentage point higher score, attributable to BLP participation. As the average score is around 60 percent, it implies an increase of about 5.8 percent or an average of just under a half question better performance.

Table 19. Impacts on Variables related to Individual Literacy and Numeracy, and Household Literacy, BLP Impact Evaluation Data

SDI Impact Evaluation Data							
Indicator	Endline Impact Estimate			Difference-in-Difference Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
Numeracy and literacy							
Prevalence of Literacy (ability to read whole card)	0.172*** [0.026]	0.013 [0.023]	0.041 [0.027]	-0.112*** [0.037]	-0.112*** [0.027]	-0.033 [0.034]	0.251
Prevalence of Numeracy (self-reported)	0.088*** [0.021]	0.020 [0.022]	0.024 [0.02]	0.039 [0.026]	0.039 [0.025]	0.012 [0.023]	0.792
Average score in math exercises (0-1 scale)	0.109*** [0.02]	0.034 [0.02]	0.042** [0.02]	- -	- -	- -	0.598
Share of Household, Literate	0.109*** [0.016]	0.024** [0.012]	0.011 [0.012]	- -	- -	- -	0.412

Notes: Sample size is 1257 for the first three columns and 2514 for the second three columns. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

While the quantitative impact estimates on outcomes are somewhat underwhelming, it could be that the impacts are somewhat subtle to measure in this sample, particularly as the participant group were clearly already more literate and numerate than the comparison group on average. The qualitative work is quite positive on impacts, even though as one focus group participant in Palpa noted, “For those of us with little education, (the training) was hard.” Another respondent in Kapilvastu illustrated the difficulty in stating, “We found learning math very difficult and it took us a long time to learn it. We would forget it easily as well and would have to relearn it again.”

Yet even though the training was difficult, a substantial number of focus group participants discussed the ability to confidently introduce one’s self, write one’s name or to “do sums” as some of the most important impacts of BLP participation. In one KII, a trainer remarked, “Now women can introduce themselves confidently while before they couldn’t. They are proud of being able to write their own names instead of using thumbprints.” From a focus group participant in Palpa, a participant remarked, “I

liked learning sums. I like it because when you know how to do sums then other people can't cheat you." Some of the other KIs also mentioned the ability to do simple math as being an important finding; with the ability to do simple math, women or participants were in less danger of being cheated in transactions, whether buying or selling.

Along the same lines, it is worth noting that a large number of both focus group participants and trainers in KIs mentioned that the improved ability to use cell phones was an important outcome of the BLP. One of the most interesting quotes comes from a KI: "Now they are able to use the phones easily. Today's children use English and they would save numbers in English which the mothers wouldn't understand. But after the class they are now able to save numbers and identify callers as well." Many participants in fact learned to dial numbers through the BLP. The ability they gained to use Arabic numerals alongside Nepali ones clearly helps them use mobile phones and is a potentially important program impact not captured by the quantitative data.

A final point is that a number of FGD respondents stated that they learned to "speak Nepali" through the BLP. Effectively, what they mean is that they learned more formal language that they had not known in the past, as people speak more of a dialect in their villages; in maintaining business relationships with others from other places, it is important to also be able to speak a more universal form of language.

Entrepreneurial Aptitudes

The final output of the program is that entrepreneurial aptitude and innovation attitudes should have expanded. The quantitative questions that might best measure this concept overlap with those measuring proximate outcomes, so in this context the analysis is completed using the qualitative data.

It is in fact challenging to change both entrepreneurial aptitudes and attitudes; it is also difficult to clearly consider the types of enterprises that can potentially be managed. For example, in discussing the types of enterprises that could be possible, a focus group participant in Palpa stated, "You can't be too ambitious in a village, it won't work. vegetables, poultry, goats..." In Gulmi, a participant said, "Until now I have worked in agriculture and it's what I know. I would like to have more goats." Challenges here, brought up in focus groups generally, are that people state they are not educated and so it is difficult to run a business, that they have grown too old to start a business, or that women stated they are running households alone due to migration, making it extremely challenging to also run a microenterprise.

Still, a number of trainers claimed that they observed changes in aptitudes since the BLP ended. For example, one stated, "They learned to use agriculture more effectively and save money." Another stated, "I have noticed changes in them. After the training, they expanded their tunnels and some started anew. Women also took up cow, goat and poultry farming. They are expanding." For reference, tunnels refer to greenhouses.

To balance these viewpoints, it appears that the BLP was successful in changing both entrepreneurial aptitude and attitudes among some, though perhaps not those who were less educated and older to begin with. It is not to say that they did not get anything out of the BLP; they may have gained in other ways, such as basic education. As the analysis moves forward through proximate and intermediate outcomes, it is worth keeping inherent heterogeneity of experiences in mind.

Summary, Outputs

In sum, the combination of qualitative and quantitative evidence demonstrates that there were positive impacts on individual literacy and numeracy, as well as some concepts related to entrepreneurial

aptitudes. Specifically, the qualitative data suggest women are better able to write their names and are marginally more literate, and both data sets suggest that women who participated in the BLP have gotten better at simple math. There is less evidence that household level literacy increased, but the combination of the former two should be enough to help change proximate outcomes.

Proximate Outcomes: Description and Impact Estimates

There are two sets of proximate outcomes: measure of self-efficacy and entrepreneurial KSAs. Each of the two types of proximate outcomes are described, followed by impact estimates here; at the end of the subsection, the results are placed in the context of the results chain.

Descriptive Results, Self-Efficacy

The first set of descriptive results in this section relate to the four measures of self-efficacy. As in the baseline survey, respondents were asked to rate their ability or confidence in acting on an 11 point scale to a large number of statements that were related to self-efficacy and a few other concepts. For each statement, an answer of 0 always signifies total disagreement or complete uncertainty, and an answer of 10 total agreement or high certainty. The way to respond to the statements was almost certainly trained differently between the baseline and endline, so average scores among groups may differ. In other words, a decline among participants between the baseline and endline does not necessarily mean that the skill has declined, as it might reflect a change in the perception of questions instead.

However, it is not necessarily a difference in training. Self-efficacy skills that were learned during the BLP could have decayed over time. If so, then the averages should decline in the BLP group relative to the comparison group. In the baseline report, self-efficacy scores tended to be higher among the BLP group than the comparison group (Westat, 2017); at the time, the thought was that the literacy and numeracy lessons that took place during the first module of the training often use examples that emphasize women's decision making and household contributions. So if the consequences of those lessons decayed over time, one should observe some convergence in the average scores.

For all sets of questions, the Cronbach's alpha is also reported. Cronbach's alpha is a measure of internal consistency or reliability. It is often used to assess how well or poorly individual items in a multi-item scale measure the same construct. A low score indicates that items in a scale may not be well aligned, and need further testing, or that the scale may not be measuring a meaningful package of factors or coherent underlying concept. Higher scores suggest the items provide a meaningful measure of the same underlying concept. Standard practice is to accept alpha values of 0.80 or above as reliable.

The first set of self-efficacy measures relate to personal judgment and decisions (Table 20). The average scores all fall from baseline to endline, both among the BLP participants and the control group, which implies that the decrease likely has to do with enumerator training. At both baseline and endline, reported average scores are somewhat higher among the BLP participants than the comparison group for all questions; at endline, the average score for these questions was 7.5 among the BLP participants, and 7.1 among the comparison group. The endline difference somewhat suggests an impact, but as the spread between the BLP participants and the comparison group is about the same at baseline and endline, it might just suggest inherent differences between the two groups.

Table 20. Perceived self-efficacy in personal judgment and decisions by BLP Participation Status, BLP Impact Evaluation data, Baseline and Endline

Statement	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
I can use my knowledge and experience to make decisions on my own	9.2	7.9	8.9	7.7
I can keep a calm focus on solutions when I face a problem.	8.4	7.5	8.0	7.1
When I need to make a decision, I can gather the information and advice I need	8.7	7.3	8.3	6.7
When my household faces important decisions, I can understand advantages and drawbacks of different choices.	8.3	7.7	7.8	7.3
When my friends and neighbors face important decisions, I can understand advantages and drawbacks of different choices.	6.9	6.0	6.2	5.1
I can learn new things or learn to do old things in a new way.	8.7	6.8	8.1	6.3
When we do not have enough food or money, I can manage household resources to get us through a hard time	8.9	8.3	8.6	8.0
I can maintain my health with good practices in nutrition and health care	9.3	8.6	8.9	8.3
Average scores and Cronbach's alpha				
Average scores	8.5	7.5	8.1	7.1
Cronbach's alpha	0.89	0.88	0.91	0.85
n	608	608	649	649

Note: After each statement above was read to the respondent, she was asked to rate the statement on a 0 to 10 scale whether she totally disagreed or was totally uncertain (with a score of zero) to total agreement or certainty (with a score of 10). A score of 5 was meant to anchor moderate agreement.

The second set of scores relates to six statements about perceived self-efficacy related to entrepreneurial skills (Table 21). As in the previous table, the scores at endline are much lower than the scores at baseline, suggesting that indeed the training was different. In this context, the average scores for some of the statements seem more reasonable relative to those at baseline. For example, the average scores for the last statement, "I can understand the financial records of a micro enterprise or local group for saving and lending," are relatively low, at 4.1 for BLP participants and 3.0 for the comparison group at endline. As the qualitative work made it clear how difficult it was to train literacy among participants, it seems plausible that such financial records would be difficult for many participants to understand, let alone non-participants. As with the previous set of statements, average scores are substantially higher (1.1 points) at endline among the BLP participants than the control group; the difference was 0.9 points on average at baseline.

Table 21. Perceived self-efficacy in successful practice of basic business planning by BLP Participation Status, BLP Impact Evaluation data, Baseline and Endline

Statement	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
I can analyze the strengths and weaknesses of a business to find ways to expand operations or profits	7.1	6.1	6.5	5.1
I can calculate profit and loss in a small business or market enterprise	6.8	5.0	5.9	3.9
I can analyze when a loan is necessary and calculate interest plus principal required for repayment	6.7	4.8	5.6	3.4
I can gather information and analyze it to find the right government office or NGO to help with micro enterprise training, advice, or funding.	5.8	4.1	4.8	3.2
I can understand the risks and consequences of taking loans to start or expand a micro enterprise.	6.9	5.8	6.0	4.9
I can understand the financial records of a micro enterprise or local group for saving and lending.	5.9	4.1	4.7	3.0
Average scores and Cronbach's alpha				
Average scores	6.5	5.0	5.6	3.9
Cronbach's alpha	0.92	0.90	0.93	0.87
n	608	608	647	647

The third self-efficacy concept within the theory of change deals with self-efficacy in the face of adversity (Table 22). The survey included seven statements on self-efficacy when facing adversity; in this case, there is one measure related to resolving conflicts within local groups that had a lot of missing answers. Similar to the other measures of self-efficacy, scores are lower at endline than at baseline, and scores are higher among the BLP participants than the comparison group, for all questions. The lowest scores are for resisting pressure from others in the community, and for resolving conflicts in the community. Finally, note that the Cronbach's alpha is lower than 0.8 for the endline survey, suggesting that potentially more than one concept is being measured here (likely the difference between household and community answers).

Table 22. Perceived Self-Efficacy in the Face of Adversity, by BLP Participation Status, BLP Impact Evaluation data, Baseline and Endline

Statement	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
I can clearly communicate my thoughts and opinions when friends and neighbors disagree.	7.2	6.4	6.4	5.8
I can speak up and express my opinions in my household when others disagree	8.3	8.2	7.9	7.8
I can stand up for myself when I am being treated unfairly	8.9	8.2	8.6	7.8
I can resist pressure when others in my household want to make my decisions for me	7.7	6.9	7.3	6.6
I can resist pressure when others in my community want to make my decisions for me.	6.2	4.9	5.7	4.6
I can resolve conflicts in my household when we disagree on how to face challenges.	8.0	7.5	7.5	7.1
I can resolve conflicts in a local group when others feel they are not being treated fairly.	5.4	4.9	4.5	4.2
Average scores and Cronbach's alpha				
Average scores	7.4	6.7	6.8	6.3
Cronbach's alpha	0.85	0.78	0.86	0.72
n	605	537	642	488

Note: The final statement is also used in measuring community decision making participation as an intermediate outcome.

The final set of self-efficacy questions relate to household conflict resolution (Table 23). In this table, questions about resolving conflict revolve around accessing health care, household production, and savings and investments.¹⁶ By and large, the decline from baseline to endline is not as large in these measures as in others reported so far, and differences between BLP participants and the comparison group are not large for the management and production measures. They are larger for savings and investment, which is sensible as these concepts were more of a target for the BLP intervention.

¹⁶ Here a question on remittances is left out, because it decreased the sample size by almost 50 percent.

Table 23. Perceived Self-Efficacy with respect to household conflict resolution, by BLP Participation Status, BLP Impact Evaluation data, Baseline and Endline

Statement	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
Household management				
Working together as a whole, how confident are you that your household can resolve conflicts about:				
Childcare and education	8.9	8.6	8.8	8.6
When or whether to access health care	8.8	8.2	8.5	8.0
Household production				
Working together as a whole, how confident are you that your household can resolve conflicts about:				
Crops to grow or not grow	8.7	8.5	8.4	8.2
Animals to raise or not raise	8.5	7.7	8.3	7.4
Savings and investments				
Working together as a whole, how confident are you that your household can resolve conflicts about:				
Other business or market ventures to try or not try	7.8	6.5	7.3	5.9
Savings accounts or insurance schemes	8.2	7.4	7.7	6.9
Major household purchases	8.6	8.2	8.4	8.1
How to use remittances	9.0	8.5	8.7	8.6
Average scores and Cronbach's alpha				
Average scores	8.5	7.9	8.2	7.6
Cronbach's alpha	0.92	0.89	0.92	0.88
n	297	203	298	215

Impacts, Self-Efficacy

The four descriptive tables suggest that self-efficacy measures tend to be higher among the BLP participant group, but the difference was already apparent at baseline. For some concepts (e.g. judgment and decisions), some changes might have already begun to differ as a result of the trainings by baseline, but it is not clear those were already impacts of the BLP, or whether they were inherent differences between the two groups. As a result, while both endline only and difference-in-difference measures for the four averages are presented, the latter might be better reflections of impacts in this context.

The impact estimates are built up in Table 24, using both just the final outcomes (column 3) and the difference-in-difference framework (column 6). The analysis using the final outcomes show both positive selection, as the coefficient estimates decline from column 1 to column 3; and show pretty strong positive impacts. The average score, once the propensity scores are applied to the control group, suggest that the BLP participants have scores that are 0.25 to 0.5 points, on average, higher than among the comparison group. The largest of these impacts is on basic business planning skills, which had the lowest score among the control group at endline. None of the difference-in-difference estimates are statistically different from zero, which is not surprising given that none of the descriptive tables suggested impacts.

Table 24. Impacts on Variables related to Self-Efficacy, BLP Impact Evaluation Data

Table 2.1: Impacts On Variables Related to Self-Efficacy; DEL Impact Evaluation Data							
Indicator	Endline Impact Estimate			Difference-in-Difference Impact Estimate			Control group mean at baseline
	No controls	Controls	Controls & LASSO weights	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
Self-Efficacy - composite indicators (average) - 0-10 scale							
Life skills basic to judgement and decisions	0.453*** [0.091]	0.24** [0.093]	0.304*** [0.095]	0.033 [0.118]	0.101 [0.113]	0.007 [0.118]	7.065
Basic business planning skills	1.091*** [0.138]	0.502*** [0.129]	0.651*** [0.135]	0.115 [0.188]	0.293* [0.17]	0.018 [0.184]	3.905
Self-efficacy in adversity	0.408*** [0.09]	0.113 [0.102]	0.145 [0.101]	-0.138 [0.129]	-0.086 [0.123]	-0.085 [0.133]	6.321
Self efficacy in Household Conflict Resolution	0.266*** [0.1]	0.057 [0.103]	0.073 [0.101]	-0.058 [0.125]	-0.052 [0.122]	-0.12 [0.128]	7.605

Notes: Sample size is 1257 for the first three columns and 2514 for the second three columns. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

Before discussing interpretation, recall that there were two statements related to the analysis of both businesses and when loans are necessary which did appear to change between baseline and endline among BLP participants relative to the control group (in Table 21). To further study these two questions, the regressions were again run with those two specific questions as the dependent variables. Although the endline impact estimates were positive and statistically significant, in the difference-in-difference formulation they were not, despite the raw differences that were apparent.

The question, then, is how to interpret the findings difference between endline only and difference-in-difference results. To be conservative, it is probably better to consider the difference-in-difference coefficients as more reflective of impacts. However, also note that they are the net result of any confidence gains that took place after the baseline survey, but also any knowledge decay that occurred between the end of the BLP and the endline survey. In discussing at least some of these outcomes, according to the baseline report the modules to which the BLP participants had been exposed to in advance of the baseline used these concepts as examples (Westat, 2017). Under that interpretation, one could take the adjusted differences at endline as the “true” impact estimates, meaning the ones that have had the propensity scores applied as weights to correct for observed differences between the two groups. However, one might also be convinced that differences at baseline were purely due to differences between the BLP participant and comparison groups, and not due to differences that began to develop after participation began. This interpretation of the results, however, could also be considered too dismissive of gains that took place after the baseline survey was conducted.

That said, the qualitative data are somewhat suggestive of impacts in this domain. One excellent, if a bit negative, quote from a FGD respondent in Kapilvastu illustrates learning about business planning: “(For a woman to start a business), she has to convince her family to support her, she has to make arrangement for loans, she has to be on the lookout for stigma that society might stamp at her, and her family might fear that the business might fail and they might be worse off than before and that fear prevents them from supporting her.” Although there are societal issues that act as barriers against microenterprise

development embedded in this quote, there is also a clear thought about the need to plan businesses; several other respondents in various FGDs mentioned the need for loans or to think through a business plan before starting.

The societal barriers discussed in the quote above come up several times as barriers to women starting or expanding businesses in general and provide some nuance to answers to a few of the statements underlying the self-efficacy in adversity index. Specifically, one statement used is “I can stand up for myself when being treated unfairly,” and another statement was “I can resist pressure when others in my community want to make my decisions for me.” Recall from Table 24 that ratings on the first statement are quite high in general (around 8.5, averaging across the two groups), while they are much lower on average for the second statement (below 5).

Several women in FGDs mention these societal barriers or constraints, in fact, which constitute a form of adversity. For example, one woman in an FGD in Arghakhanchi stated:

People love gossiping in the village. They say oh look at her, wonder where she is going on a motorcycle. That is why women can't step forward, men aren't bound by the same restriction, they don't have to think twice, thrice before stepping out of home. Sometimes when you have to go far and is pressed for time, you wish you could ask men for a motorcycle lift. You can't walk but people talk and there will be fight at home.

Going back to the statements related to adversity, the combination suggests that women may not perceive what can be termed societal constraints as being unfair; they may also not realize that in a way these constraints mean that society constrains their decision making. Everyday restrictions, such as those that keep women from asking for motorcycle rides, also constrain their decision making ability. Women who participated in the BLP may not be fully aware of these constraints. And such constraints may continue to keep women from starting or expanding microenterprises.

Descriptive Statistics and Impact Estimates, Entrepreneurial KSAs

The second set of proximate outcomes relate to entrepreneurial KSAs. The measures for impacts include whether the respondent has heard of entrepreneurial skills, and then sets of three questions related to profits and losses and loan principal and interest. The questions are whether they have heard of the specific skill or not, then whether they feel comfortable in their understanding of the skill, whether they feel at least somewhat confident using the skill, and whether they have used it or not.

The BLP group does better on all nine questions than the comparison group (Figure 3). There are in particular notable differences between the proportion of BLP participants (in red) who are more comfortable with both types of calculations than the comparison group (in blue). This point is particularly notable as the proportion who have heard of these calculations are more similar.

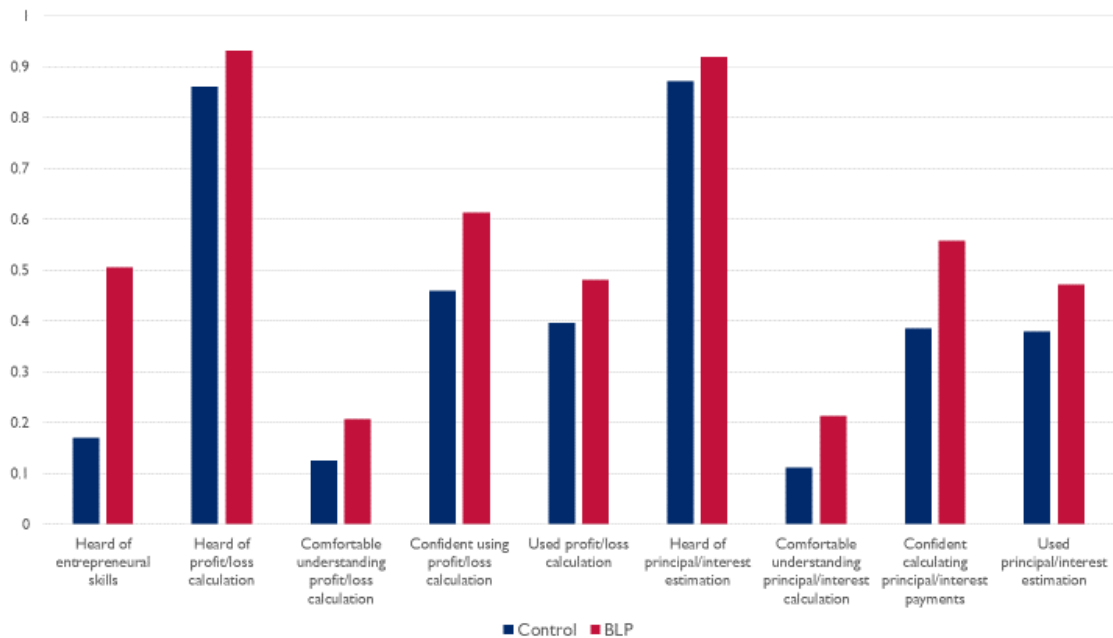


Figure 3. Proportion of BLP and Comparison Groups Answering “yes” for Entrepreneurial KSA measures, BLP Endline Impact Evaluation Data

That said, impact evaluation results are more mixed than for the self-efficacy outcomes (Table 25). With both the endline and difference-in-difference results, individuals in the BLP participant group are more likely to state they have heard of entrepreneurial skills; the impact estimate is 33 percentage points in the endline data, and 20 percentage points when differencing the baseline and endline data; only 17 percent of the comparison group had heard of entrepreneurial skills. So awareness of entrepreneurial skills at least doubled among those who participated in the BLP, if not nearly tripling.

Table 25. Impacts on Variables Measuring Entrepreneurial Knowledge, Skills, and Attitudes, BLP Impact Evaluation Data

Evaluation Data							
Indicator	Endline Impact Estimate			Difference-in-Difference Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
Entrepreneurial skills							
Has heard of entrepreneurial skills	0.334*** [0.025]	0.305*** [0.026]	0.336*** [0.026]	0.193*** [0.033]	0.203*** [0.032]	0.199*** [0.034]	0.171
Has heard about profit and loss calculation	0.071*** [0.017]	0.05*** [0.018]	0.062*** [0.02]	-0.06** [0.027]	-0.05* [0.027]	-0.034 [0.029]	0.861
Comfortable in own understanding of profit and loss calculation	0.081*** [0.021]	0.031 [0.021]	0.042 [0.021]	-0.068** [0.035]	-0.047 [0.035]	-0.057 [0.035]	0.126
Confident to use profit and loss calculation in a microenterprise/business	0.154*** [0.028]	0.074*** [0.029]	0.087*** [0.031]	0.047 [0.036]	0.076** [0.035]	0.010 [0.037]	0.459
Used calculation of profits and losses	0.085** [0.038]	0.045 [0.041]	0.073 [0.042]	-0.075 [0.047]	-0.057 [0.046]	-0.011 [0.05]	0.396
Has heard about estimation of principal and interest of a loan	0.047** [0.017]	0.018 [0.018]	0.019 [0.017]	-0.056** [0.027]	-0.049* [0.027]	-0.051* [0.027]	0.872
Comfortable in own understanding of principal and interest calculation	0.101*** [0.021]	0.043** [0.021]	0.06** [0.024]	-0.022 [0.034]	0.002 [0.032]	0.003 [0.037]	0.112
Confident in ability to calculate principal and interest payments	0.172*** [0.028]	0.071*** [0.027]	0.083*** [0.029]	0.069* [0.036]	0.091** [0.035]	0.002 [0.038]	0.385
Used estimation of principal and interest of a loan	0.092*** [0.035]	0.045 [0.037]	0.056 [0.039]	-0.050 [0.044]	-0.028 [0.042]	-0.018 [0.048]	0.380

Notes: Sample size is 1257 for the first three columns and 2514 for the second three columns. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

Next, impacts on four discrete variables related to profit and loss calculations are measured; note that these variables at least to some extent build upon one another. First, the questionnaire asked whether respondents had heard of profit or loss calculations; 86 percent of the control group had; according to the endline survey, the BLP had a positive impact of 6 percentage points on this knowledge. Indeed, the following question in the survey asked how the respondent learned about profits and losses; while the most common answer to that question for all respondents was the USAID/Nepal Education for Income Generation Program, the BLP was the only other response, and it almost exclusively came up in the BLP participation group. However, most respondents are not comfortable in their own understanding of profit/loss calculation; only 12 percent of the comparison group stated they were comfortable, and the difference of 10 percentage points between the BLP participation group and the control group found in column 1. The impact estimate is either 6 percentage points, according to the impact estimate in columns 3, or non-existent, according to the difference-in-difference estimate in column 6.

The following two variables measure whether respondents are confident in the use of profit or loss calculations, which is subtly different than comfort, and whether they had used them. If someone is not confident in using them, one would assume they had not tried to use them in the past. According to the endline data, BLP participants are more confident—by 7.6 percentage points—than the comparison group in their ability to use profit/loss calculations, but the point estimate of 7.3 percentage points for their use is only significant at the 10 percent level. The former result is quite consistent with the evidence related to simple arithmetic above.

More complex math is necessary to conduct principal and interest computations. In the following four rows, the same four variables are studied for principal and interest (Table 25, rows 6-9; heard of them, comfortable using them, confidence, and actual use). About 86 percent of the comparison group at endline had heard of interest calculations; the impact estimate suggests no difference for the BLP participation group. Far fewer respondents stated that they had heard of interest calculations exclusively from the BLP; most positive answers again were the Education and Income Growth program.

Similar to profit/loss calculations, few respondents in the comparison group felt comfortable making interest calculations (row 7); only 11.2 percent stated being comfortable. According to the endline survey, there is an impact of 6 percentage points on comfort making these calculations. However, the same is not found with the difference-in-difference estimate; it is not likely that principal and interest calculations were covered in advance of the baseline survey, so in this case the difference-in-difference estimate might be more credible than the endline only estimate.

The last two rows relate to the confidence and use of principal and interest calculations for loans. About 38 percent of the comparison group is confident and reports using these calculations in the past year; in both cases, more of the BLP participant group has confidence and reports using these calculations. However, once the estimates account for selection, only the confidence estimate is significant when using endline data. It implies an increase in those who are confident by 7.1 percentage points. Note that as with the previous estimate, it is not significantly different from zero in the differenced estimate.

Before summarizing, note that the survey also asked why households had not used these calculations. Most households did not report a need to make interest calculations in the previous year; the most common answer was that they lacked enough knowledge. Still, this answer was given by less than 5 percent of overall households. Since so few households thought these calculations were needed, they are seldom mentioned in the qualitative data.

Summary, Proximate Outcomes

The two proximate outcomes are that the BLP enhanced self-efficacy and enhanced entrepreneurial knowledge, skills, and attitudes. For self-efficacy, impacts measured with the endline survey data alone are generally positive, while they are not significant in a difference-in-difference framework. Whereas it is tempting to believe the endline results alone, the assumptions necessary to do so are that changes in self-efficacy had largely taken place by baseline, and then they did not decay over time. The qualitative data also suggest gains to self-efficacy among BLP participants, but they are confined within societal constraints, so an alternative interpretation is that the self-efficacy gains at endline are somewhat overstated; unfortunately, it is not possible to quantify how much they are overstated. For entrepreneurial KSAs, it is quite clear that there were impacts on knowing of entrepreneurial skills, but the impacts on understanding of specific concepts are mixed. Specifically, there appear to be gains to the understanding and use of profit/loss calculations, but less gains in terms of interest calculations; the latter can be explained at least in part by the rarity of loan applications in the data.

Intermediate Outcomes

There are three categories of intermediate outcomes: participation in household and community decisions, participation in formal financial transactions, and whether entrepreneurial activities actually increased. In this subsection, indicators associated with these outcomes are studied, again with the goal of measuring impacts.

Descriptive Statistics and Impact Estimates, Household and Community Decisions

Similar to the statements about self-efficacy, a set of statements was made for respondents to react to about household and community level decision making; the statements were grouped into statements related to household decision making, community decision making, and conflict resolution, following the baseline report (Westat, 2017). As a second set of indicators for community decision making, the endline specifically asked about community group participation among household members, which is aggregated into an indicator for the number of community groups in which the household is involved.

The first set of indicators related to household decision making relate to household and community level compromise and negotiation (Table 26). Results around these concepts seem relatively positive. Average scores for speaking up about household decisions are quite high; they are slightly higher among the BLP participant group than the comparison group. Scores are lower when the situation is stressful, though not too much lower. Scores for the last four variables are sometimes quite low; for example, the average score related to influencing community decisions is below 5 for both the BLP participants and the comparison group. For this variable and the statement about speaking up in group meetings, there is a wide gap between BLP participants and the comparison group, which suggests an interesting difference; this difference is further explored at least in aggregate in the impact evaluation data.

Table 26. Variables Measuring Household and Community Level Compromise and Negotiation, by BLP Participation Status, BLP Impact Evaluation Data, Baseline and Endline

Statement	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
I can speak up and express my opinions on:				
Household decisions	8.9	8.3	8.7	7.9
I can clearly communicate my thoughts and opinions:				
On very important decisions	8.6	7.9	8.3	7.6
When the situation is stressful	7.7	6.7	7.4	6.3
I can speak up and express my opinions in group meetings and my community.	6.7	5.7	5.7	4.6
I can meet in the middle or compromise with others in my household to solve problems and overcome challenges.	7.9	7.4	7.6	7.0
I can influence household decisions when we face a problem or decision.	8.1	7.5	7.7	6.9
I can influence community decisions when we face a problem or decision.	5.4	4.3	4.8	3.5
Average scores and Cronbach's alpha				
Average scores	7.6	6.8	7.2	6.3
Cronbach's alpha	0.84	0.85	0.85	0.83
n	608	608	647	649

Note: The fourth and seventh statements are also used in the average for community decision making participation.

The second concept related to participation in household and community level decisions is whether participants note changes in household and/or community level relationships relative to the comparison group (Table 27). The data suggest that participants feel like they can work with family members, friends or neighbors to solve problems. However, average scores are lower for mobilization to solve group problems and to go to external bodies (e.g. government) for help solving problems. The spread between the BLP group and the comparison group again stays relatively constant between baseline and endline, suggesting that at least in difference-in-difference terms there are not likely changes.

Table 27. Variables Measuring Household and Community Level Relationships, by BLP Participation Status, BLP Impact Evaluation Data, Baseline and Endline

Statement	Business Literacy		Comparison	
	Baseline	Endline	Baseline	Endline
I can mobilize my household to work together to solve problems.	8.6	7.9	8.3	7.5
I can mobilize the help I need from friends and neighbors when I face problems.	7.9	7.5	7.4	6.9
I can mobilize my friends and neighbors to work together when we face group problems.	6.4	5.2	5.4	4.3
I can get the help I need from government offices and agencies when I face problems.	7.1	5.2	6.5	4.5
I can mobilize people to carry out their responsibilities in my household.	8.7	8.1	8.5	7.8
I can mobilize people to carry out their responsibilities in a local group (farmers' group, women's group, etc.).	5.2	5.0	4.4	4.0
Average scores and Cronbach's alpha				
Average scores	7.3	6.5	6.7	5.9
Cronbach's alpha	0.84	0.84	0.82	0.78
n	608	544	647	493

Note: The final statement is also used in measuring community decision making participation.

The first set of intermediate outcomes relate to household management decisions, the ability to resolve conflicts, and community decision making; the variables used here are parallel to those used in the section on self-efficacy, as they were all developed from a set of statements upon which the respondent was asked to rate their participation or engagement, in this case, on a 0-10 scale. The indicators used are the average answers to all questions within a class.

When estimating impacts on the average measure of compromise and negotiation and the measure of relationships, the pattern is similar to many of the self-efficacy measures (Table 28). In both cases, the comparison group mean is close to 6 at endline; there is a statistically significant difference between the mean for the BLP group and the comparison group (column 1), but both measures show some positive selection, and the impact estimate declines as observable differences are accounted for (column 3). This impact estimate suggests that the BLP caused scores on these two rating scales that are roughly 0.3 points higher, or that the BLP led participants to be slightly more confident engaging others in compromising, or in developing relationships. However, in both cases the difference-in-difference estimates are not different from zero, and both impact estimates have large standard errors (column 6). Taken in tandem, these estimates suggest there were either no changes in respondents' ability to communicate with these skills within households or communities, or that any changes had either taken place by the baseline and were sustained, or had decayed by the time the endline took place.

Table 28. Impacts of BLP Participation on Indicators Measuring Household and Community Communication Skills, Rating Scales, BLP Impact Evaluation Data

Indicator	Endline Impact Estimate			Difference-in-Difference Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	
Participation in HH decisions – Compromise and Negotiation	0.56*** [0.097]	0.3*** [0.092]	0.329*** [0.096]	0.091 [0.13]	0.145 [0.122]	0.055 [0.13]	6.267
Engagement of others in problem resolution	0.573*** [0.104]	0.262*** [0.105]	0.328*** [0.106]	0.004 [0.141]	0.004 [0.132]	-0.021 [0.141]	5.885

Notes: Sample size is 1257 for the first three columns and 2514 for the second three columns. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

It seems likely that some changes took place before the baseline; the qualitative data are at least suggestive of changes in community relationships, which likely began to form earlier in the course. They emphasize that the BLP developed camaraderie among those who participated, even if some only went about half the time. In several groups, the FGDs sounded like the number of participants dropped early on to a stable equilibrium around half the original group size. These participants were the ones who bonded. One FGD in Palpa suggested that the women who had been in the BLP had begun farming together; they also found the class “fun.” One trainer got directly involved in business with BLP participants: “13 of us who were involved in the program have started a home stay business in our community after the program.” Another trainer stated about her community, “They wanted to explore new ventures and so formed groups, saved money and got goats, cows, and started vegetable farming. We saved money and pushed those who wanted to start a new business by lending her money.”

To measure community participation, one further rating scale is available, and one can measure the number of community groups in which each household is involved (Table 29). The latter measure is only available in the endline survey, so impacts on these two variables are only shown for the endline. For the variable measuring effective communication with community groups, the control group mean is only 3.9, suggesting fairly poor communication on average; the impact estimate is 0.54, suggesting that the average BLP participant has substantially better communication with community groups than the comparison group. Not surprisingly, the BLP participants, or their households, participate in more community organizations than comparison households. The impact estimate is about 0.5, suggesting that the average BLP participant household belongs to an additional half community group.

Table 29. Impact of BLP Participation on Community Group Membership and Communication, BLP Impact Evaluation Data

Impact Evaluation Data				
Indicator	Endline Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	
Community participation				
Effective communication with community/local group	0.941*** [0.136]	0.5*** [0.132]	0.59*** [0.135]	3.900
Number of community groups the household is involved in	0.727*** [0.078]	0.509*** [0.073]	0.566*** [0.081]	1.276

Notes: Sample size is 1257. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

To confirm that there is more frequency in community group participation among the BLP group, Figure 4 graphs the simple frequency of the number of groups mentioned by treatment group. It is quite clear that households with BLP respondents living in them are more likely to be members of multiple community groups, whereas the modal answer among the comparison group is zero.

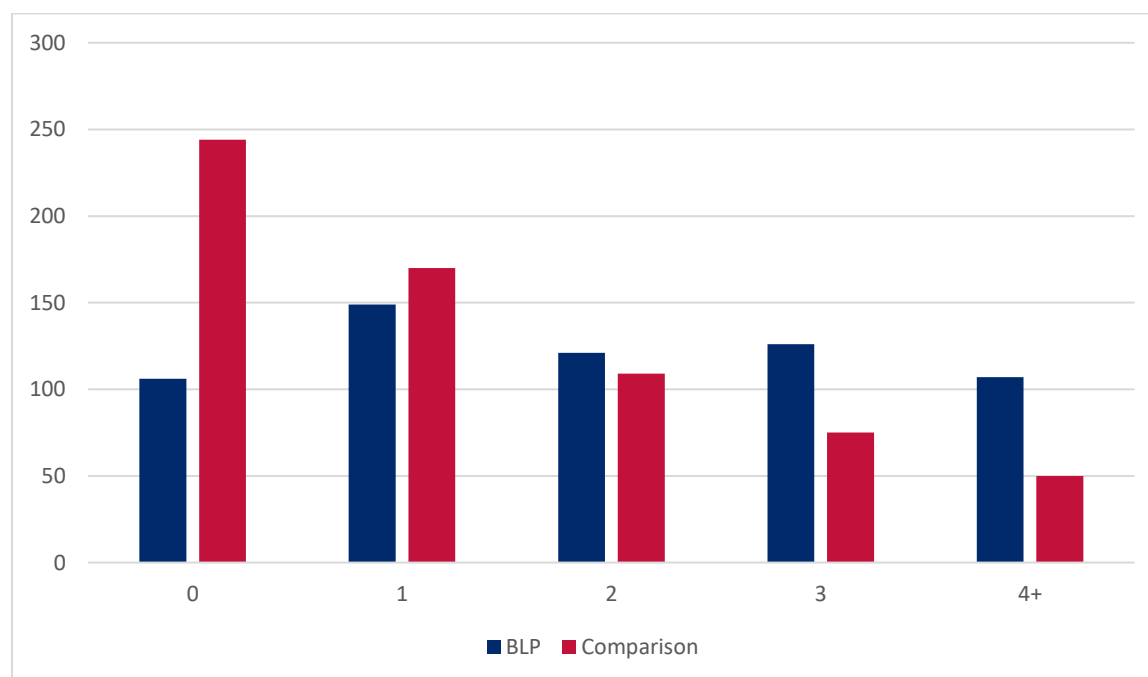


Figure 4. Number of Community Groups Respondent Households Participate in, by BLP and Comparison Group, Nepal Endline BLP Impact Evaluation Data

Combined with the evidence above, the KIIs emphasize that women have become more involved. For example, one trainer stated, “There were mothers who never had any schooling, they were included in the class and they changed and learned the need to join groups and how it can help you.” Another trainer stated about herself that “The way I speak and my behavior has also changed. I am more involved

in community work now (as well).” Finally, one trainer summed up somewhat melodramatically, “In our community people would accuse others of witchcraft, they would get drunk and fight, all these things have declined.” Although it is difficult to put a causal interpretation on the final point, the combination of the qualitative and quantitative evidence strongly suggests the BLP was good for building community, meaning that it was able to help people within communities get to know each other, even if they were from different income levels, castes, or ethnic groups. However, it might have had less impact on compromise and negotiation across those groups.

Descriptive Statistics and Impact Estimates, Access to Finance

The second intermediate outcome is whether households attempt to better integrate themselves into formal financial channels, either by building up savings, applying for loans, or attempting to purchase insurance. The first question is whether or not respondents are aware of their potential lack of access to finance (Table 30). In fact, BLP participants are nearly 13 percentage points more likely to state they have heard of access to finance than the comparison group. This difference is fairly substantial.

Table 30. Household Experience with Savings and Loans, by BLP Participation Status, BLP Impact Evaluation Endline Data

	Business Literacy	Comparison
Have heard about access to finance (%)	70.56	57.63
Tried to take a loan from any source (%)	20.07	9.40
Has a savings account in a bank (%)	55.10	41.45
n	608	649

It further translates into a quite large difference in attempts to take a loan from any source, and savings account holdings. About 20 percent of BLP participants had attempted to take a loan in the past year, versus only 9.4 percent of the comparison group. Similarly, 55 percent of BLP participants have a formal savings account, while only 41 percent of the comparison group do. Here, it is important to note that KISAN pushed all households to have formal savings accounts; however, respondents in the baseline only suggested that 40 percent of the treatment group had formal savings accounts versus 27 percent of the comparison group, so there is an improvement among both groups (though about the same size).

To further investigate knowledge about formal banking, the questionnaire asked whether respondents were aware of specific types of savings vehicles, from savings groups within communities to banks and microfinance institutions (Figure 5). In almost every case, the BLP participants are more likely to have heard of specific banks or microfinance institutions. The only real exception are savings groups, but they are informal. So one barrier to more universal access to formal finance, at least in these areas, is awareness of the institutions in the first place.

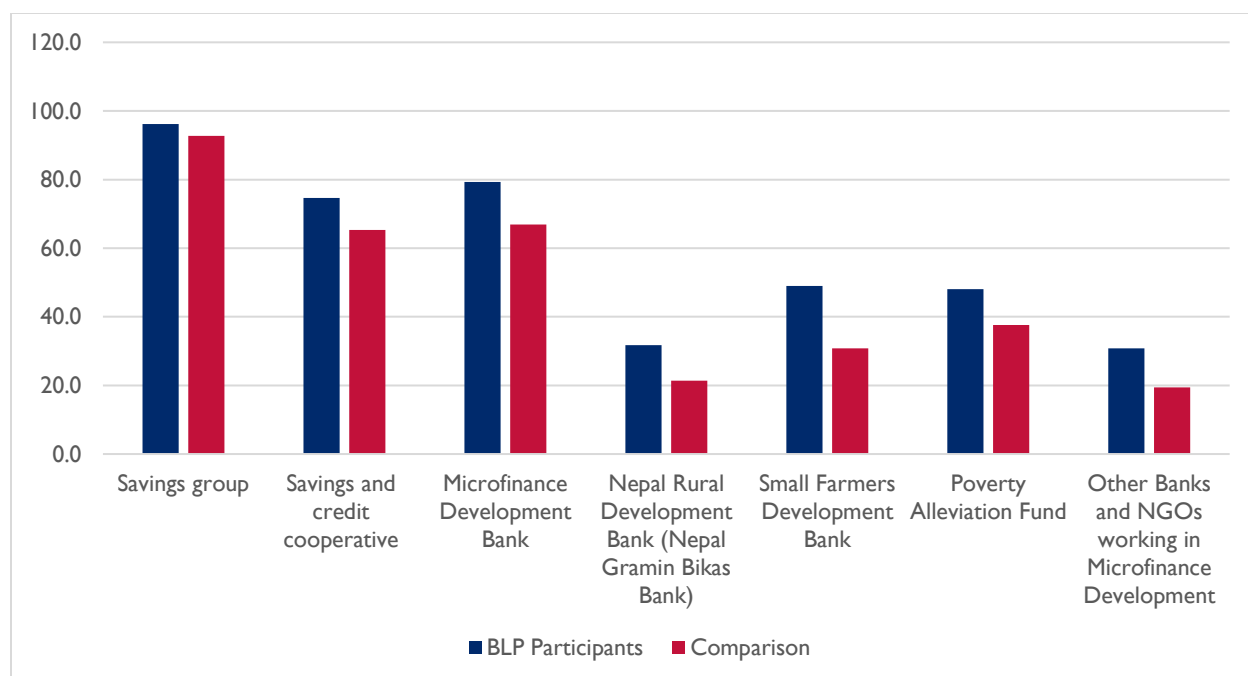


Figure 5. Proportion of BLP Participants and Comparison Group that have heard of specific financial institutions or arrangements, BLP Impact Evaluation Endline Data

A final set of variables asks whether households have awareness of crop or livestock insurance (Table 31). As with savings, BLP participants are more likely to know about insurance than the comparison group; in this case, BLP participants are 16 percentage points more likely than the comparison group to have heard of crop or livestock insurance. They are also 12 percentage points (54 percent versus 42 percent) more likely to state that insurance is available in the community; these differences translate to a large difference in attempts at enrollment (17 percent among BLP participants versus 7 percent among the comparison group). So the same challenge arises among those trying to market agricultural insurance in these areas of rural Nepal.

Table 31. Household Knowledge of Agricultural Insurance, by BLP Participation Status, BLP Impact Evaluation Endline Data

	Business Literacy	Comparison
Heard about crop/livestock insurance (%)	78.3	62.2
Is insurance available in the community?	54.1	42.1
Tried to enroll in crop/livestock insurance (%)	17.4	7.1
n	608	649

Impact estimates are conducted for three indicator variables: whether households have formal savings accounts, whether they have applied for agricultural insurance, and whether they have tried to apply for

formal loans (Table 32).¹⁷ The three concepts are measured by discrete variables, including whether the participant tried to take out a formal loan or purchase insurance; and whether the individual has a savings account. The results suggest very few comparison group members attempted to take out a loan or applied for formal insurance; only 9.4 percent of comparison group members have tried to take out a loan and only 7.3 percent tried to enroll in either crop or livestock insurance. Measured impacts on these two variables was quite high; the impact on BLP participants attempting to take out loans was 8.1 percentage points and trying to buy insurance was 9 percentage points, so both roughly doubled over the comparison group. Presumably, the improved understanding of financial products among some BLP participants led them to seek either loans or insurance.

Table 32. Impact of BLP Participation on Access to Finance, BLP Impact Evaluation Data

Indicator	Endline Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	
	Access to finance/insurance			
Tried to take a loan from any source	0.107*** [0.02]	0.081*** [0.021]	0.088*** [0.022]	0.094
Tried to enroll in crop/livestock insurance	0.105*** [0.019]	0.075*** [0.019]	0.084*** [0.021]	0.073
Has a savings account	0.137*** [0.028]	0.107*** [0.029]	0.12*** [0.031]	0.414

Notes: Sample size is 1257. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

Perhaps not surprisingly, more respondents stated that their households had savings accounts. The comparison group proportion was 41.4 percent; the impact estimate suggests that the BLP caused a 12 percentage point increase in the likelihood of having a savings account. However, as noted above it is not really possible to claim this impact is caused solely by the BLP, as KISAN encouraged savings in general, and BLP participants were a subset of KISAN participants.

Descriptive Statistics and Impact Estimates, Entrepreneurial Activity

The final section of the questionnaire asked households to report whether they had ever run, or were currently running, specific types of microenterprises. In the endline, enumerators were trained to specifically ensure that the activity was being conducted for business; for example, they were instructed not to count a homestead vegetable garden for home consumption as vegetable farming as a business, even if the household sometimes sold a little bit of excess produce. Similarly, they did not enumerate chickens for home consumption as a chicken microenterprise.

This categorization likely differs somewhat from the baseline survey, in which microenterprises appear

¹⁷ It is reasonably safe to assume that even if it were available, a very small proportion of the survey households would have attempted to purchase non-agricultural insurance.

to have been defined far more expansively. There is evidence from some of the qualitative interviews in particular. For example, in one KII in being asked about whether businesses had been started by participants, the response was, “They are doing on a small scale, vegetable farming, goats. They aren’t doing it commercially. It’s on a small scale.” The same trainer suggested that they did still sell excess produce but did not consider it a business. To the extent that a goal of the BLP was to convince participants that farming is a business, that goal was clearly not met within that village.

The impact evaluation team believes that as a result of this training difference, the proportion of households reporting managing microenterprises fell far below the baseline survey. In either case, the proportion of households stating they had run specific types of microenterprises was somewhat surprisingly low, and even fewer were running specific types of microenterprises. Some more common microenterprises are listed in Table 33, which misses one or two relatively common enterprises (specifically, general shops are excluded). Three things are notable. In all the cases listed, a substantial share of households that had run a microenterprise had given it up. Second, there is a large difference between households reporting vegetable farming as a microenterprise in the BLP participation group versus the comparison group. Finally, there is a substantial decline in the proportion of households reporting ginger farming; apparently, India’s government closed the border to Nepali ginger in 2018, and this change could reflect the loss of the main export market.

Table 33. Households running microenterprises, by BLP Participation Status, BLP Impact Evaluation Data, Endline

Experiences	Business Literacy		Comparison	
	Has run...	Currently running...	Has run...	Currently running...
HH has run				
Vegetable farming (%)	25.3	61.0	14.0	61.5
Ginger farming (%)	14.8	10.0	10.6	13.0
Goat farming (%)	16.0	55.7	10.5	66.2
Poultry farming (%)	9.0	49.1	6.6	53.5
Fruit or vegetable shop (%)	2.8	52.9	2.0	61.5
Tea or snacks shop (%)	5.9	36.1	4.9	37.5
Selling milk or milk products (%)	3.5	47.6	1.7	63.6
Selling ready-made food products (%)	8.4	56.9	6.5	47.6
N	608		649	

For the purposes of quantitative impact evaluation, it both only makes sense to conduct analysis on the endline, and to aggregate microenterprises into three categories: cash cropping (including fruits and vegetables largely sold for cash), livestock rearing (again, largely for cash), and non-farm enterprises. For each of these three, variables are constructed measuring whether the household has ever done the activity, and whether they are currently engaged in the activity.

Impact estimates are somewhat mixed (Table 34). The impact estimate for agricultural microenterprises suggests an 8.8 percentage point increase in attempts, attributable to the BLP. However, only a 5 percentage point increase in households currently cash cropping as a microenterprise is attributable to the BLP; a substantial share of households state they are no longer growing crops as a microenterprise. That does not necessarily mean they are not growing cash crops altogether, but may just be selling some excess produce rather than really growing a crop to sell on the market.

Table 34. Impacts of BLP Participation on Participation in Microenterprises, by Type, BLP Impact Evaluation Data

Evaluation Data				
Indicator	Endline Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	
Participation in Microenterprises				
Ever tried any type of agricultural microenterprise -crops	0.125*** [0.025]	0.075*** [0.026]	0.093*** [0.028]	0.219
Currently engaged in any agricultural microenterprise - crops	0.079*** [0.02]	0.055** [0.023]	0.078** [0.025]	0.116
Ever tried any type of agricultural microenterprise -livestock	0.093*** [0.023]	0.044 [0.026]	0.05* [0.027]	0.165
Currently engaged in any agricultural microenterprise - livestock	0.042** [0.019]	0.042* [0.022]	0.055** [0.023]	0.106
Ever tried non-agricultural microenterprises	0.059** [0.025]	0.008 [0.019]	0.026 [0.021]	0.237
Currently engaged in non-agricultural microenterprises	0.033 [0.022]	0.034 [0.023]	0.036 [0.024]	0.169

Notes: Sample size is 1257. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

The second set of estimates relate to rearing livestock as a microenterprise. Again, there is a positive impact on households having tried to rear livestock as a microenterprise of 6.3 percentage points, but fewer state they are currently doing so in general, and the difference in averages between the BLP participants and the comparison group is not attributable to the BLP. A similar pattern exists for the non-agricultural microenterprises; there appear to potentially be more households who have ever tried non-agricultural microenterprises among BLP participants, but there is no evidence that more households run non-agricultural microenterprises due to the BLP, according to the impact estimate.

From the quantitative data, then, the picture appears to be that some households have tried to run enterprises, but if any are running among participants they tend to be related to cash cropping, and not to livestock (including animal by products such as milk or eggs), and they are not non-agricultural.

This set of indicators is difficult to ascertain in the qualitative data, in part because there is a lack of a counterfactual. Many of the FGDs and KIs discussed growing vegetables as a cash crop, stores that women were running, or doing business in general; however, it could be that the amount of business is similar among women in the comparison group; therefore it is difficult to attribute these statements solely to the BLP.

Intermediate Outcomes, Summary

The impact evaluation results are suggestive that all three intermediate outcomes were attained in some way, although they also appear to tell a somewhat nuanced story about impacts. For household and

community level participation in decision making, the results definitely suggest that participant households are more likely to play roles in community groups; it is less clear that they have improved skills in compromise and negotiation or problem resolution; as with self-efficacy measures, the endline results alone show positive impacts, but the difference-in-difference results are not different from zero. A clearer impact is on access to finance; households who participated in the BLP are more likely to have attempted to access loans or insurance, and they are more likely to have savings accounts; however, the latter effect is almost certainly also an effect of KISAN participation, so it is not possible to fully attribute it to the BLP. Finally, there is evidence that BLP households are more likely to be running agricultural microenterprises. An expansion of microenterprises could be quite helpful towards attaining final outcomes, as otherwise the only way to find impacts would be through the expansion of existing ones.

Final Outcomes

The impact evaluation design specified net income from microenterprises as the final outcome, although it would be zero for all households not running microenterprises. For the purposes of evaluation, the questionnaire included crude questions that measure the income households earned in microenterprises; if a household was running a specific enterprise, they were asked about the amount of money they netted over the past 12 months.¹⁸ Not surprisingly, a substantial number of households in both groups state positive incomes, and reported incomes vary substantially. Conditional on running microenterprises, distributions of reported incomes are highly skewed (as expected); the median agricultural income, for example, is 33,000 rupees, whereas the average is 78,000 rupees. For the purposes of evaluation, this variable is disaggregated into farm and non-farm income.

In later discussions with DEPROSC, it was decided to add a third set of variables to the impact estimates, which is the number of animals that households owned within specific categories. Since there is a substantial amount of turnover in ownership of chickens throughout the year, the three variables that are constructed measure the number of buffaloes, cows, and goats that households own. These variables are described below.

Turning back to microenterprise income, perhaps the best way to visualize net income is with a box-and-whisker plot, which depicts the distribution of a variable. A box and whisker plot depicts the distribution as follows. The box indicates the 25th through the 75th percentiles of the distribution, whereas the whiskers (lines above and below the boxes) plot the 5th through 95th percentiles. The median of the distribution is the line in the middle of the box, and dots above any whiskers depict outliers.

Agricultural income, among the 21 percent of all households who report positive agricultural income from an enterprise, appears to be higher among the BLP participant group than the comparison group (Figure 6).¹⁹ The 75th percentile of the distribution is clearly higher among BLP participants, as is the tail. This difference suggests that households in the BLP participant group may have been more likely to expand enterprises in the past few years.

¹⁸ The questionnaire asked if they were running the enterprise as a cooperative, but very few households appeared to be doing so, so we ignore this point in computing income.

¹⁹ For both figures in this section, all values above 400000 rupees were dropped for presentation. There were less than 5 for both variables (agricultural and non-agricultural income).

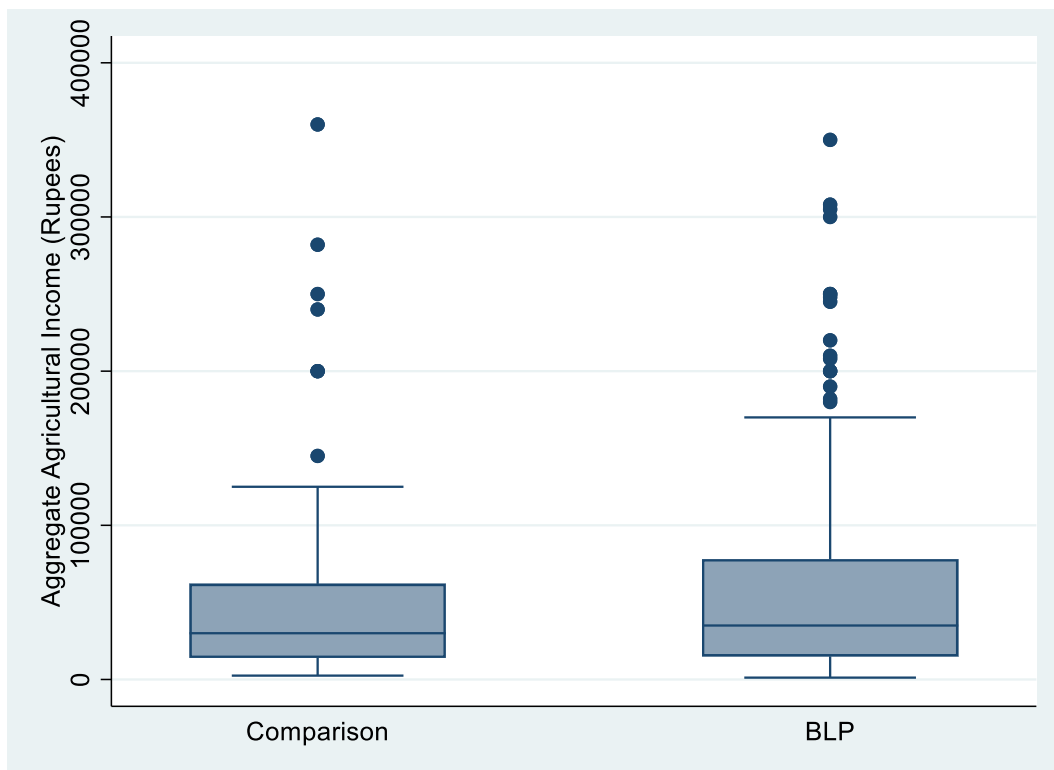


Figure 6. Average Agricultural Income among those Running Agricultural Microenterprises, BLP Impact Evaluation Data

On the other hand, there are no apparent differences for non-agricultural enterprises by participant group (Figure 7). Among those (16 percent of all households) reporting managing non-agricultural enterprises, reported incomes have roughly the same distributions; the comparison group, in fact, has a slightly longer high whisker, but the middle of the distributions appear nearly identical. So one might expect any impacts on this variable to be concentrated in agricultural income, if they can be detected. Note that the averages from an impact perspective will include all households not managing enterprises, to avoid a further selection bias into managing microenterprises in the first place.

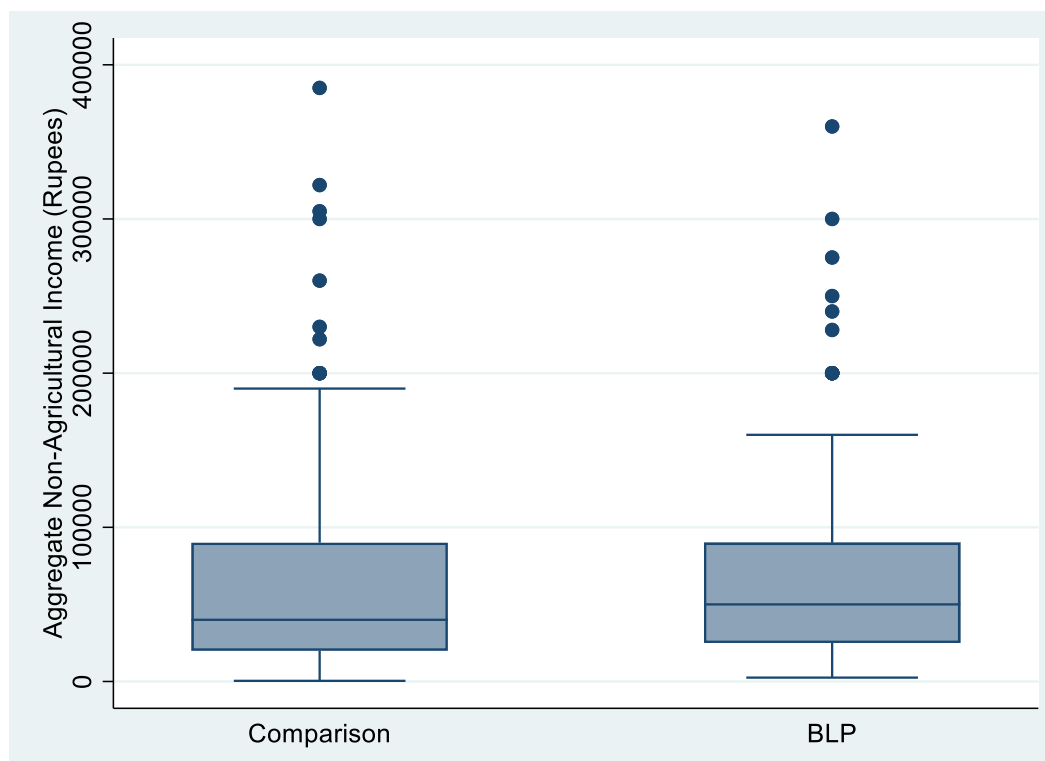


Figure 7. Aggregate Non-Agricultural Income, Conditional on Managing Enterprises, by BLP Participation, BLP Impact Evaluation Data

Finally, it is important to also discuss the number of cows, buffaloes, and goats owned by households in the BLP and comparison groups (Table 35). The BLP households clearly have more buffalo, cattle and goats than comparison households in the endline. However, as with other comparisons, it is not immediately clear whether these differences relate to the positive selection of BLP households, or if they are truly attributable to the BLP; the impact estimation will speak to that question.

Table 35. Number of Buffalo, Cattle, and Goats owned by Respondent Households, by BLP Participation Status, Nepal BLP Impact Evaluation Data

Variable	BLP Group	Comparison Group
Number of Buffalo	1.32 (0.06)	1.00 (0.05)
Number of Cattle	0.638 (0.047)	0.518 (0.040)
Number of Goats	3.27 (0.25)	2.53 (0.12)
Number of Obs.	608	649

Note: All households included; if a household does not own one of the three types of livestock, it is recorded as a zero.

Recall the intermediate outcomes suggested that BLP participant households were more likely to run agricultural than non-agricultural microenterprises. That point does not necessarily imply incomes have only increased among those running agricultural enterprises; it could be that non-agricultural enterprises have been intensified. Therefore it remains worthwhile to estimate impacts on total enterprise income. Before doing so, it should be emphasized that the estimator is measuring average treatment effects on the treated, rather than conditioning on running businesses. So any households that do not run

microenterprises are also averaged in as zeroes.

The estimates suggest that average income from agricultural microenterprises, combining cropping and livestock, are causally about 13,500 rupees higher, on average, among BLP participants (Table 36). This estimate is significant at the 10 percent level, so it should be interpreted cautiously, given that the data have not been adjusted at all for outliers.²⁰ Still, it is highly suggestive that there is an impact on agricultural income. There is no impact on net income from non-agricultural microenterprises.

Table 36. Impacts of BLP Participation on Income from Enterprises, by Agricultural Status, BLP Impact Evaluation Data

Indicator	Endline Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	
Net income from agricultural microenterprises	15336.34** [6928.007]	12785.18 [7486.025]	13495.22* [7177.788]	9592.6
Net income from non-agricultural microenterprises	1937.482 [2883.804]	1534.623 [3054.519]	2109.564 [2975.321]	12660.7

Notes: Sample size is 1257. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

The results are relatively consistent with the descriptive data above, and the qualitative data suggest that a driving force may indeed be expansion of enterprises. For example, an FGD participant in Palpa stated, “Before we would only grow a few potatoes but now we also grow cauliflower, cabbage, and take it to the market to sell it. We can calculate how much income we made and learned to save it as well.” It is also clear that not everyone is in business; for example, one conversation in a KII led to a young farmer who was named by the trainer as now farming one ropani of land, planting tomatoes, cauliflower, beans, and selling them. However, it was also clear that many participants in the same area had not started businesses. These results imply that agricultural microenterprises that participants were running saw some improvement between baseline and endline. There is less clarity that non-agricultural microenterprises did, though there may not have been as many opportunities to do so.

As described above, a concern with this result is that microenterprise income might not well reflect the way that the BLP defined a microenterprise expansion to its participants. A potentially better variable could be the number of animals owned by type, so the same estimation strategy can be used to test whether there is evidence of herd expansion (Table 37).²¹ Whereas column 1 shows that in general the

²⁰ An example of an adjustment that could be done would be to “winsorize” the data, which sets any values above or below a specific percentile (e.g. the 1st and 99th) at that percentile value. For microenterprise data, the distribution of profits often have “fat tails” due to some quite successful businesses, so the average treatment effect on the treated is perhaps not the best way to show impacts; there are recent advances in ways to demonstrate distributional changes in randomized experiments (Meager, 2020) but they have not been extended to non-randomized settings.

²¹ Since herds could have experienced substantial dynamics between the baseline and endline surveys, the choice was made not to attempt a difference-in-difference estimate for these variables.

BLP participants have more buffaloes, cattle, and goats than the comparison group, consistent with the descriptive statistics above, the impact estimates in column 3 are smaller in magnitude and are not significantly different from zero, so the difference cannot be attributed to the BLP. Nonetheless, they are all positive and so in a larger sample they could have potentially been statistically significant, particularly the coefficient for goats which has a p-value close to 0.1.

Table 37. Impact Estimates on the Number of Buffaloes, Cattle, and Goats Owned, BLP Impact Evaluation Data

Indicator	Endline Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	
Number of buffaloes	0.329*** [0.077]	0.077 [0.071]	0.113 [0.075]	0.998
Number of cattle	0.12* [0.061]	0.105 [0.064]	0.072 [0.067]	0.518
Number of goats	0.735** [0.27]	0.42 [0.279]	0.479 [0.271]	2.532

Notes: Sample size is 1257. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

Therefore, it can be concluded that there is some evidence of higher incomes from agricultural microenterprises attributable to the BLP, but not non-agricultural microenterprises nor larger livestock herds. Recall that about half of the BLP group are not participating strongly in the program, and relatively few households consider themselves to be running microenterprises; hence, this result implies that net income effects should have been larger among stronger participants, though that point is muddled again by the type of participants who made the choice to strongly participate.

Life Skills

The improvement of life skills were emphasized in the BLP, in a way that goes beyond the results chain.²² The questionnaire included a module asking about both life skills in general, and 5 of the 10 life skills included in the training modules. The module broadly asked whether respondents had heard of each life skill, then whether they recalled any messages about that life skill in an open-ended manner. If they answered with anything other than “don’t know”, enumerators coded their responses. Respondents knowing the life skill were then asked if each specific life skill had improved, stayed the same, or declined over the past two years (e.g. since the BLP ended), and whether they thought they had used that life skill to help resolve a problem. Finally, respondents were asked about the types of challenges in life that life skills had helped overcome.

Perhaps not surprisingly, BLP participants were far more likely than the comparison group to have heard of life skills (Table 38). About half of the BLP participant group had heard of life skills in general, while only 4 percent of the comparison group had. A few more individuals in each group had heard of specific

²² As discussed when indicators were introduced, life skills can be thought of as related to self-efficacy as in the results chain, but the BLP went farther in attempting to develop empowering life skills.

life skills in general. For example, about 58 percent and 12 percent of the BLP participant and comparison groups had heard of “decision making capacity,” respectively. On the other hand, “effective communication” was only known to 33 percent of the BLP group and 3.1 percent of the comparison group. Since so few people in the comparison group knew of specific life skills, as more of the answers are described, the two groups are largely combined.

Table 38. Whether or not Respondents had heard of Life Skills in general and Specific Life Skills, by BLP Participant Status, BLP Impact Evaluation Endline Data

Life Skill	Heard of Life Skill (%)	
	Business Literacy	Comparison
Life Skills in General?	55.9	4.0
Self Awareness	51.5	6.6
Effective Communication	33.1	3.1
Capacity to Face Stressful Situations	41.0	5.7
Decision Making Capacity	57.9	12.2
Capacity to Solve Problems	47.5	9.9
n	608	649

Among those who had heard of each life skill, most remembered at least one message about that life skill (Figure 8). With the exception of effective communication, respondents were able to name messages about 70% of the time. Another 15 to 18 percent of respondents gave a definition of each life skill, but was recorded as “other” by the enumerator. Only 10 to 13 percent could not define a life skill they had heard of before. For effective communication, just under half of respondents correctly recalled a message from the training, while 25 percent came up with another definition, leaving about one quarter unable to define it. In general, given that the trainings had taken place two years previously, these results are fairly encouraging.

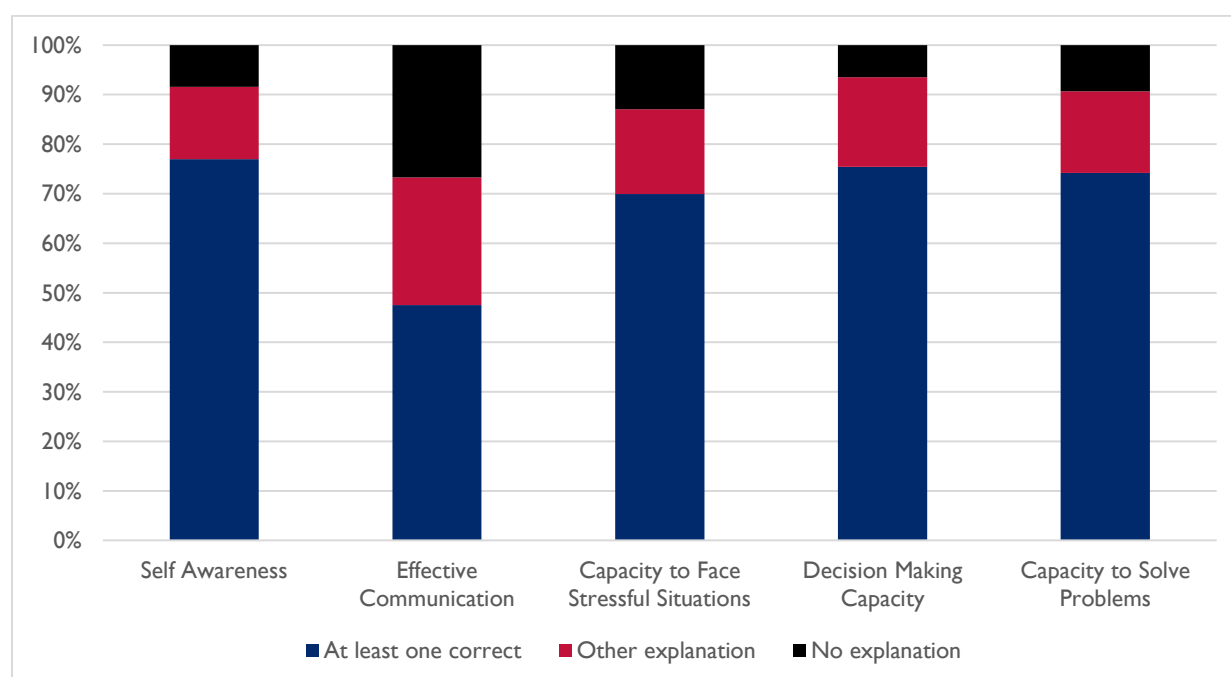


Figure 8. Recall of Messages related to Life Skills among those knowing of specific Life Skills, BLP Impact Evaluation Endline Data

Among individuals who could identify each life skill, between 82 and 89 percent of respondents were either confident or very confident in applying that skill (Figure 9). Moreover, a remarkably consistent proportion of respondents suggested that they had either improved or somewhat improved that life skill over the past two years – between 71 and 74 percent of respondents stated they had improved skills of which they were aware. It is important to note that these are not the same 70 percent of individuals who knew of one or more life skills; the modal respondent said that two life skills improved, conditional on knowing about any of the life skills specifically.

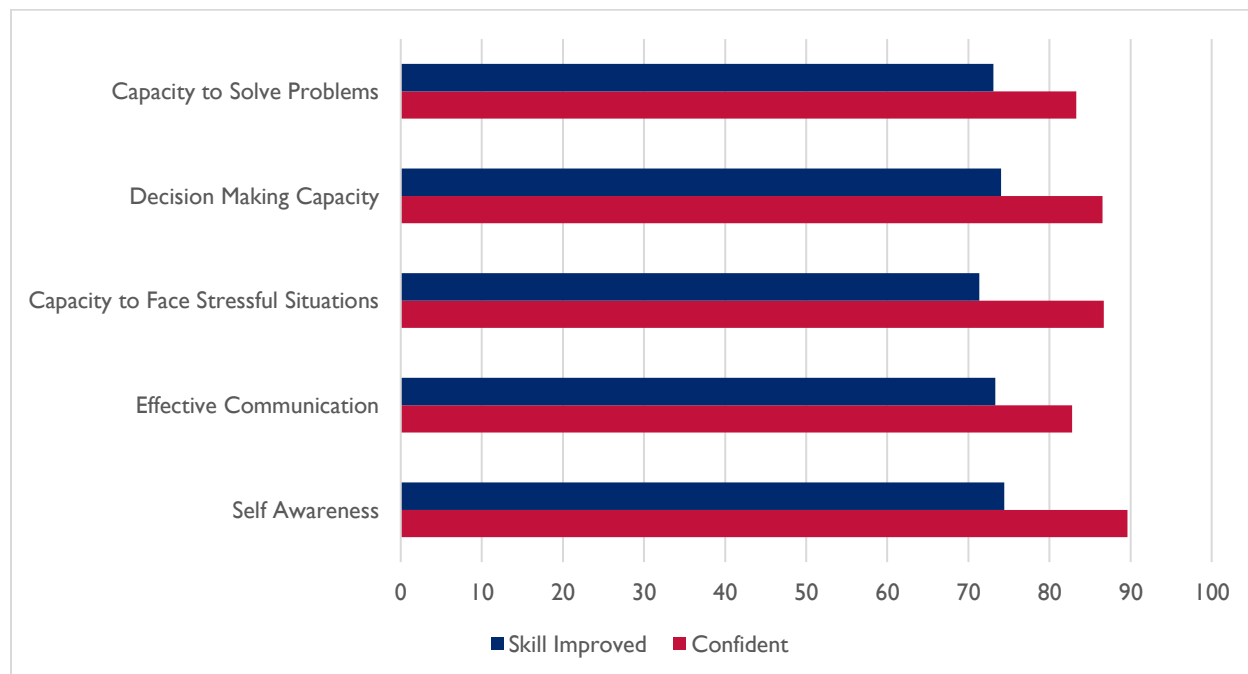


Figure 9. Confidence and Self-Report of Life Skill Improvement, by Life Skills, BLP Impact Evaluation Data

Finally, the questionnaire asked about what challenges respondents had used life skills in attempting to solve. Here, the majority of respondents mentioned household finances (Figure 10). A relatively large proportion of respondents also mentioned family planning or health care issues, or resolving disputes (30 to 35 percent). Other challenges that were enumerated were not often mentioned.

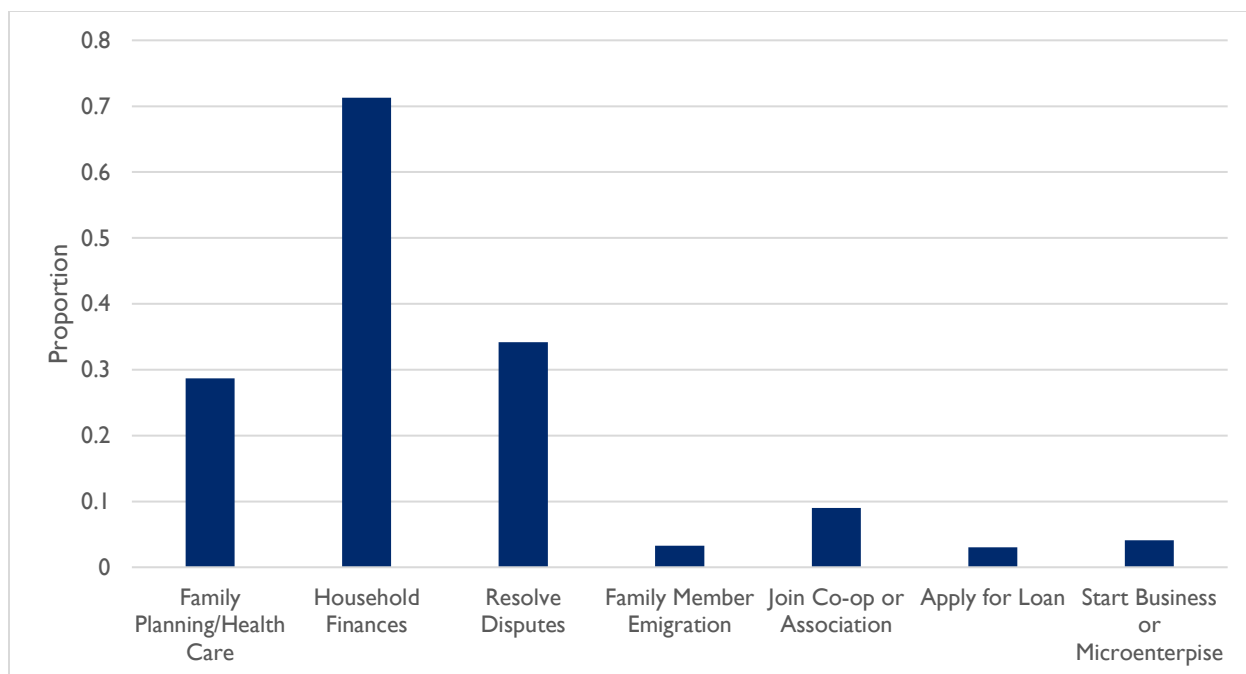


Figure 10. Responses about Challenges that Life Skills Helped Respondents Face, BLP Impact Evaluation Endline Data

This finding is borne out, at least to some extent, in the qualitative data as well. The challenge in some households may have been within household communication. A focus group participant in Arghakanchi remarked, “Because we were illiterate, we were kept in the dark about our finances. Our husbands didn’t tell us how much money we have, where it’s kept and whom he has given loan or money to. All we did was do house work, cut grass, feed the animals, cook and clean. We didn’t have any alternative. But now we can count and we can check our husband’s pocket and count how much money he has. We aren’t afraid to ask now. We ask for all details now.”

One remaining point about life skills that comes up in the qualitative data that is not well reflected in the survey relates to discrimination. In several different interviews, the concept of treating others equally came up, both related to gender and caste. From the gender perspective, in one trainer interview a trainer stated, “There was discrimination between boy and girl child before but the program has made people aware that both girls and boys should be treated equally. That attitude is changing.” Related to caste, several focus group participants brought up not discriminating against low caste individuals; a trainer put this concept nicely about the BLP in general: “Life skills. It taught you how to speak, to be nice to others in the village, not to discriminate and to love others. Things like that.” In asking about expectations from the course, one group member in Palpa stated, “Yes, before Dalits were not allowed to step inside a Brahmin’s house like this,” about another participant (a Dalit) who was present. Clearly, one program cannot change either of these types of discrimination over a short time period, but it can contribute to improving attitudes towards others and reducing gender discrimination.

Impact Estimates, Life Skills

To measure impacts on life skills, the evaluation uses a set of eleven variables. The first question is whether respondents have ever heard of life skills before or not. For those respondents who have not, the remaining questions are all coded as zero. Then, for each of the five specific life skills, the respondent is asked whether she has heard of that specific skill before, and then the second set of

variables asks whether each skill has improved over the past two years.

Consistent with the descriptive findings, there are large impacts on awareness of and improvements in life skills attributable to the BLP (Table 39). For awareness, the estimates range from 28.4 percentage points to 50.2 percentage points; these changes are as large as an order of magnitude over the comparison group. Estimates on improvements in life skills range from 21.4 percentage points to 34 percentage points, depending upon the specific skill. As not more than 7.6 percent of the comparison group claims that any of these life skills improved, these are all very large impacts as well. In sum, it is quite clear that awareness of and improvement in life skills was an impact of the BLP.

Table 39. Impacts of BLP Participation on Variables Associated with Life Skills, BLP Impact Evaluation Data

Indicator	Endline Impact Estimate			Control group mean at endline
	No controls	Controls	Controls & LASSO weights	
	Estimate	Estimate	Estimate	
Life skills				
Has ever heard of life skills in general	0.519*** [0.021]	0.486*** [0.021]	0.502*** [0.023]	0.040
Has ever heard of self awareness as a life skill	0.449*** [0.022]	0.422*** [0.022]	0.428*** [0.024]	0.066
Has ever heard of effective communication as a life skill	0.3*** [0.02]	0.266*** [0.02]	0.284*** [0.021]	0.031
Has ever heard of capacity to face stressful situations as a life skill	0.353*** [0.021]	0.309*** [0.022]	0.319*** [0.024]	0.057
Has ever heard of decision making capacity as a life skill	0.457*** [0.024]	0.414*** [0.024]	0.414*** [0.027]	0.122
Has ever heard of capacity to solve problems as a life skill	0.377*** [0.023]	0.333*** [0.023]	0.348*** [0.026]	0.099
Life skill has improved in the past 2 years: Self Awareness	0.356*** [0.021]	0.338*** [0.021]	0.34*** [0.022]	0.039
Life skill has improved in the past 2 years: Effective Communication	0.228*** [0.018]	0.206*** [0.018]	0.214*** [0.019]	0.018
Life skill has improved in the past 2 years: Capacity to face stressful situations	0.272*** [0.019]	0.239*** [0.02]	0.243*** [0.022]	0.031
Life skill has improved in the past 2 years: Decision making capacity	0.369*** [0.022]	0.34*** [0.023]	0.34*** [0.025]	0.076
Life skill has improved in the past 2 years: Capacity to solve problems	0.3*** [0.021]	0.266*** [0.021]	0.275*** [0.024]	0.060

Notes: Sample size is 1257. *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level.

Not surprisingly, impacts on life skills are clear throughout the qualitative interviews, both in focus groups and in the key informant interviews, as trainers learned a great deal about life skills as well. For example, a trainer stated, “It taught you how to speak, to be nice to others in the village, not to discriminate and to love others.” Another trainer quote suggested problem solving improvements: “When you start something, problem does come up and you learn to solve it. In agriculture we get all kinds of problems, disease, and all but we have to learn how to identify it and solve it.” Finally, another trainer wrapped up the concept nicely when she said, “There are 10 life skills in the book on Life skills. After reading that book, my self confidence has been on the rise, I am able to find solution to problems and cope with it. I can see my faults and weakness and be self critical. I am more decisive now, it has changed my life.”

Further Qualitative Results

There are three types of further qualitative results from the program that are worth brief discussion. All three do not appear on the theory of change but may be considered important for future project design. Therefore, a brief discussion of teaching methods, potential impacts on dietary patterns, and potential impacts on trainers.

Teaching Methods

A clear challenge was figuring out how to teach the literacy and numeracy module for many of the trainers. One KII respondent noted, “It was difficult to teach them numbers and alphabets. When they learned that, it became easier. They couldn’t write so had to be guided. It was very difficult at first.” From DEPROSC staff, we understand by “guided” they mean that the individuals would at first need their hands guided so they could learn to move a pencil across paper.

Despite these difficulties, other teaching methods were found quite useful; respondents in FGDs appreciated the interactive nature of much of the content. For example, an FGD participant in Gulmi stated, “Us oldies love pictures and illustrations. It made lessons fun.” A participant in another group stated, about the first module, that “Our teacher would use sticks and marbles and stones to show how $2+2=4$.” Not everyone was fully positive, as a trainer actually stated that “I think more interactive games would have helped. It made the lessons more interesting.” In other words, there were some interactive activities, but there could have been more.

These quotes at least suggest that the teaching methods were part of the success of the BLP. The interactivity and methods of illustrating concepts, beyond a chalkboard, were clearly helpful in generating knowledge that stuck with participants.

Impacts on Nutrition Knowledge

Module 2 of the BLP training focused on nutrition education. Although only a month was spent on module 2, it clearly had impacts on many people who participated in the trainings, as it came up regularly in the FGDs and among trainers in KIIs. Notably, positive messages about the nutrition module came up in all four districts.

Most of the changes that were mentioned were fairly general, which is not surprising given the time lag between the end of the BLP and the endline survey. For example, after being asked about which modules or lessons were the best, an FGD participant in Arghakanchi said, “We liked the one on food.” Others were more specific, but not terribly precise. An FGD participant in Kapilvastu stated, “We were ignorant about balanced diet. We learned what we should eat to be healthy.” Another respondent in the

same group said, “We learned how good diet can help a child’s brain grow.” The targeting was broadened by a further respondent in Arghakanchi: “It taught how to feed children and pregnant mothers.” So at least among some, lessons about the effects of improved nutrition stuck.

Another common theme was that there had been a substantial lack of knowledge about nutrition in the past. An FGD participant in Palpa illustrated by saying, “I didn’t know much about nutrition and food before. But from the book I learned what we need to eat to be healthy.” One of the former trainers stated, “(Before the trainings) they said that didn’t know about food groups and what to eat, but now they do.” In one FGD in Kapilvastu, this statement catalyzed a number of further statements about vitamins: “I now know what Vitamin is and what we need to eat.” And a final FGD respondent in Palpa encapsulated one of the overall messages well: “Rather than eat same food every day, we should try to eat variety of food and vegetables.”

A few respondents also mentioned hygiene and eating more organic food. Several respondents mentioned learning about washing hands or hygiene generally. One trainer noted: Similarly, they learned about hygiene, and showed others how to clean their homes and yard, they learned how dirt can bring disease and to clean their homes and community. We have animals at home, they learned to manage animal waste in a safe manner and to wash hands.

Finally, an FGD respondent in Palpa stated, “Now we grow organic cucumbers, we don’t even use (urea) anymore. Since learning that we need to eat organic food, we have stopped using pesticides and fertilizers.” So messages that could be recalled went beyond just the basics of eating a diverse set of foods and child feeding messages; some knowledge was also recalled related to hygiene and even growing more organic food.

Impacts on trainers

To this point, impacts on the trainers have not been discussed in detail, in part because systematic quantitative data could not be collected about them. However, some of the KIs made it clear that there were important impacts on trainers as well. Trainers likely learned the material quite deeply, as they had to convey it to students. The KIs make it clear there is heterogeneity here as well; some of the trainers clearly bonded with their groups, whereas it is not as clear about others.

That said, some of the qualitative evidence suggests that trainers often either became entrepreneurs, or became better ones. For example, when asked about impacts on themselves, a trainer stated, “Yes, I have learned to keep an account of my business. Before, we used to jot it down randomly. Now, it’s very systematic.” Another trainer stated, “Yes, I wanted to set an example and show my class that you can also run your own business and do it successfully.” Similarly, a different trainer stated, “I learned how to utilize the land and resources around me and raise goats, bees, and chickens with little capital. I was able to teach that to my students as well.” And a fourth trainer summarized well: “I knew a little beforehand and after the BL course I knew more. That you have to do business, and that if you do, anything is possible. It makes life easier, even if you face loss you can’t give it up.”

This quote from another trainer suggests that further changes included improved self-confidence and communication skills:

Umm... from that I learned how to communicate, how to increase self confidence. After taking training, I won prize as a woman agro-producer. When programs come, I believe you have to participate. I also communicated with other CTs and moved ahead.

In discussing the module on entrepreneurship, a further trainer stated:

I forgot the name of the lesson [it's been 2 years since it ended] but the one that taught how to become an entrepreneur was the best. We ourselves didn't know about it before training. It was beyond our experience. I loved being able to teach them that lesson. By teaching them how one can become an entrepreneur, what should one do, how you can become self reliant, I was able to learn these lessons as well.

A third trainer also discussed communication skills, in the context of improving communication and self-confidence:

From that I learned how to communicate, how to increase self confidence. After taking training, I won prize as a woman agro-producer. When programs come, I believe you have to participate. I also communicated with other CTs and moved ahead.

As with many programs, it is incomplete to only discuss impacts among those who participated in the BLP as “students.” The trainers learned a great deal, both in terms of how to communicate with others, but also in actually implementing the lessons that they were learning.

Impact Heterogeneity

There are a number of different ways that the BLP could have had different impacts on different groups of individuals. To test for the most meaningful differences, here we report three classifications that were deemed, by stakeholders, to be the potentially most meaningful. First, heterogeneity by the woman's age is studied; second, by caste; and third, by whether the woman effectively comes from the hills area or the *terai*. Caste is differentiated by high caste individuals (Brahmin, Chhetri) versus others; there are substantial differences in political participation by this categorization within Nepal. Family structure also differs substantially between the hills and the *terai*, making the latter distinction relevant. For the purposes of breaking age into two categories, women responding in the endline who were under 40 at baseline are categorized as young, whereas all others are categorized as not young.

A fourth relevant difference is by participation level. As indicated earlier, about half of women who were in the treatment group reported participating in half or more of the trainings, whereas the other half did not. We can further split the treatment group by participation level. However, this split is endogenous, because there could be unobservable factors about those women that made them more likely to participate more heavily in the BLP than others, and we cannot control for that difference here. As a result, though we can attempt to estimate the differences between the high and low participation group, we cannot be sure that those differences are due to participation rather than innate differences between high and low participation women.

To focus the discussion to potentially important impacts, first it is worth narrowing the types of variables that are studied. There are four classes of clear impacts so far in the report—on literacy and numeracy, on business development, on community participation, and on life skills. Therefore, in this section a focus is placed on outcomes within those four classes.

However, there are still a substantial number of outcomes that one could study, and the study was not large, so it is certainly plausible that a number of statistically insignificant results would follow, and they are not then worth pursuing in great detail. To narrow the outcomes further to focus on classes that appear potentially statistically significant, the following procedure is followed. First, a regression is estimated as follows:

$$Y_{ic} = \alpha + \beta_1 T_{ic} + \beta_2 G_{ic} + \beta_3 T_{ic} G_{ic} + \varepsilon_{ic} \quad (1)$$

where T is the treatment variable, G represents one of the two groups for the first three types of heterogeneity (younger women, high caste women, women from the *terai*), and Y is the outcome. The interesting null hypothesis is whether $\beta_3 = 0$; if the null can be rejected, then the treatment effect differs between the two groups in question. The regression in equation (1) uses the inverse probability weights developed for the study (with LASSO determined weights), but the regression is not initially run with additional covariates. The regressions all only use the endline data.

Note that it is not possible to identify women who would have been high participation within the comparison group had they been participants. So equation (1) has to be written differently to examine whether treatment effects are concentrated among the high participation women:

$$Y_{ic} = \alpha + \gamma_1 T_{ic} + \gamma_2 T_{ic} H_{ic} + \varepsilon_{ic} \quad (2)$$

where H represents high participation. The coefficient γ_2 then represents the increase in the average treatment effect for the high participation group over the low participation group; however, note it is not fully attributable to the program as it is impossible to know whether it was due to the program or innate differences in that group of people that made them more likely to participate more.

To summarize these tests, for the first three variables, for which equation (1) can be estimates, the initial tables following simply present p -values for the null hypothesis that $\beta_3 = 0$. For classes of outcomes that appear statistically significant at the 5 percent level or better, then the regression results are presented in a second set of tables, along with the control group mean for each of the groups, so that differences between the groups are clear. For high participation, we simply test an interaction term between the treatment indicator and the high participation indicator; we show all regressions in these classes of outcomes and the coefficient on the interaction is interpreted as additive.

Literacy and Numeracy

First, Table 40 presents p -values for the interaction term related to whether women report being literate and their standardized average math score. The p -values for the interaction with the young indicator are both high, suggesting there was no statistical difference between impacts on younger and older women. However, for literacy a p -value of 0.046 is observed for caste, and for being a woman from *terai* the p -values are both below 0.05, suggesting that in both cases the treatment effects might differ.

Table 40. p -Values for hypothesis that interaction term is zero, Literacy and Numeracy, Nepal Endline Impact Evaluation Data

	Literacy	Avg. Math Score
Young?	0.381	0.730
High Caste?	0.046	0.479
From <i>Terai</i> ?	0.020	0.043

Notes: Table reports p -values for the null hypothesis that $\beta_3 = 0$ in equation (4).

To test this hypothesis, the regression coefficients and control means appear in Table 41. For the indicator for literacy, column (1) suggests that high caste individuals are more likely to have gained from the intervention than individuals in other castes. Note that the treatment effect for the interaction group is statistically different from zero, as evidenced by the p -value for the sum of the two terms. In column (2), it becomes apparent that the treatment effect is focused among those without groups from

the *terai*; in fact, among groups from the *terai* the treatment effect is zero, as evidenced by the p-value testing the hypothesis that the treatment effect plus the interaction is zero. This point is also true for the average standardized math score; the treatment effect is large among those from outside the *terai*, and not different from zero among groups from the *terai* (column 4). These findings suggest that the BLP was more effective, at least at increasing literacy and numeracy, in the hilly areas rather than in the *terai*.

Table 41. Regression Coefficients for Interactions between Treatment and Specific Groups, Literacy and Numeracy, Nepal Endline Impact Evaluation Data

Variable	Literate?		Average Standardized Math Score	
	(1)	(2)	(3)	(4)
Treatment Effect	0.002 (0.043)	0.107** (0.042)	0.041 (0.031)	0.090** (0.026)
High Caste?	0.08 (0.071)		0.064 (0.038)	
From <i>Terai</i> ?		-0.271 (0.058)		-0.004 (0.043)
Interaction Term	0.162** (0.078)	-0.125** (0.051)	0.034 (0.048)	-0.125** (0.059)
p-value, Treatment+Interaction	0.013	0.668	0.050	0.486
Mean, "Yes" control group	0.227	0.302	0.584	0.585
Mean, "No" control group	0.329	0.141	0.645	0.627

Notes: **- indicates significance at the 5 percent level. p-value tests the hypothesis that the treatment effect plus the interaction term are zero. Mean for the "yes" control group is the mean value of the outcome among either the high caste group or among women from the *terai*, whereas the "no" control group are those who are not in the respective groups.

By participation level, the results are quite striking (Table 42). Recall, the interaction terms should be interpreted as additive. The interaction terms suggest that the average treatment effects measured on both literacy and the average math score are both concentrated fully among the high participation groups. While we cannot attribute causality to the coefficients in this table because the control group is not fully comparable to the high participation group, it is at the very least strongly suggestive that higher participation is a necessary condition to positive outcomes. This point is not surprising, but lends credence to the idea that the program is working for those who participate vigorously in it.

Table 42. Regression Coefficients Measuring Difference Between High and Low Participation Groups, Literacy and Numeracy, Nepal Impact Evaluation Data

	Literacy	Avg. Math Score
Treatment Effect	-0.012 (0.041)	-0.002 (0.032)
Interaction with High Participation	0.161*** (0.040)	0.123*** (0.030)

Notes: ***- indicates significance at the 1 percent level.

Entrepreneurship KSAs and Community Involvement

The second set of variables that showed clear impacts were the proximate outcomes related to entrepreneurship variables; therefore the next set of tests focuses on six variables related to learnings about entrepreneurship: whether or not the respondent has heard of business skills, whether they have tried profit/loss calculations; whether they have tried principal and interest calculations; whether they have a loan; whether they have attempted to obtain crop or livestock insurance; and whether they have a savings account in a formal institution (Table 43). Only two p-values suggest potentially significant interactions, which are the ones for younger women and loans, and insurance and women from *terai*. Therefore those two are saved for regression coefficients.

Table 43. p-Values for hypothesis that interaction term is zero, Business Knowledge Indicators, Nepal Endline Impact Evaluation Data

	Heard of Business Skills	Tried Profit Loss Calculations	Tried Principal/ Interest Calculations	Any Loan?	Any insurance?	Savings account in bank?
Young?	0.152	0.239	0.071	0.038	0.988	0.430
High Caste?	0.822	0.280	0.312	0.857	0.603	0.276
From <i>Terai</i> ?	0.567	0.067	0.190	0.240	0.020	0.149

Notes: Table reports p-values for the null hypothesis that $\beta_3 = 0$ in equation (4).

Since there were only two regressions above to consider, it makes sense to potentially combine analysis with intermediate outcome variables related to community involvement, as there are only two that showed relatively strong results. These outcomes are the community decision making participation, and the number of community groups to which household members belong (Table 44). Of the six interactions, the only one significant at the 5 percent level or better is the one among the *terai* for the community participation variable, so that one is held over.

Table 44. p-Values for hypothesis that interaction term is zero, Community Involvement Indicators, Nepal Endline Impact Evaluation Data

	Community Participation Score	Number of groups
Young?	0.623	0.116
High Caste?	0.266	0.824
From <i>Terai</i> ?	0.011	0.141

Notes: Table reports p-values for the null hypothesis that $\beta_3 = 0$ in equation (4).

Examining regression coefficients, it is apparent that treatment effects for loan applications are concentrated among young women, given the positive and statistically significant interaction term in column 1 (Table 45). In column 2, one observes that fewer women from the *terai* are likely to be induced to attempt to buy insurance by participation in the BLP; in fact, the treatment effect is not different from zero, according to the hypothesis test that the treatment effect plus the interaction are zero. Finally, the effectiveness of community group communication also appears substantially smaller in the *terai* (column 3); the coefficient for the treatment effect among hill ethnicities is large, and the additive hypothesis test again suggests that the treatment effect does not exist among women from the *terai*.

Table 45. Heterogeneity of Impacts on Loans, Insurance, and Community Participation, Nepal Endline Impact Evaluation Data

Variable	Any Loan?	Attempt to Buy Insurance?	Community Decision Making Score
	(1)	(2)	(3)
Treatment Effect	0.052 (0.027)	0.125** (0.042)	0.853** (0.163)
Young?	-0.042 (0.028)		
From Terai?		-0.089 (0.037)	-1.239 (0.379)
Interaction Term	0.095** (0.044)	-0.108** (0.044)	-0.628** (0.232)
p-value, Treatment+Interaction	0.003	0.291	0.274
Mean, "Yes" control group	0.107	0.100	4.245
Mean, "No" control group	0.077	0.015	3.159

Notes: **- indicates significance at the 5 percent level. p-value tests the hypothesis that the treatment effect plus the interaction term are zero. Mean for the "yes" control group is the mean value of the outcome among either the younger group of women or among women from the *terai*, whereas the "no" control group are those who are not in the respective groups.

Table 46. Regression Coefficients Measuring Difference Between High and Low Participation Groups, Business Skills, Loans, and Insurance, Nepal Impact Evaluation Data

	Heard of Business Skills	Tried Profit Loss Calculations	Tried Principal/Interest Calculations	Any Loan?	Any insurance?	Savings account in bank?
Treatment Effect	0.244*** (0.032)	0.033 (0.044)	-0.004 (0.049)	0.074*** (0.029)	0.061 (0.037)	0.031 (0.044)
Interaction w High Part.	0.208*** (0.048)	0.115* (0.060)	0.128*** (0.039)	0.032 (0.032)	0.070** (0.033)	0.166*** (0.047)

Notes: *- indicates significance at the 10 percent level; **- indicates significance at the 5 percent level; and ***- indicates significance at the 1 percent level.

The results for the difference in participation levels differ from those related to literacy and math skills (Table 46); here, there are obviously some impacts that occur among the entire treatment group regardless of participation level, whereas others are concentrated among the high participation group. The treatment effect for whether respondents had heard of business skills or had taken any loans or not, respectively, both have significant coefficients without the high participation interaction, suggesting that the impacts were widespread, even among those with low participation. For hearing of business skills, the coefficients do indicate the high participation individuals were more likely to report having heard of them.

Coefficient estimates for the other four variables suggest other impacts were concentrated among higher participant individuals. For the first two, whether they had tried profit/loss or principal/interest calculations, the results are sensible as higher participation might have been necessary to get over any fears of attempting such calculations. High participation individuals might also just understand insurance

better, making them more likely to seek it for crops or animals. The latter two results also suggest that insurance and savings accounts, to the extent that they were established, were also established among higher participation individuals. Note once again that encouraging savings in general, either through groups or more formal accounts, was a goal of KISAN. This point makes the latter result intriguing, as there is then some concern that KISAN could have also affected this outcome; however, now it becomes clear that high participation in the BLP is also highly correlated with increased propensity to have savings accounts. There could be two explanations for this slight puzzle. First, high participation in the BLP might also be correlated with high participation in KISAN, and only high participation KISAN individuals ended up with formal bank accounts (recall, they were not universal at endline among participants). Second, it could be that high BLP participation did lead to additional sign up for formal savings accounts, while low participation did not; although this possibility still should not be interpreted as causal.

Last, equation (2) is re-estimated with community participation and the number of group memberships as outcomes (Table 47). The first column illustrates that gains in the index for community participation are clearly concentrated among high participation individuals. However, all BLP participants appear to increase the number of community groups in which they participate; the increase is slightly higher among the high participation individuals.

Table 47. Regression Coefficients Measuring Difference Between High and Low Participation Groups, Community Participation Score and Number of Groups, Nepal Impact Evaluation Data

	Community Participation Score	Number of Groups
Treatment Effect	0.156 (0.202)	0.366*** (0.120)
Interaction with High Participation	1.024*** (0.300)	0.429*** (0.126)

Notes: ***- indicates significance at the 1 percent level.

Knowledge and Use of Life Skills

A final set of outcomes on which it is worthwhile doing heterogeneity checks is on variables related to life skills. There are eleven dependent variables for which generating test statistics is sensible: first, for whether or not individuals have heard of life skills, and then for each of the five life skills that were enumerated, whether or not respondents had heard of that specific life skill, and then whether or not it had improved over the past two years. In general, many of these interactions are not statistically significant at the 5 percent level or better (Table 48). In fact, the only three variables significant at better than the 5 percent level; two are among younger women, for whether they have heard of self—awareness and improved self-awareness. The p-value for women from *terai* groups is also below 0.01 for improving self-awareness. Finally, the p-value for whether or not younger women have heard of life skills at all is nearly 0.05, so regression results are presented on the latter variable as well, and for consistency, coefficients for all three variables among younger women and for women from the *terai* groups are shown.

Table 48. p-Values for hypothesis that interaction term is zero, Life Skills Indicators, Nepal Endline Impact Evaluation Data

	Heard of Life Skills?	Heard of ...				
		Self-Awareness	Effective Communication	Facing Stressful Situations	Decision Making Capacity	Capacity to Solve Problems
Young?	0.051	0.004	0.392	0.447	0.418	0.235
High Caste?	0.986	0.593	0.078	0.055	0.288	0.399
From Terai?	0.987	0.300	0.166	0.125	0.529	0.334
Life Skill improved in past 2 years?						
Young?		0.001	0.243	0.414	0.434	0.264
High Caste?		0.613	0.112	0.071	0.640	0.086
From Terai?		0.009	0.573	0.646	0.365	0.843

Notes: Table reports p-values for the null hypothesis that $\beta_3 = 0$ in equation (4).

The regression results suggest that life skills effects of the BLP were concentrated, at least narrowly, among younger women (Table 49). The results suggest larger treatment effects for all three variables among younger women than older women; the point estimates suggest they are between 9 and 13 percentage points higher. Meanwhile, improved self-awareness is also apparent among women from the *terai* groups even relative to other participant women; this coefficient suggests women from the *terai* were 15 percentage points more likely than women from the hills to state they thought their self-awareness had improved.

Table 49. Heterogeneity of Impacts on Selected Variables Related to Life Skills, Nepal Endline Impact Evaluation Data

Variable	Heard of Life Skills?		Heard of Self-Awareness?		Improved Self-Awareness?	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment Effect	0.483** (0.042)	0.517** (0.046)	0.394** (0.038)	0.426** (0.044)	0.304** (0.041)	0.311** (0.042)
Young?	0.008 (0.021)		0.002 (0.025)		0.002 (0.019)	
From <i>Terai</i> ?		0.014 (0.020)		0.019 (0.030)		0.008 (0.022)
Interaction Term	0.091** (0.045)	-0.001 (0.051)	0.133** (0.042)	0.063 (0.060)	0.127** (0.033)	0.152** (0.054)
p-value, Treatment+Interaction	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mean, "Yes" control group	0.030	0.034	0.060	0.056	0.033	0.034
Mean, "No" control group	0.053	0.053	0.074	0.087	0.046	0.049

Notes: ** - indicates significance at the 5 percent level. P-value tests the hypothesis that the treatment effect plus the interaction term are zero. Mean for the "yes" control group is the mean value of the outcome among either younger group of women or the *Terai* ethnicities, whereas the "no" control group are those who are not in the respective groups.

Finally, we again measure coefficients for high and low participation using all the life skills indicators as above (Table 50). Every single one of the coefficients in the table is positive and statistically different

from zero, suggesting that the BLP had impacts on both high and low participation groups, but impacts were larger on the high participant groups. Given that life skills are a focus throughout the curriculum, even those who did not participate much may have caught on about the life skills taught in the program. However, such lessons were apparently even more effective among those who participated more fully.

Table 50. Regression Coefficients Measuring Difference Between High and Low Participation Groups, Life Skills Indicators, Nepal Endline Impact Evaluation Data

	Heard of Life Skills?	Heard of ...				
		Self- Awareness	Effective Communi- cation	Facing Stressful Situations	Decision Making Capacity	Capacity to Solve Problems
Treatment Effect	0.379*** (0.038)	0.297*** (0.041)	0.188*** (0.037)	0.210*** (0.042)	0.284*** (0.035)	0.238*** (0.048)
Interaction w High Part.	0.289*** (0.057)	0.308*** (0.048)	0.232*** (0.044)	0.265*** (0.042)	0.311*** (0.045)	0.252*** (0.049)
Life Skill improved in past 2 years?						
Treatment Effect		0.221*** (0.039)	0.116*** (0.033)	0.146*** (0.039)	0.218*** (0.034)	0.182*** (0.042)
Interaction w High Part.		0.274*** (0.055)	0.227*** (0.041)	0.232*** (0.050)	0.285*** (0.049)	0.215*** (0.055)

Notes: ***- indicates significance at the 1 percent level.

Summary, Heterogeneity

The heterogeneity analysis includes interesting results, both from the perspective of what is not found, and from the perspective of what is found. In general, there is very little evidence that caste plays a role in enhancing or hindering treatment effects. The only exception is on the literacy indicator; the program may have been particularly effective at targeting illiterate high caste women; alternatively, literate high caste women may have seen no need to participate.

More interesting findings relate to the other three variables used in analysis; which are women who were younger than 40 years old at baseline and women who are from *terai* groups, all of whom live in Kapilvastu. Among younger women, evidence suggests treatment effects are larger in magnitude for taking loans, but perhaps most interestingly for knowing about life skills, and for both knowing about and improving self-awareness. In other words, it appears the learnings about life skills were stronger among younger women (but still exist among older women as well).

The heterogeneity between the hills and *terai* groups also reveals some interesting differences. First, the literacy and numeracy effects are totally concentrated among women from the hills. From a program perspective, this point is quite important, as it demonstrates localized differences in effectiveness exist immediately with primary outputs of the BLP. Unfortunately, because the impact evaluation was concentrated in the western region of Nepal, the heterogeneity in results between the hills and *terai* could also differ in the mid-west region or the far western region. Second, in the *terai* the BLP appears to have had less impact on effective communication with community groups than in the hills; it could be that group cohesion is lower among households in the *terai*, which tend to be larger.

Finally, results are estimated by participation level, necessarily using a different estimation procedure, because it is not possible to differentiate women who would have participated more in the control group from other women. As such, it is not possible to attribute the coefficient estimates on the interaction between the treatment and measured high participation as an addition due to high participation in the BLP itself; the coefficient estimates also represent factors that might lead women to participate more fully. Nonetheless, some treatment effects (e.g. literacy and numeracy) can wholly be attributed to high participation in the BLP, since the basic treatment effect estimates (or for those participating less frequently) are not statistically different from zero. Other variables—notably, those related to life skills—were affected for all participants, but impacts appear to have been higher among those who participated more regularly.

Conclusions

The impact estimation results demonstrate several relatively clear impact areas taking place at various points along the results chain. The BLP clearly had impacts on literacy and numeracy among participants, and there are clearly some impacts among proximate outcomes related to entrepreneurial KSAs. It is more difficult from this impact evaluation to tell whether there were impacts on self-efficacy, in part due to the fairly large differences already found at baseline; whereas the endline methods used are able to control for differences in observable characteristics between the BLP and comparison groups, when difference-in-difference estimation is conducted the impacts found at endline alone necessarily disappear.

Turning to intermediate outcomes, there are again relatively clear impacts on community involvement and access to formal financial products. The BLP also had large impacts on the knowledge of and comfort using life skills. Learning about entrepreneurship in general and the use of profit/loss computations, to better plan businesses, can be attributed to the BLP as well.

Before discussing some further lessons from the overall impact evaluation, it is worth reiterating some cautions about interpreting the quantitative impact estimates. Recall that although applying the propensity score weights did balance mean values of observable variables between the BLP participant group and the comparison group. However, that does not mean that the propensity score weighting necessarily balances all unobservable variables. Since BLP participants made a choice to participate, there could still be unobservables that remain unaccounted for in the analysis. If so, then quantitative impacts may be overstated.

Second, it is worth reiterating the challenges presented by the survey timing. The baseline survey took place well after the BLP had begun; therefore, some impacts may have already taken place. For example, the literacy and numeracy module had been covered; it and the following module (nutrition) used examples that could have also led to increases among other outcome measures along the results chain. This point should lead to skepticism regarding some of the difference-in-difference results. Second, the endline took place over two years after the program ended; a more ideal time would have been to do the endline immediately after the program's end. As such, some people may have forgotten what they learned, reducing measured BLP impacts; some of the difference-in-difference results may be affected by memory loss, though it is difficult to know which ones.

It is unfortunately not possible to put numbers on either of these effects. In other words, it is impossible to know how large the positive effect from any unobservables it was impossible to control for, relative to any negative effect on outcomes due to memory loss. Instead, it is important to keep them in mind to qualify the findings otherwise listed here. With these caveats, it is worth reiterating that most of the highlighted impacts above are quite large in magnitude and therefore it seems clear these impacts can be attributed to the BLP.

A third challenge relates to the fact that a large proportion of BLP participants also participated in KISAN, whereas few of the comparison group households participated in KISAN. As a result, one could imagine that complementarities between KISAN programming and the BLP may have led to some of the results. This point might ring the most true for variables such as access to a formal savings account, which was emphasized by KISAN; one could imagine that entrepreneurship around agriculture could have been facilitated by KISAN programming around extension during its earlier phase or for groups that were farther from commercialization in the second phase..

Now that caveats have been discussed, recall that many of the quantitative outcomes are closely linked to programming from the BLP, and backed up by memories that were shared in the qualitative work. Therefore, outputs are a fairly clear result of the BLP itself, and changes in entrepreneurial KSAs and community involvement also seem to be clearly results of the BLP. Other results, such as increased incidence of cash cropping (and higher farm microenterprise income) would also appear to be a result of the BLP, based on again on the combined mixed methods results.

Second, it is worth again pointing out that the average treatment effects on the treated that are reported here are an average over both a group of BLP participants who clearly participated in an intense way and a fairly sizeable proportion of respondents who participated much less. In other words, there is a second layer of self-selection into participation; as illustrated in the subsection on heterogeneity, some treatment effects were completely concentrated among high participation individuals, whereas others were spread across both heavier and lighter participants, usually with larger impacts among higher participation individuals.

Evaluation Questions

The first evaluation question asked, “To what extent and under what conditions does program exposure change individual (or household) KSAs and behaviors toward increased engagement in community and market-oriented decisions and market-oriented behaviors?” The evaluation clearly demonstrates that there is higher community involvement among BLP participants; it is somewhat less clear that there are more market-oriented decisions and behaviors. The largest measured changes come among the measures of life skills, which are not necessarily market oriented. That said, the qualitative results show that the program exposure itself appears to have led to the changes in community involvement, with increased camaraderie among beneficiaries developing where the program worked well. It clearly shows that the benefits of the BLP accrue somewhat more to the young and those outside the *terai* as well; the latter might deserve further study in the current iteration of the BLP as part of KISAN II.

The second evaluation question asks, “To what extent and under what conditions are impacts sustained or persistent over time, two years following completion of the course?” The evaluation clearly shows some impacts are present, and all those that have been discussed (literacy and numeracy, entrepreneurial KSAs, life skills, community involvement) clearly had to persist over time to be present two years later. It is not as clear for concepts such as self-efficacy, where large differences were already measured at baseline between the BLP and comparison groups.

It is also worth considering the questions related to the Feed the Future Learning Agenda. The results in this report are at least suggestive that intensive trainings for women, as in the BLP, can help improve womens’ status with regards to concepts required for additional financial empowerment in microenterprises, if not quite showing that there are clear impacts on agricultural microenterprise profits for women. Second, if one considers the BLP as a cross-market function, this report provides evidence that such intensive trainings can help participants engage in additional market-based activities that could strengthen market systems. One cannot say the evidence in that regard is fully conclusive,

but it is at least suggestive.

Results Chain

Before moving to recommendations, it is worth thinking critically about the results chain or the theory of change underlying the evaluation. In Figure 11, the results chain is repeated, with the following color coding—when the impact evaluation strongly suggests that the result was attained, the triangle is blue; when there is some question over whether it was attained, it is grey; and when there is really no evidence, it is white. As discussed throughout this section, the impact evaluation finds support that some of the steps along the result chain occurred, but there is not strong evidence that all steps occurred; for example, self-efficacy may have improved, but there were differences at baseline between groups that persist by endline. There is only somewhat weak evidence of sustained engagement in microenterprises, and there it is really only agricultural ones (and not livestock holdings).

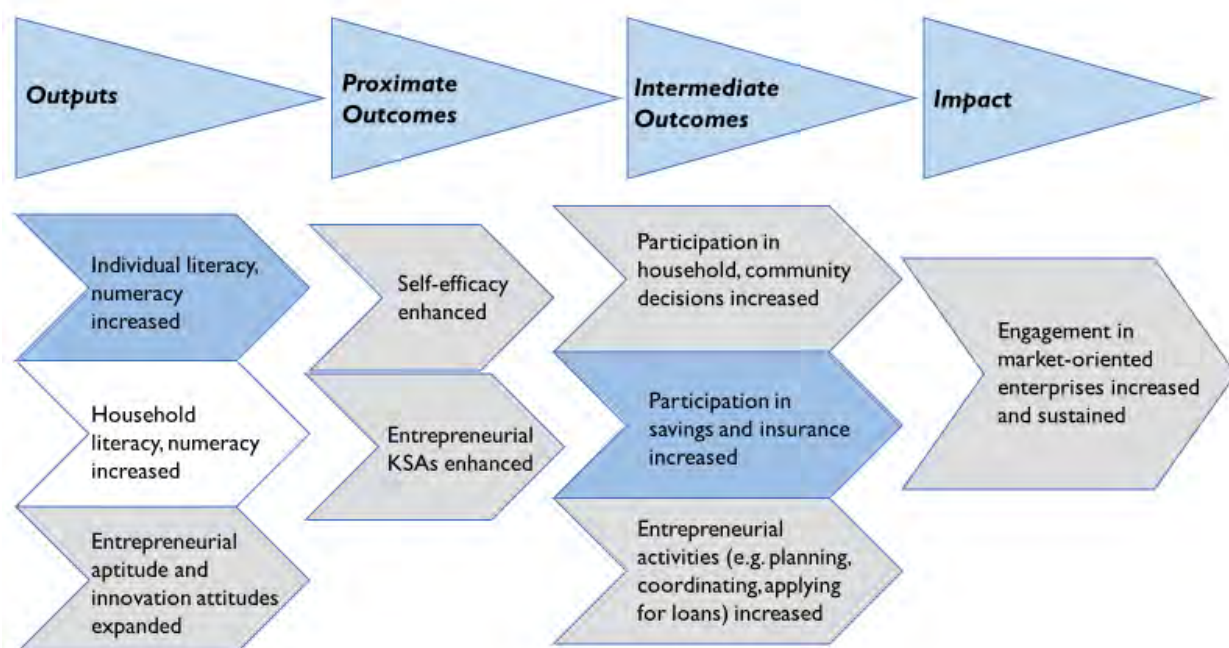


Figure 11. Results Chain, Color Coded for Level of Evidence

Although there is clear progress along the results chain, it is not entirely clear, either from the baseline report or project documents, how some of the linkages within the results chain are supposed to occur. For example, it is not entirely clear why it is necessary for self-efficacy to be enhanced before participation in the formal financial sector would increase (an intermediate outcome); it would seem that a better understanding of the products combined with agency within the household to either look into such products or to actually obtain such products would be more important factors. Moreover, the concept of life skills, which is quite central to the modules taught by the BLP, is conspicuously absent from the results chain.

Some concepts within the results chain are necessarily not well (quantitatively) defined, but could use refinement within the context of the overall programming. For example, within the context of the BLP, it seems apparent that the focus is on agricultural microenterprises, rather than microenterprises more broadly defined; this point is evident both from the results presented and from KIs with trainers who started agricultural microenterprises. Additionally, both life skills and the module on nutrition and

healthy eating should be integrated into the results chain. It would seem useful to be more precise in defining both outputs and outcomes expected from the BLP.

As a result, it would be quite useful to the current BLP, being implemented within KISAN 2, to do some careful thought about what is being assumed from one step to another within this (or a modified) results chain, to be able to test those assumptions more carefully. For example, the evaluation implicitly assumes that improved numeracy allows respondents to better think about profits and losses (an intermediate outcome), but not necessarily principal and interest calculations. So the assumption is that if numeracy increases, it is more simple numeracy (addition and subtraction) rather than more complicated numeracy (amortizing loans). And it is assumed that the simple numeracy allows one to then do those calculations and make better decisions about what to grow; of course, it is also an assumption that, for example horticultural enterprises would make more money than continuing to grow, for example, staple crops exclusively. It is also an implicit assumption that the net benefits to running a business for the household exceed those of sending out a migrant and using remittances for consumption; the latter assumption likely needs more thought in particular. And lastly, it is important to consider what aspects of KISAN 2 complement the BLP and might lead to improved impacts, and which potential impacts of the BLP might actually be impacts of KISAN 2 instead. Given the market systems structure of KISAN 2, the latter point might not be too problematic.

Recommendations

This report clearly documents impacts on numeracy skills, life skills, community involvement, links to the formal financial sector, and provides some evidence related to the expansion of agricultural enterprises. Evidence is weaker on other points of the results chain, though there are indicators that appear positive throughout the results chain. It is fair to conclude that the BLP leads to positive and important impacts, and they are clearly sustained more than two years after the program ended. The positive impacts of the BLP, the fact they are sustained, and the point that it specifically targeted a relatively vulnerable group within KISAN beneficiaries, strongly suggest continuing the BLP or programming like it.

The further recommendations then are grouped into two classes. The first group relate to ways to use the BLP in future programming, considering some of the findings here. A second group relate to the way to use evaluation in the future to sharpen the understanding of impacts.

Using the Business Literacy Program

Taking the impact estimates at face value, as discussed above there is good reason to continue using programming like the BLP in the future. After all, there appear to be benefits in terms of literacy and numeracy, life skills, community participation, and linkages to the formal financial sector; there may be improvements in the expansion of agricultural enterprises as well, though that evidence is weak. From our perspective, then, is how the BLP should or could be modified to enhance its impacts.

The qualitative interviews asked quite a bit about such improvements, but suggestions focus on what could be called “skill based training.” Skill based training can be defined to include activities like making candles or incense sticks. To the extent that Nepal has a vibrant tourist base visiting rural areas for trekking, or that such a tourist base will return post-COVID pandemic, there is some merit to the idea of developing more skills based training. However, on the other hand it seems beyond the scope of a donor funded project such as the BLP, and gains from that type of program would be likely limited by what economists call general equilibrium effects; if more craft goods were available, the prices would likely fall in equilibrium, which would in turn make the value of investments decline.

There are two clear directions in which one can envision the BLP turning from these results. The first way is to embrace the fact that it is a literacy and community building program, and to reduce the emphasis on starting businesses. The results suggest the BLP is very good at producing those outcomes, and in Nepal (as in virtually every country now) older people are in more need of literacy programs than younger people, who have almost always attended substantially more school. One could envision turning the BLP into a program substantially focused on adult literacy and community building, to enhance the value of other projects with which it is partnered.²³ The “rate of return” to that type of success might be harder to measure, but given demographic changes in rural Nepal caused by migration, increased adult literacy among older residents might have some substantial social value in the relatively near future. Moreover, the more that cell phones are used in rural Nepal, the more use there is for adult literacy and numeracy skills.

On the other hand, the BLP could be pivoted to really try to catalyze increased business activity. The literacy could be de-emphasized and trying to help participants generate ideas about businesses could be even further emphasized. In this case, the targeting should shift younger; younger people would be more likely to try new things; there is some evidence of this point in the heterogeneity analysis. However, it is important to geographically target such an intervention carefully. Two types of regions might be unsuccessful with a heavier business emphasis: high migration areas and areas more distant from district capitals or other population centers. In high migration areas, the potential returns to labor in migration might simply be too high to lead people to want to invest in microenterprises. More distant places will also have lower returns to many agribusinesses, as high return perishable items will necessarily have higher transaction costs to get them to markets.

Third, a more recent addition to the BLP has been trainings on nutrition. This angle is promising and could fit with either a restructuring as more of a literacy program or in the context of promoting more entrepreneurship among the young. In the former case, nutrition can be added as a topic to learn about; in the latter case, the “business case” for producing healthier foods can be considered (it is healthier but carries more risks inherently to produce crops that easily spoil like fruits and vegetables).

Pre-COVID, it seemed to the research team that the former goal (broader literacy among older residents) made sense. Nepal has become an economy dependent on migrant remittances from abroad; as a result, the logic goes, business opportunities in rural areas are inherently not very growth oriented if the rural population will continue to fall due to rural-urban and international migration. However, now that migrant remittances are drying up and presumably migrants are returning home (since the pandemic began), more business trainings might be valuable to raise incomes in the near term (assuming people take them up) and there is an opportunity for rural entrepreneurship to potentially flourish. The world economy will not return to normal any time soon (it will take years), and programs like the BLP, or one that is really targeted at young adults, could potentially help foster a healthier post-COVID rural economy in Nepal. Therefore, the main recommendation would now be to try to really emphasize targeting younger women in places with seeming opportunities for more business activities (e.g. where transaction costs would not hinder business opportunities in agriculture getting food to larger markets).

Recommendations Related to Evaluation

There are at least three recommendations that the IE team would like to bring up in the context of the

²³ This constraint might not be such an issue in a project such as KISAN 2 which is operating from a market systems perspective, implying that any village beneficiaries tend to be indirect.

BLP evaluation. The first relates to measurement issues that come up as a result of this evaluation; the second relates to timing; and the third relates to nutrition.

First, there were several concepts that were difficult to measure in the project results chain, but the two that are perhaps most important are self-efficacy and life skills. In the case of self-efficacy, the measures used appear to the IE team to be somewhat *ad hoc* or experimental, the questions were difficult to answer for many respondents, and needed additional work to be validated. Similarly, the life skills questions were modified for the endline and were simpler to use than the questions at baseline; the IE team is confident that those questions worked well but validation would also help their usefulness in the future. In both cases, to the extent that USAID would want to continue to use them, it might be worthwhile putting resources into finding experts to help develop validated measures that could be applied across countries.

Moreover, it would be worthwhile considering strengthening the theory of change or results chains. It is important to understand the implicit assumptions necessary to get from one step in a theory of change to the next level; in this impact evaluation, there are some “leaps of faith” between levels. For example, it is not clear what the assumptions are that lead one from improved self-efficacy to then deciding to open a savings account or find crop insurance. Spelling out these assumptions can help project staff understand what needs to happen to attain pieces of the theory of change, and can help evaluators design surveys (or qualitative interview guides) to see if those assumptions were met.

Second, it is worth again noting that the timing of this evaluation was not ideal. The baseline timing could not be helped, but more learning could have been possible if the endline had taken place closer to the end of the project (or perhaps better, a second endline was completed when the 2019 endline took place). It is almost certainly a credit to the BLP that their lessons continue to resonate so strongly among the BLP participant group that so many respondents recalled so many of their messages.

That said, it would have clearly been useful to add measures of nutrition knowledge and perhaps behavior to the endline survey. Nutrition was not part of the results chain, and with an already full survey form, the team did not consider adding questions on nutrition knowledge or behavior change. Not doing so was an oversight. Although the BLP nutrition module was short relative to others, the nutrition messages clearly resonated with respondents in the FGDs and KIIs, and it would have been helpful to include some measures of nutrition knowledge. It is fairly clear from other research that intensive nutrition trainings are potentially more effective at changing both knowledge and behavior; this nascent literature really requires more input, however, and ideally future evaluations of the BLP or similar programs that include intensive nutrition modules can help add to it.

ANNEXES

ANNEX I: EVALUATION STATEMENT OF WORK

The goal of USAID's FTF strategy in Nepal is to sustainably reduce poverty and hunger by accelerating inclusive agriculture sector growth, increasing agriculture-based incomes, and improving nutritional status, especially of women and children. With an emphasis on agriculture as the driver of food security and economic growth, it is important to develop effective and sustainable interventions, and accurately account for results and impacts.

Between 2012 and 2017, the KISAN activity operated in 20 districts, reaching more than 100,000 households in Nepal's the zone of influence (ZOI). The overall goal of KISAN was to sustainably reduce poverty and hunger in Nepal by achieving inclusive growth in the agriculture sector, increasing income of farm families and improving the participation of the private sector in promoting agriculture growth. The BLP intervention was a separate contract in the same ZOI from 2015 to 2017, which reached a subset of KISAN beneficiaries - a total of 48,000 people from vulnerable groups and communities, including women, youth, ethnic and religious minorities, and traditionally disadvantaged castes. BLP's primary objective was to increase resilience through delivering training that enhances literacy, numeracy, and business/entrepreneurial skills among vulnerable households and communities. The activity provided a 12-month training program to individuals, comprised of five modules: Literacy/Numeracy (four months); Nutrition (one month); Life Skills (two months); Entrepreneurship (four months); and Access to Finance (one month). The first phase began in 2014 in 10 districts of Mid-Western Development Region; the second phase was in 10 districts of Western and Far-Western Development Region from 2015. BLP completed all activities by early 2017. Beginning in August 2017, USAID is supporting a second phase of KISAN, in which business literacy is one component, rather than a stand-alone contract.

Quantitative Baseline Evaluation

The initial component of the impact evaluation included a quantitative survey completed in January and February of 2016 among 1307 women of 50 enumeration areas (EAs) in the four Western districts in the Feed the Future Intervention Zone in Nepal. The treatment group included 637 respondents, and the comparison group included 670 respondents. The endline impact evaluation will re-interview the baseline respondents to get panel data from both treatment and control groups.

The treatment and comparison groups were selected as follows. Participants were enrolled in the BL component of KISAN in August-September of 2015. First, the evaluation team received information about the locations of BL classes and enrollment. The 50 EAs were then selected randomly among wards on that list with at least one BL class. 16 women were selected from each list of BL participants randomly, and then the control group was selected from among nonparticipants who were within the same EAs who had similar age and literacy levels as the participants (e.g. 15 to 59 year old women who were either illiterate or barely literate).

FTF FEEDBACK developed the quantitative survey instrument and qualitative question guides, collaborating with local data collection partner, New ERA, to refine all data collection tools and approaches for the local context in Western Region enumeration areas (EAs). The baseline

survey included the following relevant modules:

Module C. Household Roster and Demographics;
Module D. Self-Efficacy in Business Literacy Topics;
Module E. Program Participation and Business Literacy Learning; and
Module F. Household Resources and Production.

Data were collected after the first BL module was completed, covering Literacy and Numeracy, and before the last three BL modules were covered on Life Skills, Entrepreneurial Skills, and Access to Finance. As a result, there should be more changes in knowledge related to the latter three BL modules assuming that women went to trainings, whereas we should not necessarily assume any further changes in literacy or numeracy due to participant in the BL modules.

In sum, then, one would expect that any changes in the treatment group found from a second round of data collection would be concentrated on:

- KSA changes related to the content of the latter three modules;
- the reinforcement of messages and KSA from the first BL modules;
- behavior changes reflecting the proximate and intermediate outcomes in the treatment group as laid out in the program's theory of change, including entrepreneurial skills, and participation in decision-making and savings and loans.

A. Description of the Problem, Development Hypothesis(es), and Theory of Change

FTF emphasizes agriculture and its market system as the driver of food security and economic growth, yet many groups of people are excluded from entering the agriculture market system because they lack specific skills, confidence or face systemic barriers. The BLP targets those excluded groups, with a specific set of skills that reduce barriers to entry into the agriculture sector. Training in literacy, numeracy, and entrepreneurship among the most disadvantaged people was delivered to increase their capacities to engage more effectively in household decisions and in their communities so that they can take better advantage of opportunities promoted through Feed the Future. Strengthening skills and entrepreneurial capacities should, for example, help households and communities that might not otherwise feel empowered to participate in and benefit from exposure and access to KISAN and other Feed the Future livelihoods activities.

The results chain below is adopted from the baseline report (Figure 1). The main outputs include increases in literacy and numeracy, expanded entrepreneurial aptitude and innovation attitudes, and then enhanced self-efficacy and entrepreneurial KSAs. Intermediate outcomes include more participation in household and community decisions and savings and insurance, and then increased entrepreneurial activities, defined as planning, coordinating, and applying for loans. The combination of these outputs and outcomes should lead to increased engagement in market oriented enterprises by the targeted vulnerable groups.

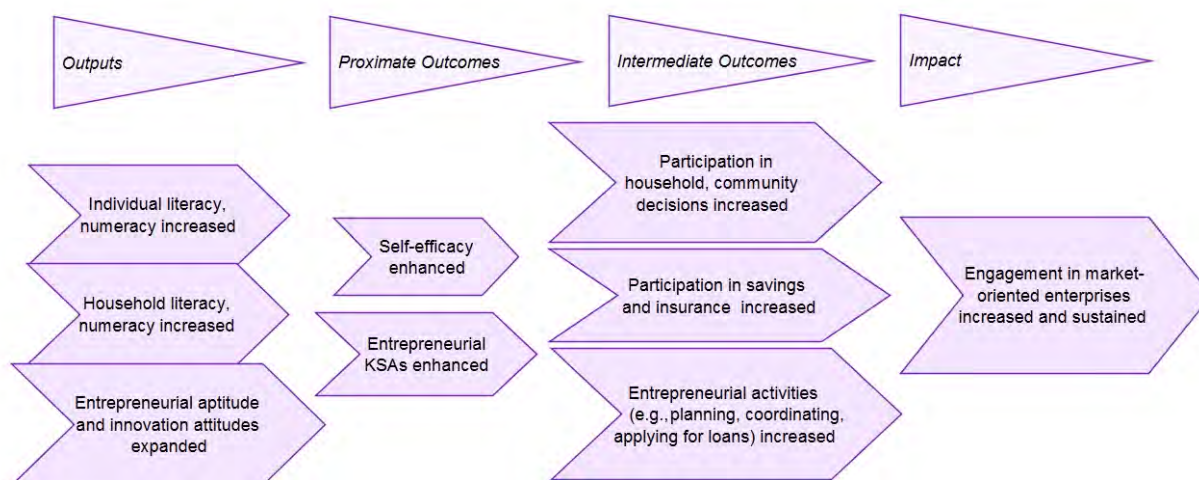


Figure A.1. Business Literacy Program Results Chain

The BLP results chain includes self-efficacy as a proximate outcome, which program theory predicts will increase measurably through the course of the training program. Program theory also predicts greater self-efficacy will increase training benefits such as learning new skills, adopting entrepreneurial attitudes, and initiating new behavior toward establishing alternate or additional small commercial activities. Through training effects on self-efficacy, in other words, participants in the BL experience are expected to become more willing and able to exercise their new knowledge and skills, to overcome the challenges of starting and managing production for market or other business ventures.

According to USAID, resilience is defined as “the ability of people, households, communities, countries and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth” (USAID, 2012). While it is not included in the BLP theory of change, recent literature suggests that empowerment also contributes to household resilience. Furthermore, data from Nepal suggests that access to markets, savings and assets all provide strategies to overcome shocks, and contribute to resilience capacities and the ability of households to recover from shocks. With this in mind, we anticipate the findings will lead to a better understanding of how to empower women to engage in the market, and with financial skills, increase savings and accumulate assets in order to prepare for and recover from shocks.

B. Summary Activity to be evaluated

This impact evaluation specifically assesses the role of business literacy as a suite of trainings delivered to KISAN households on the behaviors and attitudes related to agriculture market systems. Participation in KISAN activities requires residence in a ZOI Village District Committee (VDC) or municipality selected for KISAN activities based on program criteria such as access to land and/or proximity to roads for market access, or included after consultation with district-level officials. At least one individual from an eligible household must self-select into KISAN participation based on interest in and commitment to community activities.

Business Literacy targeted vulnerable groups, which included: disadvantaged castes or ethnic groups, women, and youth. In the context of community meetings in KISAN VDCs and municipalities, one person per qualifying KISAN household may self-select into Business Literacy training as long as he or she meets additional criteria, such as being illiterate/neoliterate/ school dropout by class 5; having interest in income-generating activities; and being able to commit the time required for the full duration of the training schedule.

Business Literacy offered its training in five modules over 12 months to participant groups. Trainings were led by community trainers, who have in turn been trained by Business Literacy master trainers. The training was implemented in 20 districts over two years: (a) the ten ZOI districts in the Mid-Western Region over 12 months beginning in 2015; and (b) the same training modules delivered in the ten ZOI districts in the Western and Far-Western Regions beginning around November 2015. The training course is designed for delivery in two-hour sessions, six days per week, each week. Module topics are: Literacy/Numeracy, four months; Nutrition, one month; Life Skills, two months; Entrepreneurship, four months; and Access to Finance, one month.

C. Secondary documents

The baseline for the BLP IE will be available, including concept notes and planning documents for the team managing endline data collection and analysis.

The materials will include:

1. Impact Evaluation original concept note (at baseline)
2. Data collection plan
3. Baseline Survey Instruments and protocol
4. Baseline Codebook
5. Baseline Data (in CSV, SAS, SPSS and STATA formats)
6. Final Report for Baseline
7. Final Report for BLP Implementation
8. BLP MEL Plan, and monitoring data

III. EVALUATION QUESTIONS

The Nepal BL IE is designed to investigate initial and longer-term or persistent impacts of the training experience on targeted aspects of beneficiaries' knowledge, skills, and attitudes (KSA), and behaviors. USAID/Nepal is also interested in whether and to what extent the BL training experience leads to adoption of targeted behaviors, such as starting new micro enterprises, that persist over time. The impact evaluation will respond to the following questions:

1. To what extent and under what conditions does program exposure change individual (or household) KSAs and behaviors toward increased engagement in community and market-oriented decisions and market-oriented behaviors?
2. To what extent and under what conditions are impacts sustained or persistent over time, up to one year following completion of the course?

IV. EVALUATION DESIGN AND METHODOLOGY

Random assignment was not feasible in the Nepal Literacy IE for several reasons. Most importantly, the program was designed to reach all potential participants in the targeted areas. With respect to establishing robust or useful comparison groups outside KISAN areas, KISAN areas differ systematically from non-KISAN areas based on the criteria for selection, and KISAN households also differ systematically from non-KISAN households on the basis of self-selection. Business Literacy criteria and individual self-selection among and within KISAN households creates an additional level of systematic differentiation between the training participants and any outside population.

Studying this self-selection process is important to understanding who selects into KISAN and Business Literacy programs. FTF FEEDBACK quantitative data collection for this IE was designed to capture enough non-participants for potential comparison with participants in KISAN and Business Literacy using Propensity Score Matching (PSM).

The BL interventions ended in February 2017, and therefore the evaluation methodology should consider how the design will account for other interventions, or any spillover effects within control group households after the end of BLP.

It is anticipated that the endline survey will be conducted with the same households who participated in the baseline survey. The evaluation team should discuss the limitations associated with attrition and non-response rate per the originally sampled group. There should be a plan to overcome this limitation in the work plan.

Appropriate methods should be used for repeated measures over the three year time span to assess changes in the sampled population, with comparisons between BLP and non-BLP households. Data collection from those who previously participated in training or capacity development interventions, any length of time after training ends offers significant learning about transformative or sustained impact of those interventions. Accordingly, this IE includes systematic data collection on training-related behaviors, attitudes, and activities not only among the BL class participants and Comparison group respondents, but also among the community trainers delivering the BL course.

Central to the BL program and IE research questions is the concept of self-efficacy, a blend of competence and confidence that facilitates learning, initiative, and innovation. Self-efficacy is experience-based and contextually specific, capturing the individual's interpretation of past events and perceived sense of control or ability to influence current situations and their future outcomes through his or her actions. The concept has been applied in numerous realms from trauma and phobias to childhood education, to disaster recovery, to entrepreneurship. The IE design uses rigorous comparison to assess both immediate post-training effects on self-efficacy, more systematically and comprehensively than the M&E indicator, and persistent effects, up to two years later, on measured self-efficacy and behavior changes associated with participant and household factors and participation in BL training. It is expected that these measures of empowerment also contribute to resilience and the household's ability to recover from shocks

and withstand stressors. Any additional analysis that can link empowerment to resilience, using data from this study, should be included to the extent possible in both quantitative and qualitative approaches.

Baseline Sample Selection Approach

The baseline sample was selected from the four Western districts (Arghakhanchi, Gulmi, Kapilvastu and Palpa) with a two-stage design for the BL and Comparison groups. Through USAID/Nepal, the program provided information on class locations (November 2015) and enrollment (December 2015). In the first stage, 50 enumeration areas (EAs) were selected randomly among wards in BL VDCs with at least one BL training class.

Program enrollment data included sex and age, with approximately 87 percent of the BL group participants identified as female in the class listings. BL sampling proceeded from the listings, and in the second stage, 16 women were randomly chosen in each selected EA. Criteria for selection into the BL sample were as noted above: enrollees listed as female between the ages of 15 and 59, inclusive. Low literacy levels were assumed as part of the BL enrollment criteria.

For the Comparison group sample, the contractor first conducted a household listing in the EAs selected in the first stage (December 2015-January 2016), identifying BL and non-BL households in the field. The Comparison group sample consisted of 24 to 33 randomly selected non-BL households. Survey data collection procedures assessed each non-BL household for the presence of at least one eligible Comparison group respondent using household roster (Module C) information for reported sex, age, and literacy level. Eligibility for Comparison group respondents was the same as for BL participation: women aged 15 to 59 with low levels of literacy, or illiterate. Men were not included as Comparison group respondents because men were not in the sample of BL participants for the survey. The tablet data entry system randomly selected one Comparison group respondent per non-BL household if more than one person met eligibility criteria. No substitutions were allowed.

Sample Weights

Data required for statistical weighting of survey data were collected throughout the sampling process. These data included, but were not limited to: (1) total number of EAs and number of selected EAs in the IE ZOI, (2) number of households in selected EAs at the time of listing, and (3) response rates at the household and individual (women) levels.

Computations based on the survey sample were weighted so that the results accurately reflect the proportions of the sampled elements within the overall sample frame of the population in the ZOI. Appendix A provides details of methods used to compute these weights.

Statistical Methods for Quantitative data

The BL program was not randomly allocated to specific groups; therefore, contractors should use matching methods to estimate impacts.

Qualitative information

In addition to the quantitative survey data, the IE will include qualitative data collected from sampled sites. The qualitative component will increase our understanding of reasons and factors influencing greater or lesser change in attitudes, intentions, and behaviors across different participant subgroups, and influencing persistent or increased (sustainable) change over time during and following completion of the training program.

Qualitative information helps contextualize measurement dimensions, provides an understanding of local concepts and the way participants define attributes and choices related to resilience, and enables a better understanding of the factors participants and non-participants value and seek in terms of life skills and avenues of accomplishment. Qualitative information is key to understanding the reasoning of the people involved, and processes and interrelationships linked to precursor intentions and behaviors, or livelihood strategies that may contribute to increased resilience.

Types of qualitative data collected by this IE will include:

- Social capital (education and skills) at household levels that contribute to changing attitudes and behaviors believed important in resilience-related strategies
- Relationships between baseline characteristics and responses or effects of training related to: attitudes; intentions; behaviors; sustained behavior change
- Gender differentiated responses or effects of training in both household and community participation and decision-making processes
- Psycho-social information including aspirations and risk preference
- Perceptions on shock recovery

Qualitative data collection will include key informant interviews (KII) and focus group discussions (FGDs) to explore decision processes shaping personal and household decisions to change, or not to change, attitudes, intentions, and behaviors based on experiences in the training program. KIIs and FGDs will be done in a sub-sample of the areas in the quantitative survey and will include non-participants as well as program participants. Non-participants and participants will be in separate FGDs. The emphasis of the FGDs for non-participants will exclude discussion of training, but otherwise be the same as that for program participants. The final data collection (one year after the end of training in each group of ten districts) will collect qualitative data needed to present a complete picture of change in indicator values over time, relating to sustainable impact. These activities may also collect data on perceptions, intentions, and understandings of trainees reflecting on the value and effects of training over time.

ANNEX II: EVALUATION METHODS AND LIMITATIONS

Quantitative Evaluation Methods

As discussed in the previous section, those choosing to participate in the BLP were not randomly selected, so a non-randomized method of impact evaluation must be used to attempt to statistically identify quantitative impacts. There are two main classes of non-random methods—regression discontinuity design, and matching methods. Regression discontinuity design relies on a variable or set of variables that change the probability of participation in a program or intervention; as there is no such variable in the BLP context, matching methods must be used. In this section, decisions about the matching method used in this context will be described, as well as the analysis of a This section describes the approach to matching, which will be used to measure impact estimates, as well as how we plan to study attrition from the sample.

Matching Methodology

The goal in choosing a matching methodology is to ensure that the method chosen is both reliable, in terms of minimizing bias, and is as low variance as possible. The first choice that has to be made relates to whether to use propensity scores or other types of matching, such as coarsened exact matching (e.g. Blackwell et al., 2009). The chosen method will use propensity scores, which are estimates of the probability that any given observation either participates, or in this case chooses to participate, in a program. Rosenbaum and Rubin (1983) first showed that balancing two samples on the propensity score can equalize their observable covariate distributions for the purposes of program evaluation. Through comparisons with experimental estimators, Heckman, Ichimura and Todd (1997, 1998) show that propensity score matching can provide reliable, low-bias estimates of program impact, under the following assumptions: (i) the same data source is used for participants and non-participants, (ii) the data include meaningful X variables capable of identifying program participation and outcomes, and (iii) participants and non-participants have access to the same markets. This logic can be extended to any estimates based on either covariate matching or reweighting estimators.

To measure the impacts of the BLP, some assumptions have to be made to ensure that the treatment and control groups are comparable. There are three specific assumptions. First, an assumption about participation in BLP groups is made; specifically, it is assumed that women who were not invited to participate in BLP groups would have done so at similar rates to participating women. There are several reasons that women might not have participated in BLP groups; for example, they might not have had good information about signing up for the BLP trainings; they may not have signed up fast enough before resources ran out to include participants; they may not have received timely information about the BLP in order to sign up, or they may have perceived their household did not have enough resources to get anything out of participation. In all these cases, the explanatory variables included in the model that estimates propensity scores must attempt to predict participation among the control group.

Second, it is assumed that women and their households in the control group are similar to those in the treatment group(s). This assumption might appear problematic, as the baseline report found some substantial differences between the two groups, particularly related to literacy. An adjusted assumption, then, states that conditional on observables, women and their households in the control group are similar to those in the treatment group. In other words, the assumption made is that once observable variables are controlled for, the treatment and control groups will also have similar average levels for unobservables.

Third, it is assumed that the treatment and control groups have access to roughly the same markets (as

above), and the X variables, measured at baseline, that are included can identify hypothetical program participation among the control group. It is also important to assume that women and households in the control group contain enough women that would have participated in the BLP to make meaningful comparisons between the treatment and control groups. Finally, it must be assumed that there are no spillovers from the treatment to control groups; we will attempt.

There are a large number of potential matching estimates to choose from. The literature suggests that several types of matching estimators are theoretically unbiased. Specifically, Hirano, Imbens, and Ridder (2003) show that a propensity score weighting estimator is asymptotically efficient relative to other propensity score estimators, and Abadie and Imbens (2006) show that a covariate matching estimator is root-N consistent and asymptotically normal under certain conditions. Therefore, once an estimator (propensity score or covariate matching) is chosen, it is important to determine a method for constructing the impact estimates.

Two relatively recent papers have conducted statistical tests to discern among the many available estimators. Busso, DiNardo, and McCrary (2013) show that among several propensity score matching, covariate matching (which encompasses coarsened exact matching), and propensity score reweighting estimators, covariate matching estimators perform best with a small number of averaged matches when overlap is poor between the treatment and control groups, whereas propensity score weighting with normalized weights performs best when overlap is substantial. Huber, Lechner, and Wunsch (2013) perform a larger Monte Carlo and find that a particular radius matching estimator is preferable, again when combined with regression, particularly when the propensity score is mis-specified. They claim the difference is potentially due to the difference between the small samples used by Busso, DiNardo, and McCrary (2013).

As both papers suggest using a propensity score weighting estimator, a next question was how to estimate the propensity scores, whether by radius matching or another method. For this report, the decision was made to use a relatively method that should improve efficiency beyond the methods discussed in those two papers. The estimator used builds in a way on a method used by Imbens, Newey, and Ridder (2005), who construct an algorithm that approximates a non-parametric estimator for the propensity score, using stopping rules. An alternative is to test the use of additional variables using a penalty function; by including this penalty function, the computer can determine whether an additional variable should be included in a model. This method is called the least absolute shrinkage and selection operator, or LASSO. The LASSO is becoming more and more frequently used to generate propensity scores, particularly in epidemiology; in that literature, Franklin et al. (2015) find it outperforms other estimators.

Propensity Score Weighting

Propensity score weighting, or reweighting, is done by estimating and applying weights to statistically balance observable characteristics between BLP beneficiaries and non-beneficiaries. The aim of this evaluation is to construct, for a range of outcomes, an estimate of the average impact of the BLP on those who had access to it—referred to as the average impact of the treatment on the treated (ATT). The formalization of this concept is as follows. Let Y_t^1 be an individual or their household's outcome in time period t if the woman is a BLP participant, let Y_t^0 be that individual or household's outcome in time period t if it does not receive any program benefits, and let D be an indicator variable equal to 1 if the household receives program benefits and 0 if not (i.e., an indicator of "treatment"). The program impact is just the change in the outcome caused by receiving benefits: $\Delta = Y_t^1 - Y_t^0$. However, each household or observation is only observed in one state, either Y_t^1 or only Y_t^0 , at time t .

The overall goal of impact estimation is to estimate the average difference between the outcome that

treated households or individuals would realize if they receive the program and the outcome that treated households would realize if they do not receive the program in period t , given a vector X of observable characteristics of the households:

$$ATT = E(\Delta \mid X, D = 1) = E(Y_t^1 - Y_t^0 \mid X, D = 1) = E(Y_t^1 \mid X, D = 1) - E(Y_t^0 \mid X, D = 1) \quad (2)$$

Because $E(Y_t^0 \mid X, D = 1)$ is not observed, a statistical comparison group for recipients out of our observations on non-recipients is required, i.e., households with $D = 0$.

Therefore, to construct a statistical comparison group, a first step is to estimate a propensity score using observables X , $P(X) = \Pr(D = 1 \mid X)$. The propensity score is the predicted probability that any household is a program recipient based only on its observable characteristics X . In a propensity score weighted regression, the researcher estimates propensity scores based on whether or not households receive benefits, and then uses the estimated propensity scores for program receipt to more heavily weight the comparison observations with higher propensity scores, since they are assumed to be more like households receiving benefits. The validity of this approach rests in part on two assumptions:

$$E(Y_t^0 \mid X, D = 1) = E(Y_t^0 \mid X, D = 0), \quad (3)$$

and

$$0 < P(X) < 1. \quad (4)$$

Equation (3) assumes conditional mean independence, i.e., that conditional on X , nonparticipants have the same mean outcomes as participants would have if they did not receive the program. Equation (4) assumes that, based only on the set of observables X , all observations in the comparison group have positive predicted probability of being treated. Further, the elements of X cannot perfectly predict either program participation or non-participation.

Under equations (3) and (4) and other technical assumptions, Hirano, Imbens, and Ridder (2003) show that one can obtain an unbiased estimate of the ATT through a weighted regression framework, if weights of 1 are assigned to the treatment group and weights of $\frac{P(X)}{1-P(X)}$ are assigned to the control group. Hirano, Imbens, and Ridder also show that the observables X used to construct the propensity score can be directly included in this weighted regression to account for additional variation and thereby improve precision.²⁴

As suggested above, in this report a LASSO procedure is used with a logit estimator to estimate propensity scores; it is used in a two step process. The approach used here is to use a cross-validation procedure to choose what is called the tuning parameter (λ) that acts as the penalty function against including irrelevant variables in the model. The cross-validation means that the data set is split and then validated in the second part in estimating all parameters. The estimator effectively works by initially choosing a large value of λ , and then the value is reduced until the mean predict error is minimized. The LASSO procedure therefore chooses agnostically from a long list of potential variables based on reducing the error of predictions, rather than based on some other potentially endogeneous criteria.

The LASSO propensity scores are compared with an approach adapted from that of Hirano and Imbens (2001) and Imbens, Newey, and Ridder (2005). In their approach, First a logit model is estimated,

²⁴ These observables are included as covariates in all estimates.

including only province dummy variables is estimated, to ensure that broad differences in market conditions can initially be absorbed.²⁵ Next, there are a set of N variables at the household and municipality level defined as possible covariates for inclusion in the logit model. We estimate N regressions, each sequentially and separately including one variable to the basic logit model. The variable that reduces the log pseudo-likelihood the most is initially kept in the model. Then, the remaining list of $N-1$ variables are sequentially added to the held variable and $N-1$ logit models are again estimated, and the variable that maximizes the reduction of the log pseudo-likelihood is again held. This procedure is followed until the reduction hits a threshold that roughly corresponds to adding a variable to the logit model that has a t-ratio of 1, indicating that the remaining variables in the list have little predictive power.²⁶ The result is that $K < N$ covariates are chosen as predictors.

Both procedures effectively let the data determine what variables should be in the propensity scores rather than generating them through researcher selection. These procedures are effectively both what are called machine learning models. The advantage of allowing the data to determine the relationship between BLP participation and baseline explanatory variables is that any potential researcher bias can be minimized.

Propensity Score Weighted Impact Estimates

Using this model, a propensity score is estimated for each individual participant in the data set; this propensity score indicates the predicted probability that the woman is a participant rather than in a comparison group of non-recipients, based on a range of observable characteristics. The propensity scores p are then used to place weights on the comparison observations: each treatment observation receives a weight of one, whereas comparison observations receive a weight of $\frac{P(X)}{1-P(X)}$. The intuition is as follows. Women, households or communities that have observable characteristics indicating that they are not likely to receive benefits receive very low weights in the regression, whereas observations with observable characteristics suggesting that they should be good comparisons to treatment observations receive a great deal of weight. By placing higher weights on non-recipient observations that have characteristics more like participants and lower weights on non-participants that have characteristics less like participants, we balance observable characteristics between participants and non-participants, even if they were unbalanced before weighting. Using the weights, next a balance test among observable characteristics—both those included in the propensity score estimation and those that were not—will be conducted to ensure that observable characteristics are balanced after applying the weights based on propensity scores.

The estimating equation for outcomes, then, can simply be written as:

$$Y_i = \alpha + \delta T_i + \bar{X}_i \beta + \varepsilon_i \quad (5)$$

where Y is the outcome; T is the treatment indicator variable, for BLP participation; $\bar{X}$ represents the vector of variables chosen to be included in the propensity scores, and ε is a mean zero error term, clustered at the enumeration area level. The average treatment effect is then given by δ .

²⁵ Note these cannot be automatically included in the LASSO model, as they may drop out due to irrelevance.

²⁶ The list of predictive explanatory variables will be used for any regressions using covariate matching when running a robustness check. Since covariate matching does not parameterize the relationship between explanatory variables and treatment status, there is no need to include any second order terms.

Estimating the Propensity Scores

The propensity scores were estimated using the LASSO logit procedure described above, as well as a procedure from Hirano, Imbens and Ridder (2005) described in the design protocol and summarized above (Table B.1). The two procedures selected slightly different variables, but a large proportion of the variables chosen by both procedures are similar, with similar coefficient estimates on the variables that are consistent between the two procedures.

Table B.1. Logit Results Predicting BLP Participation, Endline Sample using Baseline Covariates

Variable	LASSO Logit	Hirano, Imbens, and Ridder Logit
Subject is Literate (1=yes)	0.967*** (0.094)	0.959*** (0.093)
Janajati (1=yes)	-0.024 (0.121)	
High Caste (1=yes)	0.322 (0.126)	0.409*** (0.110)
Participated in Suaahara? (1=yes)	0.503*** (0.139)	0.485*** (0.139)
From Hills? (1=yes)	-0.192 (0.165)	-0.334** (0.118)
Number of males, aged 5-14	0.185*** (0.064)	0.181*** (0.058)
Number of men, aged 35-59	0.008 (0.089)	
Number of elderly (60 and over)	0.152** (0.067)	0.145*** (0.061)
Household Size	-0.001 (0.019)	
Young dependents/total members	-0.272*** (0.082)	-0.273*** (0.079)
Land per capita		-0.167 (0.271)
Household owns buffaloes	0.436*** (0.133)	0.423*** (0.093)
Household owns pigs		0.303* (0.181)
Household owns goats or sheep		0.013 (0.095)
Experienced Shock to Consumption in past 3 years	0.171 (0.124)	0.166 (0.123)
Experienced Shock due to death in household in past 3 years		0.043 (0.175)
Owens agricultural plots?	-0.452* (0.235)	-0.447* (0.237)
Own refrigerator?	0.224 (0.139)	0.207 (0.137)
Own cell phone?	-0.399 (0.265)	-0.371 (0.263)
Own bicycle?	-0.048 (0.139)	
Number of observations	1257	1257

Notes: All explanatory variables measured in the baseline survey. Standard errors in parentheses; *- indicates significant at 10 percent level; **- indicates significance at the 5 percent level; ***- indicates significance at the 1 percent level. Note that standard errors in the LASSO logit do not account for the variable selection procedure and should not be used for statistical inference, they are listed illustratively.

The predicted probability of participating in the BLP, using the LASSO logit results, are in Figure B.1. The graph demonstrates substantial overlap between the probabilities between the participant and non-participant groups, suggesting that propensity score weighting using these probabilities should be valid. If there was no overlap between the two groups, one would need to be concerned that there are no good

matches in the control group for those who chose to participate in the BLP.

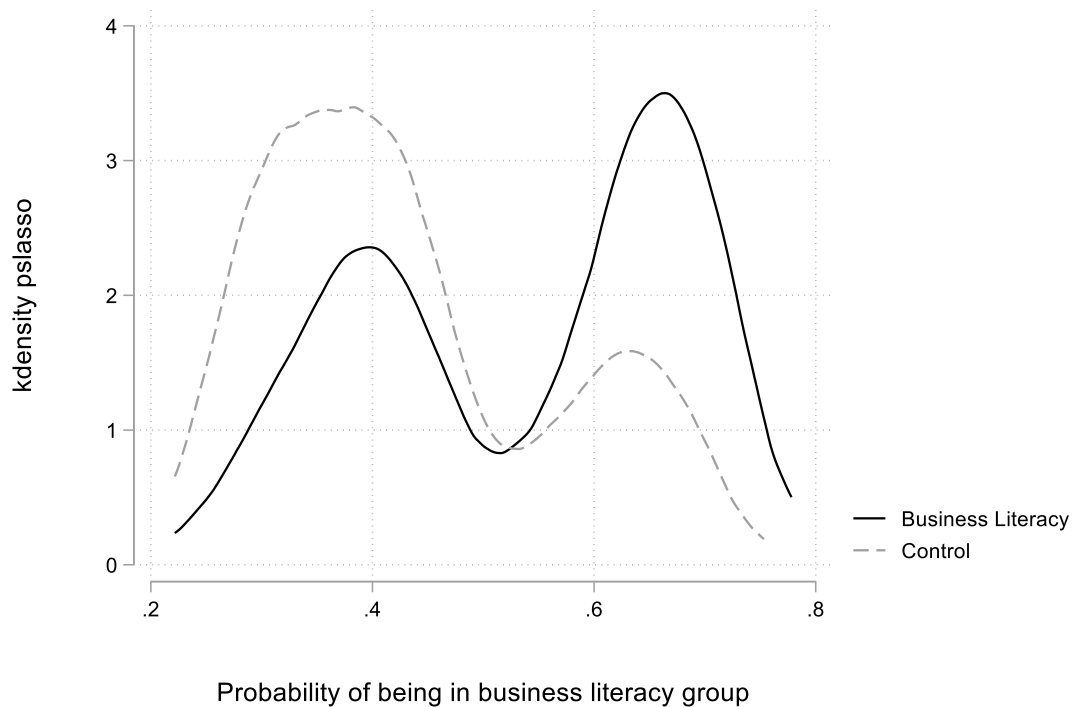


Figure B.1. Kernel Density of Probability of being in the BLP group, by Treatment Status

Next, the propensity score weights described above are applied to the control group, and the hypothesis that a large list of household characteristics have the same average, by treatment group (Table B.2). Note that the list of characteristics includes a number of measures that were not included in the propensity scores. Even though many of these variables were unbalanced before the propensity scores were applied, after weighting the control group all the p-values associated with the hypothesis that the averages are different are above 0.05. Therefore, the propensity scores appear to balance observable variables quite well. Under the assumption that they also balance unobservables, applying the propensity score weights estimated using the Lasso logit should provide low bias impact estimates for the variables described above.

Table B.2. Descriptive Variables and Test for Differences Between BLP Participants and Comparison Group, Weighted and Unweighted

Baseline Controls	Unweighted mean			Lasso logit PS weighted mean		
	Business Literacy	Control	p-value	Business Literacy	Control	p-value
Household livelihoods						
HH received remittances? (1=yes)	0.503	0.462	0.146	0.503	0.487	0.607
Family owns plot for house	0.975	0.948	0.011	0.975	0.959	0.119
HH has access to electricity	0.918	0.855	0.000	0.918	0.895	0.158
HH has access to landline telephone	0.016	0.022	0.507	0.016	0.025	0.360
Household asset ownership						
Refrigerator	0.067	0.079	0.449	0.067	0.093	0.141
Tractor	0.025	0.031	0.508	0.025	0.035	0.355
Irrigation pump	0.153	0.156	0.896	0.153	0.138	0.467
Radio	0.372	0.314	0.032	0.372	0.351	0.493
Mobile phone	0.982	0.951	0.002	0.982	0.971	0.175
Computer/laptop/tablet	0.092	0.072	0.204	0.092	0.107	0.462
Bicycle	0.360	0.408	0.080	0.360	0.335	0.377
Scooter/motorcycle	0.161	0.149	0.567	0.161	0.160	0.974
Car/taxi/truck/bus	0.005	0.005	0.936	0.005	0.007	0.665
Household agricultural asset ownership						
Buffaloes	0.686	0.521	0.000	0.686	0.648	0.180
Cows	0.424	0.411	0.642	0.424	0.417	0.815
Pigs	0.076	0.057	0.184	0.076	0.056	0.172
Goats/Sheep	0.724	0.629	0.000	0.724	0.689	0.206
Total ag. land (hectares)	0.569	0.590	0.704	0.569	0.578	0.891
Land per capita (has)	0.089	0.104	0.118	0.089	0.097	0.432
Shock exposure						
HH faced general negative shock to consumption	0.293	0.217	0.002	0.293	0.251	0.137
HH faced negative shock due to prices	0.156	0.145	0.572	0.156	0.157	0.972
HH faced negative shock due to death in hh	0.038	0.028	0.314	0.038	0.024	0.159

Table B.2 (cont.)

Baseline Controls	Unweighted mean			Lasso logit PS weighted mean		
	Business Literacy	Control	p-value	Business Literacy	Control	p-value
Household Demographics						
Household Ethnic Group: Hill or Terai	0.678	0.590	0.001	0.678	0.696	0.498
Suaahara participant? (1=yes)	0.137	0.082	0.002	0.137	0.113	0.289
Share of male HH members	0.528	0.509	0.031	0.528	0.518	0.294
Number of residents aged 60 plus	0.449	0.351	0.007	0.449	0.392	0.158
Household Size	6.464	6.123	<i>0.055</i>	6.464	6.239	0.239
Dependency ratio	0.647	0.707	0.081	0.647	0.686	0.305
Young dependency ratio	0.515	0.592	0.016	0.515	0.563	0.160
Number of residents, under 5 years old	0.497	0.590	0.042	0.497	0.553	0.236
Number of males, aged 5-14	0.737	0.650	<i>0.078</i>	0.737	0.659	0.138
Number of females, aged 5-14	0.605	0.656	0.310	0.605	0.628	0.679
Number of males, aged 15-34	1.334	1.251	0.157	1.334	1.285	0.441
Number of females, aged 15-34	1.192	1.096	<i>0.075</i>	1.192	1.145	0.437
Number of males, aged 35-59	0.785	0.704	0.013	0.785	0.750	0.330
Number of females, aged 35-59	0.865	0.824	0.131	0.865	0.828	0.229
Head is literate	0.786	0.715	0.004	0.786	0.780	0.785
Education of HH head (categorized)	2.146	1.949	0.001	2.146	2.072	0.244
Marital Status of HH head	0.938	0.917	0.159	0.938	0.925	0.404
Subject is literate	0.566	0.271	0.000	0.566	0.520	0.135
Subject marital status	0.891	0.877	0.416	0.891	0.780	0.785
High caste?	0.367	0.240	0.000	0.077	2.072	0.244
Janajati?	0.235	0.253	0.471	0.071	0.925	0.404
n	608	649		608	649	

Notes: Differences in means that are significant at the 5 percent level or better in **bold**; differences that are significant at the 10 percent level or better in *italics*.

Attrition

Although attrition is really low, it is still important to understand the reasons for attrition, and whether or not attrition was random. The enumeration team collected reasons that specific households dropped out of the sample, so after reporting these, a regression is reported on whether or not households left the sample, attempting to understand whether there are any significant correlates with the probability of attriting.

The New ERA field team noted reasons that individuals could not be interviewed (Table B.3). The most common case was migration out of the field team coverage area; many of the migrants were now living in India, in fact. The second most common reason was that the respondent could not be found, and then

that the respondent had died between surveys. Other reasons were not common at all.

Table B.3. Reasons for Attrition between Baseline and Endline Surveys, BLP Impact Evaluation

Reason For Attrition	Number of Cases
Migrated too far to Track (often India)	28
Respondent not found	8
Respondent Died	7
Respondent too ill for survey	4
Rejected Interview	2
Interviewed twice at baseline	1
Respondent in Jail	1

Given the low number of attritors, it is not surprising that attrition is not highly correlated with any of a selection of variables used to attempt to predict attrition (Table B.4).²⁷ Therefore, from a statistical perspective attrition can be assumed as approximately random, and it is not necessary to adjust results in the remainder of the report for potential attrition.

²⁷ The variables used are exactly the ones that come out of the Hirano, Imbens, and Ridder (2005) procedure described later, with one exception—everyone who attrited had had a cell phone, so that variable is dropped.

Table B.4. Regression to Explain Attrition from Sample between Baseline and Endline Surveys, BLP Impact Evaluation Data

Variable	Coefficient Estimate (Standard Error)
Subject is Literate (1=yes)	0.117 (0.325)
Ethnicity	-0.059 (0.089)
Highest Education Level in Household	-0.023 (0.162)
Number of under 5 year olds	0.231 (0.172)
Number of males, aged 5-14	-0.356 (0.209)
Number of women, aged 35-59	-0.312 (0.374)
Number of elderly (60 and over)	0.041 (0.227)
Total members aged 15-59	-0.040 (0.243)
Land per capita	-3.14 (2.05)
Household owns buffaloes	-0.109 (0.313)
Household owns pigs	0.415 (0.500)
Experienced Shock to Consumption in past 3 years	-0.209 (0.351)
Experienced Shock due to death in household in past 3 years	-0.732 (0.636)
Owns agricultural plots?	-0.190 (0.641)
Own refrigerator?	-0.139 (0.557)
Own computer, laptop, or tablet?	0.791 (0.432)
Number of observations	1308
P-value, all coefficients are zero	0.367

Notes: All explanatory variables measured in the baseline survey. Standard errors in parentheses; no coefficients were statistically significant at the 5 percent level or above.

ANNEX III: DATA COLLECTION INSTRUMENTS

FGD TOPIC GUIDE FOR BOTH BL AND NON-BL PARTICIPANTS

The purpose of this topic guide is to help facilitate focus group discussion to understand the perspectives of the study participants (both BL and non-BL participants) in relation to the achievements made due to Business Literacy program.

Background characteristics

Age	Name	Marital status	Education	Caste/ethnicity	Current member of farming or other cooperatives

Main content

Q.N.	Main Question	Probe questions
BL training Experiences (only for BL classes participants)		
1.	What are thoughts on the business literacy class that you attended?	• Reasons for enrolling • Who were involved in conducting the classes? • How often were the classes run? • Size of participants and level of participation • Suitability of training locations • What did they like the most? • What did they like the least?
2.	Did you attend the classes regularly?	• If yes, how regularly, and what are the motivating factors?-- > enabling factors. • If no, explore for barriers.
3.	What are some of the important areas that you have learned from the Business literacy class?	(Focus on training modules: Literacy and numeracy; nutrition education; life skills; entrepreneurial skills; and access to finance) • What are some of the areas that they have

Q.N.	Main Question	Probe questions
		learned? • Have they been able to transfer the knowledge to their family members, relatives and friends? • What knowledge did they transfer? Explore examples. • Why do they think it is necessary to transfer the knowledge?
4.	What were some of your expectations of the business literacy classes?	• Were the expectations met? How were they met? Ask them to provide examples. • If no, ask them why do they think that way?
5.	Have you been able to translate the knowledge you have gained into practice?	• Has the knowledge they have gained brought about any changes in them? Do they see any change in themselves prior to taking the class and now? Provide example.
6.	Have family members, friends and neighbors perceived any change in you now that you have taken the Business literacy class?	• What do family members, friends and neighbors say about the changes? Are the changes positive? Are the changes negatives? Examples.
7.	What are your thoughts on the approach adopted to conduct the classes?	• If yes, what did they like the most? • If no, what did they like the least?
8.	How were the facilitators?	• What did they like the most about the facilitators? • What did they like the least about the facilitators?
9.	What lesson/module was the most difficult to grasp?	Focus on five modules: Focus on training modules: Literacy and numeracy; nutrition education; life skills; entrepreneurial skills; and access to finance • If yes, why? How did they and their facilitators managed to overcome it?

Q.N.	Main Question	Probe questions
10.	What could have been done to make the class/lessons more effective and practical?	Probe for approach adopted, facilitators used, BL class contents etc.
For both BL and non-BL participants		
11.	What are some of the ways in which women can empower herself and her family?	Probe for reasons why the ways they mentioned are important.
12.	What does a woman need if she wants to start a small business on her own?	- Probe for her perception. - How easy/difficult for women to start a business
13.	What are a woman's sources of support and networking within her community (if she is interested in starting a new business and doesn't know how?)	- If yes, ask for three main sources of support? - If yes, ask the type of businesses they want to run?
14.	What are some of the challenges if women want to start a new business? -- > self-awareness	- Stigma, cultural norms, internal struggles, struggles within her family, struggles within her community, risk attitude and perception of fate or free will. - How might these struggles affect their belief in themselves and idea of starting a small business?
15.	What role does a spouse and family members play in owning a new business?	If family members do not support her in this endeavor then, what options are left for her? How can she overcome her family's opposition and bring them to her side? -- > Creative thinking and decision making
16.	What are the some of the benefits of owing a business?	Ask for examples?
17.	Have you ever wanted to do anything major in life which your family hasn't supported you? How did it impact you?	- Were you able to overcome this resistance? If you did, then how did you do it? (Creative thinking) - If you failed, then do you still have regret for

Q.N.	Main Question	Probe questions
		not being able to take this decision? In hindsight, what would you do differently to change this situation? What advice would you give to your younger self?
18.	Do you know anyone who like yourself has started a new business/enterprise in the location?	What does she do? What were some of the challenges that she faced? How did she overcome the challenges? (Empathy)
18.	Would you like to do something similar? Do you think you can do it successfully? Why do you think you would be able to succeed?	What are her strengths, motivation, and goals?

Thank you for your time 😊😊😊

KEY INFORMANT INTERVIEWS WITH COMMUNITY TRAINERS

The purpose of this topic guide is to help facilitate Key Informant Interviews (KII) to understand the perspectives of the community trainers in relation to the BL classes.

Background characteristics

Name	Age	Position	Marital status	Education	Caste/ethnicity	No. of months/years worked as a community trainer

Main content

Q.N.	Main Question	Probe questions
1.	Would you say that you have learned nothing useful, some useful things, or a great many useful things in this position as community trainer for the Business Literacy course?	• Why or why not? • What are the most and least useful things? • Did their own learning curve affect their interactions with the class participants? Would they say it is a help or a hindrance?
2.	Thinking back on your own life, can you think of a time when you considered trying a small business or market venture of any kind?	• What did you consider, and what were the pros and cons you considered in making the decision about starting a small business? • What did you decide? Did or do you have any regrets?
3.	Did you feel that being a trainer in the Business Literacy Program has changed you in any way?	• Knowledge, attitudes, skills, and behavior • Perceptions of the value of changes so far; not much change or a lot of change
4.	Did you consider taking some of the ideas from the course material and putting them into action yourself? Which ones were most appealing to you?	• Why or why not? How did you decide? • What other ideas would have been better, or worse?
5.	How did the BL class impact its students? What were the changes big and small that you	• If you did not notice any major change in them, why do you think it failed to impact them? What is the root of this resistance? Is it because they

Q.N.	Main Question	Probe questions
	have noticed in them as a result of the class?	didn't understand the lessons properly and thus failed to internalize them? Or is some social/cultural/political resistance to some of the important lessons that classes impart to the students? Or is it apathy?
6.	How did the class impact your community as a whole? How did the community perceive it?	What were the negative and positive reactions/feedbacks that you received from the community? Did they think this program was important/necessary?
7.	From observing the BL students, what would you say are the most important areas that Business literacy class taught?	Explore areas with examples.
8.	Have the students been able to translate their knowledge into practice?	- If yes, ask them to provide anecdotes/examples to illustrate their points. - If no, why? Ask for the main barriers
9.	Which lessons were the most difficult to teach and why?	- Reasons for difficulties - Strategies they adopted to deal with the difficult lessons.
10.	After taking lessons, did you perceive BL students more open to new ideas and challenges?	Ask if the students were positive to exploring new methods and ways of solving problems/challenges? Or were they resistant to new innovations and unwilling to open up? Why? What were the causes of resistance or willingness to change? What can be done to mitigate this problem?
11.	What do you think the lessons/ BL program lacked?	What could have been done to improve it further?
12.	How do program like this impact your community?	Do you think it's effective or is it not? Why? What do you think it needs to make it more effective to the students and the community? Why?
13.	How do you rate yourself as a teacher/facilitator? How successful do you think you were? What were the keys to your success? If not, then what were your weaknesses, what could have been done to overcome these weaknesses?	

Q.N.	Main Question	Probe questions
14.	What was the most challenging part of being a facilitator?	Ask them to explain with examples? How did they address the mentioned challenges?
15.	Do you have a success story of a BL student you can share?	<i>If there is one, note taking and recording should be done by the interviewers.</i>

Thank you for your time 😊😊😊

Quantitative Survey

Question No.	Question	Code	Code label
A01	HOUSEHOLD IDENTIFICATION		
A02	CLUSTER NUMBER		
A03	WARD NUMBER		
A04	NAME OF VILLAGE DEVELOPMENT COMMITTEE (VDC)/MUNICIPALITY		
A05	DISTRICT		
A06	REGION		
A06.1	PROVINCE		
A07	GPS		
A09	ENUMERATOR NAME		
A09.1	ENUMERATOR ID		
A09.2	RESULT	1 2 3 4 5 6 7 8 9 10 11 12 20	COMPLETED NOT HOME ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD POSTPONED/UNAVAILABLE REFUSED DWELLING VACANT NOT A DWELLING DWELLING DESTROYED DWELLING NOT FOUND TOO ILL TO RESPOND/COGNITIVELY IMPAIRED OTHER (SPECIFY) PARTIAL COMPLETE NO ELIGIBLE RESPONDENT IN HOUSEHOLD
A21	Was any female member of your household aged 18 – 62 years surveyed back in 2016 on topics related to household well-being, business skills, life-skills, and access to finance?	Yes No Don't know/Can't recall	1 2 98
A22	We would like to request the same female respondent to respond to this survey. Is that female respondent available for the survey? [Enumerator: If yes, please ensure that the rest of the survey is carried out entirely with this respondent].	Yes No	1 2

MODULE B. Informed Consent MODULE B(1). Informed Consent

INTRODUCE THE HOUSEHOLD TO THE SURVEY AND OBTAIN THE CONSENT OF AN ELIGIBLE MEMBER OF THE HOUSEHOLD TO RESPOND. STATEMENT TO BE READ TO POTENTIAL RESPONDENT(S) IN THE HOUSEHOLD:

Thank you for the opportunity to speak with you. We are a research team from New ERA, Kathmandu. We are conducting a survey to learn about well-being of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as life skills, business skills, and access to finance. The survey includes questions about the household generally, and questions about individuals within your household, if applicable. **The interview in total will take no more than 2 hours to complete.**

Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer without giving a reason and without fear of any penalty or retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me.

Your answers will be completely confidential and will be only shared with a few researchers. We will not share information that identifies you with anyone else. After entering the questionnaire into a database, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact New ERA office in Kathmandu, by calling 014413603. We will leave a copy of this statement and our organization's contact information with you so that you may contact us at any time.

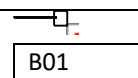
We would like to ask you to sign this paper to indicate that you understand what has been explained to you about this study, and that you are willing to participate in the interview.

May I begin the interview now?

SIGNATURE OF RESPONDENT: _____ DATE: _____

SIGNATURE OF WITNESS: _____ DATE: _____

ELIGIBLE RESPONDENT AGREES TO INTERVIEW.....1 NO RESPONDENT AGREES TO INTERVIEW.....2 END "Thank you very much for your time."
CONTINUE WITH MODULE C: "First, I'd like to ask you about the members of your household."

	Did the respondent consent to the survey?	YES		
		NO		

Now, we would like to ask you about all the members who moved out of the household in between March 2016 and now.											
Question No.		Question						Code		Code label	
C13	C09	Did any member of your household move out of the household for any purpose in between March 2016 and now (including those who may have died during that period)?						YES	1	BRAHMIN	
		What is your caste/ethnicity?						NO	2	CHHETRI	
C13.1		How many members of your household moved out between March 2016 and now (including those who may have died during that period)?							3	DALIT	
[RELEVANCE CONDITION: IF YES TO C13]											
ID CODE	Name of household member.	Why did [name] leave the household? Marriage.....1 Illness.....2 Work elsewhere.....3 Looking for job elsewhere.....4 Studying elsewhere.....5 Divorce or Separation.....6 Died.....7 Other.....9 Family split.....10	What is [NAME'S] sex? 1 = MALE 2 = FEMALE	What is [NAME'S] relationship to the primary adult decision-maker?	What is [NAME's] age? (in completed years)	What is [Name]'s marital status 1 = MARRIED 2 = NEVER MARRIED 3 = DIVORCED 4 = WIDOWED	Can [NAME] read and write? SEE RESPONSE CODES BELOW	Has [NAME] ever attended school? 1 = YES 2 = NO	5 NEWAR 6 MUSLIM 98 OTHER (SPECIFY)	What grade completed? SEE RESPONSE CODES BELOW	What is [NAME]'s current occupation?
	C10A	Is that a hill ethnic group, a terai ethnic group, or neither?		USE RESPONSE CODES BELOW					1 HILL 2 TERA 3 NEITHER 98 DON'T KNOW		
	C10B	Are you a hill [ETHNIC GROUP] or terai [ETHNIC GROUP]?							1 HILL 2 TERA 3 NEITHER 98 DON'T KNOW		
			[Relevance: C15]	[Relevance: C15]	[Relevance: C15]	[Relevance: C15]	[Relevance: C15]	[Relevance: C15]	[Relevance: C15]	[Relevance: C15]	[Relevance: C15]
		Do any [GROUP] exist in your community?									Are any household members of this group?
	C14										
01											C30
02											C31
03											Yes...1 No...2 Don't Know..98
04											Yes...1 No...2 Don't Know..98
05											If No or Don't Know, skip to next group
06											If No or Don't Know, skip to next group
07											
08											
09											
10											
		TYPE OF GROUP									
		Agriculture/Livestock/Fisheries Producers Group									
		Water Users' Group									
		Forest Users' Group									
		Credit or Microfinance Group									
		Mutual Help or Insurance Group									
		Civic or Charitable group									
		Religious Group									

Now, we would like to ask you about all the members who moved out of the household in between March 2016 and now.

C13	Did any member of your household move out of the household for any purpose in between March 2016 and now (including those who may have died during that period)?
C13.1	How many members of your household moved out between March 2016 and now (including those who may have died during that period)?

[RELEVANCE CONDITION: IF YES TO C13]

I D C O D E	Name of household member.							Why did [name] leave the household? Marriage.....1 Illness.....2 Work elsewhere.....3 Looking for job elsewhere.....4 Studying elsewhere.....5 Divorce or Separation.....6 Died.....7 Other.....9 Family split.....10	What is [NAME'S] sex? 1 = MALE 2 = FEMALE	What is [NAME'S] relationship to the primary adult decision- maker? USE RESPONSE CODES BELOW	What is [NAME's] age? (in completed years)	What is [Name]'s marital status 1 = MARRIED 2 = NEVER MARRIED 3 = DIVORCED 4 = WIDOWED	Can reac writ SEE COD
									[Relevance: C15 is not 7]	[Relevance: C15 is not 7]	[Relevance: C15 is not 7]	[Relevance: C15 is not 7] & [Relevance: C18>=15]	[Re C15 [Rel C18
	C14							C15	C16	C17	C18	C19	C20
01													
02													
03													
04													
05													
06													

07							
08							
09							
10							

In BL	Question No.	Question
	D001.1_note	We want this module to be filled by the female HH member who was in Business Literacy Program managed by DEPROSC in 2016-2017 or could have been eligible to be a part of that program.
	D001.1	Who will be filling out this module?
1	D001	Now, I would like to ask you to read this sentence to me. SHOW CARD TO RESPONDENT WITH PREVIOUSLY PRINTED SENTENCE IN NEPALI. IF RESPONDENT CANNOT READ THE WHOLE SENTENCE, PROBE: Can you read part of the sentence?
1	D002	Can you add and subtract numbers?
	NOTE: Now we will ask you to solve a few numerical questions involving additions and	

	subtractions.	
	D002.1	4 + 5 = ?
	D002.2	4 - 2 = ?
	D002.3	3 + ? = 9
	D002.4	10 - ? = 3
	D002.5	12 + 6 = ?
	D002.6	16 + 8 = ?
	D002.7	19 - 8 = ?
	D002.8	12 - 3 = ?
	NOTE	"This section of the survey helps us increase understanding and improve development of programs intended to help people manage life situations and cope with challenges. By providing us your frank appraisal on these issues, you are contributing important value to this research. There are no right or wrong answers to any of these questions! We will use a confidence scale for a series of activities that you might undertake in different circumstances. The next four items are practice examples. We want to make sure the scale and response process is clear. I will read statements about your confidence or belief in your ability to perform a task. For the following activities, please rate your current confidence level in your own ability to do what is described in the statement. Please provide a number between 0 and 10. For instance, "0" means that you are certain that you cannot perform the task. 5 means that you are moderately certain that you can perform the task. 10 means that you are very certain that you can perform the task. Higher numbers indicate greater certainty that you can perform the task."
	D003	I can lift a small sack of rice right now. (around 5 kgs)
	D004	I can lift an enormous bag of rice right now. (around 50 kgs)
	SECTION ONE: ATTITUDES	
	"I'd like to read some statement about confidence or belief in your ability to complete tasks and reach goals. For the following activities described in these statements, please rate your confidence level that you can do each one as stated, from 0 meaning being very certain that you cannot perform the task to 10 meaning greater certainty that you can perform the task."	

1	D101	I can use my knowledge and experience to make decisions on my own.
1	D102	I can speak up and express my opinions on household decisions.
1	D106	I can clearly communicate my thoughts and opinions on very important decisions.
1	D108	I can clearly communicate my thoughts and opinions when friends and neighbors disagree.
1	D109	I can clearly communicate my thoughts and opinions when the situation is stressful.
1	D110	I can speak up and express my opinions in group meetings and my community.
1	D111	I can speak up and express my opinions in my household when others disagree.
1	D113	I can stand up for myself when I am being treated unfairly.
1	D114	I can keep a calm focus on solutions when I face a problem.
1	D117	I can mobilize my household to work together to solve problems.
1	D118	I can mobilize the help I need from friends and neighbors when I face problems.
1	D119	I can mobilize my friends and neighbors to work together when we face group problems.
1	D120	I can get the help I need from government offices and agencies when I face problems.
1	D121	I can resist pressure when others in my household want to make my decisions for me.
1	D122	I can resist pressure when others in my community want to make my decisions for me.
1	D123	I can meet in the middle or compromise with others in my household to solve problems and overcome challenges.
	SECTION TWO: KNOWLEDGE AND SKILLS	
	"I'd like to read some statements about confidence or belief in your ability to complete tasks and reach goals. For the following activities described in these statements, please rate your confidence level that you can do each one as stated, from 0 meaning being very certain that you cannot perform the task to 10 meaning greater certainty that you can perform the task."	
1	D201	When I need to make a decision, I can gather the information and advice I need.
1	D204	When my household faces important decisions, I can understand advantages and drawbacks of different choices.
1	D205	When my friends and neighbors face important decisions, I can understand advantages and drawbacks of different choices.
1	D206	I can learn new things or learn to do old things in a new way.
1	D208	I can resolve conflicts in my household when we disagree on how to face challenges.
1	D209	I can mobilize people to carry out their responsibilities in my household.
1	D210	I can mobilize people to carry out their responsibilities in a local group (farmers' group, women's group, etc.).

1	D211	I can resolve conflicts in a local group when others feel they are not being treated fairly.
1	D212	When we do not have enough food or money, I can manage household resources to get us through a hard time.
1	D213	I can influence household decisions when we face a problem or decision.
1	D214	I can influence community decisions when we face a problem or decision.
1	D215	I can maintain my health with good practices in nutrition and health care.
1	D217	I can analyze the strengths and weaknesses of a business to find ways to expand operations or profits.
1	D218	I can calculate profit and loss in a small business or market enterprise.
1	D219	I can analyze when a loan is necessary and calculate interest plus principal required for repayment.
1	D220	I can gather information and analyze it to find the right government office or NGO to help with micro enterprise training, advice, or funding.
1	D221	I can understand the risks and consequences of taking loans to start or expand a micro enterprise.
1	D222	I can understand the financial records of a micro enterprise or local group for saving and lending.
	SECTION THREE: PERCEIVED HOUSEHOLD EFFICACY	
	I'd like to ask about your confidence or belief in your household's ability to perform tasks concerning the following activities. Please rate your confidence level, remembering that 0 means you are certain your household cannot perform the task, with confidence levels up to 10 meaning greater certainty your household can perform the task.	
	Working together as a whole, how confident are you that your household can make good decisions about:	
1	D301	Child care and education
1	D302	Crops to grow or not grow

1	D303	When or whether to sell crops
1	D304	Animals to raise or not raise
1	D306	Other business or market ventures to try or not try
1	D307	Savings accounts or insurance schemes
1	D308	When or whether to access health care
1	D310	Major household purchases
	Working together as a whole, how confident are you that your household can resolve conflicts about:	
1	D311	Child care and education
1	D312	Crops to grow or not grow
1	D314	Animals to raise or not raise
1	D316	Other business or market ventures to try or not try
1	D317	Savings accounts or insurance schemes
1	D318	When or whether to access health care
1	D320	Major household purchases
	D321	Does your household receive remittances from family members working in other countries?
	D321.1	Does your household receive internal remittances from family members working within the country but outside of this village?
1	D322	How confident are you that your household can work together to make good decisions on how to use remittances?
1	D323	How confident are you that your household can work together to resolve conflicts on how to use remittances?

--	--	--

Present in BL	Question No.	Question	Code	Code label
	E101.1_note	We want this module to be filled by the female HH member who was in Business Literacy Program managed by DEPROSC in 2016-2017 or could have been eligible to be a part of that program.		
	E101.1	Who will be filling out this module?		
	SECTION ONE: AWARENESS OF RECENT FOOD SECURITY, LIVELIHOODS, SKILLS DEVELOPMENT PROGRAMS OPERATING IN THESE REGIONS			
	I'd like to ask about any experiences you've had with food security, livelihoods, and skills development programs operating recently in this Region. Are/Were you aware of activities or opportunities promoted by [program initiative or opportunity]?			
	E111	Are you aware of activities or opportunities sponsored by Early Grade Reading Program (EGRA)?		1=yes, 2=no
	E112	If yes, have you or any children in this household participated in EGRA?		1=yes, 2=no

	E120	Are you aware of activities or opportunities sponsored by PAHAL?		1=yes, 2=no
	E121	If yes, have you participated in PAHAL?		1=yes, 2=no
	E122	Are you aware of activities or opportunities sponsored by SABAL?		1=yes, 2=no
	E123	If yes, have you participated in SABAL?		1=yes, 2=no
	E124	Are you aware of Nepal Seed and Fertilizer (NSAF) activity?		1=yes, 2=no
	E125	If yes, have you participated in NSAF?		1=yes, 2=no
	E115	Are you aware of OTHER agriculture/commerce/related PROGRAMS sponsoring activities or opportunities during the last five years?		1=yes, 2=no
	E115a	OTHER agriculture/commerce/related PROGRAMS sponsoring activities or opportunities during the last five years _____		
	SECTION TWO: INTEREST AND/OR PARTICIPATION IN BUSINESS LITERACY TRAINING			
	Now I'd like to ask about your awareness of the Business Literacy Program managed by DEPROSC in 2016-2017.			
	E201	Have you heard about the Business Literacy training course, which was managed by DEPROSC in 2016-2017? [Enumerator: make sure that they do not confuse BL training with KISAN 2 or any other program. In case of hesitation, please probe to check whether they understand which program we are talking about.]		
	E202	Once you heard about the Business Literacy training, were there any factors that influenced you toward learning more about the course? (SELECT ALL THAT APPLY)	1	HUSBAND/WIFE SUGGESTED
			2	PARENT SUGGESTED
			3	FRIEND/NEIGHBOR/OTHER RELATIVE SUGGESTED
			4	WANTED TO START A BUSINESS
			5	WANTED TO LEARN NEW SKILLS
			6	THOUGHT WOULD IMPROVE PERSONAL/HH SITUATION

			7	INTERESTED IN CONTINUING EDUCATION/ADULT LITERACY
			8	NOT INTERESTED TO EXPLORE FURTHER
			66	OTHER:
			98	DON'T KNOW/CAN'T RECALL
	E203	Once you heard about the training, were there any factors that influenced you against learning more about the course? (SELECT ALL THAT APPLY)	1	HUSBAND/WIFE DISCOURAGED
			2	PARENT DISCOURAGED
			3	FRIEND/NEIGHBOR/OTHER RELATIVE DISCOURAGED
			4	TOO MANY RESPONSIBILITIES (LACK OF TIME/ENERGY)
			5	THOUGHT IT WOULD NOT BE USEFUL
			6	COURSE HAD ALREADY STARTED/MISSED DEADLINE
			66	OTHER:
			98	DON'T KNOW/CAN'T RECALL
	E204	Did you enroll in the Business Literacy training?		
	E205	What would you say was the main reason you did not enroll?	1	OTHER PEOPLE'S OPINIONS
			2	TOO MANY RESPONSIBILITIES (LACK OF TIME/ENERGY)
			3	NOT A CONVENIENT TIME OR PLACE
			4	ILLNESS OR INJURY OF MYSELF OR FAMILY MEMBER(S)
			66	OTHER:
			98	DON'T KNOW/CAN'T RECALL
	E206.1	Can you estimate how many training sessions you attended in total? (# of days of training)	98	DON'T KNOW/CAN'T RECALL

	E207	Of all the business literacy training offered, about how much of it did you attend? (Can read list)	1	ALMOST ALL
			2	MOST
			3	ABOUT HALF
			4	LESS THAN HALF
			5	VERY FEW
			98	DON'T KNOW/CAN'T RECALL
	E208	If you missed any sessions, what were the reasons you did not attend? (SELECT ALL THAT APPLY)	1	HUSBAND/WIFE/PARENT DID NOT WANT ME TO GO
			2	NEEDED TO CARE FOR CHILDREN; NO CHILD CARE
			3	HAD OTHER FAMILY/HOUSEHOLD WORK TO DO
			4	HAD PAID WORK TO DO
			5	PERSONAL ILLNESS OR INJURY
			6	NO TRANSPORTATION
			7	NO MONEY FOR TRANSPORT OR OTHER EXPENSES
			8	VISITS TO PARENTAL FAMILY
			9	DID NOT MISS ANY SESSION
			66	OTHER
			98	DON'T KNOW/CAN'T RECALL
	E209	How relevant to your situation did you find the trainings?	1	VERY RELEVANT
			2	SOMEWHAT RELEVANT
			3	SOMEWHAT IRRELEVANT
			4	VERY IRRELEVANT
	E210	In general, how would you rate the quality of the trainers?	1	VERY GOOD
			2	GOOD
			3	ACCEPTABLE
			4	POOR
			5	VERY POOR

	MODULE E, SECTION 3: LIFE SKILLS				
	E601	Have you heard of life skills?			
		E604	E605	E605a	E606
	Types of life skill	Have you heard of this life skill [...]?	How would you describe this life skill [...]? [DO NOT READ THE OPTIONS, SELECT ALL THAT APPLY] (OPTIONS BELOW)	Do you have confidence in your ability to apply [LIFE SKILL] to face challenges in life or making hard choices?	Has your [...] improved or declined in the past year?
		1. Yes		1. Very confident	1. Improved a lot
		2. No [Go to the next life skill]		2. Confident	2. Somewhat improved
				3. Somewhat confident	3. Stayed the same
				4. Not too confident	4. Somewhat declined
				5. Not confident at all	5. Declined a lot
				98. Don't know	98. Don't know

1	Self Awareness				
3	Effective Communication				
5	Capacity to Face Stressful Situations				
6	Decision Making Capacity				
7	Capacity to Solve Problems				
E605 codes					
Self Awareness	1. inner capabilities				
	2. weaknesses				
	3. values				
	4. wishes				
	5. needs				
	6. character				
	98. Don't know/Can't recall				
Effective Communication	1. presenting one's thoughts to others	Capacity to Face Stressful Situations	1. No matter how much stress, don't lose your mind		
	2. presenting one's feelings to others		2. Identify positive aspects of pressure		
	3. presenting one's problems to others		3. Identify challenges causing stress		
	4. talk with respect		4. Identify the effects of stress in your life		
	5. listen to other's thoughts/ feelings/ problems carefully		5. Find techniques to avoid stress inducing situations		
	98. Don't know/Can't recall		98. Don't know/Can't recall		
		Decision Making Capacity	1. Never make decisions under someone else's pressure		
			2. Think about consequences of decision		
			3. Weight the negatives versus positives of potential decision		
			98. Don't know/Can't recall		
		Capacity to Solve Problems	1. Identify the problem and its causes		
			2. Identify options to solve the problem		
			3. Weigh the positives and the negatives of each possible solution to the problem		
			4. Face problems in a positive and creative way		
			5. Problems must be solved; they do		

		not go away	
		6. Creative thinking can help solve problems	
		98. Don't know/Can't recall	

SECTION FOUR: ENTREPRENEURIAL SKILLS					
	E401	"Entrepreneurial Skills" can help make business more successful. Have you heard of entrepreneurial skills?			
	E402	One way to explain entrepreneurial skills is the knowledge and competencies that are needed to start up and run a business or micro enterprise. Considering this explanation of entrepreneurial skills: To what extent do you agree with the following statement?: ... "I am very comfortable in my understanding of entrepreneurial skills."		4 point scale: 1 DISAGREE STRONGLY 2 SOMEWHAT DISAGREE 3 SOMEWHAT AGREE 4 AGREE STRONGLY	
1	E403	One topic related to entrepreneurial skills is calculation of profit or loss. Have you heard of the topic of profit or loss calculation?			NO 2àGO TO E405
1	E404	Where have you heard of calculations of business profits or losses? (select all that apply)	1	1=Yes, 2=No	
			2	BUSINESS LITERACY PROGRAM	
			3	EIG PROGRAM	
			4	OTHER TRAINING CLASS OR PROGRAM	
			5	SCHOOL (FORMAL EDUCATION)	
			6	PARENTS/RELATIVES	

			7	OTHER FRIENDS/COMMUNITY	
			66	RADIO, TV, OTHER MEDIA	
			98	OTHER	
		E405 STARTS HERE One way to explain profit or loss calculation is comparing business expenditures and income to find the amount of profit when income is greater than expenditures or to find the amount of loss when expenditures are greater than income. To what extent do you agree with the following statements:		DON'T KNOW/CAN'T RECALL	
1	E405	... "I am very comfortable in my understanding of calculating profit or loss."		4 point scale: 1 DISAGREE STRONGLY 2 SOMEWHAT DISAGREE 3 SOMEWHAT AGREE 4 AGREE STRONGLY	
1	E406	... "I have confidence in my ability to calculate profit or loss in a business or micro enterprise."			
1	E409	Have you or other members of your household tried to use profit or loss calculations in the last year to make decisions on business activities?	1	YES	1->GO TO E411
			2	NO	
			98	DON'T KNOW	
1	E410	Can you tell me any reasons you have not tried to use calculations of profit or loss in the last year? (SELECT ALL THAT APPLY)	1	SPOUSE/HH DISCOURAGED	Go to E417
			2	NOT ENOUGH CONFIDENCE	Go to E417
			3	NOT ENOUGH KNOWLEDGE	Go to E417
			4	NO NEED FOR NEW DECISIONS ON ENTERPRISES/ACTIVITIES	Go to E417
			66	OTHER	Go to E417
			91	NOT APPLICABLE	Go to E417

			98	DON'T KNOW/CAN'T RECALL	
	E411	In what kinds of entrepreneurial activities have you calculated profits or losses? (SELECT ALL THAT APPLY)	1	HH AGRICULTURAL PRODUCTION 1	
			2	HH LIVESTOCK PRODUCTION 2	
			3	HH SMALL ANIMALS/POULTRY..... 3	
			4	HH SERVICE ORIENTED BUSINESS 4	
			5	CO-OP/ASSOCIATION AGRICULTURE ... 5	
			6	CO-OP/ASSOCIATION ANIMALS/POULTRY 6	
			7	CO-OP/ASSOCIATION SERVICE/SHOP 7	
			66	OTHER	
			98	DON'T KNOW/CAN'T RECALL	
	E412	What kinds of decisions have you been able to make using calculation of profits or losses? (SELECT ALL THAT APPLY)	1	START A HH BUSINESS OR NOT 1	
			2	JOIN A CO-OPERATIVE OR NOT..... 2	
			3	START CO-OP/ASSOCIATION BUSINESS OR NOT..... 3	
			4	WHAT KIND OF BUSINESS TO START ... 4	
			5	EXPAND A BUSINESS OR NOT 5	

			6	HOW TO EXPAND A BUSINESS OR INCREASE BUSINESS INCOME 6	
			66	OTHER	
			98	DON'T KNOW/CAN'T RECALL	
	E413	What challenges or difficulties did you encounter when you tried to calculate profits and losses? (SELECT ALL THAT APPLY)	1	SPOUSE/HH DISCOURAGED 1	
			2	I DID NOT HAVE CONFIDENCE 2	
			3	DID NOT HAVE INFORMATION NEEDED..... 3	
			4	DID NOT HAVE CAPACITY/SKILLS 4	
			5	NO CHALLENGES 5	
			66	OTHER	
			98	DON'T KNOW/CAN'T RECALL	
1	E417	Have you heard of the topic of calculating principal and interest on a loan?		Yes...1 No....2	2-> Go to E419
1	E418	Where have you heard of principal and interest calculations? (SELECT ALL THAT APPLY)	1	BUSINESS LITERACY PROGRAM	
			2	EIG PROGRAM	
			3	OTHER TRAINING CLASS OR PROGRAM	
			4	SCHOOL (FORMAL EDUCATION)	
			5	PARENTS/RELATIVES	
			6	OTHER FRIENDS/COMMUNITY	
			7	RADIO, TV, OTHER MEDIA	

			66	OTHER	
			98	DON'T KNOW/CAN'T RECALL	
		E419 STARTS HERE One way to explain principal and interest calculations is using correct formulas based on lending rules to determine the partial and total amounts due to pay back a loan. To what extent do you agree with the following statements:			
1	E419	... "I am very comfortable in my understanding of principal and interest calculations."		4 point scale: 1 DISAGREE STRONGLY 2 SOMEWHAT DISAGREE 3 SOMEWHAT AGREE 4 AGREE STRONGLY	
1	E420	... "I have confidence in my ability to calculate principal and interest payments."			
1	E423	Have you or other members of your household tried to use principal and interest calculations in the last year?	1	YES	1->GO TO E425
			2	NO	
			98	DON'T KNOW	
1	E424	Can you tell me any reasons you have not tried to use calculations of principal and interest in the last year? (SELECT ALL THAT APPLY)	1	SPOUSE/HH DISCOURAGED	
			2	NOT ENOUGH CONFIDENCE	
			3	NOT ENOUGH KNOWLEDGE	
			4	NO NEED FOR NEW DECISIONS ON LOANS OR REPAYMENTS	
			66	OTHER	
			91	NOT APPLICABLE	
			98	DON'T KNOW/CAN'T RECALL	

	E425	For what kinds of entrepreneurial activities have you calculated principal and interest? (SELECT ALL THAT APPLY)	1	HH AGRICULTURAL PRODUCTION	
			2	HH LIVESTOCK PRODUCTION	
			3	HH SMALL ANIMALS/POULTRY	
			4	HH SERVICE ORIENTED BUSINESS	
			5	CO-OP/ASSOCIATION AGRICULTURE	
			6	CO-OP/ASSOCIATION ANIMALS/POULTRY	
			7	CO-OP/ASSOCIATION SERVICE/ORIENTED BUSINESS	
			8	FOR REPAYMENT OF FARMERS' GROUP LOANS	
			9	FOR REPAYMENT OF OTHER LOANS	
			66	OTHER _____	
			98	DON'T KNOW	
	E426	What kinds of decisions have you been able to make using calculation of principal and interest? (SELECT ALL THAT APPLY)	1	START A HH BUSINESS OR NOT	
			2	JOIN A CO-OPERATIVE OR NOT	
			3	START GROUP BUSINESS OR NOT	
			4	WHAT KIND OF BUSINESS TO START	
			5	EXPAND A BUSINESS OR NOT	
			6	HOW TO EXPAND A BUSINESS OR INCREASE BUSINESS INCOME	
			7	REPAYING A LOAN/LOANS	
			66	OTHER _____	
			98	DON'T KNOW/CAN'T RECALL	

	E427	What challenges or difficulties did you encounter when you tried to calculate principal and interest? (SELECT ALL THAT APPLY)	1	SPOUSE/HH DISCOURAGED	
			2	I DID NOT HAVE CONFIDENCE	
			3	DID NOT HAVE INFORMATION NEEDED	
			4	DID NOT HAVE CAPACITY/SKILLS	
			5	NO NEED/USE FOR CALCULATIONS	
			6	NO CHALLENGES	
			66	OTHER _____	
			98	DON'T KNOW	

MODULE E, SECTION 5: INSURANCE

E701	Have you heard of crop and/or livestock insurance?	Yes	1	Skip the module
		No	2	
E702	From where have you heard of crop and/or livestock insurance? (SELECT ALL THAT APPLY)	BUSINESS LITERACY PROGRAM	1	
		EIG PROGRAM	2	
		OTHER TRAINING CLASS OR PROGRAM	3	
		SCHOOL (FORMAL EDUCATION)	4	
		PARENTS/RELATIVES	5	
		OTHER FRIENDS/COMMUNITY	6	
		RADIO, TV, OTHER MEDIA	7	
		OTHER	66	
		DON'T KNOW/CAN'T RECALL	98	
E703	To your knowledge, is crop and/or livestock insurance available in your	Yes	1	

	community through any program or organization?	No	2	Skip the module
		Don't Know	98	Skip the module
E704	Have you or anyone in your household tried to enroll in a crop and/or livestock insurance in the past 2 years?	Yes	1	
		No	2	Skip to E706
E705	Were you/ HH member successful in enrolling in a crop and/or livestock insurance in the past 2 years?	Yes	1	Skip the module
		No	2	Skip the module
E706	Can you tell me any reasons you or your HH member did not try to get crop and/or livestock insurance in the past 2 years (SELECT ALL THAT APPLY)?	SPOUSE/HH DISCOURAGED	1	
		NOT ENOUGH CONFIDENCE	2	
		NOT ENOUGH KNOWLEDGE	3	
		NOT AFFORDABLE	4	
		OTHER	66	
		NOT APPLICABLE	91	
		DON'T KNOW/CAN'T RECALL	98	

MODULE E, SECTION 6: ACCESS TO FINANCE

E501	Have you heard of or know about access to finance?	YES	1	
		NO	2	>>E5003
E502	Where have you heard of access to finance? (SELECT ALL THAT APPLY)	BUSINESS LITERACY PROGRAM	1	
		EIG PROGRAM	2	
		OTHER TRAINING CLASS OR PROGRAM	3	
		SCHOOL (FORMAL EDUCATION)	4	
		PARENTS/RELATIVES	5	
		OTHER FRIENDS/COMMUNITY	6	
		RADIO, TV, OTHER MEDIA	7	
		OTHER	66	
		DON'T KNOW/CAN'T RECALL	98	

		E5003	E5004	E5005	E5006	E5007	E5008
	Types of source of finance	Have you heard of [...]?	From where have you heard of [...]? (SELECT ALL THAT APPLY)	Have you or anyone in your household tried taking a loan from [...] for business activities in the past 2 years?	For what kinds of business activities did you (or your household member) try to get a loan in the past 2 years from [...]? (SELECT ALL THAT APPLY)	Were you/ HH member successful in getting a loan from X for the said business activities in the past 2 years [...]?	Can you tell me any reasons you or your HH member did not try to get a loan from [...] in the past 2 years (SELECT ALL THAT APPLY)?
			RELEVANCE: E5003 is 1.	RELEVANCE: E5005 is 1.	RELEVANCE: E5005 is 1.	RELEVANCE: E5005 is 1.	RELEVANCE: E5005 is 2.
		1. Yes 2. No [Go to the next source of		1. Yes 2. No	SEE CODES BELOW	1. Yes 2. No [Go to the next source of finance]	

		finance]					
1	Savings group						
2	Savings and credit cooperative						
3	Microfinance Development Bank						
4	Nepal Rural Development Bank (Nepal Gramin Bikas Bank)						
5	Small Farmers Development Bank						
6	Poverty Alleviation Fund						
7	Other Banks and NGOs working in Microfinance Development						

CODES

E5006	HH AGRICULTURAL PRODUCTION 1 HH LIVESTOCK PRODUCTION 2 HH SMALL ANIMALS/POULTRY 3 HH SERVICE ORIENTED BUSINESS 4 CO-OP/ASSOCIATION AGRICULTURE .. 5 CO-OP/ASSOCIATION ANIMALS 6	E5004	BUSINESS LITERACY PROGRAM 1 EIG PROGRAM 2 OTHER TRAINING CLASS OR PROGRAM 3 SCHOOL (FORMAL EDUCATION) 4 PARENTS/RELATIVES 5
-------	--	-------	---

CO-OP/ASSOCIATION
SMALL
ANIMALS/POULTRY
..... 7

CO-OP/ASSOCIATION
SERVICE ORIENTED
BUSINESS
..... 8

OTHER _____ 66
DON'T KNOW/CAN'T
RECALL 98

OTHER FRIENDS/COMMUNITY 6

RADIO, TV, OTHER MEDIA 7

OTHER 66

DON'T KNOW/CAN'T RECALL 98

E5008

SPOUSE/HH
DISCOURAGED.....
..... 1

NOT ENOUGH
CONFIDENCE
..... 2

NOT ENOUGH
KNOWLEDGE
..... 3

NO NEED FOR NEW
FINANCING 4

OTHER _____ 66

NOT APPLICABLE
..... 91

DON'T KNOW/CAN'T
RECALL 98

Lending Sources/ Debt		Has anyone in your HH taken loans or borrowed cash/in-kind from [...] in the past 12 months?	What was the total value of the loan from this source (principal amount, in Rs.)? [Enumerator: if multiple loans were taken from the same source, please record the total figure. If the respondent doesn't know the amount or can't recall, please record "-98"..	What was the associated interest rate with the loan? [Enumerator: if multiple loans were taken from the same source, please record the average rate. If the respondent doesn't know or can't recall, please record "-98". (SKIP IF F125.1 is -98 or -99)	Who made the decision to borrow from [...]?		Who participated in the decision about what to do with the money/item borrowed from [...]?	Has the loan been repaid?
		F125	F125.1	F125.2	F125.3	F126	F127	F128
A	Non - gov ern men tal orga nizat ion (NG O)	YES, CASH 1 YES, IN-KIND 2 YES, CASH AND IN-KIND 3 NO 4→GO TO NEXT ITEM DON'T KNOW 98→GO TO NEXT ITEM REFUSED 99→GO TO NEXT ITEM	VALUE _____ _DON'T KNOW 98 REFUSED 99	INTEREST RATE (% VALUE) _____ _____	INTEREST RATE (UNIT): WEEKLY 1 MONTHLY 2 QUARTERLY 3 YEARLY 4 OTHER (SPECIFY) 66	1=SELF 2=PARTNER/SPOUSE 3=SELF WITH PARTNER/SPOUSE JOINTLY 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=OTHER HH MEMBERS JOINTLY 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION MEMBERS 11=SELF AND OTHER HH MEMBERS 98=DON'T KNOW 99=REFUSED	1=SELF 2=PARTNER/SPOUSE 3=SELF WITH PARTNER/SPOUSE JOINTLY 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=OTHER HH MEMBERS JOINTLY 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 11=SELF AND OTHER HH MEMBERS 98=DON'T KNOW 99=REFUSED	YES 1 NO 2 DON'T KNOW 98 REFUSED 99

B	Informal lender	YES, CASH 1YES, IN-KIND 2YES, CASH AND IN-KIND 3NO 4→GO TO NEXT ITEM DON'T KNOW 98→GO TO NEXT ITEM REFUSED 99→GO TO NEXT ITEM	VALUE _____ DON'T KNOW 98 REFUSED 99	INTEREST RATE (% VALUE) _____	INTEREST RATE (UNIT): WEEKLY 1 MONTHLY 2 QUARTERLY 3 YEARLY 4 OTHER (SPECIFY) 66	1=SELF2=PARTNER/SPOUSE3=SELF WITH PARTNER/SPOUSE JOINTLY4=OTHER MALE HH MEMBER5=OTHER FEMALE HH MEMBER6=OTHER HH MEMBERS JOINTLY7=SELF AND NON-HH MEMBERS8=PARTNER/SPOUSE AND NON-HH MEMBERS9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS10=GROUP/ASSOCIATION11=SELF AND OTHER HH MEMBERS98=DON'T KNOW99=REFUSED	1=SELF2=PARTNER/SPOUSE3=SELF WITH PARTNER/SPOUSE JOINTLY4=OTHER MALE HH MEMBER5=OTHER FEMALE HH MEMBERS JOINTLY7=SELF AND NON-HH MEMBERS8=PARTNER/SPOUSE AND NON-HH MEMBERS9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS10=GROUP/ASSOCIATION11=SELF AND OTHER HH MEMBERS98=DON'T KNOW99=REFUSED	YES 1NO 2DON'T KNOW 98REFUSED 99
C	Formal lender (bank/financial institution)	YES, CASH 1 YES, IN-KIND 2 YES, CASH AND IN-KIND 3 NO 4→GO TO NEXT ITEM DON'T KNOW 98→GO TO NEXT ITEM REFUSED 99→GO TO NEXT ITEM	VALUE _____ DON'T KNOW 98 REFUSED 99	INTEREST RATE (% VALUE) _____	INTEREST RATE (UNIT): WEEKLY 1 MONTHLY 2 QUARTERLY 3 YEARLY 4 OTHER (SPECIFY) 66	1=SELF 2=PARTNER/SPOUSE 3=SELF WITH PARTNER/SPOUSE JOINTLY 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=OTHER HH MEMBERS JOINTLY 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 11=SELF AND OTHER HH MEMBERS 98=DON'T KNOW 99=REFUSED	1=SELF 2=PARTNER/SPOUSE 3=SELF WITH PARTNER/SPOUSE JOINTLY 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=OTHER HH MEMBERS JOINTLY 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 11=SELF AND OTHER HH MEMBERS 98=DON'T KNOW 99=REFUSED	YES 1 NO 2 DON'T KNOW 98 REFUSED 99

D	Friends and/or relatives	YES, CASH 1YES, IN-KIND 2YES, CASH AND IN-KIND 3NO 4→GO TO NEXT ITEM DON'T KNOW 98→GO TO NEXT ITEM REFUSED 99→GO TO NEXT ITEM	VALUE _____ DON'T KNOW 98 REFUSED 99	INTEREST RATE (% VALUE) _____	INTEREST RATE (UNIT): WEEKLY 1 MONTHLY 2 QUARTERLY 3 YEARLY 4 OTHER (SPECIFY) 66	1=SELF2=PARTNER/SPOUSE3=SELF WITH PARTNER/SPOUSE JOINTLY4=OTHER MALE HH MEMBER5=OTHER FEMALE HH MEMBER6=OTHER HH MEMBERS JOINTLY7=SELF AND NON-HH MEMBERS8=PARTNER/SPOUSE AND NON-HH MEMBERS9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS10=GROUP/ASSOCIATION11=SELF AND OTHER HH MEMBERS98=DON'T KNOW99=REFUSED	1=SELF2=PARTNER/SPOUSE3=SELF WITH PARTNER/SPOUSE JOINTLY4=OTHER MALE HH MEMBER5=OTHER FEMALE HH MEMBERS6=OTHER HH MEMBERS JOINTLY7=SELF AND NON-HH MEMBERS8=PARTNER/SPOUSE AND NON-HH MEMBERS9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS10=GROUP/ASSOCIATION11=SELF AND OTHER HH MEMBERS98=DON'T KNOW99=REFUSED	YES 1NO 2DON'T KNOW 98REFUSED 99
E	Group based micro-finance or lending	YES, CASH 1YES, IN-KIND 2YES, CASH AND IN-KIND 3NO 4→GO TO NEXT ITEM DON'T KNOW 98→GO TO NEXT ITEM REFUSED 99→GO TO NEXT ITEM	VALUE _____ DON'T KNOW 98 REFUSED 99	INTEREST RATE (% VALUE) _____	INTEREST RATE (UNIT): WEEKLY 1 MONTHLY 2 QUARTERLY 3 YEARLY 4 OTHER (SPECIFY) 66	1=SELF 2=PARTNER/SPOUSE 3=SELF WITH PARTNER/SPOUSE JOINTLY 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=OTHER HH MEMBERS JOINTLY 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 11=SELF AND OTHER HH MEMBERS 98=DON'T KNOW 99=REFUSED	1=SELF 2=PARTNER/SPOUSE 3=SELF WITH PARTNER/SPOUSE JOINTLY 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=OTHER HH MEMBERS JOINTLY 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 11=SELF AND OTHER HH MEMBERS 98=DON'T KNOW 99=REFUSED	YES 1NO 2DON'T KNOW 98REFUSED 99

MODULE F. Household Resources and Production

SECTION ONE: FINANCES

F101.1_note	We want this module to be filled by the female HH member who was in Business Literacy Program managed by DEPROSC in 2016-2017 or could have been eligible to be a part of that program.	[Relevance condition: A21=2 or A21=98 or (A21=1 and A22=2)]
F101.1	We want this module to be filled by the female HH member who was in Business Literacy Program managed by DEPROSC in 2016-2017 or could have been eligible to be a part of that program. Who will be filling out this module?	
F101	Do you currently have a savings account in a bank?	YES 1 NO 2→GO TO F104 DON'T KNOW 98→GO TO F104 REFUSED 99→GO TO F104
F102	Whose names are on this bank account? (SELECT ALL THAT APPLY)	1=SELF 2=PARTNER/SPOUSE 3=JOINT ACCOUNT, SELF WITH PARTNER/SPOUSE 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=JOINT ACCOUNT, OTHER HH MEMBERS 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 98=DON'T KNOW 99=REFUSED
F103	Can you access funds in this account by yourself?	YES 1 NO 2 DON'T KNOW 98 REFUSED 99

F104	Do any other household members have a savings account in a bank?	YES 1 NO 2→GO TO F107 DON'T KNOW 98→GO TO F107 REFUSED 99→GO TO F107
F105	Whose names are on any other bank accounts? (SELECT ALL THAT APPLY)	1=SELF 2=PARTNER/SPOUSE 3=JOINT ACCOUNT, SELF WITH PARTNER/SPOUSE 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 6=JOINT ACCOUNT, OTHER HH MEMBERS 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 98=DON'T KNOW 99=REFUSED
F106	Can you access funds in any of these bank accounts by yourself?	YES 1 NO 2 DON'T KNOW 98 REFUSED 99
F107	Does anyone in your household currently have savings in a local group (farmer's group, women's group, etc.)?	YES 1 NO 2→GO TO F110 DON'T KNOW 98→GO TO F110 REFUSED 99→GO TO F110
F108	Which household members have names on any group savings account? (SELECT ALL THAT APPLY)	1=SELF 2=PARTNER/SPOUSE 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 98=DON'T KNOW 99=REFUSED
F109	Can you access funds in any of these group savings accounts by yourself?	YES 1 NO 2 DON'T KNOW 98 REFUSED 99
F110	Does anyone in your household currently store savings in the house (not in any account)?	YES 1 NO 2→GO TO F113 DON'T KNOW 98→GO TO F113 REFUSED 99→GO TO F113

F111	Who in the household controls access to cash and savings in the house? (SELECT ALL THAT APPLY)	1=SELF 2=PARTNER/SPOUSE 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 98=DON'T KNOW 99=REFUSED
F112	Can you access cash and savings in the house by yourself?	YES 1 NO 2 DON'T KNOW 98 REFUSED 99
F113	Does anyone in your household currently receive a pension?	YES 1 NO 2→GO TO F119 DON'T KNOW 98→GO TO F119 REFUSED 99→GO TO F119
F114	What is the source of the pension? (SELECT ALL THAT APPLY)	INDIAN ARMY 1 NEPALESE ARMY 2 BRITISH ARMY 3 NEPALESE POLICE 4 GOVERNMENT SERVICE 5 PRIVATE COMPANY 6 OTHER (SPECIFY) 66 DON'T KNOW 98 REFUSED 99

F115	Who in the household makes decisions about how to use pension money? (SELECT ALL THAT APPLY)	1=SELF 2=PARTNER/SPOUSE 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 98=DON'T KNOW 99=REFUSED
F119	Does anyone in your household currently have other financial assets or accounts?	YES 1 NO 2→GO TO F122 DON'T KNOW 98→GO TO F122 REFUSED 99→GO TO F122
F120	Whose names are on the assets or accounts? (SELECT ALL THAT APPLY)	1=SELF 2=PARTNER/SPOUSE 4=OTHER MALE HH MEMBER 5=OTHER FEMALE HH MEMBER 7=SELF AND NON-HH MEMBERS 8=PARTNER/SPOUSE AND NON-HH MEMBERS 9=OTHER HOUSEHOLD MEMBER AND NON-HH MEMBERS 10=GROUP/ASSOCIATION 98=DON'T KNOW 99=REFUSED
F121	Can you access any of these assets or accounts by yourself?	YES 1 NO 2 DON'T KNOW 98 REFUSED 99
F122	Does anyone in your household lend money?	YES 1 NO 2→GO TO F125 DON'T KNOW 98→GO TO F125 REFUSED 99→GO TO F125

F123	Who in the household makes decisions about lending out money? (SELECT ALL THAT APPLY)	1=SELF2=PARTNER/SPOUSE4=OTHER MALE HH MEMBER5=OTHER FEMALE HH MEMBER98=DON'T KNOW99=REFUSED	
F124	Can you make decisions to lend money by yourself?	YES 1 NO 2 DON'T KNOW 98 REFUSED 99	

MODULE G: ENTREPRENEURIAL AUTONOMY		
G01.1_note	We want this module to be filled by the female HH member who was in Business Literacy Program managed by DEPROSC in 2016-2017 or could have been eligible to be a part of that program.	[Relevance condition: A21=2 or A21=98 or (A21=1 and A22=2)]
G01.1	Who will be filling out this module?	
G_filter	Is the gender of the respondent for this section female?	YES 1 NO 2 (Skip module)
Note	Rama is a woman from a neighboring village who runs a micro-enterprise business. I want to ask you some hypothetical questions about her. Please answer the following questions based on what you think is likely to be true about a woman like Rama.	
The types of products to make and/or sell in the market		

G01	Rama cannot decide what product to make or sell in the market. She makes such product because this is what her family has always done in the past.	Likely true Likely false Don't know	1 2 98
G02	Rama is an entrepreneur and makes her product because another person or group in her community tells her she must do so. She does what they tell her to do.	Likely true Likely false Don't know	1 2 98
G03	Rama is engaged in the business that she's in because that's what her family or community expect. She wants them to approve of her as a good entrepreneur or businesswoman.	Likely true Likely false Don't know	1 2 98
G04	Rama chooses the type of business she is engaged in and what to produce and sell in the market that she thinks are best for herself and her family. She values undertaking this type of business. If she changed her mind, she could act differently.	Likely true Likely false Don't know	1 2 98
The location of the enterprise			
G05	Rama's business is located where it is located now because this is where the family has always had their business.	Likely true Likely false Don't know	1 2 98
G06	Rama's business is located where it is now because another person in her family is telling her to do so. She does what they tell her to do.	Likely true Likely false Don't know	1 2 98
G07	Rama's business is located where it is because that's what her family or community expect. She wants them to approve of her as a good entrepreneur or businesswoman.	Likely true Likely false Don't know	1 2 98
G08	Rama can choose where she will locate her business, whether at home or close to the market. She chooses the best location for her business, not any other person.	Likely true Likely false Don't know	1 2 98
The size of the enterprise			
G09	Even if funds are available, Rama cannot decide whether to expand her business by hiring more workers. She is keeping it the same size because it is what she has done in the past.	Likely true Likely false Don't know	1 2 98
G10	Funds are available and Rama is expanding the business and hiring workers because another person in her family is telling her to do so. She does what they tell her to do.	Likely true Likely false Don't know	1 2 98

G11	Rama is expanding the business and hiring workers because that's what her family or community expect. She wants them to approve of her as a good entrepreneur or businesswoman.	Likely true Likely false Don't know	1 2 98
G12	Rama is expanding the business and hiring workers because she thinks it is a good business opportunity. If she changed her mind, she could act differently.	Likely true Likely false Don't know	1 2 98
How to use income generated from the enterprise			
G13	"There is no alternative to how Rama uses her income. How she uses her income is determined by necessity.	Likely true Likely false Don't know	1 2 98
G14	Rama uses her income how her spouse, or another person or group in her community tell her she must use it there. She does what they tell her to do.	Likely true Likely false Don't know	1 2 98
G15	Rama uses her income in the way that her family or community expect. She wants them to approve of her.	Likely true Likely false Don't know	1 2 98
G16	Rama chooses to use her income how she personally wants to, and thinks is best for herself and her family. She values using her income in this way. If she changed her mind, she could act differently.	Likely true Likely false Don't know	1 2 98

F200.1	Now we are going to talk about some shocks that your household may have faced in the recent years. By shock we mean an unexpected, negative event that causes economic damage to your household. These shocks could have come about due to many factors, such as climatic, economic, familial, out of accidents, out of natural disasters, etc. Did you household experience any such shocks in the past 3 years?					1 Yes	2 No	[Skip the module if No]
	F201	F203	F205	F206	F207			
Type of shocks	What were the shocks that your household experienced in the past 3 years?	During the past one year did your household experience [shock]?	How severe was the impact on your income and food consumption?	To what extent were you and your household able to recover?	How did you cope with the stressful events you experienced in the last year?			
	[Select all that may apply, do not read the list]	1. Yes 2. No [Go to next shock] 98. Don't know 99. Refused	[severity codes]	[recovery codes]	[coping strategy codes] [select all that apply]	Severity codes 1 None 2 Slight impact 3 Moderate impact 4 Strong impact 5 Worst ever happened 98 DON'T KNOW 99 REFUSED		
Excessive rains								
Too little rain/drought								
Livestock disease								
Crop disease								
Very bad harvest								
Landslides/erosion								

Theft of money						
Theft of crops						Recovery co
Theft or destruction of assets						
Theft of livestock (raids)						1 Did not recov
Destruction or damage of house due to violence						Recovered so 2 but worse off than before [event]
Loss of land due to conflict						Recovered to 3 same level as before [event]
Violence against household members						4 Recovered and better off
Sharp food price increase						5 Not affected b [event]
Unavailability of agricultural or livestock inputs						98 DON'T KNOW
No demand for agricultural or livestock products						99 REFUSED
Increase in price of agricultural or livestock inputs						
Drop in price of agricultural products						
Drop in price of livestock products						
Death of household member						
Business bankruptcy/loss						
Household member illness/health shock						
Household member physical accident						
Other, specify						
Other, specify						

F308	How much farm land does your family own?	ROPANI 1 Number = _____ BIGHA.....2 Number = _____ = _____ SQUARE METERS...3 Number = _____ = _____ NONE = 0 DON'T KNOW/CAN'T RECALL 98
F309	Does your family own this house plot?	YES 1 NO 2
Next I am going to ask you some questions about your house and things that your household may have.		
F310	Does your house have electricity?	YES 1 NO 2
F311	Does your house have a landline telephone?	YES 1 NO 2
F312	Does your house have a refrigerator?	YES 1 NO 2
F313	Does your household have a tractor?	YES 1 NO 2
F314	Does your household have an irrigation pump?	YES 1 NO 2
For the next items, please tell me if your household has any of these, and if so how many.		
F315	Radio?	YES..... 1 (_____) NO 2
F316	Mobile telephone?	YES..... 1 (_____) NO 2
F317	Computer or laptop or tablet?	YES..... 1 (_____) NO 2
F318	Bicycle?	YES..... 1 (_____) NO 2
F319	Scooter or motorcycle?	YES..... 1 (_____) NO 2
F320	Car, taxi, truck, or bus?	YES..... 1 (_____) NO 2
Now I'd like to ask you about animals your household may own, and how many male and female of each type of animal you have.		
F321	Do you own cattle, sheep/goats, poultry, or any other farm animals?	YES 1 NO 2 → GO TO F350
F322	Buffaloes?	YES..... 1 (MALE _____) (FEMALE _____) NO 2
F323	Cattle?	YES..... 1 (MALE _____) (FEMALE _____)

		NO 2
F325	Goats?	YES..... 1 (MALE _____) (FEMALE _____) NO 2
F326	Sheep?	YES..... 1 (MALE _____)(FEMALE _____)NO 2
F327	Chickens?	YES..... 1 (MALE _____) (FEMALE _____) NO 2
F328	Ducks?	YES..... 1 (MALE _____) (FEMALE _____) NO 2
F329	Swine/pigs?	YES..... 1 (MALE _____) (FEMALE _____) NO 2

Household identification module must be completed before this module.						
Module: Micro-enterprises (Agricultural)						
F350a	F350	F351	F351a	F352	F353	F354
Types of agricultural micro-enterprise	Has your household ever tried the micro enterprise of [enterprise type]?	Is your household currently engaged in [enterprise type] as a micro enterprise?	Has your household tried the micro-enterprise of [enterprise type] in the last two years?	Why did your household stop [enterprise type] micro enterprise? (SELECT ALL THAT APPLY)	In your opinion, what are/were the benefits of [enterprise type] micro enterprise? (SELECT ALL THAT APPLY)	In your opinion, what are/were the negatives [enterprise type] micro enterprise? (SELECT ALL THAT APPLY)

	1. Yes 2. No [Go to F355]	1. Yes [Go to F353] 2. No [Go to F351a]	1. Yes 2. No [Go to F355]	1. Crop/herd/stock/flock /hive failures 2. Quality too low for sale 3. Production too low for sale 4. Low demand for product 5. Too expensive 6. Lacked information/knowledge 7. Lacked skills 8. Found better opportunities 66. Other, specify 98. Don't know/can't recall	1. No benefits 2. Additional cash income 3. Additional nutritional value [prod. valued for home consumption] 4. Easy to grow/raise and maintain 66. Other, specify 98. Don't know/can't recall	1. No negatives 2. Lost cash income 3. Not good to eat [not valued for home use] 4. Hard to grow/raise and maintain 66. Other, specify 98. Don't know/can't recall
Vegetable farming						
Ginger farming						
Organic farming						
Goat farming						
Fish farming						
Poultry farming						
Beekeeping						
Tunnel Farming						
Other, specify						
Other, specify						

If No to F350 in ALL cases, please ask: F357 CODES						
	What factors lead your household to not manage any agricultural microenterprises?					
	1. Quality for market too difficult to attain					
	2. Lack credit/money to start					
	3. Production too low for sale					
	4. Low demand for products					
	6. Lacked information/knowledge					
	7. Lacked skills					
	8. Found better opportunities					
	66. Other, specify 98. Don't know/can't recall					

Household identifier						
Module: Micro-enterprises (Non-Agricultural)						
F350a	F350	F351	F351a	F352	F353	F354

Types of non-agricultural micro-enterprise	Has your household ever tried the micro enterprise of [enterprise type]?	Is your household currently engaged in [enterprise type] as a micro enterprise?	Has your household tried the micro-enterprise of [enterprise type] in the last two years?	Why did your household stop [enterprise type] micro enterprise? (SELECT ALL THAT APPLY)	In your opinion, what are/were the benefits of [enterprise type] micro enterprise? (SELECT ALL THAT APPLY)	In your opinion, what are/were the negatives [enterprise type] micro enterprise? (SELECT ALL THAT APPLY)
	1. Yes 2. No [Go to F355]	1. Yes [Go to F353] 2. No [Go to F351a]	1. Yes 2. No [Go to F355]	1. Too much competition 2. Quality too low for sale 3. Production too low for sale 4. Low demand for services 5. Overhead too expensive 6. Lacked information/knowledge 7. Lacked skills 8. Found better opportunities 66. Other, specify 98. Don't know/can't recall	1. No benefits 2. Additional cash income 3. Valuable community service 4. Easy to get into business 66. Other, specify 98. Don't know/can't recall	1. No negatives 2. Lost cash income 3. Not valued by the community 4. Hard to start business 66. Other, specify 98. Don't know/can't recall
Agro-vet shop						
Fruit or vegetable shop						
Tea or snacks shop						
Selling milk or milk products						
Selling ready-made food products						

Selling products made from bamboo, cane, or nigalo						
Providing electronic/wiring repairs or services						
Other, specify						
Other, specify						
Other, specify						
If No to F350 in ALL cases, please ask:						
F357 CODES	What factors lead your household to not manage any non-agricultural microenterprises?					
	1. Quality for market too difficult to attain					
	2. Lack credit/money to start					
	3. Production too low for sale					
	4. Low demand for products					
	6. Lacked information/knowledge					
	7. Lacked skills					
	8. Found better opportunities					
	66. Other, specify					
98. Don't know/can't recall						

PI D	Module H: Labor (Version 1)
	Introduction: In this module we are going to ask you about productive activities done by members of the household in the last 12 months.
	ENUMERATOR: For this module, if available, members of the household other than respondents may report for themselves.

		H1	H2	H3		H4
	Name (Preloaded) All household members aged 14+	Is [NAME] reporting for him/herself?	Who is responding on behalf of [NAME]?	In the last 12 months, which of the following productive activities was [NAME] involved in? READ OPTIONS, MARK ALL THAT APPLY	Programming note: Ask the following questions based on the response to H3.	Why was [NAME] not doing any productive activity in the last 12 months?
		Y/N	PID	See code list		Select from not work list
			H1 = 0			H3 = 5
1	[NAME 1]					
2	[NAME 2]					
3	[NAME 3]					
...	...					
PID	H5			H6		H7
	Programming note: Ask this question for each activity in the activity list (see codelist). In the last 12 months did [NAME] work on this household's farm in {ACTIVITY}?			In this work on the household farm, which of the following best describes [NAME]'s role? MARK ALL THAT APPLY		Where does the work associated with this work on the household farm occur? Mark all that apply
	Y/N for each activity			Select from role list		Select from location list
	If H3 = 1			If H3 = 1		If H3 = 1
	1					
2						
3						
4						

...						
PI D	Module ? : Labor					
	H8		H9		H10	
	Programming note: Ask this question for each activity in the activity list. In the last 12 months did [NAME] work on someone else's farm in {ACTIVITY}?		In this work on someone else's farm, which of the following best describes [NAME]'s role? MARK ALL THAT APPLY		Where does the work associated with this work on someone else's farm occur? Mark all that apply	
	Y/N for each activity		Select from role list		Select from location list	
	If H3 = 3		If H3 = 3		If H3 = 3	
1						
2						
3						
...						
PI D	H11	H12	H13	H14	H15	H16
	Was any of the household business work related to agriculture? Y/N	In this work on household business, which of the following best describes [NAME]'s role? MARK ALL THAT APPLY Select from role list	Where does the work associated with household business occur? Mark all that apply Select from location list	Was any of the off farm wage work related to agriculture? Y/N	In this off farm wage work, which of the following best describes [NAME]'s role? MARK ALL THAT APPLY Select from role list	Where does the off farm wage work occur? Mark all that apply Select from location list

	If H3 = 2	If H3 = 2	If H3 = 2	If H3 = 4	If H3 = 4	If H3 = 4
1						
2						
3						
4						
...						

	H3 Options		Role list
1	Household farm work	1	Working for someone else for pay?
2	Household Business	2	An employer?
3	Wage work or salaried job- On farm	3	Self-employed?
4	Wage work or salaried job- Off farm	4	Helping without pay in a household business?
5	None	5	An apprentice?
	Activity list	6	Working on the household farm or with household livestock?
1	Physical labor: Pre-harvest activities (planting, land preparation, etc)		Location list
2	Physical labor: Harvest	1	Inside Home/Compound
3	Physical labor: Post-harvest activities (eg processing and storage)	2	On Household Fields/Farm
4	Identify, hire, or supervise non-household laborers	3	Elsewhere, in village
5	Decisions regarding input purchases and/or use	4	Elsewhere, outside village - MARKET TOWN
6	Small quantity sales of production	5	Elsewhere, outside village - RURAL
7	Bulk sales of production	6	Elsewhere, outside village - URBAN/DISTRICT CAPITAL
8	Physical labor: Livestock care	6	Other (specify)
9	Livestock and/or livestock by-product sales		
10	Any kind of training, learning, or experimentation with new agricultural techniques		
	Not work list		
1	Student		
2	Other Household Responsibilities		

3	Physically/Mentally Unable
4	Unable to find work
5	Retired
66	Other (specify)

Module H: Labor							
Introduction: In this module we are going to ask you about productive activities done by members of the household in the last 12 months.							
ENUMERATOR: For this module, if available, other members besides the respondent may report for themselves.							
PID		H1	H2	H12	H13	H14	H15
	Name (Preloaded) All household members aged 14+	Is [NAME] reporting for him/ herself?	Who is responding on behalf of [NAME]?	In the last 12 months what was your primary productive activity? Enumerator note: The primary productive activity is the productive activity that the respondent has spent the most time doing in the last 12 months.	Why was [NAME] not doing any productive activity in the last 12 months? -> END MODULE	What activities were you involved in? READ OPTIONS, MARK ALL THAT APPLY	Was this activity related to agriculture?
		Y/N	PID	H12	H13	H14	Y/N
			H1 = 0		H12 = 5	H12 = 1 or 3	H12 = 2 or 4
	1	[NAME 1]					
2	[NAME 2]						
3	[NAME 3]						
...	...						

PID	H18		H19		H20	H21	H22
	In this primary job/business that [NAME] had during the last 12 months, which of the following best describes [NAME]'s role?		Where does the work associated with this primary job/business occur? Mark all that apply		In the last 12 months, in which months did [NAME] do this work? Mark all that apply	In the last 12 months, in a typical month that [NAME] did this work, how many days did he/she do it?	In the last 12 months, in a typical day that [NAME] did this work, how many hours did he/she do it?
	H18		H19		Months	Number of days	Number of hours
1							
2							
3							
4							
...							
PID	Module C: Labor						
	H23	H24		H25			
	In the last 12 months what was your second most productive activity? Enumerator note: The second productive activity is the productive activity that the respondent has spent the second most	What activities was [NAME] involved in? Mark all that apply		Was this activity related to agriculture?			

	time doing in the last 12 months. If "None" -> C43						
	H12	H14	Y/N				
		H23 = 1 or 3	H23=2 or 4				
1							
2							
3							
...							
PID	H28		H29		H30	H31	H32
	In this second job/business that [NAME] had during the last 12 months, which of the following best describes [NAME]'s role?		Where does the work associated with this second job/business occur? Mark all that apply		In the last 12 months, in which months did you do this work? Mark all that apply	In the last 12 months, in a typical month that you did this work, how many days did you do it?	In the last 12 months, in a typical day that you did this work, how many hours did you do it?
	H18		H19		Months of year	Number of days	Number of hours
1							
2							
3							
...							
PID	Module H: Labor						

	H43	H44	H45	H46	H47	H48	H49	H50
	At any time in the past 12 months did [NAME] leave this village for more than a week to work elsewhere?	Was this one of the activities mentioned earlier?	Which activity was this among the earlier mentioned activities? SELECT ALL THAT APPLY Choose from list of earlier responses.	Where did [NAME] go to work?	For how many months did [NAME] do this work in the last 12 months?	What did [NAME] do while away?	What activities was [NAME] involved in while away? SELECT ALL THAT APPLY	Are these activities related to agriculture?
	Y/N	Y/N		H46	Number of months		H12	Y/N
		H43=Y	H44=Y	H43=1	H43=1	H43=1	H48 = 1 or 3	H48= 2 or 4
1								
2								
3								
...								
PID								
1								

2			
3			
...			
Unit Codes- Module H			
	Time period		H18
1	Days	1	Working for someone else for pay?
2	Weeks	2	An employer?
3	Months	3	Self-employed?
	H12	4	Helping without pay in a household business?
1	Household farm work	5	An apprentice?
2	Household Business	6	Working on the household farm or with household livestock?
3	Wage work or salaried job- On farm		H19
4	Wage work or salaried job- Off farm	1	Inside Home/Compound
5	None	2	On Household Fields/Farm
	H13	3	Elsewhere, in village
1	Student	4	Elsewhere, outside village - MARKET TOWN
2	Other Household Responsibilities	5	Elsewhere, outside village - RURAL
3	Physically/Mentally Unable	6	Elsewhere, outside village - URBAN/DISTRICT CAPITAL
4	Unable to find work	7	Other (specify)
5	Retired		H33
6	Other (specify)	1	Same as [Primary] in the last 12 months
	H14	2	Same as [Secondary] in the last 12 months
1	Physical labor: Pre-harvest activities (planting, land preparation, etc)	3	Different activity
2	Physical labor: Harvest	4	None
3	Physical labor: Post-harvest activities (eg processing and storage)		H46
4	Identify, hire, or supervise non-household laborers	1	Rural, within district

5	Decisions regarding input purchases and/or use	2	Urban, within district (specify village/town)
6	Small quantity sales of production	3	Rural, outside of district (specify district)
7	Bulk sales of production	4	Kathmandu
8	Physical labor: Livestock care	6	Other urban, outside of district (specify district, city/town)
9	Livestock and/or livestock by-product sales	7	Outside Nepal (specify country)
10	Any kind of training, learning, or experimentation with new agricultural techniques		
66	Other (specify)		

ANNEX IV: SOURCES OF INFORMATION

The Internal Review Board does not allow the publication of names of interviewees for this research. However, the below tables provide information about the Focus Group Discussion participants (Table D.1) and the names of villages included in the study (Table D.2).

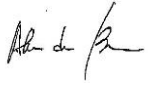
Table D.1. Background characteristics of FGD participants, BLP Impact Evaluation

Age Range	BL participants		Non-BL participants	
	Frequency	Percent	Frequency	Percent
20-30	7	10	18	29.5
31-40	9	12.9	19	31.1
41-50	29	41.4	18	29.5
51-60	21	30	4	6.6
61 & above	4	5.7	2	3.3
Gender				
Female	70	100	61	100
Educational level				
12	1	1.4	1	1.6
Illiterate	4	5.7	12	19.7
1 to 5	1	1.4	3	4.9
6 to 10	11	15.7	18	29.5
SLC & Above	2	2.9	9	14.8
literate	51	72.9	18	29.5
Ethnicity				
Brahmin/Chhetri	38	54.3	27	44.3
Janajati	18	25.8	18	29.5
Dalit	2	2.9	6	9.8
Madheshi	12	17.1	10	16.4

Table D.2. List of Wards in which Survey was conducted

District Name	VDC/Municipality Name	Ward No.
Arghakhanchi	Thulapokhara	3
Arghakhanchi	Thulapokhara	6
Arghakhanchi	Thulapokhara	8
Arghakhanchi	Thulapokhara	9
Arghakhanchi	Narapani	2
Arghakhanchi	Narapani	6
Arghakhanchi	Dharapani	2
Arghakhanchi	Dharapani	5
Arghakhanchi	Sitapur	1
Arghakhanchi	Sitapur	4
Arghakhanchi	Thada	2
Arghakhanchi	Sandhikharka	1
Arghakhanchi	Sandhikharka	13
Gulmi	Digam	6
Gulmi	Thanapati	8
Gulmi	Birbas	9
Gulmi	Gaundakot	2
Gulmi	Arbani	9
Gulmi	Harmichaur	3
Gulmi	Thulo Lumpek	2
Gulmi	Bishukharka	6
Gulmi	Gwadi	7
Kapilvastu	Gauri	3
Kapilvastu	Gauri	6
Kapilvastu	Gauri	8
Kapilvastu	Kopawa	4
Kapilvastu	Kopawa	9
Kapilvastu	Niglihawa	7
Kapilvastu	Niglihawa	8
Kapilvastu	Niglihawa	9
Kapilvastu	Tilaurakot	4
Kapilvastu	Tilaurakot	7
Kapilvastu	Basantapur	8
Kapilvastu	Gotihawa	6
Kapilvastu	Baidauli	9
Kapilvastu	Bahadurganj	4
Kapilvastu	Bahadurganj	9
Kapilvastu	Birpur	1
Kapilvastu	Somdiha	2
Kapilvastu	Kajarhawa	1
Palpa	Deurali	8
Palpa	Palung Mainadi	6
Palpa	Khasyoli	3
Palpa	Masyam	2
Palpa	Masyam	5
Palpa	Nayarnamtales	1
Palpa	Nayarnamtales	8
Palpa	Galdha	6
Palpa	Rampur	9
Palpa	Rampur	14

ANNEX V: DISCLOSURE OF ANY CONFLICTS OF INTEREST

Name	Alan de Brauw (on behalf of team)
Title	Senior Research Fellow
Organization	IFPRI
Evaluation Position?	☒ X Team Leader ☐ Team member
Evaluation Award Number (contract or other instrument)	
USAID Project(s) Evaluated (Include project name(s), implementer name(s) and award number(s), if applicable)	Nepal Business Literacy Program
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ X No
If yes answered above, I disclose the following facts: <i>Real or potential conflicts of interest may include, but are not limited to:</i> 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	
I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.	
Signature	
Date	27 February 2020

U.S. Agency for International Development
1300 Pennsylvania Avenue, NW
Washington, DC 20523