

REPORT

FINAL REPORT

The Access to Agricultural Finance Credit Program in Moldova: Findings from an End-of-Compact Analysis

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ACRONYMS

AAF	Access to Agricultural Finance
AAFS	Access to Agricultural Finance Survey
ACED	Agricultural Competitiveness and Enterprise Development
ADI	Agribusiness Development Institute
CIS	Centralized Irrigation System
CISRA	Centralized Irrigation System Rehabilitation Activity
CLD	Credit Line Directorate
GHS	Growing High-Value Agriculture Sales
Ha	Hectares
HVA	High-Value Agriculture
IFAD	International Fund for Agricultural Development
ISRA	Irrigation Sector Reform Activity
Lei	Moldovan Currency
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
ODIMM	Organization for Small and Medium Enterprises Sector Development
PNAET	National Youth Economic Empowerment Program
RISP	Rural Investment and Services Project
THVA	Transition to High-Value Agriculture
U.S.	United States
VAT	Value-Added Tax

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I. INTRODUCTION

Moldova has historically enjoyed a strong agricultural sector, and its location, fertile soil, and water resources put it in an excellent position to expand the production and sales of high-value agriculture (HVA) products. However, since the fall of the Soviet Union, Moldovan farmers have found it challenging to produce and sell HVA products competitively in the local and foreign market. Encouraging farmers to switch to and productively grow HVA crops requires stimulating agricultural investments in new production technologies and equipment, irrigation infrastructure, and modern post-harvest infrastructure such as processing, packaging, and cold storage facilities.

To address some of these infrastructure and investment needs, the Millennium Challenge Corporation (MCC), through its 2010–2015 compact with Moldova, sponsored the Transition to High-Value Agriculture (THVA) project. MCC contracted with Mathematica Policy Research to evaluate the THVA project. The project comprises several activities intended to increase rural incomes and catalyze future investments in HVA (Table I.1): (1) the Irrigation Sector Reform Activity and Centralized Irrigation System Rehabilitation Activity (ISRA-CISRA), which are two complementary activities that aim to improve access to irrigation on agricultural land; (2) the Growing High-Value Agriculture Sales (GHS) activity, which aims to increase sales of HVA by developing and expanding markets, providing training, providing technical assistance, and improving the enabling environment for HVA; and (3) the Access to Agricultural Finance (AAF) activity, the focus of this report, which provides financing for investments related to HVA production, processing, and sales, as well as investments related to irrigation. The evaluation of the THVA project will include an impact evaluation that focuses on 11 Centralized Irrigation System (CIS) areas where key activities are concentrated, as well as a broader mixed-methods performance evaluation that seeks to describe lessons learned from project design and implementation, barriers to achieving the envisaged results, and contributions of different activities to results that were achieved (Borkum et al. 2015).

To inform the performance evaluation of the THVA project, this report describes the financing provided and investments made under the credit program established by the AAF activity as part of the credit facility subactivity. This credit program financed investments related to HVA production, processing, and sales, especially investments in cold storage and post-harvest infrastructure. As we describe below, the activity also included a separate hire-purchase program that provided financing for irrigation-related investments, which we do not cover in this report.

The report draws on data from four main sources: (1) quantitative and qualitative data collected from AAF loan beneficiaries through the AAF Survey (AAFS); (2) qualitative data collected through semi-structured interviews with non-beneficiaries and with commercial banks involved in agricultural financing (including banks responsible for administering AAF loans); (3) data collected from applicants at the time of loan application; and (4) Credit Line Directorate (CLD) records, which contain administrative data on AAF beneficiaries and their loans.¹ Most of the data used in this report, particularly the AAFS and qualitative data, were collected close to

¹ The CLD is the government institution operating under the Ministry of Finance that is charged with overseeing the administration of AAF loans, in addition to other activities.

the end of the compact, in mid-2015. The timing of data collection thus enabled us to gather information before it was challenging for borrowers to recall relevant details about their loans and investments.

Table I.1. THVA project activities

Activity	Description	Timing
Irrigation Sector Reform Activity (ISRA)	<i>Irrigation Management Transfer subactivity:</i> Provided technical assistance and training in 11 CIS areas to create local water user associations and build their capacity to manage and maintain the CISs.	Started in 2010; by the end of the compact, management transfer complete in 10 CISs
	Supported transfer of the management and operations of the CISs from the government of Moldova to the water user associations under a new legal framework.	
Centralized Irrigation System Rehabilitation Activity (CISRA)	<i>River Basin Management subactivity:</i> Supported policy reform and improvements to water resource management to ensure a sustainable long-term supply of water throughout Moldova.	Started in 2010; completed by late 2015 (end of compact)
	Rehabilitated irrigation infrastructure to deliver water to farmers' fields in 10 of the 11 selected CIS areas.	
Growing High-Value Agricultural Sales (GHS) Activity	Included complementary subactivities to increase sales of HVA by addressing constraints specific to selected crops' value chains.	Started in 2011; completed in March 2016 (post-compact)
Access to Agricultural Finance (AAF) Activity, Credit Facility Subactivity ^a	<i>Credit program:</i> Provided loans to farmers and rural entrepreneurs for investments related to HVA production, processing, and sales.	First loan disbursed in January 2012; will continue post-compact through reflows
	<i>Hire-purchase program:</i> Provided irrigation equipment or farming equipment and machinery for irrigated land.	

CIS = Centralized Irrigation System, HVA = High Value Agriculture

^aThere was also another AAF subactivity, the investment development services subactivity, which was designed to help farmers and rural entrepreneurs access funding under the AAF credit program. However, this component was taken over by the GHS activity implementer, and in practice was limited to "some outreach activities and support to the CLD for environment-related screening" (MCA-Moldova 2015).

Longer-term outcomes associated with the AAF credit program will be measured in several ways. First, in this report, we report findings from the AAFS on beneficiaries' expectations for the future use of their investments. Second, future rounds of qualitative data collection will include a small sample of AAF borrowers to ask about their perceptions of the longer-term effects of AAF loans. Third, follow-up rounds of the farmer surveys in THVA-affected areas will track the use of AAF-funded infrastructure to understand the extent to which farmers are benefitting from these investments and the types of farmers who are benefitting.

The remainder of this chapter describes in greater detail the AAF activity and the data sources used for this report. In Chapter II, we describe the characteristics of AAF beneficiaries, their loans, and their investments prior to and after receiving AAF loans. In Chapter III, we describe the agricultural credit environment in Moldova more broadly and the perspectives of beneficiaries, non-beneficiaries, and commercial banks on how the AAF credit program operated within and affected this environment. We also use beneficiaries' own assessments, as well as information provided by non-beneficiaries, to provide suggestive evidence on what AAF beneficiaries would have done in the absence of the AAF credit program. We conclude in Chapter IV.

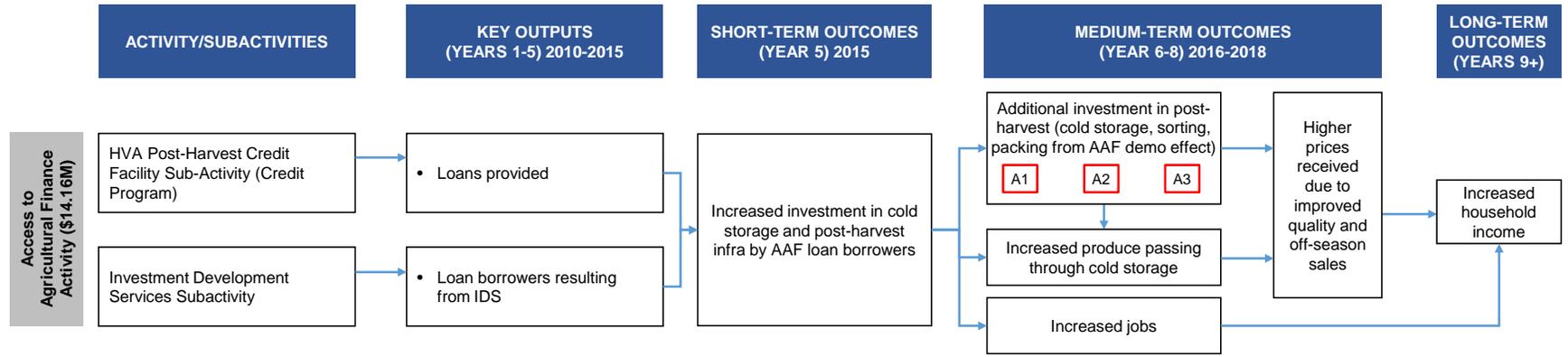
A. The Access to Agricultural Finance activity

The AAF activity aimed to increase competitiveness and profitability for farmers and rural entrepreneurs by enabling investments to increase production, cost-effectively sort and package produce, extend the production and marketing seasons, and bring produce (especially HVA products) to market. The credit facility subactivity of the AAF activity included two financial instruments: a credit program and a hire-purchase program. The credit program provided loans with terms of three to seven years to farmers and rural entrepreneurs through participating Moldovan financial institutions for investments related to HVA production, processing, and sales (with a focus on cold storage and other post-harvest infrastructure). The hire-purchase program, which was introduced towards the end of the compact, in early 2015, enabled farmers to purchase irrigation equipment or farming equipment and machinery for irrigated land on a hire-purchase basis.

This report focuses on the AAF credit program.² The program logic for the AAF credit program (Figure I.1) anticipated that, in the short term, AAF loans would enable farmers and rural entrepreneurs to invest in cold storage and other post-harvest infrastructure, increasing access to post-harvest infrastructure more broadly. In the medium term, the increased use of these facilities would improve the quality of the products and increase off-season sales, leading to higher prices and higher volume of sales in domestic and export markets. Over the long term, increased prices and sales would increase household income.

² The hire-purchase program will be covered in future data collection efforts.

Figure I.1. Logic model for the AAF activity of the THVA project



THVA project logic model assumptions for AAF	
A1	Financing for post-harvest investments will be available after AAF for demonstration effect to work (banks will be more knowledgeable about lending for post-harvest and/or the project will result in lower risk which would reduce collateral requirements and/or banks will use their own funds if donor money is not available)
A2	Enterprises will have the capacity to invest in post-harvest infrastructure (knowledge, business plans, collateral, etc.)
A3	Improved access to finance resulting in more stable and better forecasted cash flow and increased collateralization capacity of AAF borrowers

Note: The program logic does not include the hire-purchase program because the credit facility subactivity did not include this program when the program logic was developed.

The eligibility criteria for AAF loans changed several times over the course of the credit program, reflecting changes in the priorities of MCC and MCA-Moldova and their interest in stimulating demand for loans (Table I.2). Initially, these loans focused exclusively on investments in post-harvest infrastructure or equipment, such as cold storage, with large loan amounts from \$50,000 to \$600,000. Entities throughout Moldova were eligible to apply. In November 2012, eligibility for AAF funding was restricted to farmers and businesses in the raions (districts) in which the 11 targeted CIS areas were located, to facilitate the transition to HVA in these areas. In March 2013, eligibility was extended to borrowers in raions that bordered the raions that served these 11 CIS areas, and the minimum loan amount was decreased to \$20,000. Subsequently, in January 2014, eligible investments for AAF loans were expanded to include equipment related to HVA production, such as greenhouse and irrigation equipment and the establishment of nurseries and plantations, and the minimum loan amount was decreased to \$5,000. More recently, in April 2015, geographic eligibility for AAF loans was expanded to include entities throughout Moldova (retaining the expanded set of eligible investments and \$5,000 minimum loan amount).

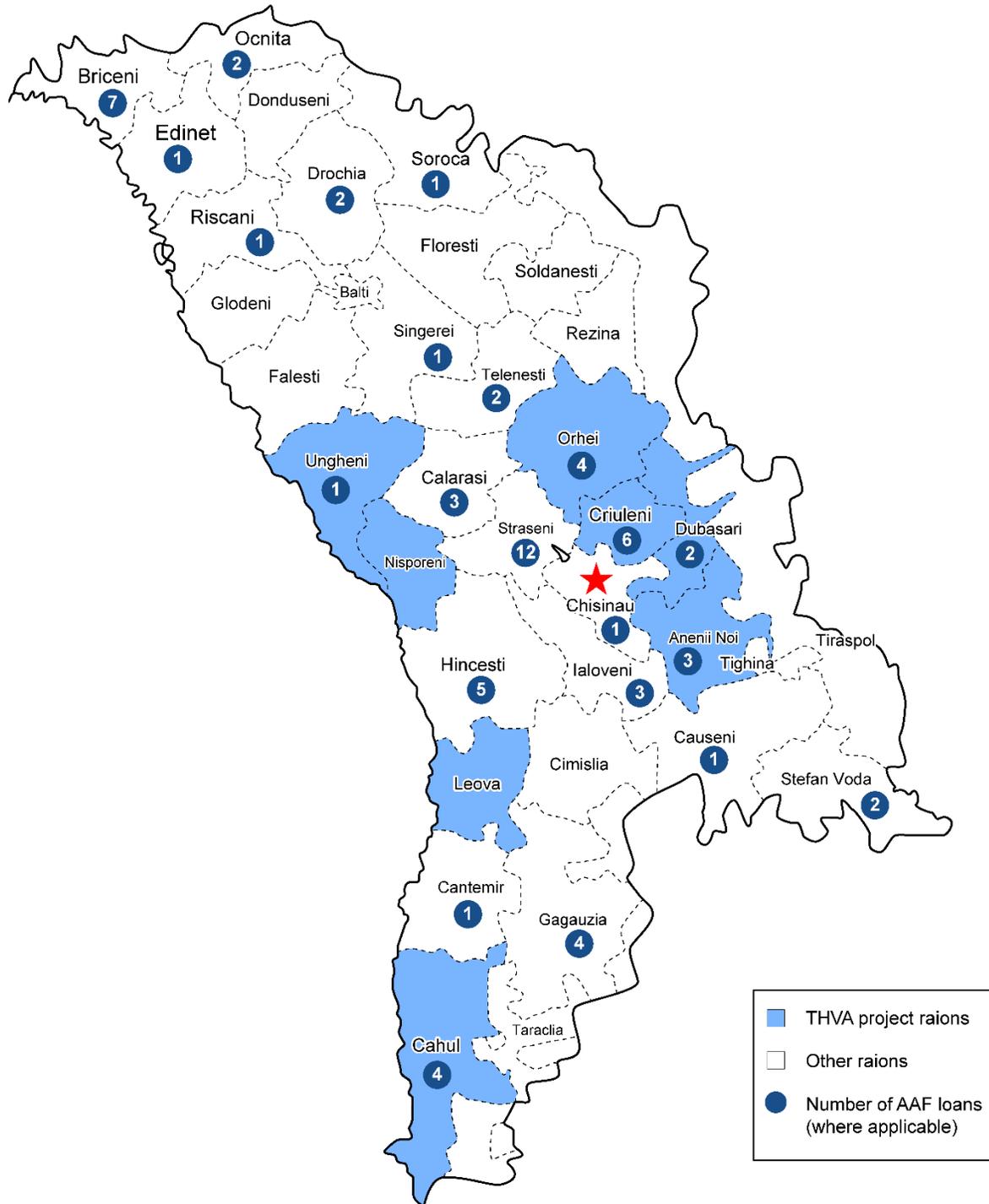
Table I.2. Eligibility criteria for the AAF credit program

Phase	Start Date	Number of Approved Loans	Minimum Loan Amount	Maximum Loan Amount	Eligible Borrowers	Eligible Investments
Pilot	January 2012	21	\$50,000	\$600,000	Entities located throughout Moldova	Post-harvest infrastructure
Scale-Up	November 2012	0			Entities located in the raions of the 11 CISs	
	March 2013	5	\$20,000	\$600,000	Entities located in the raions of the 11 CISs and raions bordering those raions	
	January 2014	30	\$5,000	\$600,000		Post-harvest infrastructure, greenhouses, irrigation equipment, and the establishment of nurseries and orchards
	April 2015	17			Entities located throughout Moldova	

The AAF credit program began disbursing loans in January 2012; by the end of the compact, on September 1, 2015, 69 loans had been disbursed to 62 beneficiaries, totaling about \$11.74 million (CLD 2015). The smallest of these loans was about \$13,000 and the largest was \$600,000, with a median loan size of about \$140,000. These disbursed loans had terms of between 3 and 7 years and annual interest rates of between about 5 and 14 percent. Purchases of goods that were made using these loans were exempt from the national value added tax (VAT) of 20 percent (a common exemption for the first round of donor-funded agricultural credit programs in Moldova). There was substantial variation in the geographic location of the enterprises that received these loans; these enterprises were located in 23 of the 32 raions in Moldova. Of the

disbursed loans, 29 percent were provided to enterprises that operated in the same 8 raions in which the full suite of THVA project activities was implemented (Figure I.2).

Figure I.2. AAF loans disbursed by the end of the compact, by raion



Source: Credit Line Directorate (CLD) administrative data.

Note: The compact was completed on September 1, 2015.

B. Data sources

Our analysis of the AAF credit program draws on both quantitative and qualitative data collected by ACT Research and the Agribusiness Development Institute (ADI), a Moldovan organization, with oversight from Mathematica. The AAFS gathered quantitative and limited qualitative data on AAF-relevant investments and experiences from credit program beneficiaries. Semi-structured interviews with non-beneficiaries and commercial banks gathered additional qualitative data. We supplemented these data with data that were collected from loan applicants at the time of application, as well as administrative data from the CLD. Below, we describe each of these data sources in detail.

1. Moldova Access to Agricultural Finance Survey (AAFS)

The AAFS was conducted from June 2015 to August 2015; interviews were attempted with all 61 beneficiaries whose AAF loans were approved before the end of July 2015. Fifty-six of these 61 beneficiaries responded to the survey.³ Because some beneficiaries received more than one loan, these 56 respondents cover 60 of the 66 loans approved by that time. About 43 percent of these loans had been disbursed within the 12 months prior to the survey, and another 25 percent had been disbursed 13 to 24 months prior to the survey (Table I.3). This timing suggests that most borrowers would have been able to accurately respond to questions about their AAF loans, although the time available for them to make their planned investments and begin benefitting from those investments would be limited in some cases.

Table I.3. Timing of the AAFS relative to the AAF loan disbursement (percentage of AAF loans unless otherwise indicated)

Time since loan disbursement	Estimate
0 – 6 months	21.7
7 – 12 months	21.7
13 – 24 months	25.0
> 24 months	31.7
Mean (months)	18
Median (months)	13
Sample size	60

Source: 2015 Moldova Access to Agricultural Finance Survey and Credit Line Directorate (CLD) administrative data.

The AAFS collected information on borrowers and their agricultural loans and investments. This information included, for example, the financial situation of borrowers, the credit environment at the time of the AAF loan, experiences with applying for AAF credit, the investments for which the loan was used, and use of new post-harvest infrastructure or other AAF investments (Table I.4 describes the modules and key topics for the survey; the full questionnaire is included in the Appendix A). The survey also included a small number of open-ended questions to qualitatively capture issues such as the extent to which the borrowers would

³ The respondents to the AAFS were typically the owners or directors of these beneficiary enterprises, although accountants frequently provided the detailed financial information requested as part of the survey.

have made these investments without the AAF loans, and the challenges they faced in making these investments.

Table I.4. 2015 AAFS modules and topics

Module	Key topics covered
Information about enterprises and respondents	Core business activities and location of activities (at the time of AAF loan application) (*); ownership structure (*), number of owners (*), and whether female-owned (at the time of AAF loan application) (**); number of hectares cultivated in 2014 (if applicable); crops and amounts cultivated or processed/stored in 2014 (if applicable); manager gender, age, education, and experience (at the time of AAF loan application) (*); respondent gender and position in enterprise
Enterprise characteristics in the 2014 fiscal year	Value of sales, profits, investments, and total assets and liabilities
Employment in the 2014 fiscal year	Number of full-time employees, by gender (managerial and other positions); number of part-time employees and person-days of hired labor, by gender
AAF-related infrastructure prior to AAF	Purpose of AAF loan (*); availability, usage, and ownership of similar infrastructure in the area prior to 2012; barriers to using this infrastructure
Investments prior to AAF	Interest in agricultural investments in the three years prior to the AAF loan; purpose and estimated cost of desired investments; whether applied for a loan; reasons for not applying for a loan (if applicable); reasons for rejected loan application (if applicable); for approved loan applications, details including date of approval, source of credit, loan size, collateral value, term, and interest rate; whether met scheduled repayments; extent to which planned investments were made
Credit environment at the time of the AAF loan	Available sources of credit for AAF-related investments and how they compared to AAF (size, interest rate, collateral requirements, and term); other barriers to obtaining credit; other barriers to making AAF-related investments
Experiences with AAF loan	How borrower learned about AAF; whether and how investment changed to meet AAF criteria; total cost of investment; other sources of credit considered and applied for, and amounts received (if applicable); reasons for applying to AAF; size and terms of loan; satisfaction with application, approval, and disbursement process; whether meeting scheduled repayments and reasons for non-repayment (if applicable)
Investments after AAF	Interest in other AAF-related investments since the AAF loan was approved; purpose and estimated cost of desired investments; whether applied for a loan; reasons for not applying for a loan (if applicable); reasons for rejected loan application (if applicable); for approved loan applications, details including date of approval, source of credit, loan size, collateral value, term, and interest rate; whether met scheduled repayments; extent to which planned investments were made; plans for future AAF-related investments and sources of funding
Use of infrastructure supported by AAF loans	Whether infrastructure is completed and fully operational; number, type, and location of intended, current, and future users of infrastructure; income obtained and expected from infrastructure investment; expected profitability of investment
Qualitative discussion	Investment in the absence of AAF; challenges faced in obtaining and using AAF credit; suggestions for AAF program improvement

* These answers were pre-filled in the AAFS using the information found in the AAF Loan Applicant Intake Form and confirmed during in-person interviews.

** This item was pre-filled in the AAFS using information provided by MCA-Moldova

2. Qualitative data from non-beneficiaries and commercial banks

To gain a more complete perspective of the agricultural credit environment during the period over which the AAF credit program operated, we gathered qualitative data through semi-structured interviews with 10 non-beneficiaries of the AAF activity and six commercial banks. The 10 non-beneficiaries were intended to be agricultural producers and processors who did not receive AAF loans, were similar to AAF beneficiaries in terms of their ability to qualify for credit, and were interested in making investments for AAF-eligible purposes from 2012 to 2015 (the period over which the AAF credit program operated). The interviews, which were conducted from May to August 2015, gathered information on their perspectives of the agricultural credit market, investment needs since 2012, awareness of AAF loans, and their results from using non-AAF agricultural credit from 2012 to 2015 (if they obtained credit for their planned investments).

The six commercial banks that were interviewed included four banks that participated in the AAF credit program. These four participating banks were selected from a total of seven that participated in the credit program, and included the two that disbursed the greatest number of AAF loans. The interviews with these banks gathered information about their perspectives on the agricultural credit market, the agricultural credit they provided from 2012 to 2015, and their awareness of or involvement in the AAF activity during that same period. The two commercial banks that did not participate in the AAF credit program were suggested by MCA-Moldova as being active in the agricultural credit market and were included to provide a broader perspective of this market.

3. Other data sources

Our analysis of the AAF credit program also draws on the following data sources:

- **AAF loan applicant intake form.** All applicants to the AAF credit program were required to complete a loan applicant intake form, developed jointly by MCC, MCA-Moldova, and Mathematica, at the time of application.⁴ These intake data were designed to provide information about the characteristics of the loan requested (such as size and purpose of the loan), amount and type of collateral offered, financial information, and credit history.
- **Administrative data from the CLD.** The CLD, which administers the AAF credit program, collects data on AAF loans. These data complement the loan applicant information by providing information on loan characteristics, such as the size of approved loans, interest rates, and dates of disbursement, as well as the loan repayment history.

In the chapters that follow, we use the information collected from the data sources discussed above to describe the AAF credit program and draw initial conclusions about its implementation and potential effects.

⁴ This form was developed with the intent of gathering data on all applicants, whether approved or not, for evaluation purposes. In practice, AAF loan applications were only submitted by entities that were ultimately approved, so we have AAF applicant intake data only for approved borrowers.

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II. BENEFICIARY CHARACTERISTICS, LOANS, AND INVESTMENTS

In this chapter, we describe the enterprises that benefitted from the AAF credit program and their investment experiences before, during, and after the program. We begin by describing the characteristics of the AAF beneficiary enterprises and their financial status, as well as investments they made prior to the AAF credit program. We then describe the characteristics of the loans made under the program, as well as the characteristics and use of the investments that they funded—with a specific focus on cold storage infrastructure, the most common type of investment. We also describe the awareness of and experiences of beneficiaries and commercial banks with the AAF credit program and their suggestions for program improvement. Finally, we examine additional investments that beneficiaries were interested in making after receiving loans through the program.

A. Beneficiary enterprise characteristics, financial status, and investments prior to AAF

1. Beneficiary enterprise characteristics

The AAF beneficiary enterprises that responded to the AAFS varied in characteristics such as geographic location (Figure I.2), the gender composition of ownership, and core business activities. In part, this variation reflects the fact that the program was, during portions of the implementation period, open to a wide range of loan amounts, geographic locations, and loan purposes. About 40 percent of beneficiary enterprises had at least one female owner, and about 13 percent had more than half of their owners female (the mean number of owners was 2 and the median was 1.5) (Table II.1). The AAFS also asked about the gender composition of the enterprises' management at the time of the survey; about 46 percent had at least one female manager, and about 20 percent had more than half of their managers female (the mean number of managers was 2 and the median was 1). The vast majority of beneficiary enterprises were primarily agricultural, with the most common core business activities reported as agricultural production (77 percent of enterprises), marketing (50 percent), and storage (38 percent) (Figure II.1).

Table II.1. Enterprise ownership and management, by gender (percentage of beneficiaries unless otherwise indicated)

	Sample size	Estimate
Ownership:		
Number of owners at time of application:	52	
1		50.0
2		28.8
3		13.5
4-8		7.7
Mean	52	1.9
Median	52	1.5
Any female owner	52	40.4
More than half of owners are female	52	13.5

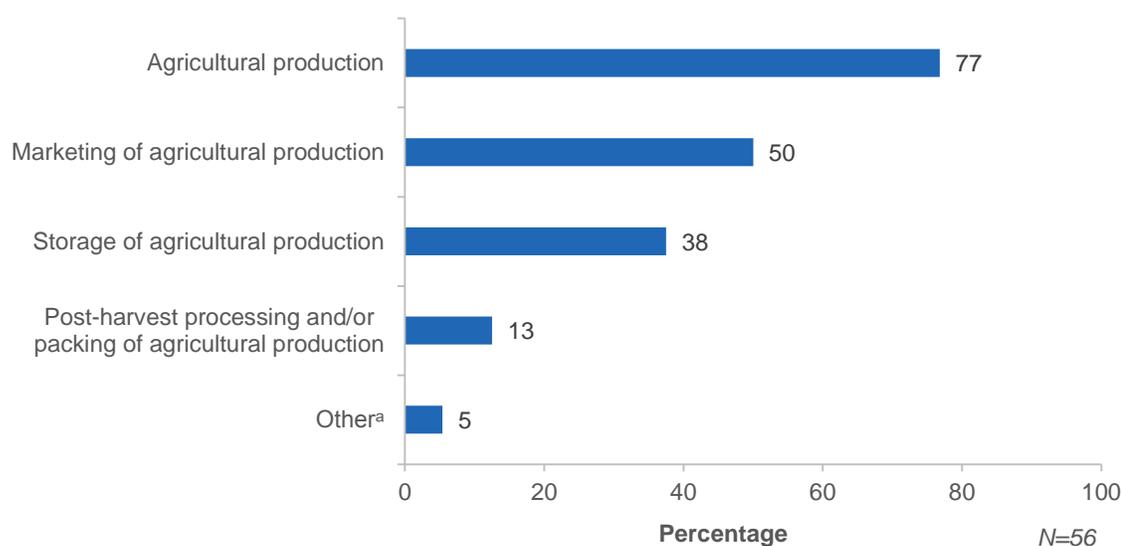
	Sample size	Estimate
Management:		
Number of managers at time of AAFS:	56	
1		51.8
2		21.4
3-4		14.3
5-13		8.9
Mean	56	2.4
Median	56	1.0
Any female manager	56	46.4
More than half of managers are female	56	19.6

Source: Credit Line Directorate (CLD) administrative data (ownership) and 2015 Moldova Access to Agricultural Finance Survey (management).

Note: Table omits four beneficiaries for whom complete information about ownership was not available in the CLD data.

AAFS=Access to Agricultural Finance Survey.

Figure II.1. Enterprise core business activities (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

^aOther business activities reported were: provision of agricultural services and cattle/livestock breeding.

Beneficiary enterprises also varied in size and scale of their operations, with the reduction in minimum loan size over the course of the program enabling smaller enterprises to participate. One measure of enterprise size is the number of employees. About 46 percent of beneficiary enterprises had fewer than 10 employees in 2014, and about 16 percent had at least 50 employees

(the mean number of employees was 28 and the median was 11) (Table II.2).⁵ For agricultural beneficiary enterprises that operated any land, a measure of the scale of operations is the size of the area that they operated in 2014. Among these enterprises, about 22 percent operated from 1 to 10 hectares, 37 percent operated from 10 to 100 hectares, 29 percent operated from 100 to 1,000 hectares, and 12 percent operated more than 1,000 hectares.⁶ The mean land area operated in 2014 among these beneficiary enterprises was 296 hectares while the median was 60 hectares. For beneficiary enterprises involved in agricultural processing or storage, a relevant measure of the scale of operations is the quantity of produce that was stored or processed. Among these beneficiary enterprises who processed or stored any crops in 2014, there was also substantial variation in amounts processed or stored.

Table II.2. Enterprise characteristics (percentage of beneficiaries unless otherwise indicated)

	Sample size	Estimate
Number of employees in 2014	56	
0-9		46.4
10-49		37.5
≥50		16.1
Mean		28.1
Median		11.0
Land operated in 2014, among agricultural enterprises that operated any land	49	
1-<10 Ha		22.4
10-<100 Ha		36.7
100-<1000 Ha		28.6
≥1,000 Ha		12.2
Mean (Ha)		296
Median (Ha)		60
Quantity processed or stored in 2014, among enterprises that are involved in agricultural processing or storage and processed or stored any crops	46	
1-<250 tons		32.6
250-<1,000 tons		39.1
≥1,000 tons		28.3
Mean (tons)		1,223
Median (tons)		490

Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: The analysis excludes 7 beneficiary enterprises that did not cultivate land in 2014 and 10 beneficiary enterprises that did not process or store crops in 2014. To account for outliers, hectares of land operated and tons processed or stored were top-coded using 95th percentiles as the cutoff points.

Ha=Hectares

⁵ Although beneficiary enterprises received AAF loans from 2012 to 2015, we used 2014 as a common (and simple) reference point for questions on enterprise characteristics.

⁶ In contrast, an analysis of data from the 2011 General Agricultural Census found that about 11 percent of farms in Moldova operated less than one hectare, 26 percent operated from 1 to 10 hectares, 5 percent operated from 10 to 100 hectares, 25 percent operated from 100 to 1,000 hectares, and 23 percent operated more than 1,000 hectares (NBS 2011). Therefore, AAF beneficiary enterprises include disproportionately more medium-sized farms compared to the overall distribution of farm size in Moldova, which consists mainly of very small and very large farms.

To get a sense of the distribution of AAF investments across different value chains, we included questions in the AAFS about the specific crops cultivated, processed, or stored during the 2014 agricultural season. Beneficiary enterprises cultivated and processed or stored a wide variety of crops (Table II.3). Many beneficiary enterprises (80 percent of those cultivating crops and 78 percent of those processing or storing crops, not shown) were involved with more than one crop, so the variation in crops is driven by both variation across and within enterprises. The three most common crops—namely apples, plums, and table grapes—are all HVA crops, and were cultivated by 36 to 43 percent of beneficiary enterprises, and processed or stored by 23 to 41 percent of beneficiary enterprises. The types of investments funded through the AAF credit program may be especially relevant for these HVA crops—especially investments in post-harvest infrastructure such as cold storage. Non-HVA crops such as wheat, sunflowers, barley, and corn, were the next most common crops.

Table II.3. Crops cultivated or processed/stored in the 2014 agricultural season (percentage of beneficiaries)

	Crops cultivated	Crops processed/stored
Apples	42.9	41.1
Plums	35.7	23.2
Table grapes	35.7	23.2
Wheat	30.4	21.4
Sunflowers	25.0	21.4
Barley	17.9	14.3
Corn	17.9	16.1
Soybeans	14.3	10.7
Sweet cherries	12.5	-- ^b
Technical grapes	12.5	-- ^b
Potatoes	7.1	-- ^b
Cabbage	7.1	-- ^b
Tomatoes	7.1	-- ^b
Onions	7.1	-- ^b
Cucumbers	7.1	-- ^b
Watermelons	7.1	0.0
Tree fruit seedlings	7.1	7.1
Peaches	7.1	-- ^b
Apricots	7.1	-- ^b
Other	28.6 ^a	28.6 ^c
None	14.3	16.1
Sample size	56	56

Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses. High-value agriculture (HVA) crops are highlighted in bold.

^aOther reported cultivated crops were: peas, carrots, walnuts, red and sugar beets, fodder plant/forage, tobacco, rapeseed, peppers, seeds, strawberries, eggplants, oats, sweet corn, beans, pears, pumpkins, melons, buckwheat, and zucchini. Each were cultivated by no more than 5 percent of beneficiary enterprises.

^bCrop included in "other" category because it was processed/stored by a small percentage of beneficiary enterprises.

^cOther reported processes/stored crops were: peas, carrots, red beets, fodder plant/forage, tobacco, rapeseed, seeds, oats, pumpkins, potatoes, cabbage, tomatoes, onions, cucumbers, sweet cherries, peaches, apricots, technical grapes. Each were processed/stored by no more than 5 percent of beneficiary enterprises.

2. Financial status

Most of the enterprises in the survey (59 percent) reported sales of at least \$100,000, and overall mean and median annual sales were \$423,406 and \$156,417, respectively, in 2014 (Table II.4).⁷ About 9 percent of these enterprises reported no annual sales in 2014. Mean and median net profits in 2014 were \$52,123 and \$11,024, respectively, although about a quarter of enterprises reported zero or negative net profit. Similar to net profit, about a quarter of enterprises reported zero or negative net capital, with mean and median net capital of \$354,828 and \$105,817, respectively.⁸

Table II.4. Enterprise financial characteristics in 2014 (percentage of beneficiaries unless otherwise indicated)

	Estimate
Annual sales:	
\$0	9.3
\$1-<\$25,000	13.0
\$25,000-<\$100,000	18.5
\$100,000-<\$500,000	31.5
≥\$500,000	27.8
Mean (dollars)	423,406
Median (dollars)	156,417
Annual net profit:	
≤\$0	25.9
\$1-<\$25,000	35.2
\$25,000-<100,000	14.8
≥\$100,000	24.1
Mean (dollars)	52,123
Median (dollars)	11,024
Net capital:	
≤\$0	25.9
\$1-<\$25,000	14.8
\$25,000-<\$100,000	9.3
\$100,000-<500,000	33.3
≥\$500,000	16.7
Mean (dollars)	354,828
Median (dollars)	105,817
Sample size	54

Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Net capital was estimated by calculating total assets (sum of investments, long-term assets, and short-term assets) and subtracting current liabilities and equity. To account for outliers, annual sales were top-coded using the 95th percentile as the cutoff point; net profit and net capital were top- and bottom-coded using 95th and 5th percentiles as the cutoff points. Monetary amounts were converted from Moldovan lei to U.S. dollars using the average midpoint exchange rate in 2014 obtained from oanda.com.

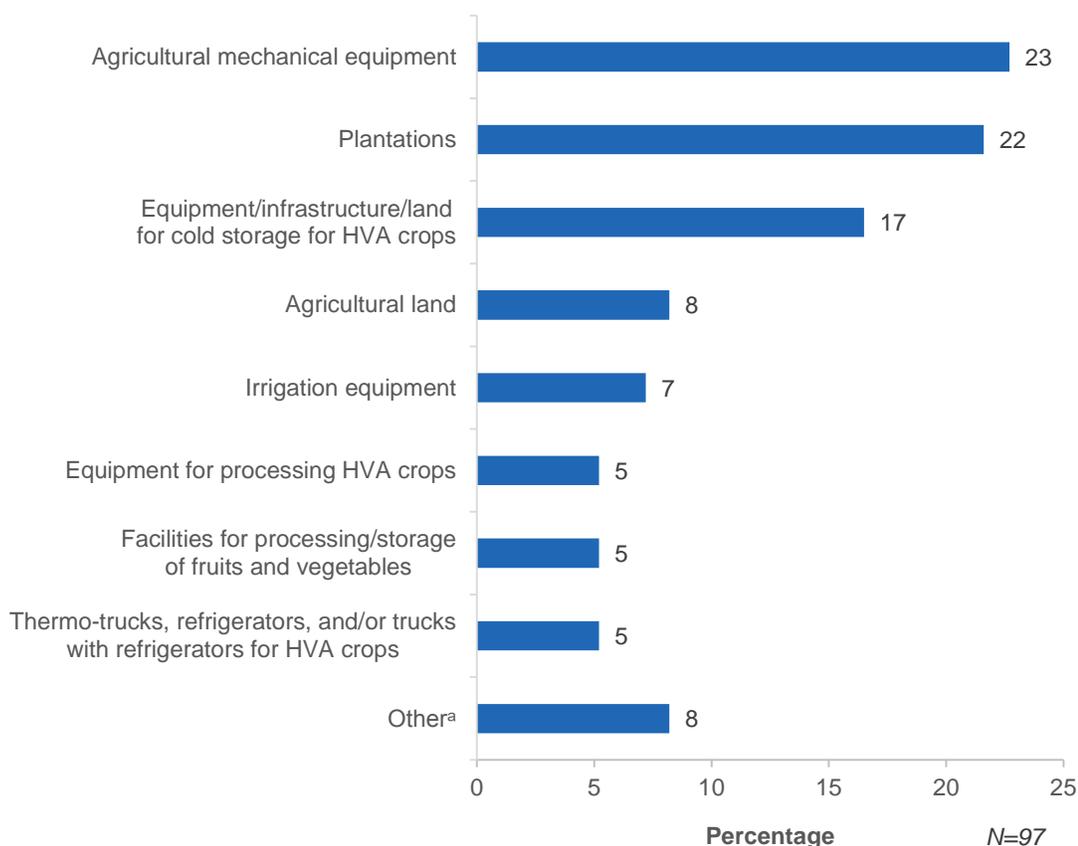
⁷ As above, we used 2014 as a common reference point for questions on enterprise financial status because it was the most recent complete year at the time of the survey.

⁸ We defined net capital as total assets (investments, long-term assets and short-term assets) less total liabilities and equity.

3. Investments prior to the AAF credit program

The AAFS asked respondents about agricultural investments made in the three years prior to receiving an AAF loan.⁹ About 16 percent of respondents reported not having made any investments, 25 percent reported having made one investment, and 59 percent reported having made two or three investments over this period (not shown). The majority of these investments were for agricultural mechanical equipment (23 percent), plantations (22 percent), or equipment, infrastructure, or land for cold storage (17 percent) (Figure II.2). The remaining investments (39 percent) included investments in land, equipment, and facilities. The costs of these prior investments varied substantially (Figure II.3), with a mean cost of \$158,455 and a median of \$60,522.

Figure II.2. Types of agricultural investments in the three years prior to receiving an AAF loan (percentage of investments)



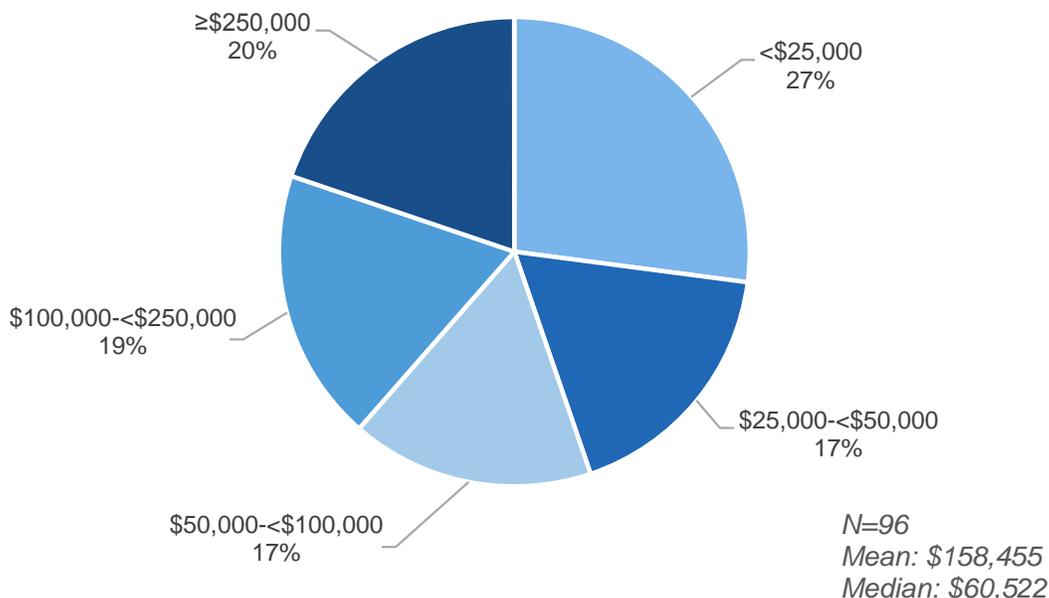
Source: 2015 Moldova Access to Agricultural Finance Survey.

^aOther investment types reported were: constructing or expanding a greenhouse; equipment for processing non-HVA crops; equipment/infrastructure/land for cold storage for non-HVA crops; accumulation of water (lake); rootstock plantation nursery; and a water tank (reservoir).

HVA=High-value agriculture

⁹ In asking about investments prior to AAF, the AAFS gathered data on agricultural investments for both AAF-eligible and ineligible purposes.

Figure II.3. Size of agricultural investments in the three years prior to receiving an AAF loan (percentage of investments)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: To account for outliers, the estimated cost of investment was top-coded using the 95th percentile as the cutoff point. Monetary amounts were converted from Moldovan lei and euros to U.S. dollars using the average midpoint exchange rates obtained from oanda.com. For beneficiaries that received a loan to finance these investments, we used the average monthly rate in the month the loan was approved. For beneficiaries that did not apply for a loan, we used the average exchange rate in the period of three years prior to the AAF loan receipt.

Most AAF beneficiaries (84 percent) had made other large investments in the three years prior to AAF; however, beneficiary enterprises only applied for loans for 29 percent of these investments (not shown). All of those applications were successful, suggesting that only well-qualified applicants tended to apply. The loans granted to finance prior investments varied in size—although 80 percent were below \$100,000—with a mean loan size of \$56,937 (Table II.5). The majority (64 percent) of these loans were financed by banks' own resources, with another 28 percent of loans financed by IFAD credit lines, and the remaining 8 percent financed by other sources.

Table II.5. Financing of agricultural investments in the three years prior to receiving an AAF loan, among investments funded through a loan (percentage of investments unless otherwise indicated)

	Estimate
Loan size:	
<\$25,000	36.0
\$25,000-<\$50,000	16.0
\$50,000-<\$100,000	28.0
≥\$100,000	20.0
Mean (dollars)	56,937
Loan source:	
Private or commercial bank's own resources	64.0
IFAD credit line	28.0
Other ^a	8.0
Sample size	25

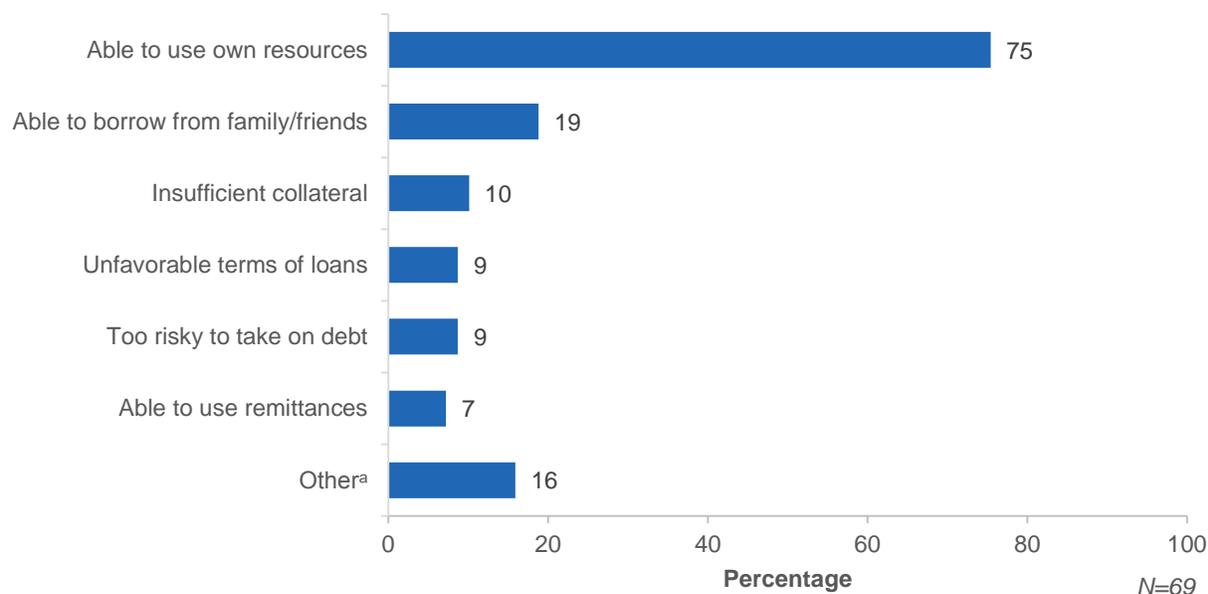
Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: To account for outliers, the loan size was top-coded using the 95th percentile as the cutoff point. Monetary amounts were converted from Moldovan lei and euros to U.S. dollars using the average midpoint exchange rates obtained from oanda.com. We used the average monthly rate in the month the loan was approved, which varied by beneficiary.

^aOther reported sources of loans were: Rural Investment and Services Project (RISP) and the Organization for Small and Medium Enterprises Sector Development (ODIMM) National Youth Economic Empowerment Program (PNAET). IFAD=International Fund for Agricultural Development

Among prior investments for which the beneficiary enterprise did not apply for a loan, most (75 percent) did not require a loan because the beneficiary was able to use their own resources for the investment (Figure II.4). Other common reasons for not applying were the ability to borrow from family and friends (19 percent of investments that did not involve a loan), insufficient collateral (10 percent), and unfavorable terms of loans (9 percent).

Figure II.4. Reasons for not applying for a loan to finance investments in the three years prior to receiving an AAF loan, among investments for which the beneficiary did not apply for a loan (percentage of investments)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses for a given investment.

^aOther reported reasons were: was not aware of available loans; decided not to make the investment; no water sources available; investment was just an idea; and other unspecified reasons.

In summary, the vast majority of AAF beneficiaries were agricultural enterprises involved with HVA crop production, processing, or storage. However, these enterprises varied in characteristics such as geographic location, gender ownership, core business activities, and scale of operations, as well as in their financial status. Many of these enterprises made significant investments prior to the AAF credit program, although the types and sizes of these investments varied. However, most of these investments were not financed through loans—primarily because the enterprises were able to fund them using their own resources or resources borrowed from family and friends.

B. Characteristics of AAF loans and investments

1. AAF loan characteristics

To better describe the AAF credit program, we examined the characteristics of AAF loans, including loan size, loan-to-investment ratio, interest rate, collateral-to-loan ratio, and loan term. The majority of AAF loans in our sample (63 percent) were greater than \$100,000, and 17 percent were greater than \$250,000, with a mean loan amount of \$171,178 and a median of \$141,711. Very few (7 percent) of the AAF loans were less than \$25,000 (Table II.6). The typical loan may have been large because AAF loans were initially required to be \$50,000 or more (Table I.2), although the minimum was later reduced. The mean AAF loan-to-investment ratio was 0.53, indicating that total investments were on average twice as large as the AAF

loan amount and that beneficiaries used additional resources to make the full investments (we discuss additional sources of investment financing below).

Table II.6. AAF loan characteristics (percentage of AAF loans unless otherwise indicated)

	Estimate
Loan size:	
<\$25,000	6.7
\$25,000-<\$50,000	8.3
\$50,000-<\$100,000	21.7
\$100,000-<\$250,000	46.7
≥\$250,000	16.7
Mean (dollars)	171,178
Median (dollars)	141,711
Loan-to-investment ratio:	
<0.25	8.3
0.25-<0.5	40.0
0.5-<0.75	35.0
0.75-1	16.7
Mean	0.53
Interest rate ^a :	
5.0%-7.5%	63.3
7.6-8.9%	0.0
9.0%-14.5%	36.7
Collateral-to-loan ratio	
<1.5	28.3
1.5-2	50.0
>2	21.7
Mean	1.9
Loan term	
3-<5 years	36.7
5 years	45.0
>5-7 years	18.3
Mean (years)	4.8
Sample size	60

Source: 2015 Moldova Access to Agricultural Finance Survey (investment amount, interest rate, collateral, and loan term) and Credit Line Directorate (CLD) administrative data (loan size).

Note: The CLD reported the U.S. dollar equivalent of loan size, regardless of the currency of disbursement. If investment or collateral was reported in a currency other than U.S. dollars, the amount was converted from Moldovan lei and euros to U.S. dollars. For beneficiaries that reported these amounts in the same currency as the AAF loan amounts (and not in U.S. dollars), we converted to U.S. dollars using the implied exchange rate in CLD administrative data. For beneficiaries that reported these amounts in a currency other than that of the AAF loan amount, we used the average midpoint exchange rate obtained from oanda.com for the month in which the AAF loan was disbursed. To account for outliers, the collateral-to-loan ratio was top-coded using the 95th percentile as the cutoff point.

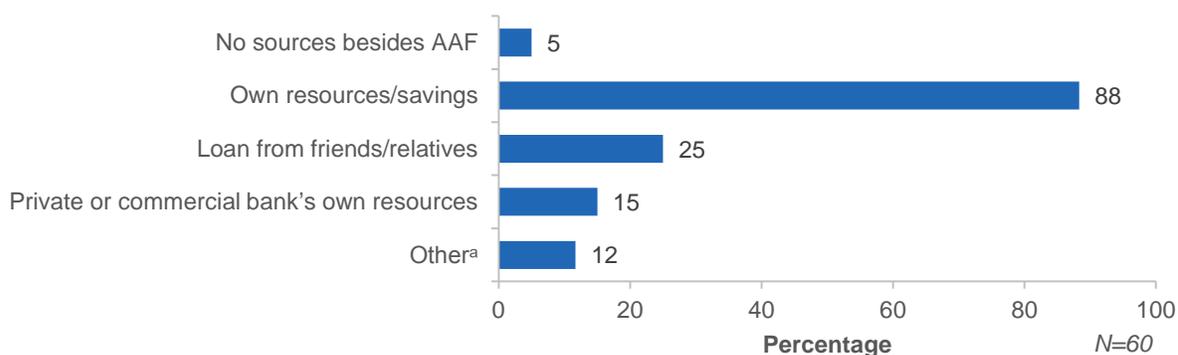
^aLoans disbursed in foreign currency (euros or U.S. dollars) had an interest rate that ranged from 5 to 7.5 percent whereas loans requested in Moldovan currency (lei) had an interest rate that ranged from 9 to 14.5 percent. The mean interest rate could therefore be misleading, and we do not report it.

Most of the loans (63 percent) were disbursed in foreign currency (euros or U.S. dollars) and had an interest rate that ranged from 5 to 7.5 percent. In contrast, loans requested in Moldovan currency (lei) had a higher interest rate that ranged from 9 to 14.5 percent. Beneficiaries typically offered collateral of 1.9 times the loan size, on average, with collateral more than double the loan amount for 22 percent of loans. The AAF loan repayment period ranged from three to seven years, with almost half of the loans (45 percent) having five-year terms. (In Chapter III we describe beneficiaries and commercial banks' perspectives about how some of these characteristics compared to those of other sources of agricultural credit that were available over the same period.)

Beneficiaries were typically satisfied with the conditions of their AAF loans (73 percent of loans), less than one quarter were neither satisfied nor dissatisfied (22 percent of loans) and only a few were dissatisfied (5 percent of loans) (not shown). For most loans, beneficiaries had either met the repayment schedule as of the survey date (77 percent of loans) or had not begun repayment because the repayment period had yet not started (22 percent of loans) (not shown). Only one respondent reported not having met the repayment schedule for the enterprise's loan (not shown).

As mentioned above, AAF-funded investments were about twice as large as AAF loan amounts, on average, indicating that beneficiaries used other funding sources in addition to AAF. Overall, only five percent of AAF-funded investments reported in the AAFS were funded entirely by AAF loans (Figure II.5). Among the investments funded by additional sources, about 65 percent used one additional source only, about 26 percent used two additional sources, and the remaining 9 percent used three or more additional sources (not shown). The most common additional source was beneficiaries' own resources and savings (88 percent of investments), while other common sources included loans from beneficiaries' friends or relatives (25 percent), bank loans (15 percent), and a variety of other sources (12 percent).

Figure II.5. Use of additional sources of investment financing for AAF investment (percentage of AAF-funded investments)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

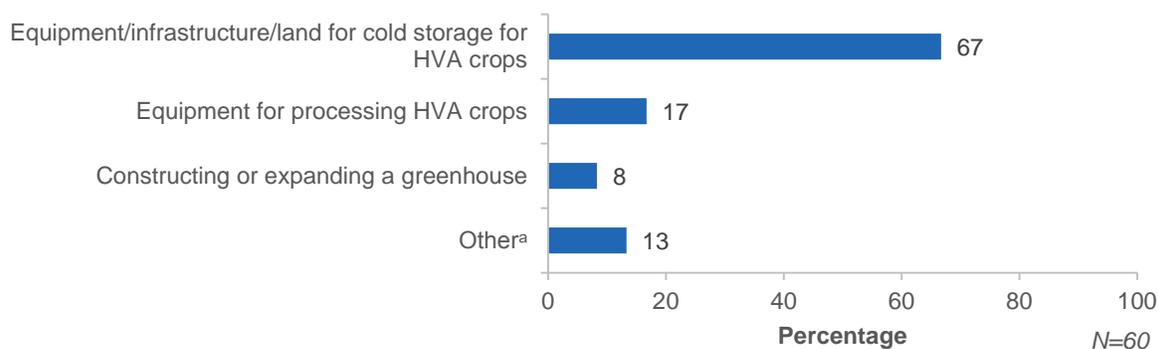
^aOther sources of credit reported were: Rural Investment and Services Project (RISP), International Fund for Agricultural Development (IFAD) or other donor credit lines, microfinance organizations, savings and credit associations, credit line directorate (CLD), and foreign investors.

To understand the relative contributions of these alternative funding sources in financing the AAF investment, we calculated the percentage of the total investment contributed by each funding source. On average, slightly more than half of the total investment amount was financed by the AAF loan, about a third from beneficiaries' own sources and savings, and only a small percentage from other sources (not shown). Therefore, even though most investments used additional funding, AAF loans still typically contributed the majority of the total investment cost, and was typically the only formal loan used for the investment.

2. Characteristics of and demand for AAF-funded investments

As described in Chapter I, for the first two years of the program, AAF loans were available only for investments in post-harvest infrastructure and equipment; the set of eligible purposes was expanded over the course of the program. One of the program's implementation targets was to help beneficiary enterprises build or rehabilitate cold storage capacity totaling 10,500 tons. Consistent with this focus, the majority of AAF loans (67 percent) were used to fund investments related to cold storage for HVA crops (Figure II.6). By the start of September 2015 (the month in which the compact ended), MCA-Moldova confirmed that AAF loan beneficiaries had constructed approximately 20,705 tons of cold storage capacity, far exceeding the initial target. About 20 percent of this capacity was constructed in the 8 raions in which other key THVA project activities were implemented. The other most common purposes for AAF loans were procuring equipment for processing HVA crops (17 percent of loans), and constructing or expanding a greenhouse (8 percent).

Figure II.6. Investments funded by the AAF credit program (percentage of AAF loans)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because four respondents used the loans for multiple purposes.

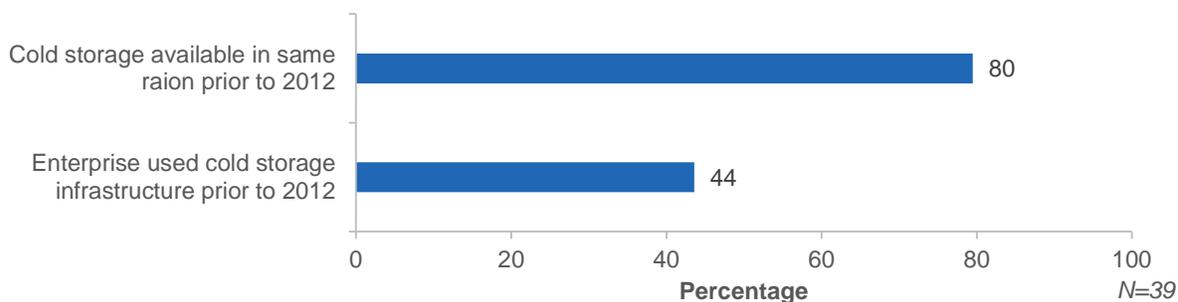
^aOther reported types of investments were: irrigation equipment; facilities for processing/storage of fruits and vegetables; thermo-trucks, refrigerators, or trucks with refrigerators for HVA crops; electric forklift; planting an orchard; equipment for the production of cardboard boxes; packing house; and tree fruit seedlings.

HVA=High-value agriculture

Among beneficiaries that invested in cold storage through the AAF credit program, the vast majority (80 percent) reported that cold storage infrastructure existed in the same raion prior to 2012 (the year the AAF program began distributing loans). However, the percentage of beneficiaries that reported having used cold storage was much lower (44 percent) (Figure II.7).

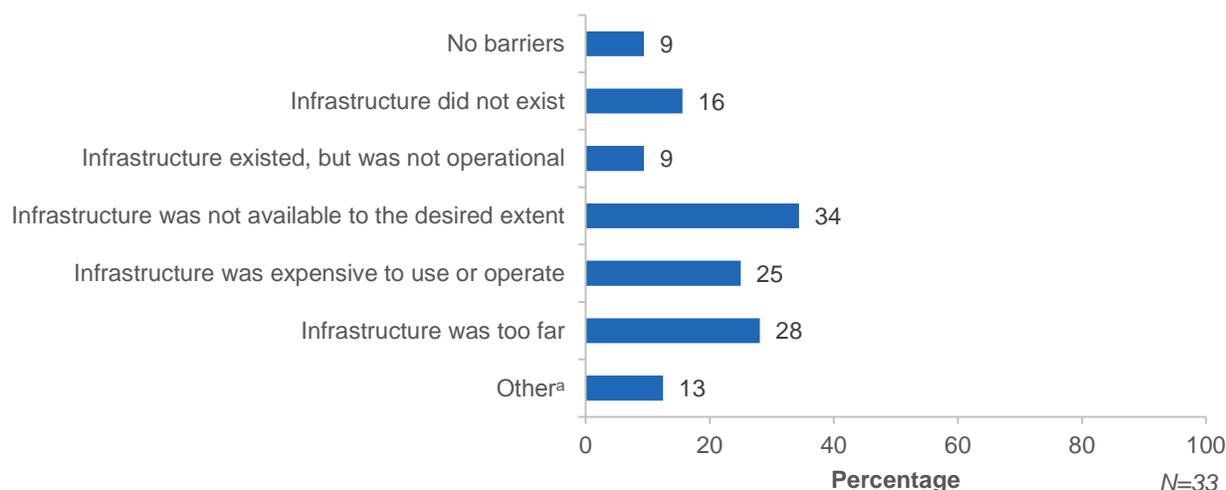
Most of the beneficiaries that invested in cold storage reported at least one barrier to using cold storage prior to 2012. The most commonly reported barriers were that cold storage was not available to the desired extent (34 percent), was too far away (28 percent), or was expensive to use or operate (25 percent) (Figure II.8). These findings suggest that there was a need for additional cold storage that the AAF credit program might have helped address.

Figure II.7. Existence and use of cold storage infrastructure prior to 2012, among beneficiary enterprises that invested in cold storage (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Figure II.8. Barriers to using cold storage infrastructure prior to 2012, among beneficiary enterprises that invested in cold storage (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses. Seven beneficiary enterprises provided “other” responses that were not relevant to the question and were excluded from this analysis.

^aOther barriers reported were: infrastructure was not modern; apples were bought directly from the field; and the enterprise did not collect a large enough yield.

3. Use of cold storage infrastructure funded by AAF loans

To understand how infrastructure built under the program would be used by beneficiaries and other entities, the AAFS also asked survey respondents whether they expected to use the infrastructure themselves and whether they expected others to use the infrastructure. Almost all beneficiaries that made AAF-funded investments in cold storage intended to use the cold storage facility themselves when they made the investment, and expected to be using it themselves in 5 years' time (100 and 97 percent, respectively) (Table II.7). Slightly fewer expected to be using this infrastructure themselves in the 2015 agricultural season (87 percent), likely because not all of the cold storage investments were operational in time (about 80 percent were operational as of the survey date, not shown). Some beneficiaries intended or expected their AAF-funded cold storage to be used by other entities, as well—for example, by individual producers (from 31 to 39 percent, depending on the time period), or by producer enterprises (from 5 to 8 percent). Overall, from 36 to 46 percent of beneficiaries who invested in cold storage expected it to be used by at least one other entity, depending on the time period. Because most cold storage was intended or expected to be used primarily by the beneficiary enterprise, the median number of intended and expected users was one, but the mean ranged from 4 to 6 users. These patterns were similar when examined for all AAF-funded investments, not limited to cold storage (not shown).

Table II.7. Intended users of AAF-funded cold storage infrastructure, among beneficiary enterprises that invested in cold storage (percentage of beneficiaries unless otherwise indicated)

	Intended at time of investment	Expected in 2015 agricultural season	Expected in 5 years' time
Types of users:			
Any users	100.0	89.7	100.0
Beneficiary enterprise	100.0	87.2	97.4
At least one other entity	35.9	43.6	46.2
Other entity type:			
Producer – individual/household	30.8	33.3	38.5
Producer – cooperative	2.6	2.6	0.0
Producer – enterprise	5.1	7.7	7.7
Processor – individual/household	2.6	2.6	2.6
Processor – cooperative	0.0	0.0	0.0
Processor – enterprise	2.6	2.6	0.0
Trader – wholesale	5.1	5.1	10.3
Trader – individual	0.0	0.0	0.0
Number of users expected:			
Mean	4.7	3.6	5.8
Median	1	1	1
Sample size	39	39	39

Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

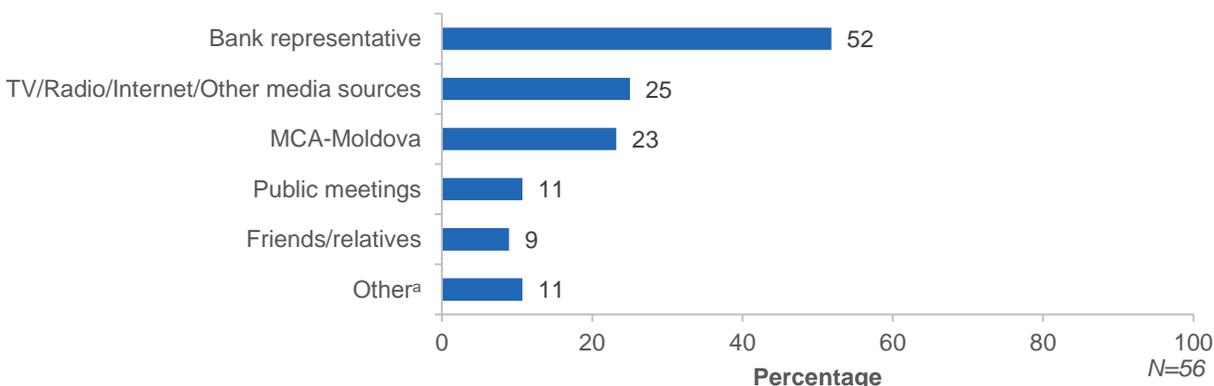
In summary, our findings suggest that AAF loans typically did not cover the full cost of the funded investments, although they contributed to more than half of the total investment cost, on average. To fund the remaining investment costs, beneficiaries typically relied on their own resources, rather than other sources of credit. Most AAF-funded investments were for cold storage—in line with the program’s initial focus on post-harvest infrastructure. Although most beneficiaries who invested in cold storage reported that it existed in their raion prior to 2012, the relatively limited use of cold storage (mainly because of barriers such as limited availability, distance, and cost) indicates a potential need for these investments when the AAF program was introduced. Almost all of the beneficiaries who invested in cold storage intended for their enterprises to use it; from one-third to one-half were planning to provide services to other entities, as well.

C. Awareness of and experiences with the AAF credit program

1. Awareness of the AAF credit program

To learn more about how beneficiaries became aware of the AAF credit program, the AAFS asked how they learned about AAF. About half of respondents reported that they approached the bank to obtain financing for their planned investment, and were then referred to AAF by a bank representative (Figure II.9). Beneficiaries also reported other ways they learned about the program, most commonly through media sources (TV, radio, internet, and so on) (25 percent) or MCA-Moldova (23 percent). Representatives of the four participating commercial banks that we interviewed confirmed that, although some clients approached them and specifically requested loans through the AAF program, at least half of those clients were referred to the program by the banks’ loan officers because the program offered the best terms for their clients relative to other available loans (in particular, the VAT exemption benefit). Interviews with enterprises and representatives of commercial banks that did not participate in the AAF credit program also asked about their awareness of the program. All of these respondents mentioned being aware of the program, indicating that it was well-known even by those who did not participate.

Figure II.9. How beneficiary enterprises learned about the AAF credit program (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

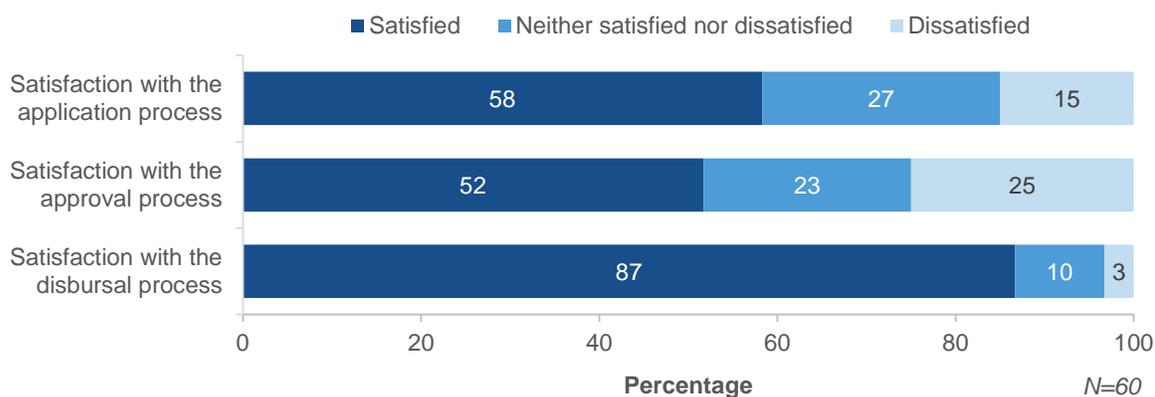
^aOther sources reported were: business development service providers; the Agricultural Competitiveness and Enterprise Development (ACED) Project; suppliers of cold storage equipment; and the Ministry of Agriculture.

MCA=Millennium Challenge Account

2. Experiences with the AAF credit program and suggestions for program improvement

Most respondents reported that their experience with the AAF program was positive. Specifically, beneficiaries reported being satisfied with the application process, the approval process, and the disbursement process for most AAF loans (58, 52, and 87 percent of loans, respectively) (Figure II.10). Although there were reports of dissatisfaction for some loans—most commonly with the application or approval process—this applied to about a quarter of AAF loans at most. When asked specifically about challenges they experienced in obtaining and using AAF credit for investments, most beneficiaries (80 percent) reported at least one challenge (not shown). Common challenges that beneficiaries reported included extensive documentation requirements by the banks, long wait times for approval, and high collateral requirements (not shown).

Figure II.10. Experience with AAF application and disbursement (percentage of AAF loans)



Source: 2015 Moldova Access to Agricultural Finance Survey.

All AAF-participating commercial banks that were interviewed reported being satisfied with their interactions with MCA-Moldova and the CLD during the compact. However, many commented that the eligibility restrictions, especially the geographic restrictions (discussed in Chapter I), significantly reduced the number of applications. One bank representative noted that changes to these criteria over the course of the program also confused their clients, some of whom were initially interested in applying but then discovered that their planned investments were no longer eligible for the AAF loans because of the geographic restriction to specific raions. In those cases, the bank was able to find other funding sources. Some bank representatives felt that the documentation required by the AAF program was excessive and too complex for clients to prepare. One specifically noted the difficulties helping clients comply with the program's environmental requirements. Despite these challenges, bank representatives noted that the banks would participate in the program again, if available, as this and similar programs led to new clients.

Beneficiaries and representatives of participating commercial banks also provided suggestions for AAF credit program improvement. The majority of beneficiaries (63 percent) indicated that they would have liked the interest rates to have been significantly lower (not

shown). Many beneficiaries (38 percent, not shown) thought that direct disbursement of the loan to the borrower (without going through the banks) would have resulted in lower interest rates, as in the case of the AAF hire-purchase program for irrigation-related equipment. These beneficiaries also suggested that running the program outside of banks might have helped alleviate some of the other challenges they experienced with the AAF loan process, such as extensive documentation and large collateral requirements imposed by the banks. About a quarter of beneficiaries (not shown) commented that they would have liked for the loan to include a grant element, which would have helped to cover some expenses such as documentation preparation, for example. However, others noted they were appreciative of the VAT exemption.

Overall, beneficiaries and commercial bank representatives both suggested that the program should have included fewer documentation requirements, expanded the loan eligibility criteria to include additional types of investments, and removed the geographic eligibility restrictions. Other beneficiary suggestions included keeping the VAT exemption, improving outreach, providing help with customs documentation, and offering larger loan amounts, longer loan periods, and more program funding. Commercial bank representatives provided additional suggestions as well: to include smaller banks in the program, offer shorter approval and disbursement periods, and move towards electronic records.

In sum, AAF loan beneficiaries and participating commercial banks generally reported a positive experience with the program, and the representatives of participating commercial banks noted that they would participate in similar programs in the future. Beneficiaries described several challenges they experienced in obtaining and using the AAF credit for investments; however, most were related to interactions with the banks disbursing the loans. Both beneficiaries and commercial banks provided several suggestions related to improving the loan terms and requirements, simplifying the approval and disbursement process by using an implementation unit or smaller banks (as opposed to using commercial banks), and expanding the loan eligibility criteria.

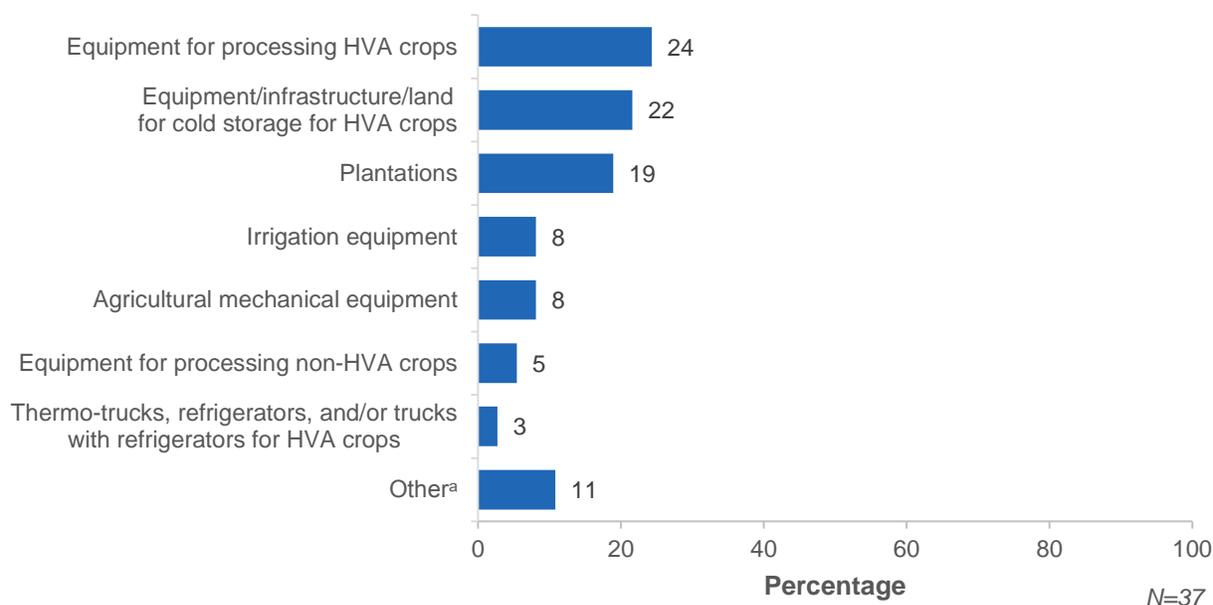
D. Investments after AAF loan receipt

With the experience of having borrowed from banks and made a significant investment, AAF beneficiaries might be better-positioned to make investments and take on credit in the future. To track beneficiaries' investments after the AAF loan, the AAFS asked respondents about their investment activity from the time they received the AAF loan until the survey date (from one month to 42 months, depending on the respondent). To allow sufficient time for respondents to consider subsequent investments, we restricted the sample for this analysis to the 19 respondents who received AAF loans at least two years prior to the AAFS. Of these, 17 respondents reported being interested in making additional investments after AAF and provided information about a total of 37 potential investments (most beneficiaries were interested in more than one additional investment).

These potential investments were diverse, varying in purpose, size, and financing. They included equipment for processing HVA crops (24 percent of investments of interest), equipment/infrastructure/land for cold storage for HVA crops (22 percent), and plantations (19 percent) (Figure II.11). Most of these potential investments were new investments (59 percent)

rather than improvements to or expansion of existing infrastructure (Table II.8). The investments of interest ranged in size, although most cost \$100,000 or more (62 percent of investments), with a mean investment of \$223,274 and median of \$127,178. Few beneficiaries had applied for a loan to finance the investments of interest (24 percent of investments), although almost all who applied for a loan received one (22 percent of investments) (not shown). Those that secured loans received financing primarily from private or commercial banks' own resources or the International Fund for Agricultural Development (IFAD). Overall, about one half of the investments of interest had been made as of the survey date and about 22 percent had been made using financing from a loan (Table II.8); respondents reported financial constraints as the main reasons for not making the other investments (not shown).

Figure II.11. Types of additional AAF-eligible investments of interest between AAF loan receipt and the survey date (percentage of investments of interest)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Responses are based on investment interests indicated by 17 respondents who received an AAF loan at least two years prior to the survey.

^aBeneficiaries reported being interested in other types of investments: cold storage or equipment/infrastructure/land for cold storage for non-HVA crops; containers for storing apples; drying room; production of cardboard boxes; and facilities for processing/storage of HVA crops.

HVA=High-value agriculture

Table II.8. Features of additional AAF-eligible investments of interest between AAF loan receipt and the survey date (percentage of investments of interest unless otherwise indicated)

	Sample size	Estimate
Estimated cost of investment:	37	
<\$25,000		2.7
\$25,000-<\$50,000		18.9
\$50,000-<\$100,000		16.2
\$100,000-<\$250,000		29.7
≥\$250,000		32.4
Mean (dollars)		223,274
Median (dollars)		127,178
Investment was for new infrastructure	37	59.5
Made the planned investment	37	51.4
Made the planned investment and financed it with a loan	37	21.6

Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: To account for outliers, the estimated cost of investment was top-coded using the 95th percentile as the cutoff point. Monetary amounts were converted from Moldovan lei and euros to U.S. dollars using the average midpoint exchange rates obtained from oanda.com. For beneficiaries that received a loan to finance these investments, we used the average monthly rate in the month the loan was approved. For beneficiaries that did not apply for a loan, we used the average exchange rate from the date of the AAF loan receipt to July 2015 (the approximate survey date).

Overall, these findings suggest that most AAF beneficiaries were interested in making additional investments for AAF-eligible purposes in the two (or more) years after receiving an AAF loan. The median cost of these additional investments was similar to that of the AAF investments, but the mean was about 30 percent higher because a larger proportion of subsequent investments were \$250,000 or more. The purposes of these investments were also more varied than the AAF-funded investments, with less of a focus on cold storage investments. However, despite the experience with obtaining financing through the AAF program, most beneficiaries did not seek out loans to finance these additional investments.

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III. THE AGRICULTURAL CREDIT MARKET AND ROLE OF AAF

To capture the short-run effects of the AAF credit program, we also want to understand how it may have changed the market for agricultural credit and changed the investment behavior of beneficiaries. In this chapter, we describe the agricultural credit market environment in Moldova during the period the AAF credit program was active (2012-2015), and compare the program to other potential funding sources that were available during that time. We begin by describing alternative sources of loans for agricultural investments and the barriers to making these investments. We then provide some evidence on the additionality of AAF loans—that is, the extent to which the AAF credit program enabled investments that would not otherwise have been made. We conclude by examining whether the AAF credit program affected banks' lending practices for similar types of investments.

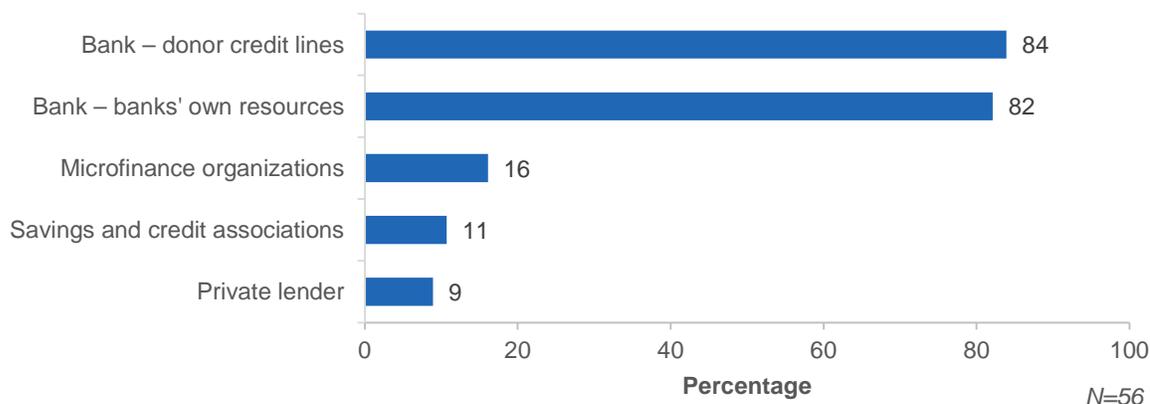
A. The agricultural credit market environment during the AAF credit program

1. Sources of loans for agricultural investments

Commercial bank representatives can provide context on the market for agricultural credit, including other donor credit lines and available sources of credit. In our interviews with commercial bank representatives, they described a general increase in the number of loans available for agricultural investments in the period leading up to and including the period during which the AAF credit program was active. In particular, many financial institutions—including commercial banks, microfinance organizations, and leasing companies—offered agricultural loans during that period. Agricultural loans were also available from international donors, typically with more favorable rates and a more straightforward application and approval process. There was strong demand for loans that included a grant element (in the form of a tax exemption or subsidies, for example).

Beneficiaries' impressions were consistent with those of commercial bank representatives, as they cited donor credit lines disbursed through commercial banks (for example, IFAD and RISP credit lines) and commercial banks' own resources (mentioned by 84 and 82 percent of beneficiaries, respectively) as major sources of available credit for agricultural investments (Figure III.1). Beneficiaries also mentioned several other types of entities providing agricultural credit in Moldova during the same period, including microfinance organizations, savings and credit associations, and private lenders (16, 11, and 9 percent, respectively).

Figure III.1. Sources of available credit for agricultural investments at the time of the AAF application, as reported by AAF beneficiaries (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Notes: Figure shows the percentage of beneficiaries identifying each source as a major source of loans for investments in AAF-eligible purposes. Respondents were asked to focus on available sources at the time of AAF application, which was from 2012 to 2015, depending on the beneficiary. Percentages may sum to more than 100 because some respondents gave multiple responses.

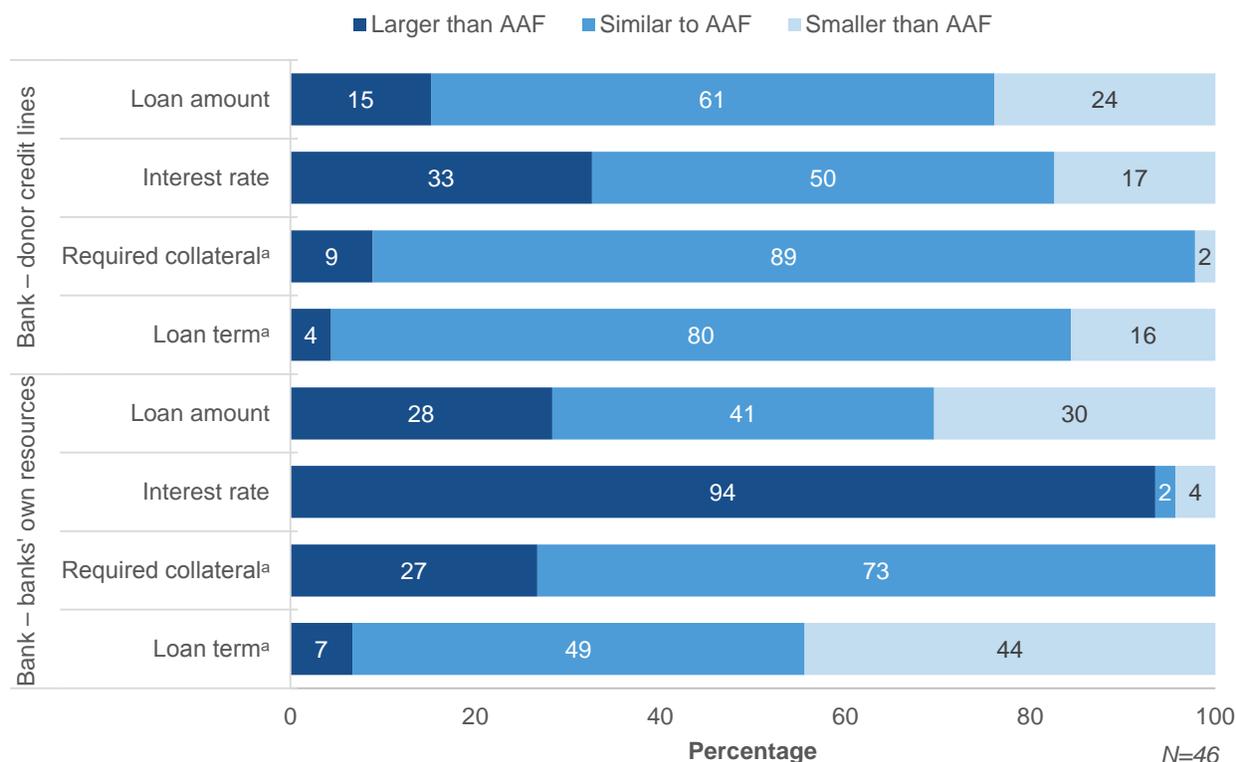
We also examined how the conditions of loans from other sources compared to AAF, focusing on the two most commonly cited loan sources: donor credit lines administered through banks and banks' own resources.¹⁰ According to beneficiary reports, AAF loan characteristics were generally similar to those offered through other donor credit lines. Among beneficiaries who cited donor credit lines as a main source of loans for agricultural investments, the vast majority reported that the required collateral and the term of the loans were similar to those offered by AAF (89 and 80 percent, respectively) (Figure III.2). At least half of beneficiaries also agreed that loan amount and interest rate were similar to those provided by AAF (61 and 50 percent, respectively). The remainder of respondents had mixed opinions on whether other donor credit lines had loan amounts and interest rates that were higher or lower relative to AAF, though more commonly they thought that the loan amount was smaller and the interest rate was higher for these other loans.

The differences between perceived conditions for AAF loans and loans offered through banks' own resources were more substantial. On average, beneficiaries who identified the latter as a main source of credit reported that the loan amount, collateral requirements, and loan term for loans from banks' own resources were similar to those of AAF loans (Figure III.2). However, compared to donor credit lines, there was less consensus from beneficiaries about the characteristics of loans from banks' own resources along these dimensions. Most significantly, the vast majority of these beneficiaries (94 percent) suggested that interest rates on loans from banks' own resources were higher relative to AAF interest rates. Qualitative interviews with representatives of commercial banks and enterprises that did not apply for AAF confirmed that

¹⁰ We focus on the two most common sources of loans because the sample sizes for other sources were too small to provide meaningful estimates.

these loans’ interest rates were typically much higher compared to both AAF loans and other donor credit lines.

Figure III.2. Perceived differences between the AAF loans and other sources of agricultural credit at the time of AAF application (percentage of beneficiaries)



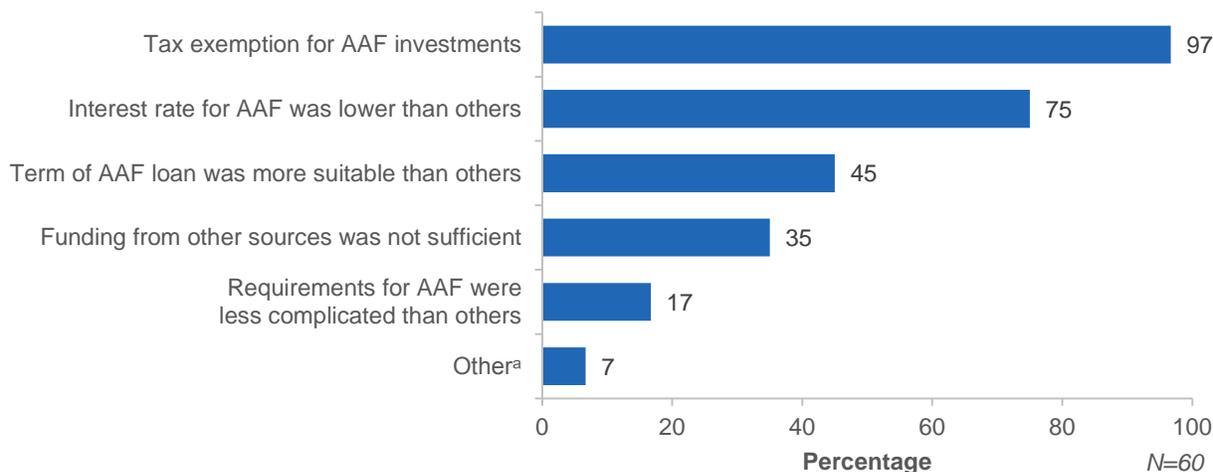
Source: 2015 Moldova Access to Agricultural Finance Survey.

Notes: Figure compares characteristics of other loan sources to AAF loans at the time of the AAF application, which was from 2012 to 2015, depending on the beneficiary. It focuses on the two most common sources of loans because the sample sizes for other sources were too small to provide meaningful estimates.

^a Three respondents provided a response of “don’t know” to these questions and were excluded from these analysis samples.

Beneficiaries cited several reasons they found the AAF credit program attractive. The VAT exemption for goods purchased with AAF funds appears to provide strong motivation to apply to the AAF credit program instead of or in addition to other sources (cited by 97 percent of beneficiaries) (Figure III.3). The relatively lower interest rate for AAF loans was another attractive feature (cited by 75 percent of beneficiaries). Beneficiaries also mentioned a more suitable loan term and insufficient funding from other sources as important reasons for applying to the AAF credit program (45 and 35 percent of loans, respectively).

Figure III.3. Reasons for applying to the AAF credit program instead of/in addition to other sources (percentage of AAF-funded investments)



Source: 2015 Moldova Access to Agricultural Finance Survey.

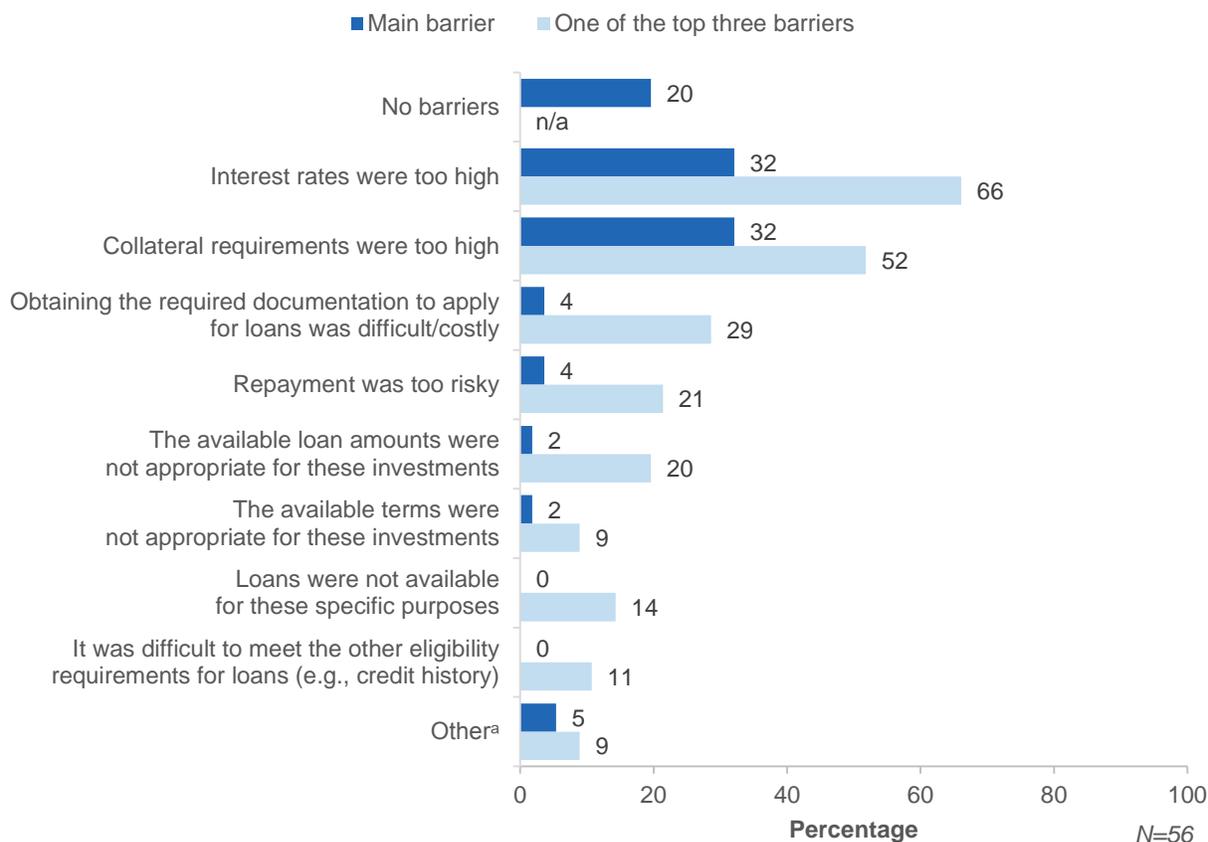
Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

^aOther reasons reported were: AAF loans required less collateral and AAF loans had no penalty in case of delayed payment.

2. Barriers to making agricultural investments

The AAFS asked each beneficiary to name the top three barriers that enterprises faced in obtaining credit for agricultural investments. The majority of beneficiaries cited high interest rates and collateral requirements among the top three barriers (66 and 52 percent, respectively) (Figure III.4). These barriers were also the most frequently cited when respondents were asked to identify the single main barrier to obtaining credit. As described above, the AAF credit program might have helped alleviate the interest rate barrier to some extent by providing loans with lower interest rates (particularly relative to loans offered by banks' own resources), although the collateral requirements were generally perceived as similar to other loans. Obtaining required documentation, the risk associated with repayment, and the lack of availability of an appropriate loan amount were among more commonly cited barriers.

Figure III.4. Barriers to obtaining credit for agricultural investments at the time of the AAF application (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

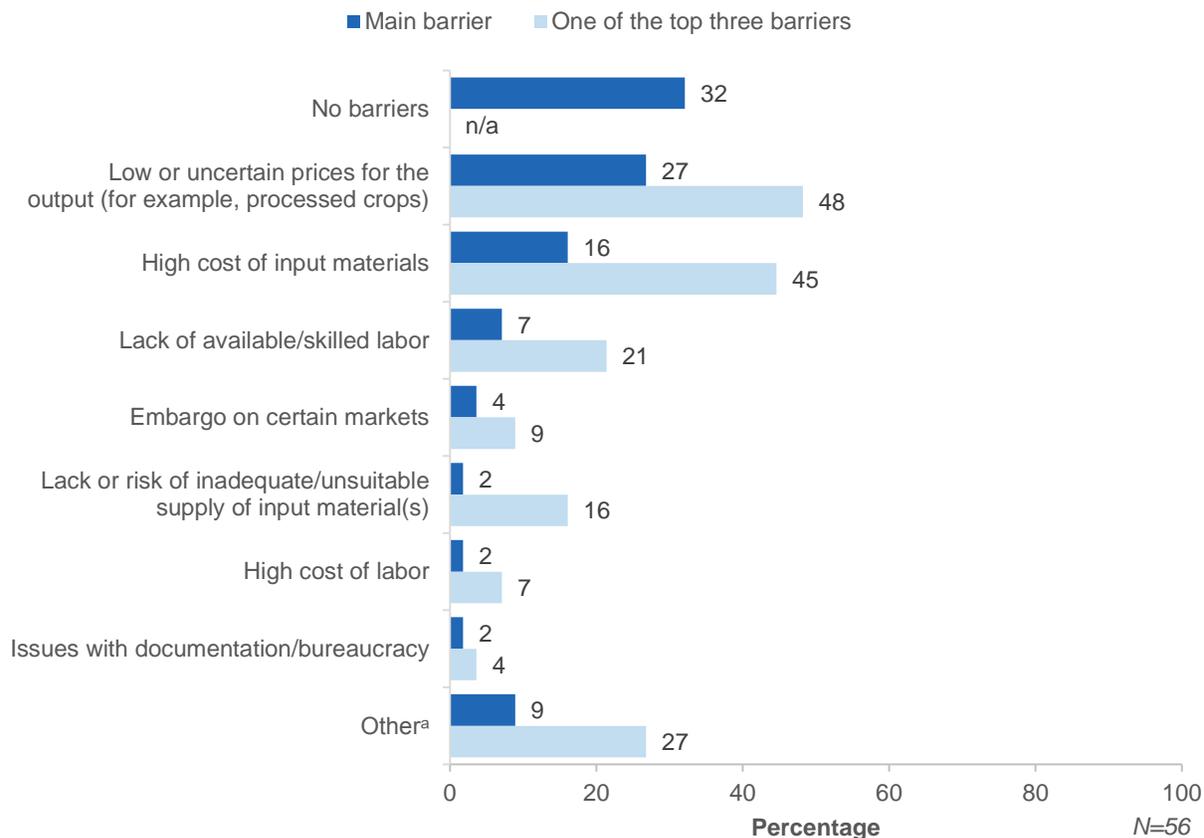
Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

^aOther barriers reported were: high loan commission; high costs of evaluation and loan insurance; the credit file examination process was too long; the grace period for loan repayment was too short; too much competition for the available loans; and VAT on imports.

n/a = not applicable

The AAFS also asked beneficiaries to describe other non-credit related barriers to making agricultural investments at the time of the AAF loan application. Most beneficiaries (68 percent) mentioned at least one barrier, and most were related to production costs and availability of markets to sell the expected outputs from the investment (Figure III.5). Almost half of beneficiaries cited low or uncertain prices for outputs and high cost of inputs among the top three barriers (48 and 45 percent, respectively). Other barriers that were commonly cited among the top three included lack of available or skilled labor, an embargo on certain markets, and lack or risk of inadequate/unsuitable supply of input materials.

Figure III.5. Other barriers to making agricultural investments at the time of the AAF application (percentage of beneficiaries)



Source: 2015 Moldova Access to Agricultural Finance Survey.

Note: Percentages may sum to more than 100 because some respondents gave multiple responses.

^aOther barriers reported were: obstacles from processing and marketing enterprises; lack of association between producers to strengthen the position on the market; lack of own production for storage; lack of technical or business know-how; permanent control from the authorities; limited or uncertain demand for use of the infrastructure; devaluation of the national currency; financial instability; and setting up the infrastructure.

n/a = not applicable

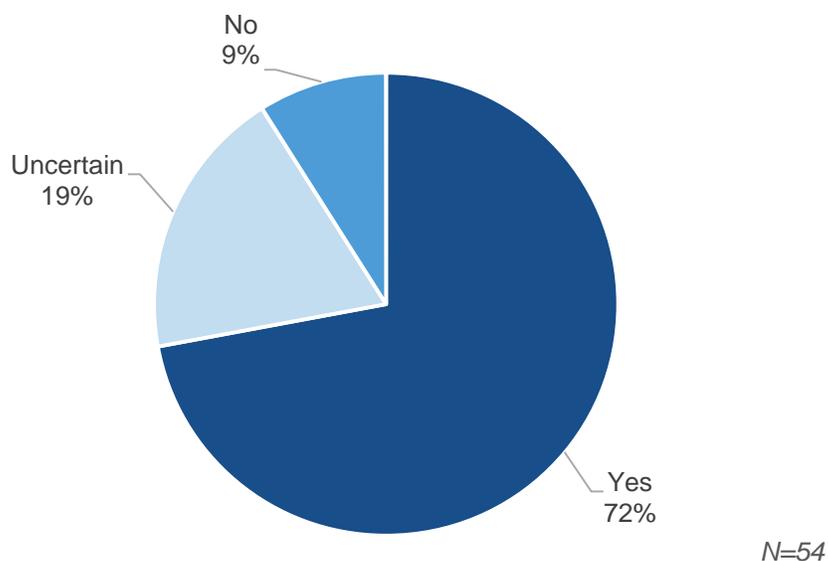
In summary, there were a range of sources of agricultural credit available in Moldova at the time of the AAF credit program. These included other international donor credit lines, which beneficiaries indicated typically offered loans that had similar conditions to AAF loans, and banks’ own resources, which, according to beneficiaries, generally offered loans with higher interest rates. Almost all beneficiaries were drawn to the AAF credit program as a funding source for its VAT exemption benefit and relatively lower interest rates (especially compared with loans using banks’ own resources). Though the AAF program may have addressed some of the barriers to making agricultural investments, there were various credit and non-credit related barriers that the program may not have been able to address.

B. Role of AAF

1. Investments in the absence of AAF

An important goal of the AAF credit program was to facilitate investments that would not have been completed in the absence of the program, rather than simply altering the composition of funding for these investments from other sources to the AAF program. To explore the extent to which AAF added to investment, the AAFS asked beneficiaries to describe whether they would have changed their investment decisions if the lending program did not exist. Overall, most beneficiaries claimed they would have made the planned investments in the absence of the AAF credit program (Figure III.6). Of the 54 beneficiaries that provided responses, the majority (72 percent) were certain they would have made the investment in the absence of the program, 19 percent were uncertain, and the remaining 9 percent said they would not have made the investment in the absence of the program. However, an important caveat to these findings is that they are based on beneficiaries' perceptions of a hypothetical scenario, and we cannot rule out that their actual investment behavior would have differed.

Figure III.6. Beneficiaries' perceptions of whether they would have made AAF-related investments in the absence of the AAF credit program (percentage of beneficiaries)



Source: Open-ended question posed to AAF credit program beneficiaries as part of the 2015 Moldova Access to Agricultural Finance Survey.

Note: Responses were categorized as "Yes," "Uncertain," or "No" based on open-ended responses to the question, "If the AAF program were not available, would anything have been different about your investment behavior, the financing, or your enterprise's activities? Please describe. Example probes: Would you have made the investment(s)? If you would have financed the same investment(s), please describe the funding source(s) you would have used. Would you have changed the investment(s) (in terms of purpose, amount, etc.)? If so, how? Would the outcome of the investment(s) have been any different?"

Although most beneficiaries noted that they would have made the planned investments through other funding sources in the absence of AAF, many commented that the investments would likely have been smaller in size and/or would have taken longer to finalize. Among the

49 beneficiaries who thought they would or might have made the investment in the absence of AAF, 80 percent said that they would have requested funding from commercial banks or other donors, and 37 percent said they would have used their own resources or borrowed from friends and relatives (Table III.1). A third of these beneficiaries (31 percent) said that the investment type, amount, and timing would not have changed. However, about 45 percent said the investment would have been implemented over a longer time horizon (a delayed start and/or a longer implementation period) and 27 percent said it would have been smaller in size. Overall, in the full sample of AAFS respondents, 24 percent were confident that they would have made the AAF-funded investments with no changes in the absence of the program (not shown).

Table III.1. Perceived investment situation in the absence of the AAF credit program, among beneficiaries who would have made the investments in the absence of the program (percentage of beneficiaries)

	Estimate
Potential funding sources other than AAF:	
Other donors or financial institutions ^a	79.6
Own savings and friends/relatives	36.7
Potential changes to investment purpose, amount, or timing: ^b	
No change	30.6
Longer time horizon	44.9
Smaller investment amount	26.5
Different purpose	2.0
Unknown ^c	6.1
Potential changes to investment outcome:	
No change	40.8
Less profitable	46.9
Unknown or other ^d	12.2
Sample size	49

Source: Open-ended question posed to AAF credit program beneficiaries as part of the 2015 Moldova Access to Agricultural Finance Survey.

Note: Responses were categorized based on open-ended responses to the question, "If the AAF program were not available, would anything have been different about your investment behavior, the financing, or your enterprise's activities? Please describe. Example probes: Would you have made the investment(s)? If you would have financed the same investment(s), please describe the funding source(s) you would have used. Would you have changed the investment(s) (in terms of purpose, amount, etc.)? If so, how? Would the outcome of the investment(s) have been any different?"

^aOther donors or financial institutions included: commercial banks' own resources, grant associations, IFAD, credit provided by the government of Poland, RISP, Filiera Vinului, and other unspecified donors.

^bPercentages sum to more than 100 because some respondents reported multiple changes.

^cIncludes one respondent who said that changes to the investment amount would depend on the banks' evaluation of collateral and two respondents who did not provide an answer.

^dResponses in which beneficiaries thought the outcome would have changed in the absence of the AAF credit program, but in which they did not specify how, were coded under this category.

Almost half of the beneficiaries who thought they would or might have made the investment in the absence of the AAF loan said that the outcome of the AAF-funded investment would have been less profitable. Beneficiaries cited higher investment costs in the absence of the VAT exemption and higher interest rates for bank lending programs as common reasons for lower

profitability. The remaining beneficiaries said the outcome would not have changed or were not sure (41 and 12 percent, respectively).

2. Experiences of similar enterprises that did not receive AAF loans

As mentioned in Chapter I, we also interviewed 10 enterprises that did not receive loans through AAF. These 10 non-beneficiaries were intended to be similar to AAF beneficiaries in terms of their ability to qualify for credit and their interest in AAF-eligible investments. Though many of these non-beneficiaries were broadly comparable—in that they were large enterprises that had the resources to make these types of investments and had an interest in cold storage, post-harvest processing, greenhouses, and other large investments—many of them were not actively pursuing such investments in this period because of uncertainty about the profitability of these investments or because they were financially overextended at the time. Specifically, some respondents perceived these investments as risky because of a potential lack of demand for cold storage, uncertainty around prices for agricultural produce, and general economic instability in Moldova. Others were not interested in investing over this period because they had recently made other large investments, had concerns about qualifying for credit, or had difficulty gathering the required documentation to apply for loans.

Though most of these respondents were aware of AAF in general terms, many were not aware of the details of the program, perhaps because they were not actively considering it. Among those who knew more about the program, many perceived AAF to be similar to other available credit sources, particularly those offered through banks. One respondent cited the VAT exemption as an advantage of the AAF program, but other respondents noted attractive terms offered by other donors, including lower interest rates and grants. These findings are consistent with beneficiaries' impressions that they would have been able to find alternative funding sources in the absence of AAF.

3. Implications of AAF loans for banks' lending practices

We also asked representatives of four commercial banks that participated in the AAF credit program about whether the AAF credit program had an effect on lending practices for agricultural investments. These banks' perceptions of whether the AAF credit program affected lending behavior were mixed. Among the three banks that responded, one bank commented that it attracted some new clients as a result of working with the AAF program (although most applicants were existing clients), and these beneficiaries applied for additional loans for agricultural investments through the bank. Another bank commented that the bank gained valuable experience financing cold storage through the AAF program. However, the third bank noted that the bank's portfolio of agricultural loans remained unchanged.

In summary, most AAF loan beneficiaries indicated that they would have made the same investment in the absence of the AAF credit program, albeit with a potentially longer implementation period, higher cost, and smaller investment amount. Interviews with non-beneficiary enterprises confirm that similar investments were made using other funding sources, although not always to the desired extent. Commercial banks' opinions on the demonstration effect of AAF for their agricultural lending practices were mixed.

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IV. CONCLUSION

In this chapter, we briefly summarize our key findings related to the AAF activity's credit program and the investments made under the program. We also outline our future plans for data collection related to the AAF activity which, together with the findings in this report, will inform the broader performance evaluation of the THVA project.

A. Summary of findings

Our key findings from the previous chapters are as follows:

- **The program served a diverse group of beneficiaries.** Our analysis found substantial variation in geographic location, gender ownership, core business activities, scale of operations, and financial status of beneficiary enterprises. This was likely driven by the fact that the program was, at points during implementation, open to a wide range of loan amounts, geographic locations, and loan purposes. Importantly for our overall evaluation of the THVA project, only 29 percent of AAF loans were provided to enterprises that operated in the same 8 raions in which other key THVA project activities were implemented. This suggests that the contribution of the AAF credit program to overall impacts in these areas might be limited (although we will continue to explore the extent of this contribution in future data collection efforts).
- **Beneficiaries typically supplemented AAF funding with their own resources to complete investments.** Although AAF loans were typically large in size (almost two-thirds were more than \$100,000, and the median loan amount was \$141,711), very few of these loans covered the full cost of the desired investment. More specifically, about 95 percent of AAF-funded investments were funded through a combination of the AAF loan and other funding sources. Most commonly, the additional funding was obtained from beneficiaries' own resources, rather than other loans. Nevertheless, AAF funding still contributed to slightly more than half of the total investment cost (on average), suggesting that it may have played an important role in facilitating these investments.
- **The program funded a substantial amount of cold storage.** Consistent with the program's initial focus on investments for post-harvest infrastructure, most AAF loans were used for investments in cold storage infrastructure or equipment. (The other most common purposes were procuring equipment for processing HVA crops and constructing or expanding a greenhouse.) This enabled the program to far exceed its target for the creation of 10,500 tons of additional cold storage capacity, although only approximately 20 percent of the added capacity was in the raions in which other key THVA project activities were implemented. From one-third to one-half of AAF cold storage investors were planning to provide cold storage services to other entities too, indicating potential benefits for other entities beyond the beneficiary enterprises.
- **Most beneficiaries claimed that, in the absence of the AAF credit program, they would have made the planned investment, but that it may have been less profitable and/or smaller.** Almost three-quarters of beneficiary enterprises that we interviewed were confident they would have made the planned investment in the absence of the AAF program, although we cannot rule out that respondents' actual investment behavior in the absence of the

program would have differed from these claims. However, about half of those who claim they would still have made the investment said that that it would have led to less profitable outcomes, and about a quarter mentioned that the investment amount would have been smaller. This is consistent with the fact that agricultural credit was available from other sources, including other international donor credit lines and banks' own resources, but potentially at less favorable conditions than the AAF program. In particular, AAF loans had low interest rates (at least relative to loans offered through banks' own resources) and a VAT exemption benefit that made them less costly for investors. Overall, this evidence suggests that the AAF credit program contributed to HVA-related investments in Moldova during the compact.

B. Plans for future data collection

As described in Chapter I, most of the data used in this report were collected close to the end of the compact, in mid-2015, and therefore focused on describing participation in the AAF credit program and its short-term outcomes (the investments that were made). Two future data collection efforts will explore some of the longer-term effects of the AAF credit program. The first involves in-depth interviews with a sample of AAF beneficiaries to be conducted in early 2020, which will explore how the investments, their use, and their effects have evolved over time. The second involves farmer surveys in the CIS areas targeted by the THVA project to be conducted in early 2019 and early 2021 as part of the broader THVA evaluation. These surveys will capture (amongst other things) the extent to which AAF-funded infrastructure is being used in these areas, and by whom. Combined with the information in this report, this will provide a comprehensive picture of the AAF credit program and its likely effects to inform the final THVA evaluation report, which will be submitted in 2022.

Future data collection efforts will also examine the AAF hire-purchase program for irrigation-related equipment, which is an important component of the AAF activity that was not covered by this report. Data collection related to the hire-purchase program will include in-depth interviews with beneficiaries, as well as the implementing organization (2KR), which will be conducted in early 2017 and early 2020. These interviews will explore beneficiaries' experiences with the program, the nature of their investments, and the perceived effects of these investments. Farmers in CIS areas targeted by the THVA project will describe their participation in the hire-purchase program and use of irrigation-related equipment as part of the farmer surveys conducted in early 2019 and early 2021 (the same surveys mentioned above). Again, this information will contribute to the final THVA evaluation report in 2022.

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APPENDIX A

ACCESS TO AGRICULTURAL FINANCE SURVEY

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ACCESS TO AGRICULTURAL FINANCE SURVEY

Consent Statement:

Hello, my name is **(first name, last name):**

I represent the Agribusiness Development Institute (ADI), which is fielding the Access to Agricultural Finance Survey (AAFS). The study is being conducted on behalf of MCA-Moldova and the Millennium Challenge Corporation (MCC).

You have been selected for an interview based on the fact that you financed an agricultural investment with a loan from the Compact's Access to Agricultural Finance (AAF) activity. You previously signed a consent form in which you agreed to participate in subsequent evaluations on behalf of the donor (MCA-Moldova).

Your participation in the survey is very important for us. The information that we collect will help our organization provide an objective analysis of the Access to Agricultural Finance component.

The interview will take approximately 90 minutes. Any information you provide or have provided that can identify you or your enterprise will be kept strictly confidential by the parties conducting this study, including employees of MCA-Moldova and MCC, employees of the ADI, and researchers, to the maximum extent permitted by the laws of the United States of America and the laws of Moldova. This information will be used for statistical purposes only, and all identifiable information such as names or contact information will be removed before the data are analyzed.

Although you previously agreed to participate, your participation is nevertheless voluntary and you may choose not to answer any or all questions for any reason. You may contact ADI's Executive Director, XXXXXXXX, at (+XXX) XX-XX-XX-XX, if you have questions, concerns, or complaints about the study or your rights as a participant. You will also receive a copy of this consent statement. Do you have any questions before we begin?

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Section A - Information about Enterprise and Respondents

Enterprise characteristics at time of AAF application

A.1. Enterprise name

Write in *(Prior to the interview insert this information exactly from Loan Applicant Form)*

A.2. Legal form of enterprise *(Prior to the interview insert this information exactly from Loan Applicant Form)*

1. GT - gospodarie taraneasca (peasant farm)
2. II - intreprindere individuala (individual enterprise)
3. SA - societate pe actiuni (joint stock company)
4. SRL - societate cu raspundere limitata (limited liability company)
5. SNC - societate in nume colectiv (limited liability partnership)
6. SC - societate in comandita (limited partnership)
7. CP - cooperativa de productie (production cooperative)
8. CI - cooperativa de intreprinzatori (business cooperative)
9. IA - intreprindere de arenda (rent enterprise)
10. ISIM - intreprindere de stat sau intreprindere municipala (state or municipal enterprise)
11. Peasant Farm with no registration

A.3. Date enterprise was registered or established

Write in *(Prior to the interview insert this information exactly from Loan Applicant Form)*

____ DD ____ MM ____ YYYY

A.4. Enterprise's legal address *(Prior to the interview insert this information exactly from Loan Applicant Form)*

Street name & number _____

City or village name _____

Raion _____

A.5. Address where business activities take place *(Prior to the interview insert this information exactly from Loan Applicant Form)*

Street name & number _____

City or village name _____

Raion _____

A.6. Number of owners *(Prior to the interview insert this information exactly from Loan Applicant Form)*

Write in _____

A.7. Whether female-owned? *(Prior to the interview insert this information from MCA)*

1. Yes
2. No

A.8. Core business activities

Write in *(Prior to the interview insert this information exactly from Loan Applicant Form)*

A.9. If enterprise is primarily agricultural, indicate number of hectares at time of application.

Write in _____ *(Prior to the interview insert this information exactly from Loan Applicant Form)*

A.10. If enterprise is primarily agricultural, indicate number of hectares operated in 2014.

Write in _____

A.11. If enterprise is involved in agricultural processing or storage, indicate number of tons processed or stored in 2014.

Write in _____

A.12. If enterprise is primarily agricultural, indicate the crops cultivated or processed/stored and the number of hectares or tons for each for the 2014 agricultural season. (Select all that apply.)

Crop	a. Cultivated in 2014 (Yes/No)	b. If cultivated, hectares under cultivation in 2014	c. Processed/Stored in 2014 (Yes/No)	d. If processed/stored, tons processed/stored in 2014
Wheat				
Barley				
Oat				
Corn				
Sweet corn				
Pea				
Bean				
Fodder plant/forage				
Tobacco				
Sunflower				
Rapeseed				
Soybean				
Potato				
Cabbage				
Tomato				
Pepper				
Onion				
Cucumber				
Carrot				
Watermelon				
Seed				
Veg. seedling (item)*				
Tree fruit seedling (item)*				
Natural pastures/hayfields				
Apple				
Pear				
Sweet cherry				
Plum				
Peach				
Apricot				
Walnut				
Strawberry				
Table grape				
Technical grape				
Other (specify)				
Other (specify)				
Other (specify)				

Other (specify)				
-----------------	--	--	--	--

* Please report volume processed/storage (column d) for these crops in terms of the number of items, rather than tons.

Enterprise's Management: director/manager (Prior to the interview insert A.13-A.19 exactly from Loan Applicant Form)

- A.13. Name _____
- A.14. Phone number _____
- A.15. Age _____
- A.16. Sex _____
 - 1. Male
 - 2. Female
- A.17. Education _____
 - 1. Primary
 - 2. Technical/professional
 - 3. University or higher
- A.18. Specialty obtained _____
- A.19. Years of work experience at enterprise
Write in _____

Respondent Characteristics

	Respondent 1	Respondent 2	Respondent 3	Respondent 4
A.20. Respondent's name				
Write in				
A.21. Respondent's telephone number				
Write in				
A.22. Respondent's gender				
Male	1	1	1	1
Female	2	2	2	2
A.23. Respondent's position in the enterprise (Circle all that apply)				
Director or co-director	1	1	1	1
Owner or co-owner	2	2	2	2
Chief accountant	3	3	3	3
Other (specify)	4	4	4	4
	_____	_____	_____	_____

Section B – Enterprise characteristics in 2014 fiscal year

Financial situation	fiscal year 2014
B.1. Annual sales (write in thousand MDLs)	
B.2. Annual net profit (write in thousand MDLs)	
B.3. Annual total investments (write in thousand MDLs)	
B.4. Long term assets (write in thousand MDLs)	
B.5. Short term assets (write in thousand MDLs)	
B.6. Total debts (write in thousand MDLs)	
B.7. Equity (write in thousand MDLs)	

Section C – Employment

If the enterprise does not have any employees of a given type, please record “0”

C.1. Could you please specify the number of paid employees who worked in your enterprise during the 2014 fiscal year by the following categories (enter 89 if refused and 99 if don't know):

Employees in managerial positions: (1) total number, (2) male managers, (3) female managers.

Other full-time employees: (1) total number, (2) male employees, (3) female employees.

	Total	Male	Female
Managers			
Other full-time employees			

C.2. In the 2014 fiscal year, how many part-time workers were employed by your enterprise? [Estimate person-days and number of different workers]

	Total	Male	Female
Person-days	_____ person/days	_____ person/days	_____ person/days
Number of workers	_____ people	_____ people	_____ people
Refused	-89	-89	-89
Don't know	-99	-99	-99

Section D - pre-AAF infrastructure.

D.1. For what kind of infrastructure was the AAF loan used? *(Prior to the interview insert this information exactly from Loan Applicant Form)*

- Cold storages or equipment/infrastructure/land for cold storage for HVA crops
- Cold storages or equipment/infrastructure/land for cold storage for non-HVA crops
- Equipment for processing HVA crops
- Equipment for processing non-HVA crops
- Equipment for HVA products' quality control
- Facilities for processing/storage of fruits and vegetables
- Thermo-trucks, refrigerators, and/or trucks with refrigerators for HVA crops

- h. Thermo-trucks, refrigerators, and/or trucks with refrigerators for non-HVA crops
- i. Constructing or expanding a greenhouse
- j. Other, specify: _____

D.2. Prior to 2012, were there enterprises in your rayon with [this type of infrastructure], including yours?

- 1. Yes
- 2. No
- 89. Refused
- 99. Don't know

D.3. Prior to 2012, did your enterprise use [this type of infrastructure] in your rayon or elsewhere?

- 1. Yes → D4
- 2. No → D5

D.4. If yes, was it owned by your enterprise? *[If respondent used the infrastructure from multiple sources, ask about the source that was used the most]*

- 1. Yes, my enterprise was the sole owner
- 2. Yes, my enterprise was a shareholder
- 3. No, but I used it for free
No, I paid to use it

D.5. What were the main barrier to using [this type of infrastructure] prior to 2012 (select all relevant)? *[If options 1, 2, or 3 are selected, no other options should be selected]*

- 1. No barriers
- 2. Infrastructure did not exist
- 3. Infrastructure existed, but was not operational
- 4. Infrastructure was not available for my use to the extent I wanted
- 5. Infrastructure was expensive to use or operate
- 6. Infrastructure was too far from my business
- 7. Other (specify): _____
- 8. Other (specify): _____
- 9. Other (specify): _____

Section E – Investments prior to AAF.

I'd like to talk with you about your experience with agricultural investments prior to receiving an AAF loan. *[If the respondent has had more than one AAF loan, please ask about his/her experience prior to the first loan.]*

E.1. In the three years prior to receiving an AAF loan, were you interested in making other agricultural investments (**excluding the investment for which you received an AAF loan**)? Please include investments that you did not make but were interested in making. *[Interviewer: this could include agricultural investments for both AAF and non-AAF eligible purposes; it should not include the investment financed by the AAF loan(s) itself]*

- 1. Yes → E2
- 2. No → Section F

Starting with the most recent investment you were interested in making in the three years prior to AAF: *(Interviewer: complete questions E2-E18 for each investment by going down the rows. If more than three investments, focus on the three most recent investments in the pre-AAF period).*

	Investment 1	Investment 2	Investment 3
E.2. For what was the investment? (select one)			
Cold storages or equipment/infrastructure/land for cold storage for HVA crops	1	1	1
Cold storages or equipment/infrastructure/land for cold storage for non-HVA crops	2	2	2
Equipment for processing HVA crops	3	3	3
Equipment for processing non-HVA crops	4	4	4
Equipment for HVA products' quality control	5	5	5
Facilities for processing/storage of fruits and vegetables	6	6	6
Thermo-trucks, refrigerators, and/or trucks with refrigerators for HVA crops	7	7	7
Thermo-trucks, refrigerators, and/or trucks with refrigerators for non-HVA crops	8	8	8
Constructing or expanding a greenhouse	9	9	9
Other, specify	10	10	10
E.3. What was the initial estimated cost of this investment (thousands)?			
Cost			
Currency code (1=MDL, 2=Euro, 3=USD)			
E.4. Did your enterprise apply for a loan to finance this investment?			
Yes	1 → E6	1 → E6	1 → E6
No	2 → E5	2 → E5	2 → E5
Refused	89 → E16	89 → E16	89 → E16
Don't know	99 → E16	99 → E16	99 → E16
E.5. What were the reasons your enterprise did not apply for a loan to finance this investment (select all relevant)?			
Did not think I/we would qualify for a loan due to insufficient collateral	1	1	1
Did not think I/we would qualify for a loan due to insufficient credit history	2	2	2
Did not think I/we would qualify for a loan due to poor credit history	3	3	3
Did not think I/we would qualify for a loan for other reasons	4	4	4
The terms of loans available are unfavorable to me/us	5	5	5
Afraid I/we would not be able to pay back the loan/did not wish to get into debt/too risky to take on debt	6	6	6
I/we did not know of available loans in my/our area/not sure of application process	7	7	7
I/we did not need a loan—able to use remittances	8	8	8
I/we did not need a loan—able to borrow what was needed from family/friends	9	9	9
I/we did not need a loan—able to use own resources	10	10	10

Decided not to make the investment	11	11	11
Other (specify)	12	12	12
Other (specify)	13	13	13
Other (specify)	14	14	14
Refused	89	89	89
Don't know	99	99	99
	→E16	→E16	→E16
E.6. Was the loan approved? [If respondent applied to multiple sources, select "yes" if any of the applications were approved]			
Yes	1→E8	1→E8	1→E8
No	2 →E7	2 →E7	2 →E7
Refused	89→E16	89→E16	89→E16
Don't know	99→E16	99→E16	99→E16
E.7. What were the reasons you think the application was rejected (select all relevant)?			
Poor business plan	1	1	1
Inability to demonstrate income	2	2	2
Insufficient collateral	3	3	3
Discrimination against enterprises/people like me/us	4	4	4
Bad credit history	5	5	5
Insufficient credit history	6	6	6
Repayment too risky	7	7	7
I/we do not have crop insurance	8	8	8
The loan I/we applied for was too small to interest the lender	9	9	9
Other (specify)	10	10	10
Refused	89	89	89
Don't know	99	99	99
	→E16	→E16	→E16
E.8. When was the loan approved? [If respondent received multiple loans for the investment, focus on the largest loan for questions E9-E15; if the respondent received more than one loan of equal size and those are the largest loans, choose one loan at random.]			
Enter MM /YYYY	--/----	--/----	--/----
Refused	89	89	89
Don't know	99	99	99
E.9. What was the main source of credit? [One answer]			
RISP	1	1	1
IFAD credit line	2	2	2
Other donor credit line	3	3	3
Private or commercial bank's own resources	4	4	4
Micro-credit organization	5	5	5
Savings and credit association	6	6	6
Other (specify)	7	7	7

	_____	_____	_____
Refused	89	89	89
Don't know	99	99	99
E.10. What was the currency of the loan? [One answer]			
EURO	1	1	1
MDL	2	2	2
USD	3	3	3
Refused	89	89	89
Don't know	99	99	99
E.11. What was the size of loan? [One answer; in thousands; use the same currency as in E10]			
Enter amount in thousands	-----	-----	-----
Refused	89	89	89
Don't know	99	99	99
E.12. What was the assessed value of collateral? [One answer; if the response is in thousands; use the same currency as in E10; if the response is in percentage terms, please enter the integer value, for example, 150 for 150%.]			
Enter value	-----	-----	-----
Response type (1=currency in thousands, 2=percentage of total loan)			
Refused	89	89	89
Don't know	99	99	99
E.13. What was the term of loan? [One answer]			
Enter number of months	--	--	--
Refused	89	89	89
Don't know	99	99	99
E.14. What was the interest rate of the loan? [One answer]			
Enter interest rate / percent	--, -- %	--, -- %	--, -- %
Refused	89	89	89
Don't know	99	99	99
E.15. Did you meet the repayment schedule for this loan? [One answer]			
Yes, and loan has been fully repaid at this time	1	1	1
Yes, and loan has been partially repaid at this time	2	2	2
No, in the grace period/repayment period has not yet started	3	3	3
No, and not in the grace period	4	4	4
Refused	89	89	89
Don't know	99	99	99
E.16. Did you make the planned investment?			
Yes, I/we made the full investment	1	1	1
Yes, I/we made part of the investment	2	2	2
No	3 → E18	3 → E18	3 → E18
E.17. How much did you invest in total?			
Amount invested (thousands)			
Currency code (1=MDL, 2=Euro, 3=USD)			
	→ section F	→ section F	→ section F
E.18. What was the main reason you did not make the investment (select one)?			

Did not obtain sufficient funding	1	1	1
The investment was no longer necessary for my business	2	2	2
Decided the investment would not be profitable	3	3	3
Found a more attractive investment opportunity	4	4	4
Had to respond to an unexpected or emergency need for money	5	5	5
Other specify	6	6	6

Section F – Credit environment at the time of the AAF loan

Focus on availability of credit besides AAF at the time of the AAF loan application. *[If the respondent has had more than one AAF loan, please ask about the time of the first loan application.]*

F.1. At the time you applied for the AAF loan, what were the main sources of loans for investments in post-harvest infrastructure, greenhouses, or other AAF-eligible purposes and how did these compare to AAF in terms of the loan amounts, interest rate, collateral, and the term? *(Circle all relevant)*

	a. Main source?		b. loan amounts				c. interest rate				d. collateral required				e. term			
	Yes (continue to b-e)	No (go to next row)	Larger than AAF	Similar to AAF	Smaller than AAF	DK	Larger than AAF	Similar to AAF	Smaller than AAF	DK	More than AAF	Similar to AAF	Less than AAF	DK	Longer than AAF	Similar to AAF	Shorter than AAF	DK
1.1. Bank – bank own resources	1	2	1	2	3	-9	1	2	3	-9	1	2	3	-9	1	2	3	-9
1.2. Bank – donor credit lines	1	2	1	2	3	-9	1	2	3	-9	1	2	3	-9	1	2	3	-9
1.3. Microcredit organizations	1	2	1	2	3	-9	1	2	3	-9	1	2	3	-9	1	2	3	-9
1.4. Savings and credit associations	1	2	1	2	3	-9	1	2	3	-9	1	2	3	-9	1	2	3	-9
1.5. Private lender	1	2	1	2	3	-9	1	2	3	-9	1	2	3	-9	1	2	3	-9
1.6. Other (specify)	1	2	1	2	3	-9	1	2	3	-9	1	2	3	-9	1	2	3	-9

F.2. What were the main barriers for enterprises like yours to obtaining loans for investments in post-harvest infrastructure, greenhouses, or other AAF-eligible purposes at the time? *(Circle one per column; if there are no barriers circle "1" in first column and continue to F3)*

	Main reason	Secondary reason	Tertiary reason
No barriers	1		
Obtaining the required documentation to apply for loans was difficult/costly	2	2	2
Collateral requirements were too high	3	3	3
It was difficult to meet the other eligibility requirements for loans (e.g. credit history)	4	4	4
Loans were not available for these specific purposes	5	5	5
There was too much competition for the available loans	6	6	6
The available loan amounts were not appropriate for these investments	7	7	7
The available terms were not appropriate for these investments	8	8	8
Interest rates were too high	9	9	9
Repayment was too risky	10	10	10
Don't know	88	88	88
Other (specify) _____	89	89	89
Other (specify) _____	90	90	90
Other (specify) _____	91	91	91

F.3. Besides credit, what were the other barriers to making investments in post-harvest infrastructure, greenhouses, or other AAF-eligible purposes? (Circle one per column; if there are no barriers circle "1" in first column and continue to section G)

	Main reason	Secondary reason	Tertiary reason
No barriers	1		
Lack of available/skilled labor	2	2	2
High cost of labor	3	3	3
Lack or risk of inadequate or suitable supply of input material(s)	4	4	4
High cost of input materials	5	5	5
Lack of technical know-how	6	6	6
Lack of business know-how	7	7	7
Limited or uncertain demand for use of the infrastructure	8	8	8
Low or uncertain prices for the output (for example, processed crops)	9	9	9
Don't know	89	89	89
Other (specify) _____	88	88	88
Other (specify) _____	90	90	90
Other (specify) _____	91	91	91

Section G – Experience with AAF loan

Now let us focus on the AAF loan that was received.

G.1. How did you learn about AAF? (Circle all relevant)

1. From a presentation by MCA-Moldova
2. From TV/Radio
3. From other media source
4. From internet

5. From public meeting
6. From friends/relatives
7. From bank representative
8. From a business development service provider
9. Other (Specify) _____

G.2. Did you change the type of investment you were initially seeking to finance to meet AAF criteria?

1. Yes → G3
2. No → G4

G.3. How did you change the type of investment?

Write in _____

G.4. Did you change the size of the loan you were seeking to meet AAF criteria?

1. Yes, decreased size
2. Yes, increased size
3. No

G.5. What was the total cost of this investment, including AAF and other sources? (thousands)

Write in _____ Currency: (MDL, Euro, USD)

G.6. What were the other sources of financing that you considered besides AAF credit for this investment? Did you apply to any of them or receive funds from any of them?

	a. Considered (1=yes, 2=no) If 2 → next row	b. Applied for (1=yes, 2=no) If 2 → next row	c. Received/used funds (1=yes, 2=no) If 2 → next row	d. Amount received/used (thousands, specify currency)
1. RISP				
2. IFAD credit line				
3. Other donor credit line				
4. Private or commercial bank's own resources				
5. Micro-credit organization				
6. Savings and credit association				
7. Own resources/savings				
8. Loan from friends/relatives				
9. Other (specify) _____				

G.7. Why did you apply to AAF instead of/in addition to other sources? (Circle all relevant)

1. Funding from other sources was not sufficient
2. Interest rate for AAF was less than others
3. Requirements for AAF were less complicated than others
4. Collateral requirements for AAF were less than others
5. Term of AAF loan was more suitable than others
6. Tax exemption for AAF investments
7. Other (Specify)_____

G.8. Did you receive external assistance in preparing the AAF loan application?

1. Yes→G9
2. No→G10

G.9. What were the costs of preparing the AAF loan application?

Write in _____(MDL)

G.10. How much time did you/your enterprise spend preparing the AAF loan application?

Write in _____(Days)

G.11. How satisfied were you with the application process?

1. Dissatisfied
2. Neither satisfied nor dissatisfied
3. Satisfied

G.12. How long did it take to get approved once the application was submitted?

Write in days_____

G.13. How satisfied were you with the approval process?

1. Dissatisfied
2. Neither satisfied nor dissatisfied
3. Satisfied

G.14. What was the loan amount that was approved? (insert from Loan Application Form)

Write in _____(circle: MDL/EURO/USD)

G.15. What was the interest rate? (insert from Loan Application Form)

Write in __, __ %

G.16. What was the collateral requirement?

Write in _____(circle: MDL/EURO/USD/% of total loan)

G.17. What was the term of loan? (insert from Loan Application Form)

Write in _____(months)

G.18. Were you satisfied with these conditions?

1. Dissatisfied
2. Neither satisfied nor dissatisfied
3. Satisfied

G.19. How long did it take from approval to distribution?

Write in _____(Days)

G.20. Were you satisfied with the distribution process?

1. Dissatisfied
2. Neither satisfied nor dissatisfied
3. Satisfied

G.21. Have you met the repayment schedule for the AAF loan?

1. Yes, and loan fully repaid at this time→Section H
2. Yes, and loan partially repaid at this time→Section H
3. No, in the grace period/repayment period has not yet started →Section H
4. No, and not in the grace period→G22

G.22. Why was the loan not repaid on schedule?

Write in _____

Section H - Investments after AAF

Focus on the period *after* respondent received the AAF loan until the present. *[If the respondent has had more than one AAF loan, please ask about his/her experience after the most recent loan.]*

H.1. Were you interested in making additional AAF-eligible investments over this period? [Interviewer: probe for new AAF-eligible investments and further investment in existing AAF infrastructure]

1. Yes → H2
2. No → Section I

	Investment 1	Investment 2	Investment 3
H.2. What was the investment for? (select one)			
Cold storages or equipment/infrastructure/land for cold storage for HVA crops	1	1	1
Cold storages or equipment/infrastructure/land for cold storage for non-HVA crops	2	2	2
Equipment for processing HVA crops	3	3	3
Equipment for processing non-HVA crops	4	4	4
Equipment for HVA products' quality control	5	5	5
Facilities for processing/storage of HVA crops	6	6	6
Thermo-trucks, refrigerators, and/or trucks with refrigerators for HVA crops	7	7	7
Thermo-trucks, refrigerators, and/or trucks with refrigerators for non-HVA crops	8	8	8
Constructing or expanding a greenhouse	9	9	9
Other, specify	10	10	10
H.3. What was the initial estimated cost of this investment (thousands)?			
Cost			
Currency code (1=MDL, 2=Euro, 3=USD)			
H.4. Was this a new investment or further investment in existing infrastructure?			
New investment	1	1	1
Further investment in existing infrastructure	2	2	2
H.5. Did your enterprise apply for a loan to finance this investment?			
Yes	1→H7	1→H7	1→H7
No	2→H6	2→H6	2→H6
Refused	89→H17	89→H17	89→H17
Don't know	99→H17	99→H17	99→H17
H.6. What were the reasons your enterprise did not apply for a loan to finance this investment (select all relevant)?			
Did not think I/we would qualify for a loan due to insufficient collateral	1	1	1
Did not think I/we would qualify for a loan due to insufficient credit history	2	2	2
Did not think I/we would qualify for a loan due to poor credit history	3	3	3
Did not think I/we would qualify for a loan for other reasons	4	4	4
The terms of loans available are unfavorable to me/us	5	5	5
Afraid I/we would not be able to pay back the loan/did not wish to get into debt/too risky to take on debt	6	6	6
I/we did not know of available loans in my/our area/not sure of application process	7	7	7
I/we did not need a loan—able to use remittances	8	8	8

I/we did not need a loan—able to borrow what was needed from family/friends	9	9	9
I/we did not need a loan—able to use own resources	10	10	10
Decided not to make the investment	11	11	11
Other (specify)	12	12	12
Other (specify)	13	13	13
Other (specify)	14	14	14
Refused	89	89	89
Don't know	99	99	99
	→H17	→H17	→H17
H.7. Was the loan approved? [If respondent applied to multiple sources, select “yes” if any of the applications were approved]			
Yes	1→H9	1→H9	1→H9
No	2 →H8	2 →H8	2 →H8
Refused	89→H17	89→H17	89→H17
Don't know	99→H17	99→H17	99→H17
H.8. What were the reasons you think the application was rejected (select all relevant)?			
Poor business plan	1	1	1
Inability to demonstrate income	2	2	2
Insufficient collateral	3	3	3
Discrimination against enterprises/people like me/us	4	4	4
Bad credit history	5	5	5
Insufficient credit history	6	6	6
Repayment too risky	7	7	7
I/we do not have crop insurance	8	8	8
The loan I/we applied for was too small to interest the lender	9	9	9
Other (specify)	10	10	10
Other (specify)	11	11	11
Other (specify)	12	12	12
Refused	89	89	89
Don't know	99	99	99
	→H17	→H17	→H17
H.9. When was the loan approved? [If respondent received multiple loans for the investment, focus on the largest loan for questions H10-H16; if the respondent received more than one loan of equal size and those are the largest loans, choose one loan at random.]			
Enter MM /YYYY	--/_----	--/_----	--/_----
Refused	89	89	89
Don't know	99	99	99
H.10. What was the source of credit? [One answer]			

RISP	1	1	1
IFAD credit line	2	2	2
Millennium Challenge Account-Moldova credit line/Access to Agricultural Finance (AAF) activity	3	3	3
Other donor credit line	4	4	4
Private or commercial bank's own resources	5	5	5
Micro-credit organization	6	6	6
Savings and credit association	7	7	7
Other (specify)	8	8	8
	-----	-----	-----
Refused	89	89	89
Don't know	99	99	99
H.11. What was the currency of the loan? [One answer]			
EURO	1	1	1
MDL	2	2	2
USD	3	3	3
Refused	89	89	89
Don't know	99	99	99
H.12. What was the size of loan? [One answer; in thousands; use the same currency as in H11]			
Enter amount in thousands	-----	-----	-----
Refused	89	89	89
Don't know	99	99	99
H.13. What was the assessed value of collateral? [One answer; if the response is in thousands; use the same currency as in H11; if the response is in percentage terms, please enter the integer value, for example, 150 for 150%.]			
Enter value	-----	-----	-----
Response type (1=currency in thousands, 2=percentage of loan)			
Refused	89	89	89
Don't know	99	99	99
H.14. What was the term of loan? [One answer]			
Enter number of months			
Refused	89	89	89
Don't know	99	99	99
H.15. What was the interest rate of the loan? [One answer]			
Enter interest rate / percent	--, -- %	--, -- %	--, -- %
Refused	89	89	89
Don't know	99	99	99
H.16. Did you meet the repayment schedule for this loan? [One answer]			
Yes, loan fully repaid at this time	1	1	1
Yes, loan partially repaid at this time	2	2	2
No, in the grace period/repayment period has not yet started	3	3	3
No, and not in the grace period	4	4	4
Refused	89	89	89
Don't know	99	99	99

H.17. Did you make the planned investment?			
Yes, I/we made the full investment	1	1	1
Yes, I/we made part of the investment	2	2	2
No	3 →H19	3 → H19	3 → H19
H.18. How much did you invest in total?			
Amount invested (thousands)			
Currency code (1=MDL, 2=Euro, 3=USD)			
	→H20	→H20	→H20
H.19. What was the main reason you did not make the investment (select one)?			
Did not obtain sufficient funding	1	1	1
The investment was no longer necessary for my business	2	2	2
Decided the investment would not be profitable	3	3	3
Found a more attractive investment opportunity	4	4	4
Had to respond to an unexpected or emergency need for money	5	5	5
Other specify	6 _____	6 _____	6 _____

H.20. Are you interested in making additional AAF-eligible investments in the future? [Interviewer: probe for new AAF-eligible investments and further investment in existing AAF infrastructure]

1. Yes →H21
2. No →Section I

H.21. Are these new investments, or further investments in existing infrastructure?

1. New investments
2. Further investment in existing infrastructure
3. Both

H.22. How do you hope to finance these investments (select all that apply)?

1. Use savings
2. Borrow money from friends/relatives
3. Take credit

[If “3” is not selected in H22, skip to Section I]

H.23. To which source/s do you plan to apply? (Select all relevant)

1. RISP
2. IFAD credit line
3. Millennium Challenge Account-Moldova credit line/Access to Agricultural Finance (AAF) activity
4. Other donor credit line
5. Private or commercial bank’s own resources
6. Micro-credit organization
7. Savings and credit association
8. Other (specify) _____

Section I - Use of infrastructure supported by AAF loans.

Focus on the investment made through AAF.

I.1. Has the infrastructure in which you invested been completed?

1. Yes
2. No

I.2. Is it operational?

1. Yes, fully operational
2. Yes, partially operational
3. No

I.3. Is this infrastructure intended to be used by only your enterprise or by others?

1. Only by my enterprise → I4
2. Only by others → I5
3. Both → I5

I.4. Is this infrastructure intended to be used only for your own production, or will you/have you purchase(d) produce from others as well?

1. Only for my production → I9
2. Only for others' production → I9
3. Both → I9

I.5. How much do you expect to charge others to use this infrastructure? (please price per a given unit (such as per ton or per month))

Write in measurement unit _____

Write in the price per indicated unit _____ MDL

Intended users of this infrastructure:

	At time of the investment:	2015 agricultural season:	5 years from now:
I.6. Total number of users			
I.7. Types of individuals expected to use/are using this infrastructure (select all that apply in each column):			
Respondent's enterprise	1	1	1
Single producer farmers/households	2	2	2
Producer cooperatives	3	3	3
Processor enterprises	4	4	4
Processor single farmers/households	5	5	5
Processor cooperatives	6	6	6
Processors enterprises	7	7	7
Wholesale traders	8	8	8
Single traders	9	9	9
I.8. Ask if options 2-9 selected in I7. Users (other than your own enterprise) were expected to come/are coming from :			
From this village	1	1	1

From neighboring villages	2	2	2
From this rayon	3	3	3
From neighboring rayons	4	4	4
Outside neighboring rayons	5	5	5

I.9. How much income did you obtain from this investment in the past year? [*Probe: what is the difference between your income with and without this investment*]

Write in _____ MDL

I.10. How much annual income from this investment do you expect to obtain 5 years from now? [*Probe: what will be the difference between your income with and without this investment*]

Write in _____ MDL

I.11. Do you expect this investment to be profitable in the long-run?

1. Yes → Section J
2. No
3. Don't know → Section J

I.12. If not, why not? (*Circle all relevant*)

1. The investment costs were higher than expected
2. The operating costs are too high
3. The maintenance costs are too high
4. The number of users/volume of use is too low to be profitable
5. The price of the final product (e.g. processed crops) is too low to be profitable
6. Other, specify _____

Section J – Discussion

J.1. If the AAF program were not available, would anything have been different about your investment behavior, the financing, or your enterprise's activities? Please describe. Example probes:

- Would you have made the investment(s)?
- If you would have financed the same investment(s), please describe the funding source(s) you would have used.
- Would you have changed the investment(s) (in terms of purpose, amount, etc.)? If so, how?
- Would the outcome of the investment(s) have been any different?

Write in _____

J.2. What were the main challenges that you faced in obtaining and using AAF credit(s) for your investment?

Challenge 1 Write in _____

Challenge 2 Write in _____

Challenge 3 Write in _____

J.3. Would you suggest any changes for this program or similar programs in the future?

1. Yes → J4
2. No → Finish the interview

J.4. If yes, what are your suggestions?

Suggestion 1 Write in _____

Suggestion 2 Write in _____

Suggestion 3 Write in _____

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