



Impact of Access to Finance on participants of SLVC-II Project, Nepal

Analysis of impact of formal credit and HIC's facilitation.

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Goals and the objectives of this analysis.

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SLVC II (Sustainable Livestock Value Chain II) Intro

SLVC II Nepal working districts (counties)



Participants



140K
Farmers



6,855
SHGs



178
Coops



Geography

84

Municipalities

29

Districts

6

Provinces



Value chain actors



505

Local traders



30

LSPs



22

BFIs

SHG = Heifer-assisted self-help groups.

Coops = Heifer-assisted cooperatives.

LSPs = Local service providers.

BFIs = Bank and microfinance institutions.

The project has three **main** purposes.



Improve market linkage

- Relationship with banks, BFIs, MSMEs
- Engage local providers
- Business development



Income

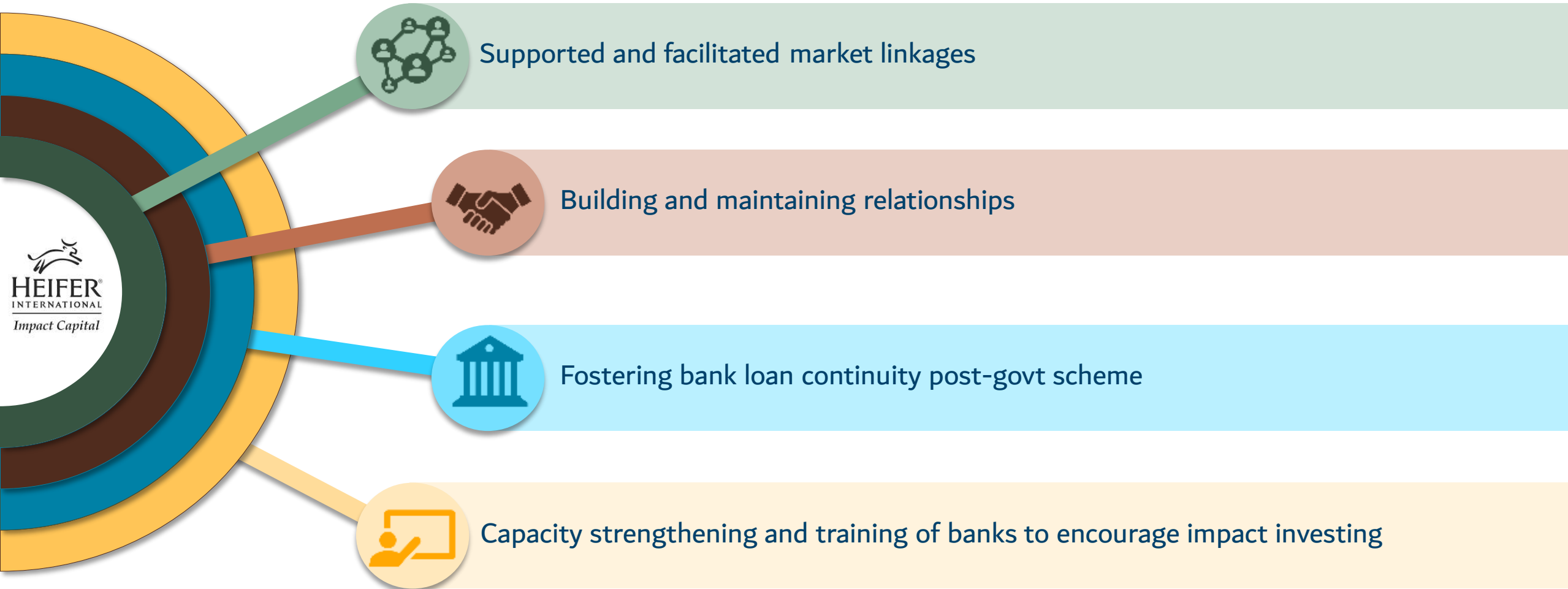
- Increase household income
- Close living income gap



Develop Agri-livestock systems

- Better agri-livestock practices
- More production
- Low wastage

HIC plays a crucial role in supporting the SLVC II Project.



The analysis focuses on assessing the impact of formal credit on project participants.



Goal

Evaluate the Impact of access to formal finance & HIC intervention on participants of the SLVC II Project.

Objectives



Measure income growth and livelihood impact



Assess impact of access and use of formal credit

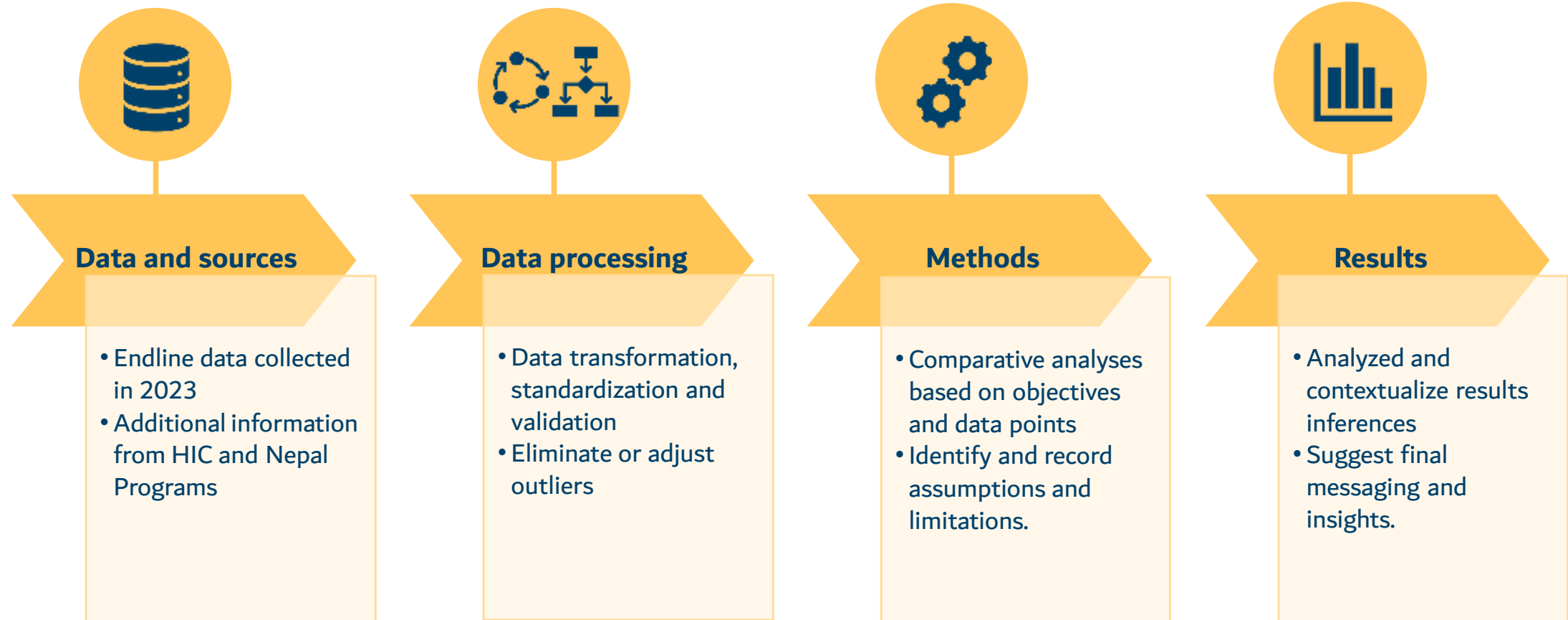


Assess impact on agri-practices

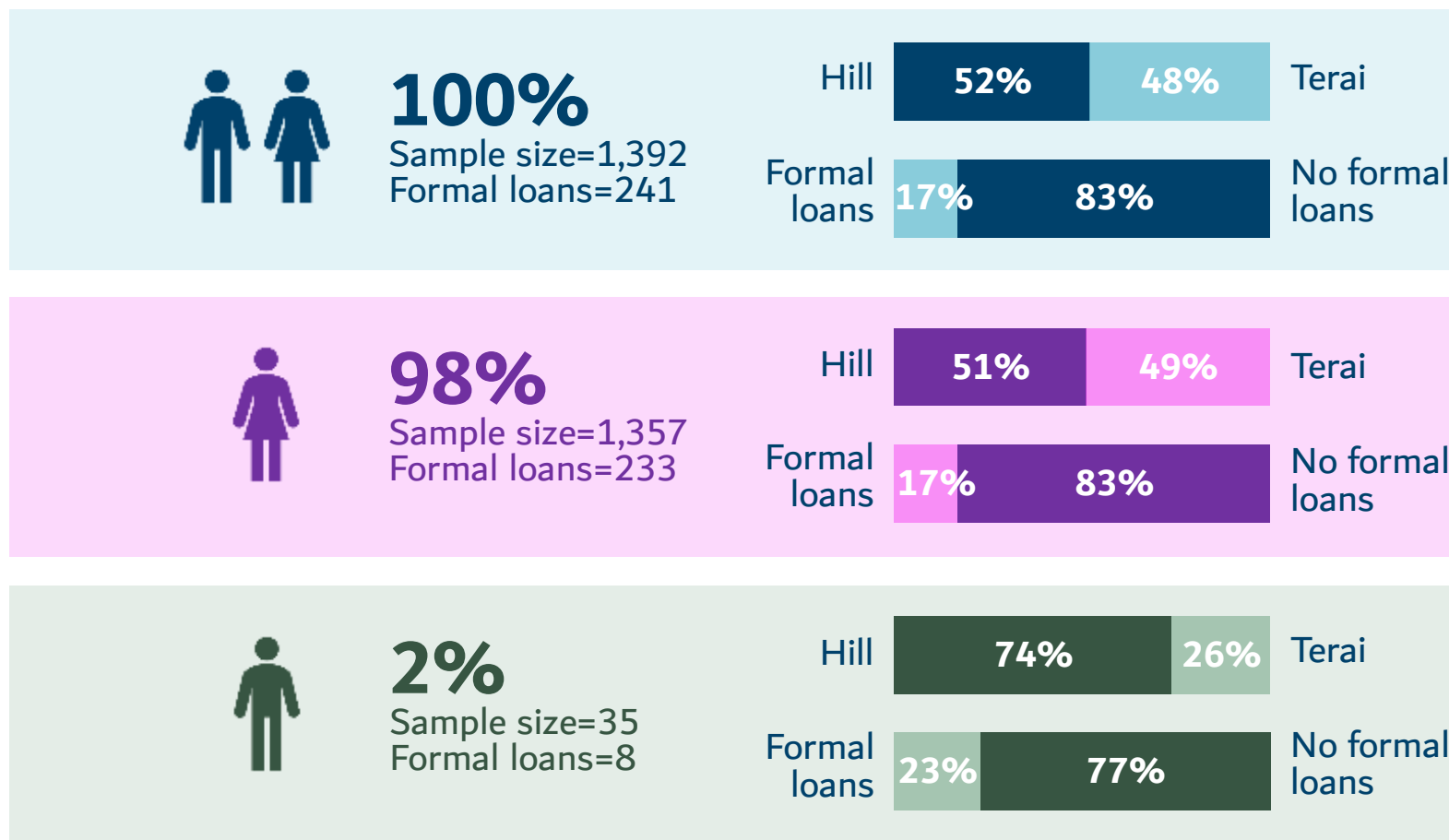


Assess change due to accessing marketing systems

Methodology



The sample from the 2023 endline survey of the SLVC II project consisted mostly females.



*Of original sample size of 1,483 households, 91 outliers were statistically identified and removed before analysis to minimize skewness of results.

The sample from the 2023 endline survey of the SLVC II project consisted mostly females.

Analysis results

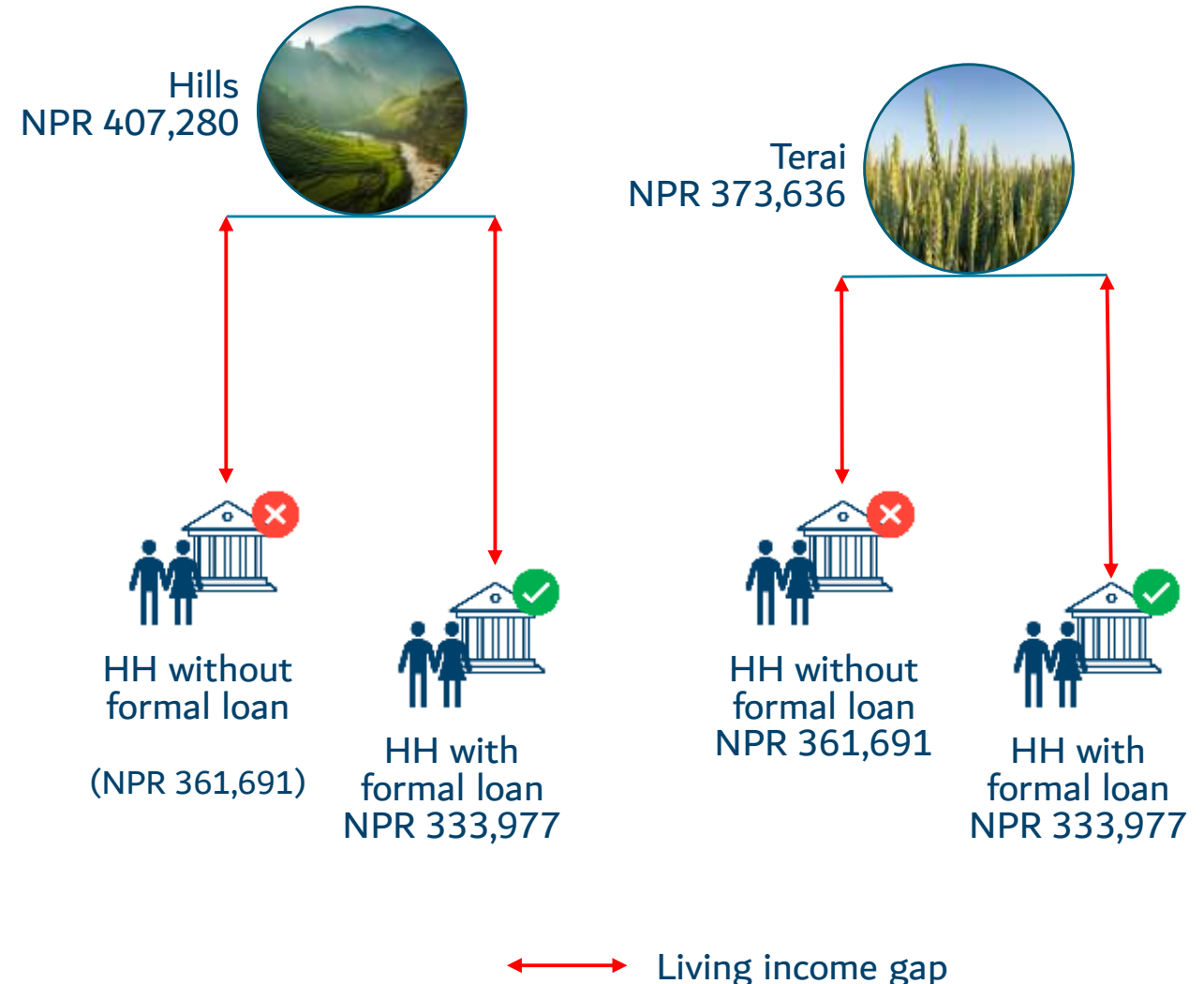
In addition to the project baseline, we used **regional LIBs** and **separate baseline** for households with.

It helped us to calculate true **living income gaps** and **income changes**.

Note: The baseline for HH with formal loan was collected based on respondent's recall and not from documented data. It may have some recall bias.

Hills region: Hills and terraced farms.

Terai region: Fertile plains ideal for livestock and agriculture.



Average income of all survey households grew **24%** since baseline, **50%** achieved living income benchmark.

Average income since baseline



24%

NPR 454,100/ \$
Both regions

% households reached living income

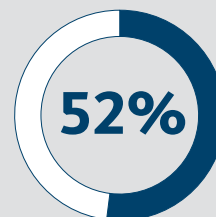


No. of households
696



32%

NPR 481,962
Hills region

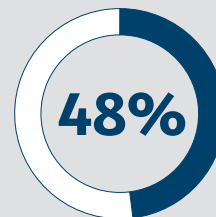


No. of households
376



16%

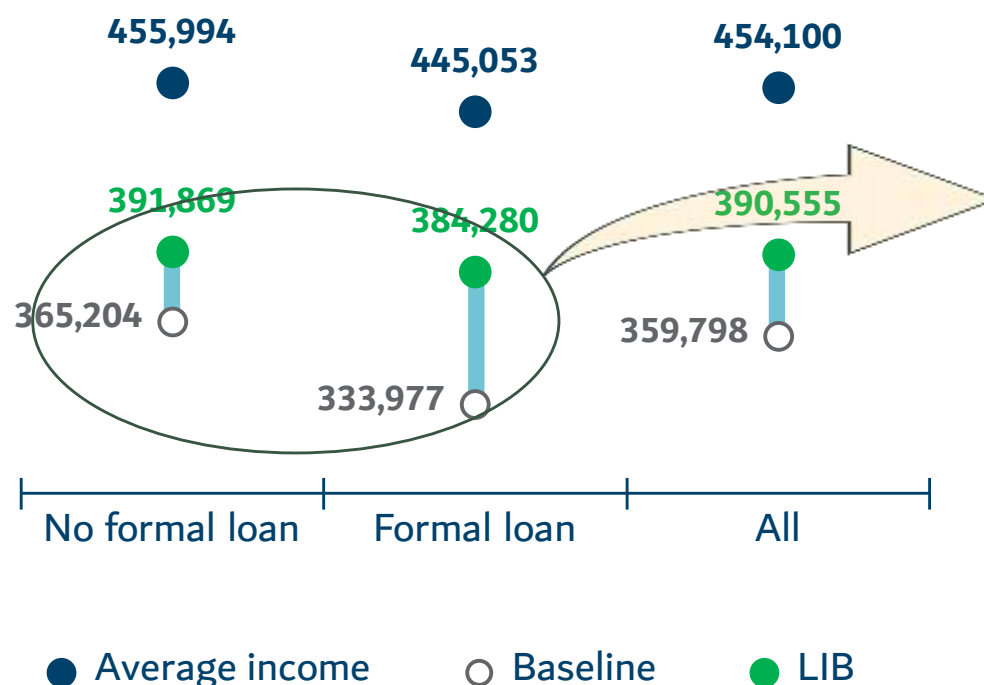
NPR 455,139
Terai region



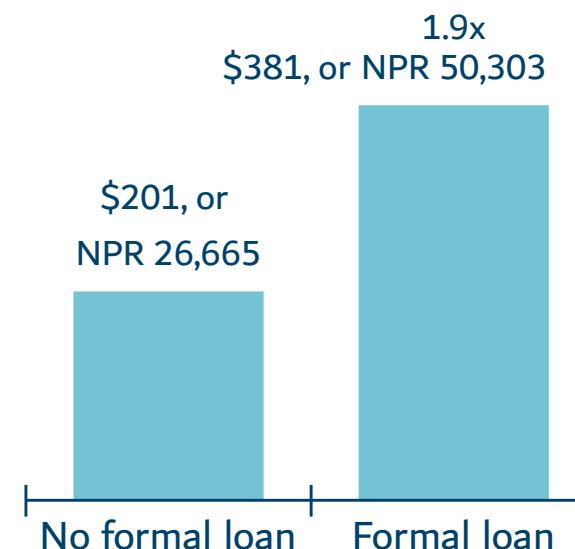
No. of households
320

Households with formal loans had **1.9x** larger living income gap as they started at a **lower** baseline.

Avg. income compared with baseline and LIB

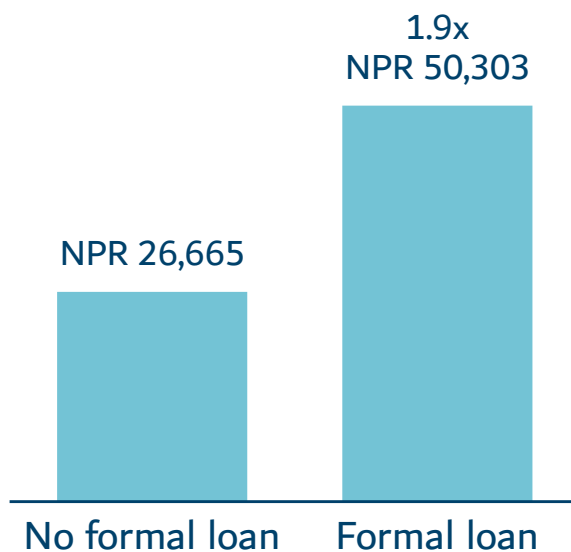


HH with formal loans had higher living income gap

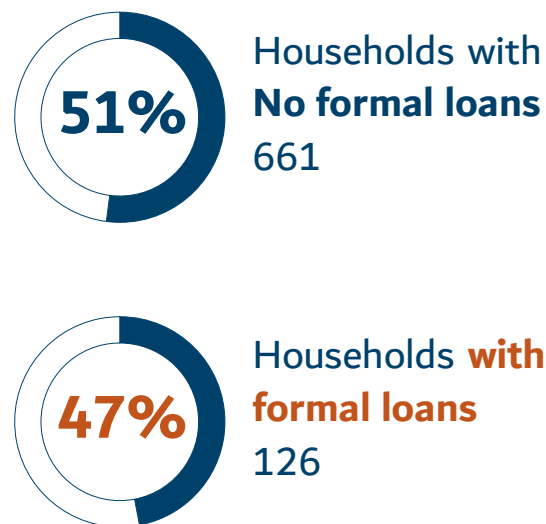


Despite a 1.9x higher LI gap, **47%** of these households reached LIB, closed **22%** more living income gap.

HH with formal loans had higher living income gap



% households reached living income

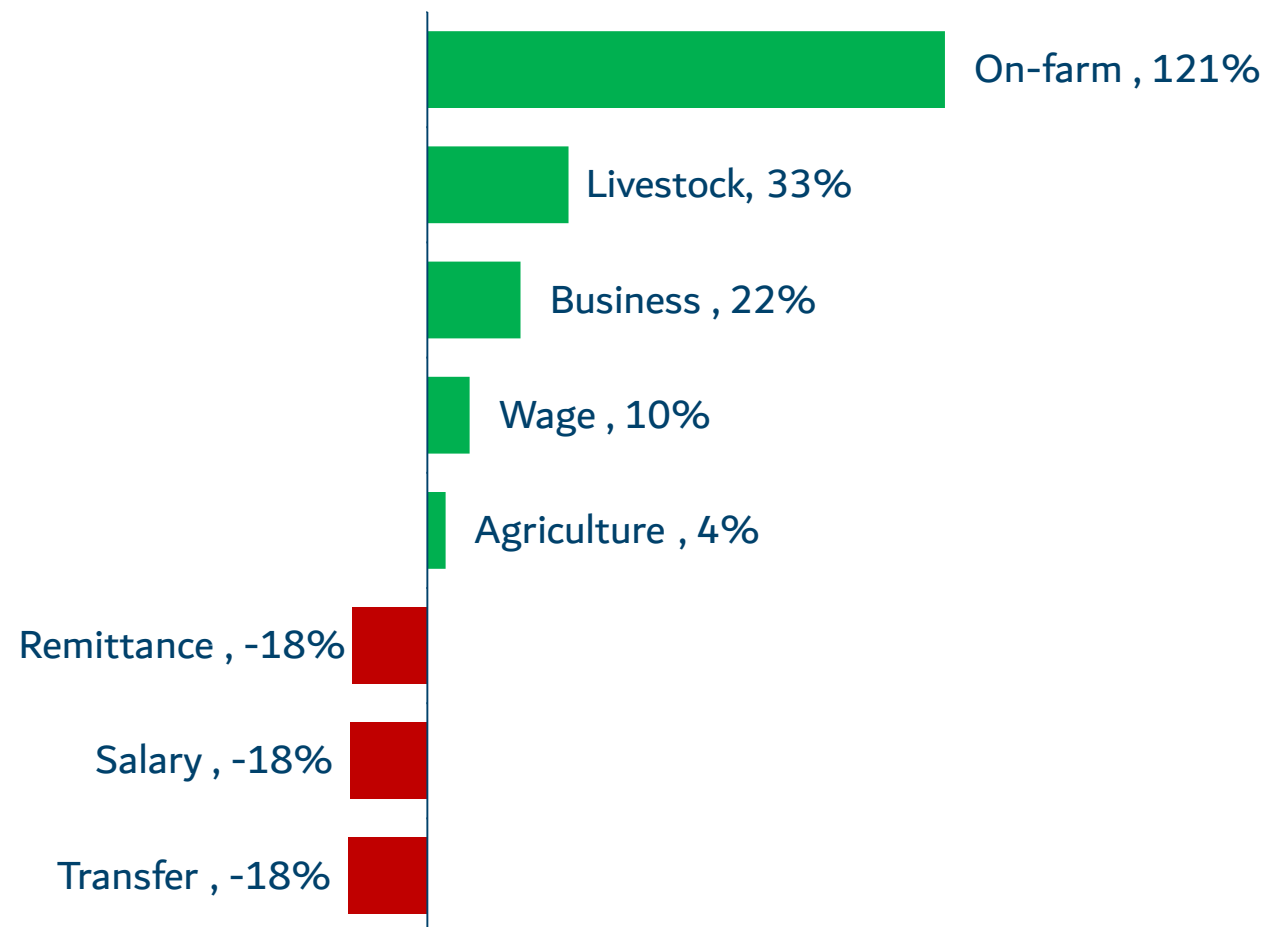


22%

Higher income gap closed on average.

These households saw **maximum** increase in the incomes from the streams of project **focus**.

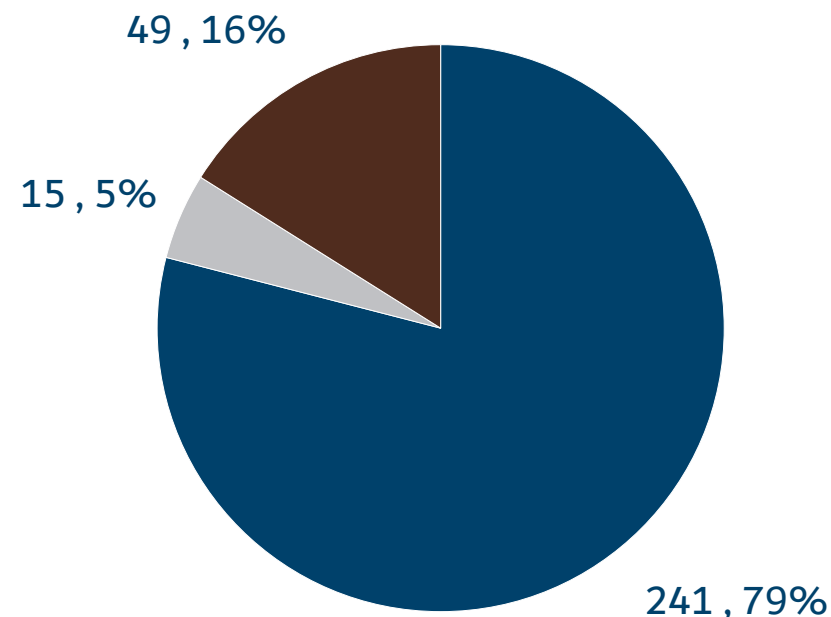
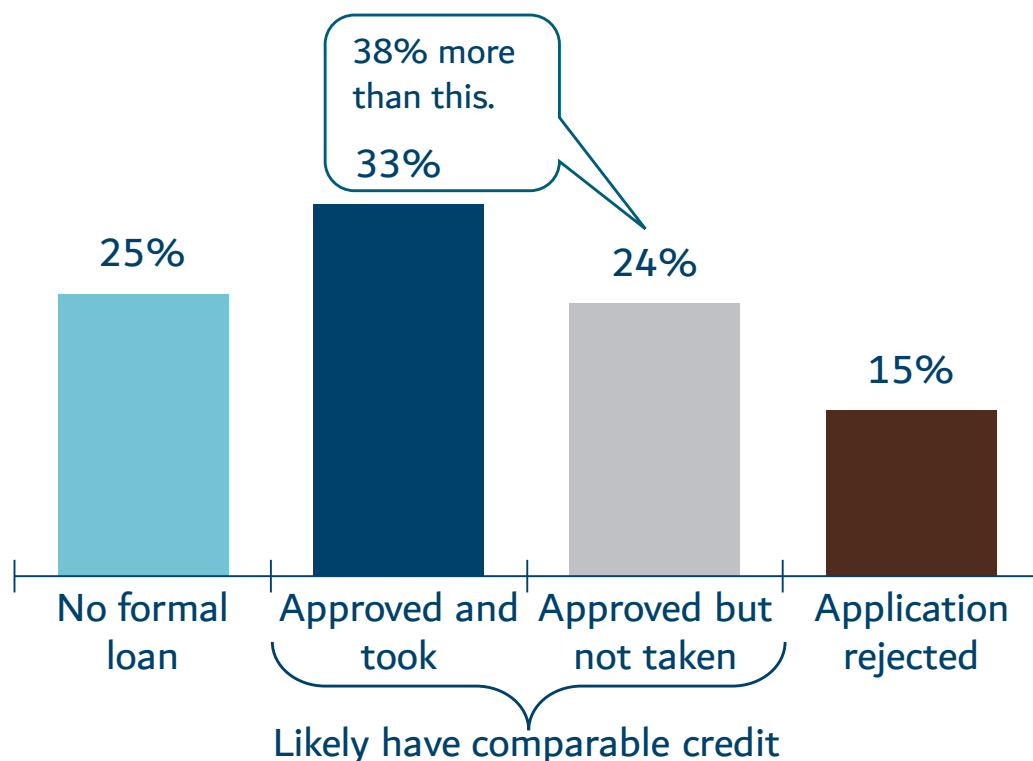
% income change of households with formal loan compared to those without



The rate of income increase for households that took loans **outpaced** those who avoided loans.

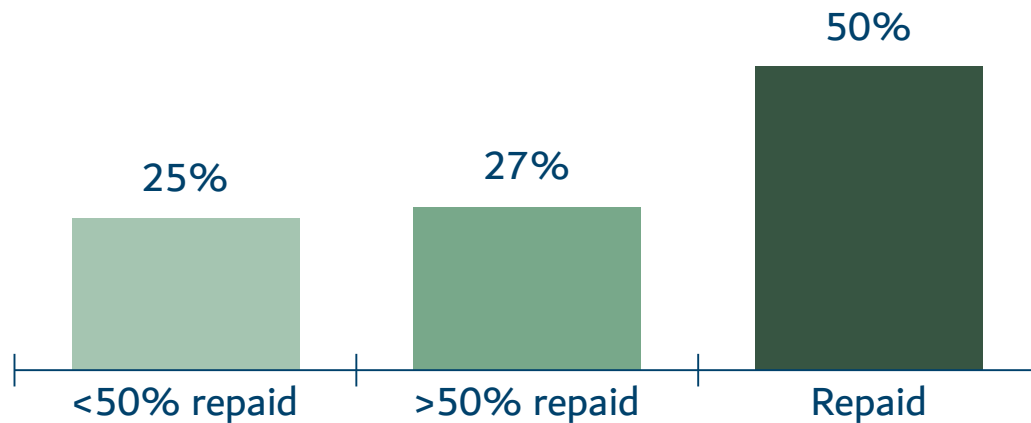
Income rose **equally** for households who did not take approved loan and those who never applied.

79% of all households applying for a formal loan were approved of one and took it.

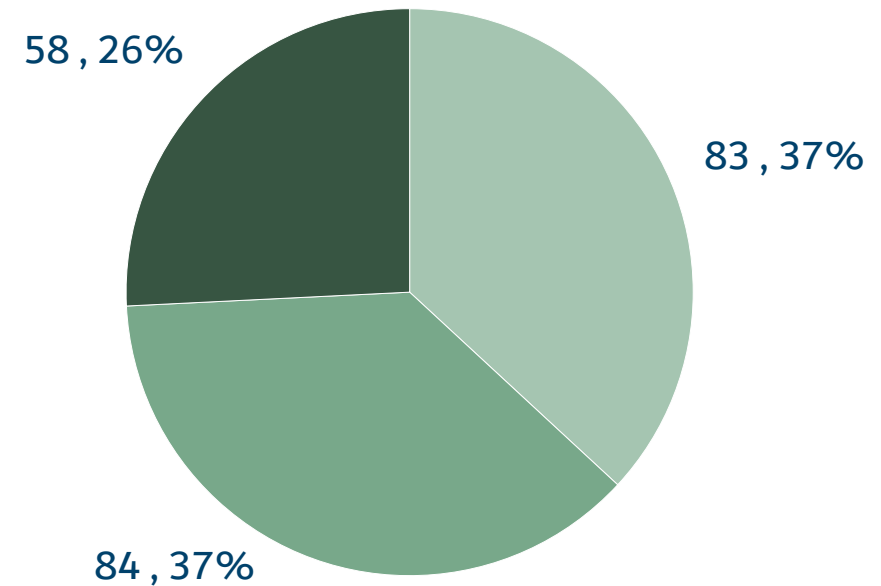


Income of households increases as they repay their loans.

% Increase in income since baseline.



2/3rd of the households with formal loans repaid their loan either fully or most of it.



Analysis results

An average loan from a bank was almost **4x** as much as that of a cooperative loan.



Cooperative loan
\$882
(NPR 116,671)



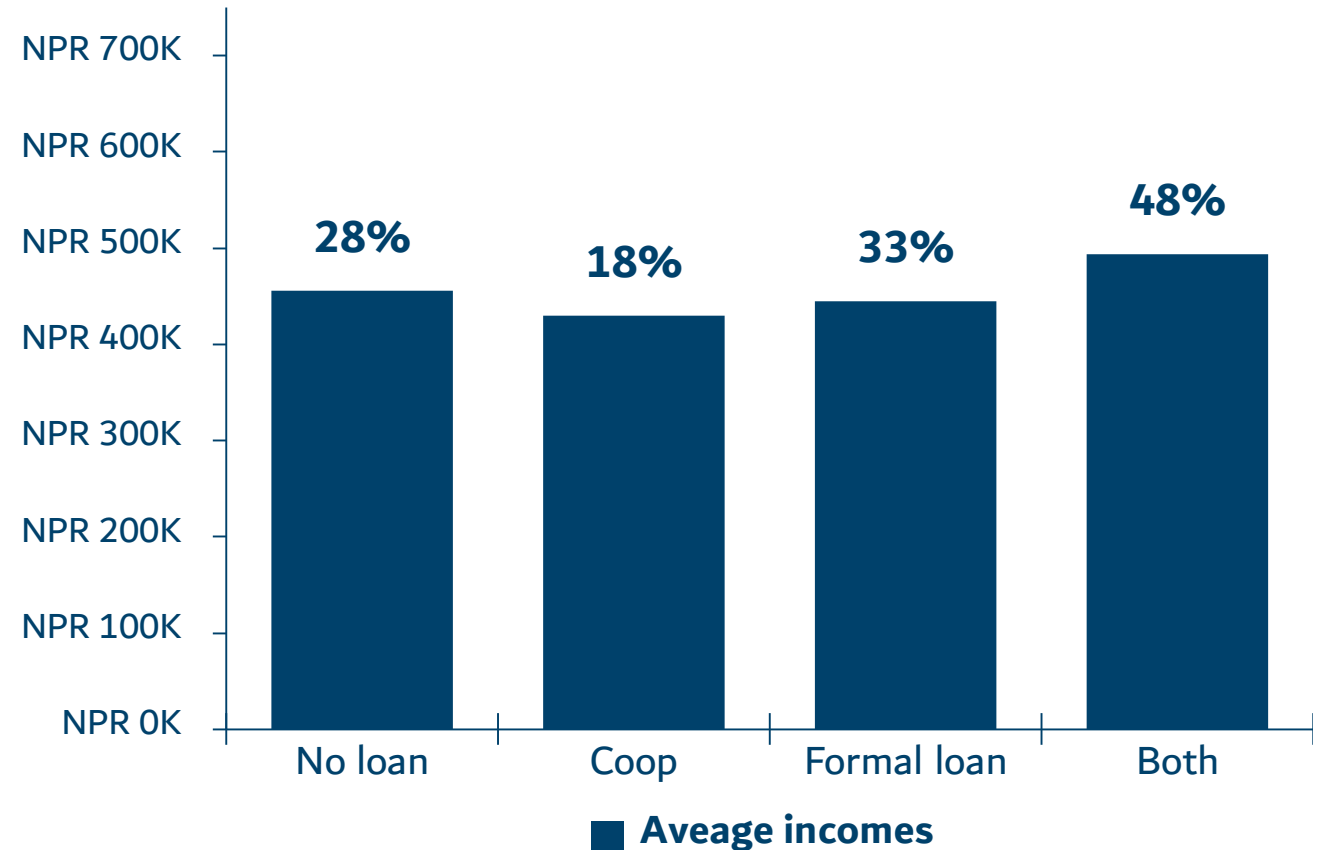
3.8x
Formal loan
\$3,309
(NPR 437,791)

Analysis results

Households with formal loans saw **higher** income increase, while coop loans saw the **least**.

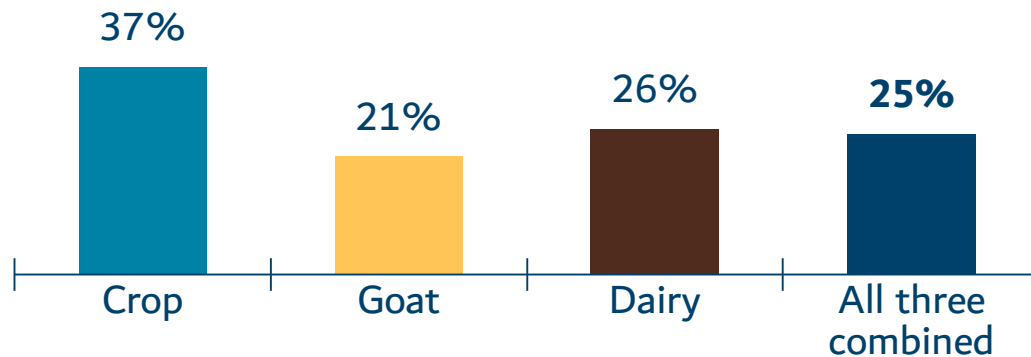
The households with a formal loan also reported the highest incomes, more so if they had a coop loan as well as a formal loan.

Average incomes and % change from baseline

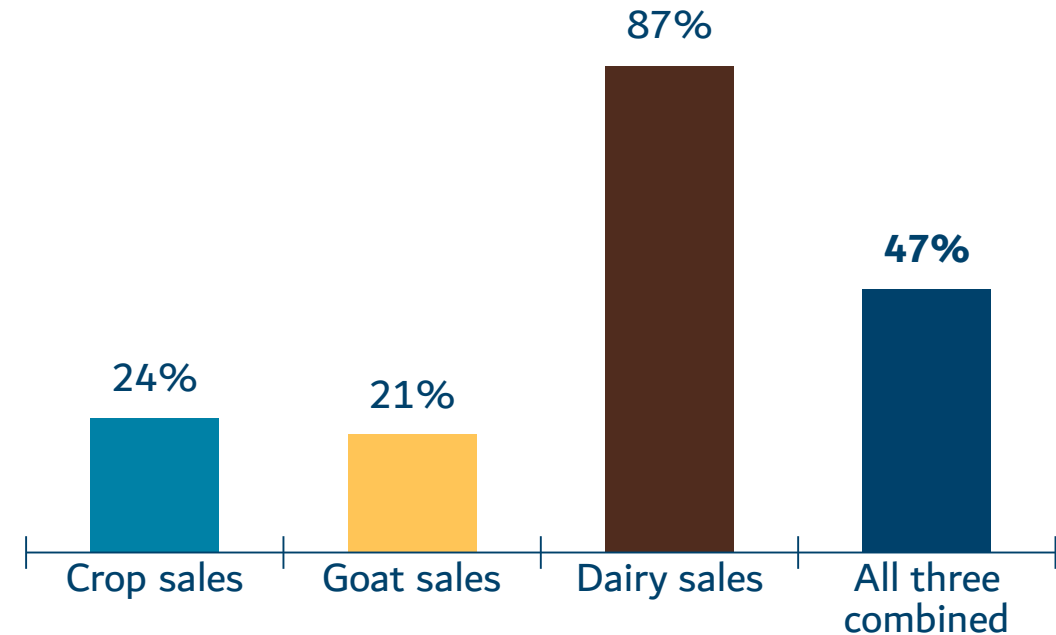


Households with formal loans reported **25%** more sales qty and **47%** more value than those without.

% More qty sold vs households without loan

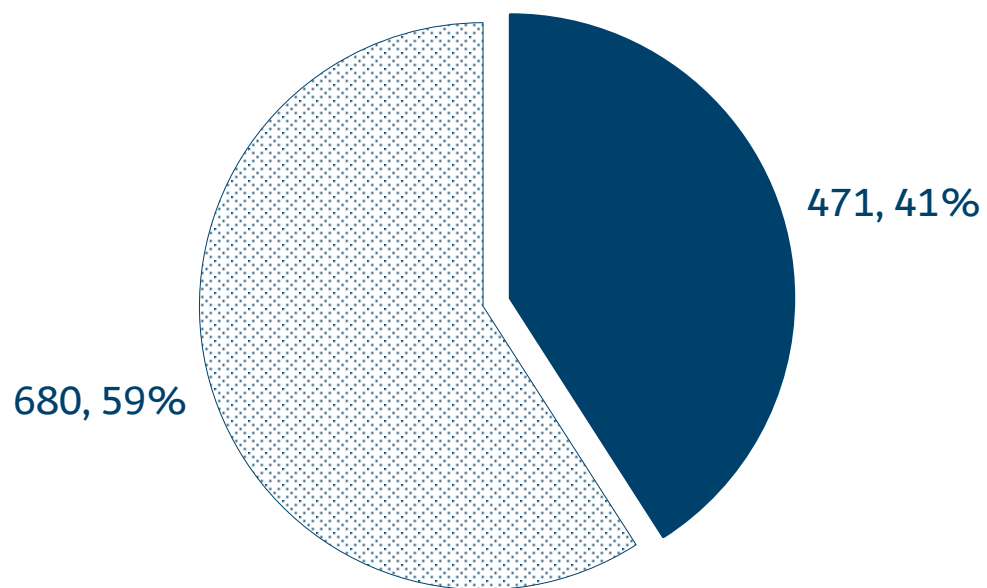


% More sales value vs households without loan



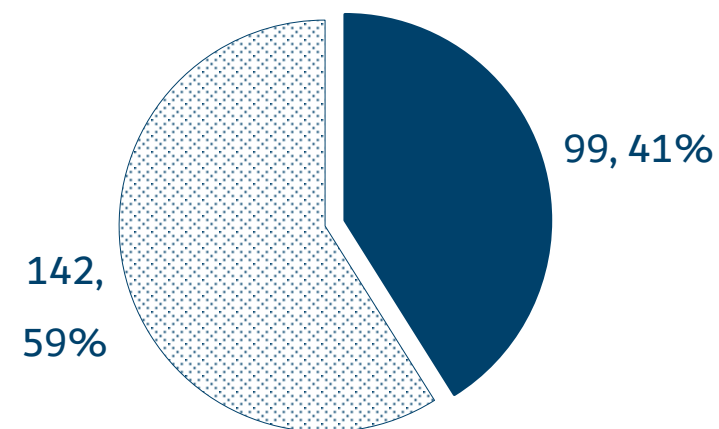
41% of all households marketed their commodities, regardless of loan status.

Households with **no** formal loans



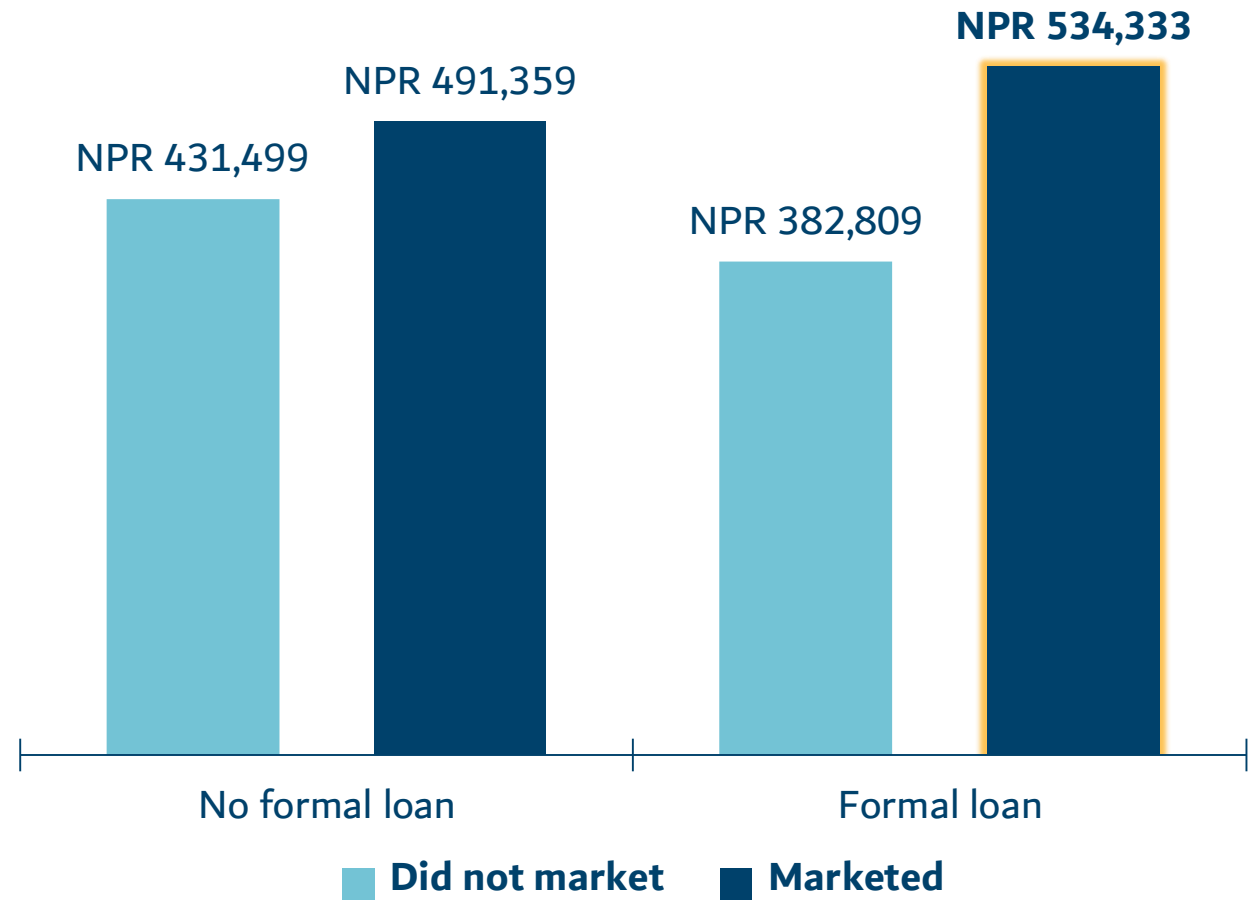
Sample size=1,151

Households **with** formal loans



Sample size=241

Marketing
commodities and
formal loans increase
household incomes by
40%.



When households **had formal loans**, they reported,



Income
growth

↑ **2.2x** boost in income from farm activities and ↑ **1.3x** from livestock.

↑ **2x** income growth doubled once a formal loan was repaid in full.



Living
income gap
closure

↑ **22%** higher average living income gap closed compared to those without a formal loan.



Comparison
with coop
loan

↑ **3.8x** An average formal loan was double in amount than a cooperative loan.

↑ **1.8x** rate of income growth with formal loan than that with cooperative loan.

Households **accepting** formal loans saw the **highest** income jump.



Production
and sale

↑ **25%** higher quantity of commodities sold.

↑ **47%** more sales value reported.

General statements based on analysis & assumptions.

We can say

- Households with a formal loan had a higher incomes and a higher rate of income growth.
- They closed more living income gap.
- They sold more quantities in the market and earned higher value for it.
- The more they repay their loan, the higher income they reported, and the highest once they repaid it in full.

We cannot say,

- Taking formal loans increased households' incomes. Other factors may be involved.
- Households could get better sales due to marketing access, and access to bank and microfinance loans.

Limitations and assumptions

These bullets either limit some claims we may want to make based on the analysis or allow us to do so with a caveat around them.

- ⚠ The baseline income for households with a formal loan was based on respondent recall rather than documented data. This may introduce recall bias but provides a general idea.
- ⚠ There was insufficient data to link income increases directly to bank loans, preventing the establishment of a clear cause-and-effect relationship.
- ⚠ The specific criteria for qualifying for a formal loan were not available. However, it is reasonable to assume that households offered a formal loan had stable credit, as they were approved by a bank or microfinance company.
- ⚠ While outliers were eliminated statistically before analysis, human error in data entry/response cannot be fully eliminated.
- ⚠ External comparisons could not be made due to the lack of income and loan data for non-Heifer households.

Thank you!

For any follow-up, please contact:

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HIC role in SLVC II

Machapuchram bank

2 banking unions or district unions took loans from Everest Bank.

\$75k earmarked funded at 5%. They gave loans to district unions, but vendors stopped paying back.

HIC

- Maintaining relationship and resolving relationship conflicts with district unions and cooperatives.
- Supported the project in facilitating market linkages, improving their market negotiating power, Butwal Meat Processing Pvt Co., formed by the farmers cooperative and rural meat entrepreneurs.
- Continue to sustain and scale relationships with the banks.
- Bank Sathi model, to bring these banking institutions to continue deploying loans to farmers even after govt schemes stopped, which made the banks stop giving more loans (since 2023).
- Capacity strengthening of impact investment, to do training.

Impact investment (market players) facilitates financing and market system. Help players to engage with our farmers, buy from them, pay better prices, buy more quantities, etc.

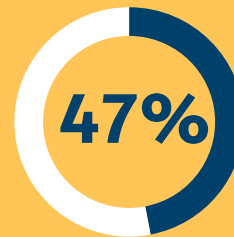
A2F (production level) is an impact that impact investment drives at the production level.

HHs with formal loans in **Hills** started with lower incomes and larger LI gap but achieved **comparable** LIB rates.

Both regions

1.9x

Had higher living income gap.



Reached living income of all with formal loans.

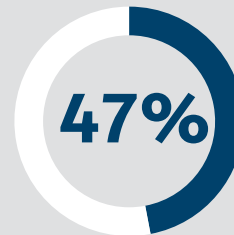


22% more
Average LI gap closed

Hills

1.7x

Had higher living income gap.



Households reached living income.

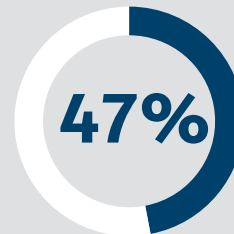


8% more
Average LI gap closed

Terai

5x

Had higher living income gap.



Households reached living income.



85% more
Average LI gap closed

Analysis results

Additionally, HHs with formal loans closed **22%** additional LI gap overall.

The households in the Terai region who took formal loans closed **85%** additional living income gap on average.



22% more
Average LI gap closed
Both regions



85% more
Average LI gap closed
Terai

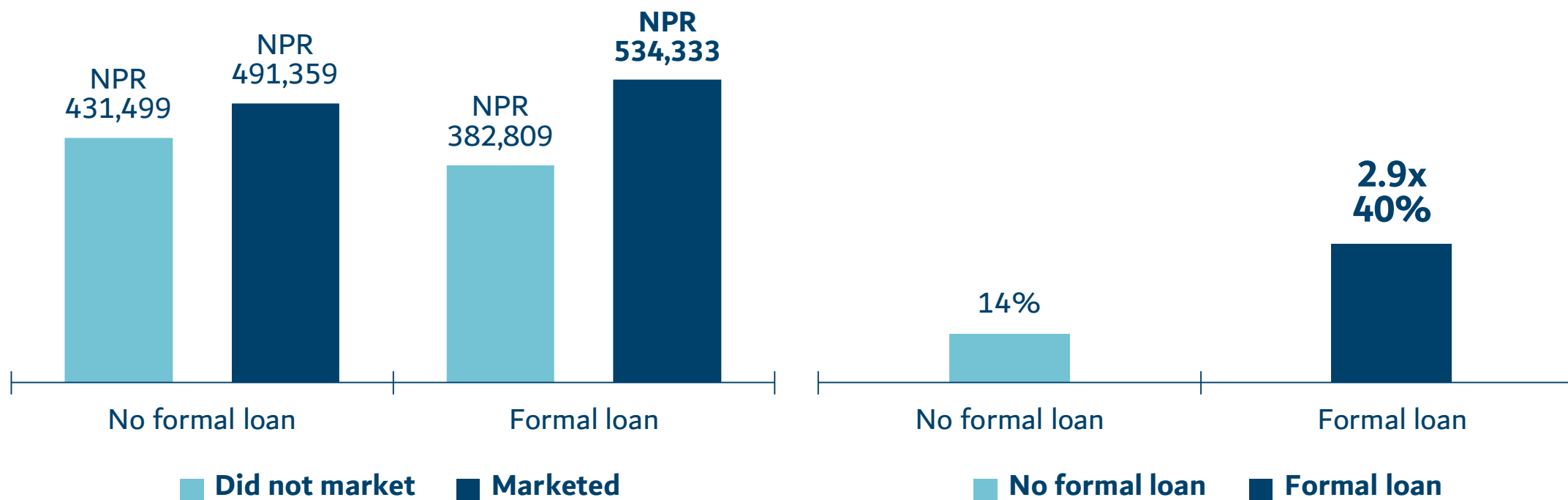


8% more
Average LI gap closure
Hills

Households who **marketed** their commodity increased their incomes, more so if they had **formal loans**.

Average incomes of all HHs **increased** with access to markets.

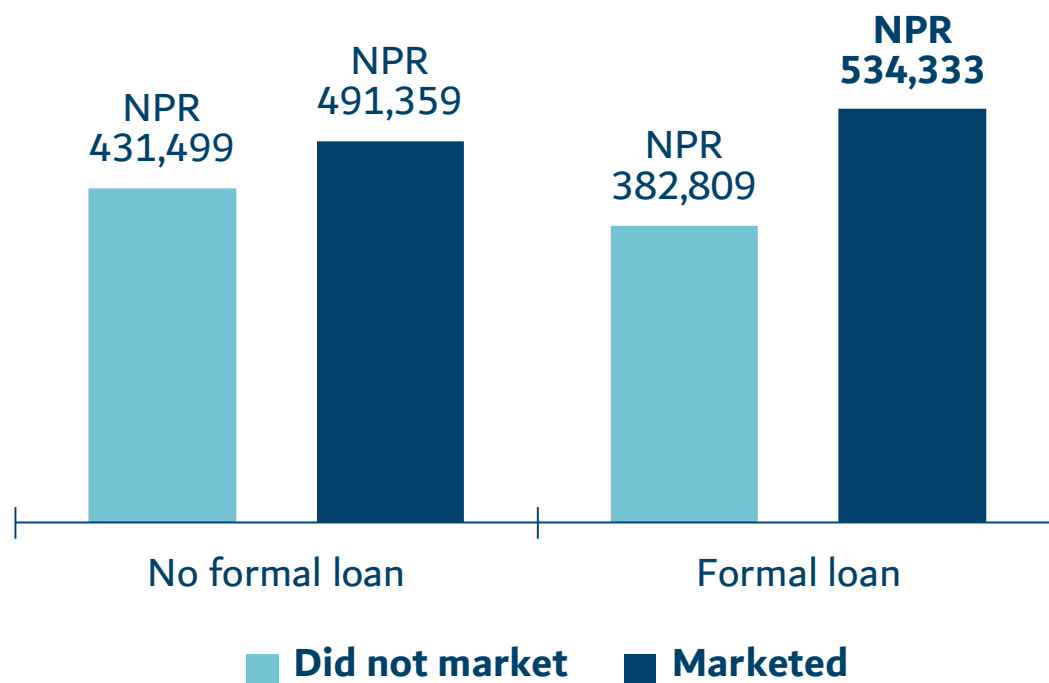
This increase was **~3x** for households who took formal loans.



Households who **marketed** their commodity increased their incomes, more so if the had **formal loans**.

Average incomes of all HHs **increased** with access to markets.

This increase was **~3x** for households who took formal loans.



14%
No formal loan



40%
With formal loan

An average loan from a bank was **twice** as much as that of a cooperative loan.

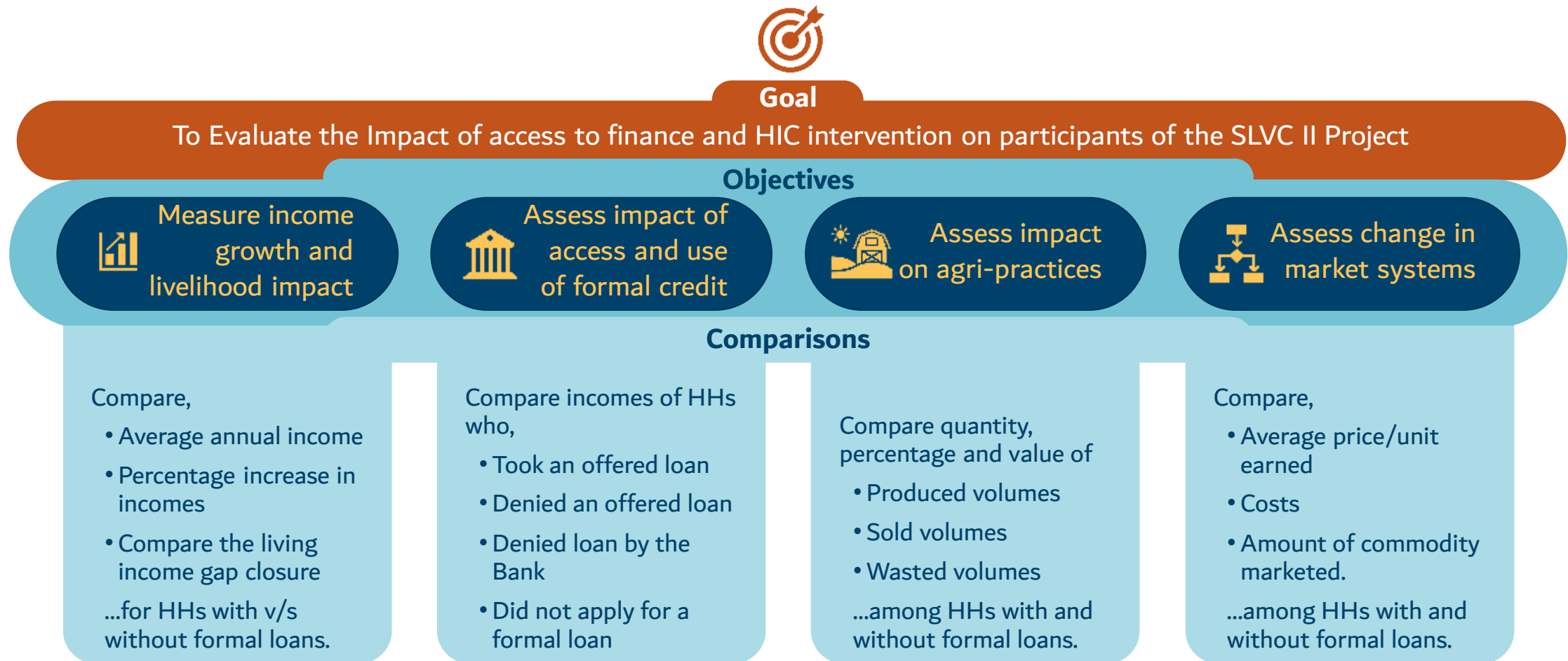


Cooperative loan
NPR 36,066



2.1x
Formal (Bank) loan
NPR 74,180

The analysis focuses on assessing the impact of formal credit on project participants.



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Goal

To Evaluate the Impact of access to finance and HIC intervention on participants of the SLVC II Project

Objectives



Measure income growth and livelihood impact



Assess impact of access and use of formal credit



Assess impact on agri-practices



Assess change in market systems

1. Households with loans closed **22%** more living income gap despite being almost **2x** as far from the living income.
2. Maximum positive income changes were noticed in the value chains of focus, farm activities and livestock, **2.2x** and **1.3x**, respectively.
3. Households who accepted offered loans saw the highest income increase % compared to those who avoided it.
4. Household incomes increase by **2x** as much when they repaid their loans. Their income showed **positive** relationship with loan repayment.
5. Average size of a formal loan was **2.1x** of a cooperative loan.
6. Households with formal loans had higher incomes than the ones with a cooperative loan. The average rate of their income increase from baseline was **1.8x** more.
7. Households with formal loans reported **25%** higher sales quantity and **47%** higher sales value.

General statements based on analysis & assumptions.

We **can** say,

- Households who sold crops to Nueva Kerala reported higher incomes.
- Households who sold crops to Nueva Kerala are closer to the living income.
- Households received better price for cardamom from Nueva Kerala.

We **cannot** say,

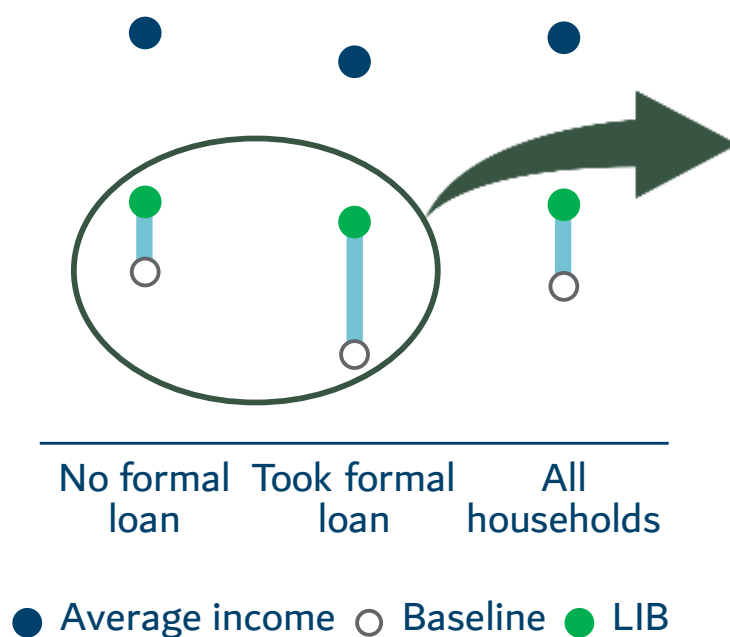
- Households made higher incomes because of Nueva Kerala.
- Households who sold crops to Nueva Kerala are likely to reach living income sooner/faster.
- Households who sold crops to Nueva Kerala have higher annual income growth rate.

Limitations and assumptions

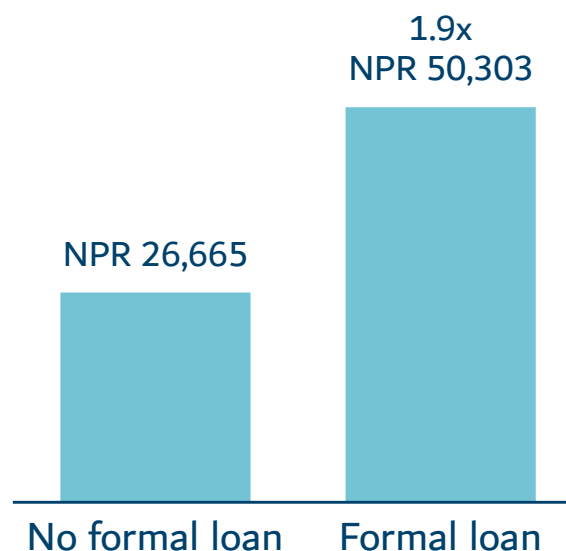
- Analysis **assumed that all the households in the survey started from the baseline.** This may/may not be true.
- There was **not enough data to attribute the increase in income to doing business with Nueva Kerala.** In other words, there was not enough data to establish a cause & effect relationship between Nueva Kerala and higher incomes.
- Nueva Kerala's **quality criteria may have introduced selection bias**, i.e., households who qualified for business with them may be producing better quality spices already.
- We do **not know the incomes of the non-Heifer households doing business with Nueva Kerala.** Hence, we could not compare incomes of Heifer's Nueva Kerala population with them.

HHs with formal loans started with lower incomes and larger LI gap but achieved **comparable** LIB rates.

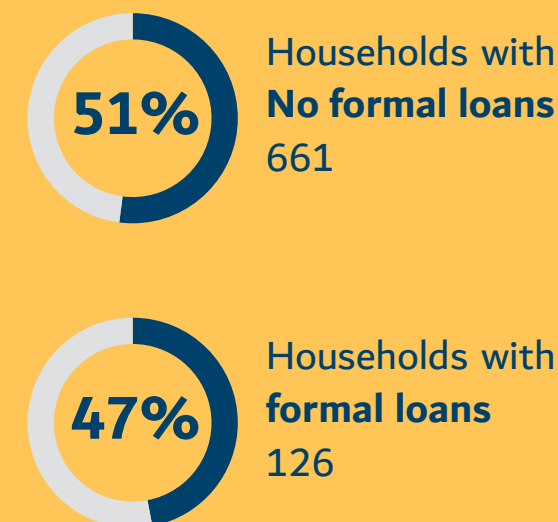
Avg. income compared with baseline and LIB



HH with formal loans had higher living income gap



% households reached living income



Households with formal loans and living income gap.

- ✓ Households who took approved loans,
 - ✓ had the highest incomes
 - ✓ earned more than the households who rejected these approved loans
- ✓ Income of these households,
 - ✓ increase as they repay loan
 - ✓ highest when they repaid in full
- ✓ On average, the ticket size of a formal loan was 2x of a cooperative loan
- ✓ The households with a bank loan earned more, had income increase % that those with cooperative loans

When households **had formal loans**, they reported,

↑**2.2x** boost in income from farm activities and ↑**1.3x** from livestock.

↑**2x** income growth doubled once a formal loan was repaid in full.

↑**25%** higher quantity of commodities sold.

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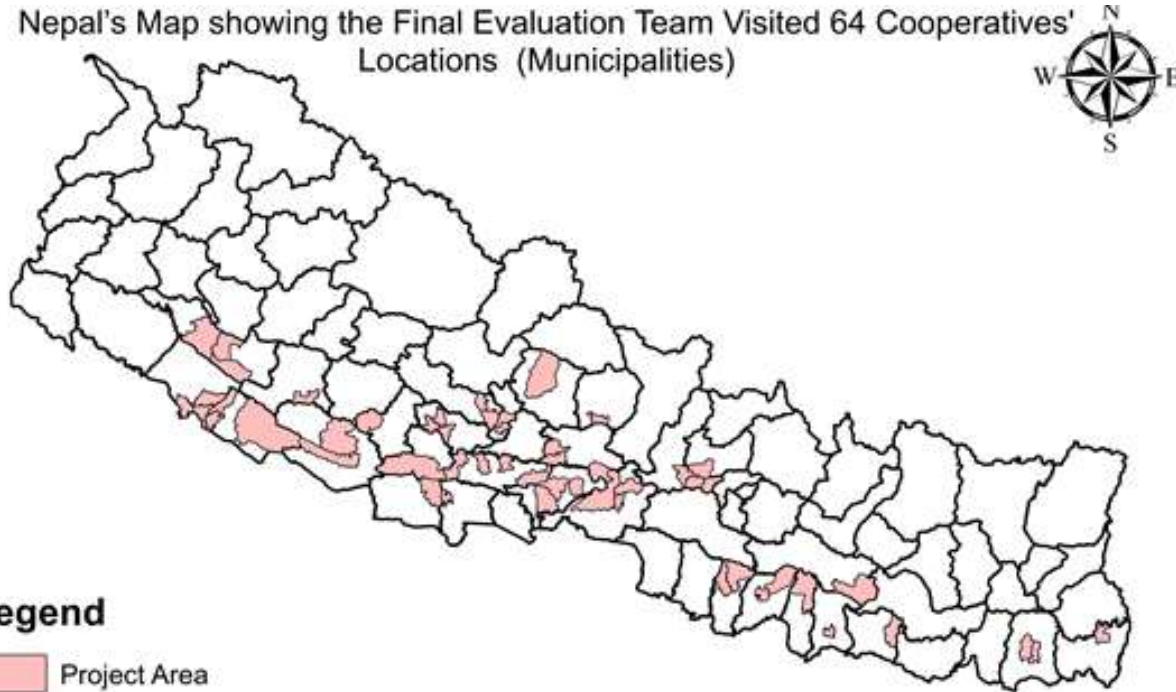
↑**1.8x** rate of income growth with formal loan than that with cooperative loan.

Households **accepting** formal loans saw the **highest** income jump.

↑**22%** closed more living income gap compared to households without a formal loan, despite starting at lower baseline income.

SLVC II (Sustainable Livestock Value Chain II) Intro

Nepal's Map showing the Final Evaluation Team Visited 64 Cooperatives' Locations (Municipalities)



Participants



140K
Farmers



6,855
SHGs



178
Coops



Geography

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Value chain actors



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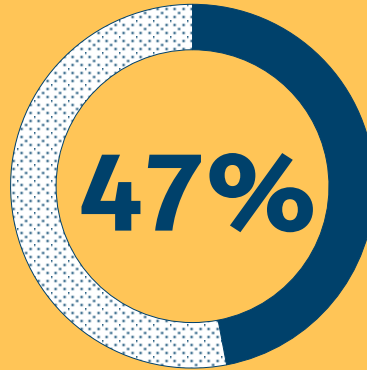
LSPs = Local service providers.

BFIs = Bank and microfinance institutions.

Households with formal loans and living income gap.

1.9x

Had higher living
income gap.



Of all households with a
formal loan reached
living income.



22%

More living income gap
closed on average.