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AGRICULTURAL COMPETITIVENESS AND ENTERPRISE DEVELOPMENT PROJECT

YEAR FIVE ANNUAL SURVEY REPORT

JANUARY 2016

This publication was produced for review by the United States Agency for International Development. It was prepared by Development Alternatives, Inc. for the Moldova Agricultural Competitiveness and Enterprise Development (ACED) Project, USAID contract number AID-117-C-11-00001.

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USAID Office: USAID/Ukraine Regional Contract Office

Contract Number: AID-117-C-11-00001

USAID Contractor: Development Alternatives, Inc. (DAI)

Date of Publication: January 2016

Document Authors: DAI/ACED M&E Manager, Andrea Chartock,
DAI/ACED M&E Coordinator, Elena Brinza and
DAI/ACED Training & Monitoring assistant, Irina Ungureanu

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**USAID Moldova - MCC Moldova
AGRICULTURAL COMPETITIVENESS AND
ENTERPRISE DEVELOPMENT PROJECT**

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1. Executive Summary

From October to December of 2015 ACED project staff carried out a targeted end of year survey of producers trained over the course of the entire project to date. The survey queried a group of producers (100) who had attended four or more production trainings of which three or more trainings were on the same value chain and who had no techniques and/or practices adopted as per the records in ACED's Technical & Administrative Management Information System (TAMIS). The survey tested the hypothesis that the interest and commitment shown by these beneficiaries' relatively intensive and extensive participation in ACED training events would translate into a larger number of these producers actually having adopted a technique or practice, but that their results regarding adoption was under-reported in the TAMIS reporting system for a variety of reasons (which are examined later in section 4 of this report).

In fact, once surveyed, it was found that forty-eight out of the 100 selected training participants reported that they had adopted new techniques and/or practices (T/Ps), on crops covering approximately 130 hectares of land, due to ACED assistance. Based on assistance provided by the ACED project, participants in the annual survey have reported that they also generated additional sales revenue of \$191,795. Respondents also reported making a number of new HVA investments, with the reported value of these investments totaling approximately \$47,300. In addition to these positive results, 100% of the survey respondents said that the project was useful for them (section 3f).

This end-of-year survey is the fourth such annual survey carried out by the ACED Monitoring & Evaluation Team, but the second survey that uses the targeted survey approach as the survey samples were randomly selected in 2012 and 2013. This targeted survey approach was used for a variety of reasons, including the flexibility provided by the Project Monitoring and Evaluation Plan to carry out special studies, and the fact that the PMEP system hasn't been designed for the extrapolation of observed results based on a random sample, as all project results are linked in the TAMIS system to a specific individual and company.

In addition to assuring project staff that the performance of the project is on track, this end of year survey has also given ACED staff an opportunity to reflect upon the quality of the data currently in the project's TAMIS system. More information on all of these topics can be found in the following sections of this report.

2. Introduction to the Survey

a) Purpose and Objectives

This report presents the results of the fourth ACED annual end-of-year survey (AS), which took place close to the end of project Year Five. The analyses presented are related to the data collected on the adoption of techniques & practices (T/Ps) by training participants, changes in sales revenues and/or new investments reported by these producers. The targeted survey sample was taken from the list of participants who attended four, or more, ACED production training events over the past five years (from April 2011 to October 2015), with three or more trainings being for the same value chain. Related themes, such as feedback from producers regarding ACED's usefulness, as well as a data quality assessment, are also covered in this report.

The objectives of the survey included: learning more about the key ACED indicator results such as adoption rates, investments, and sales facilitated, internal learning, data quality assessment of information already collected in TAMIS, and an evaluation of ACED project results. Data used from this survey will provide a point of triangulation that can be compared with the data already gathered, and that data which the project team has been learning about as they interact with beneficiaries.

b) Methodology and Staffing

The Year Five Annual Survey was a targeted one. ACED staff focused on the following two criteria for the selection of survey participants:

- The producer attended at least four ACED production training events of which three or more training events were focused on the same value chain;
- The company represented by the producer trained did not have any entry in the TAMIS system regarding techniques and practices adopted.

Out of a total population of 6,569 individual training participants, all of whom have participated in ACED training events by the end of September 2015, ACED extracted from TAMIS the names of 131 producers that met the criteria mentioned above, but who hadn't been part of the targeted survey at the end of Project Year Four.

From the list of 131 producers identified, the final list of producers to be surveyed was reduced to 100 producers for the following reasons:

- Six producers were surveyed by Regional Training Service Providers (RTSPs) during the survey preparation;
- Eight Transnistrian producers were left to be surveyed by Transnistrian RTSPs;

- 17 producers from the CIS zones were left to be surveyed by Central Irrigation System (CIS) zone RTSPs.

Data on the 100 trainees selected was exported to an Excel spreadsheet in TAMIS.

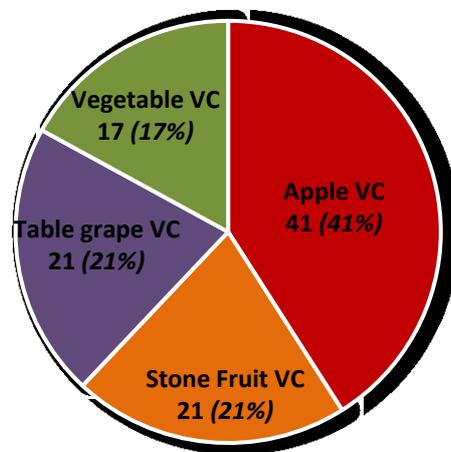
The survey questionnaire was modified from the one used the year before by the ACED Monitoring & Evaluation Team, in consultation with the project's technical teams. The questionnaire was adjusted slightly from the previous year to be as simple as possible for farmers to understand. Two ACED employees called the producers by phone to survey them, and they then populated an Excel spreadsheet with the data collected. Out of the 100 trainees, the two survey interviewers were able to reach 92 producers.

3. Survey Findings

a) Training Attendance

One hundred participants were called by the ACED interviewers. From this number 41 producers attended three or more production trainings regarding apples, 21 on stone fruit and/or post-harvest handling (PHH), 21 on table grape production and/or PHH and 17 on vegetable production and/ or PHH (see Figure 1 below).

Fig. 1: Surveyed Producers by Value Chains of production trainings



As a result of the survey, data on these 100 producers were collected and tabulated into the Excel spreadsheet. Out of 100 producers, 48 producers reported having adopted an ACED trained technique (referred to as “adopters”) and 44 said they hadn’t adopted a trained technique, marked as “non-adopters” (see Figure 2 below).

Fig. 2: Survey results statistics



Eight of the 100 selected producers were not interviewed, for the following reasons:

- The cell phone number in our records was not correct or it did not exist – 3;
- The producer did not answer the phone (the effort was abandoned after 3 - 4 attempts to contact the person) – 3;
- It was determined that the producer was out of the country – 2.

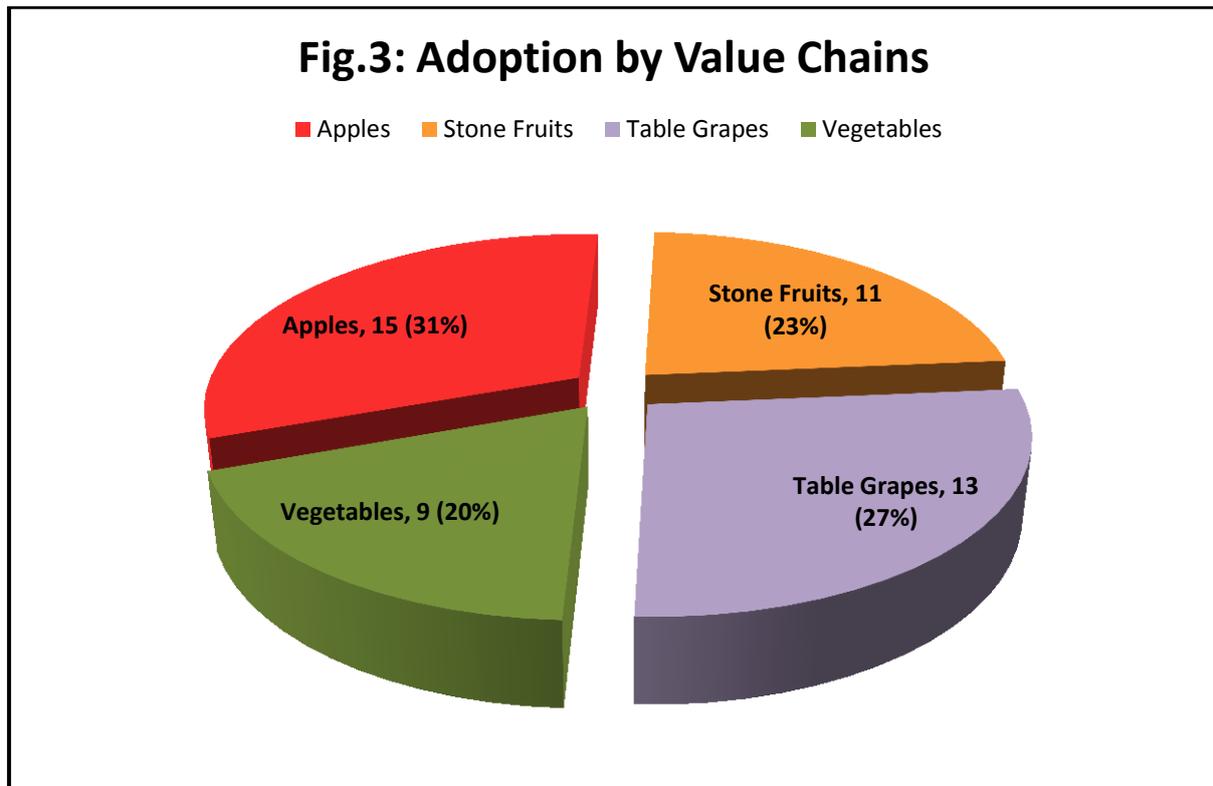
b) Adoption Rates by Value Chain

Forty eight of the 100 surveyed producers confirmed the adoption of one or more techniques/practices as a result of ACED training events. This provides evidence that the adoption numbers in the TAMIS system are effectively under-reported.

Less than half of the surveyed producers didn't adopt any T/Ps. The reasons given by the non-adopters are as follows:

- The respondents said they are reluctant to adopt new T/Ps – 12 producers
- The respondents said they have a high interest in a certain value chain for potential future production – 7 producers
- The respondents said they don't remember, as the seminars they attended took place two to three years ago – 7 producers
- The respondents said they didn't adopt new T/Ps because their production fields are old and the T/Ps are not relevant – 7 producers
- The respondents said they plan to adopt T/Ps next season – 5 producers
- The respondents said they attended the seminars to market their own informational and consultancy services – 3 individuals
- The respondents said they did not have the money needed – 2 producers
- The respondent said he/she did not adopt because of drought – 1 producer

Table 1: Adoption rates by Value Chain						
Value Chain	Adopters		Non-adopters		Total	
	No.	%	No.	%	No.	%
Apple	15	39%	23	61%	38	100%
Stone Fruits	11	55%	9	45%	20	100%
Table Grapes	13	62%	8	38%	21	100%
Vegetables	9	69%	4	31%	13	100%



c) Types of Techniques & Practices Adopted

The pie charts on the following pages provide information on the types of techniques & practices adopted by producers, with data on the number of farmers adopting each T/P. As a general rule, producers are more likely to adopt techniques that have a relatively low cost of adoption or implementation. This tendency can be seen in the charts, in that the techniques & practices most frequently adopted generally cost less to implement than the ones which were less frequently adopted.

However, the spectrum of adopted T/Ps includes techniques that involved investments in seedling materials, new cultivars, spraying equipment for chemical thinning, and drip irrigation, all of which are relatively significant investments for the producers.

Fig.4: T/Ps adopted on Apple VC

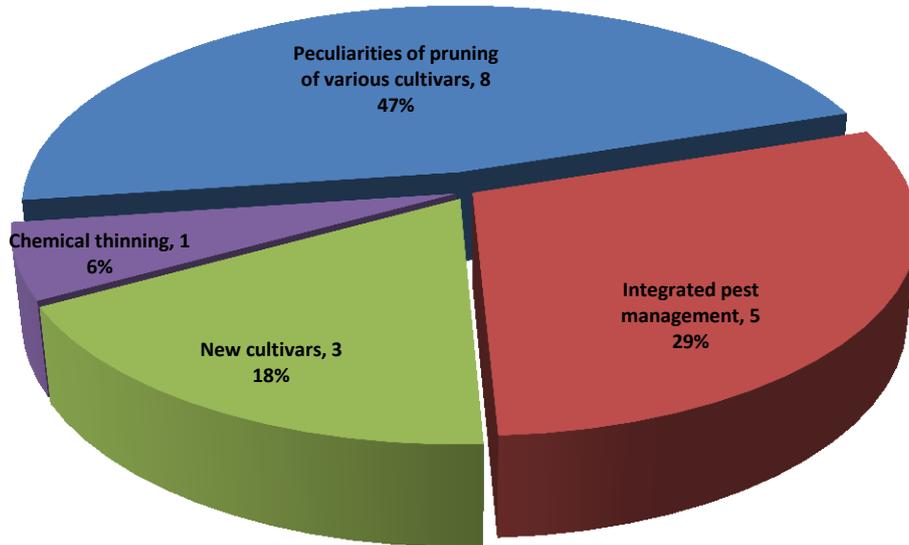


Fig.5: T/Ps adopted on Stone Fruit VC

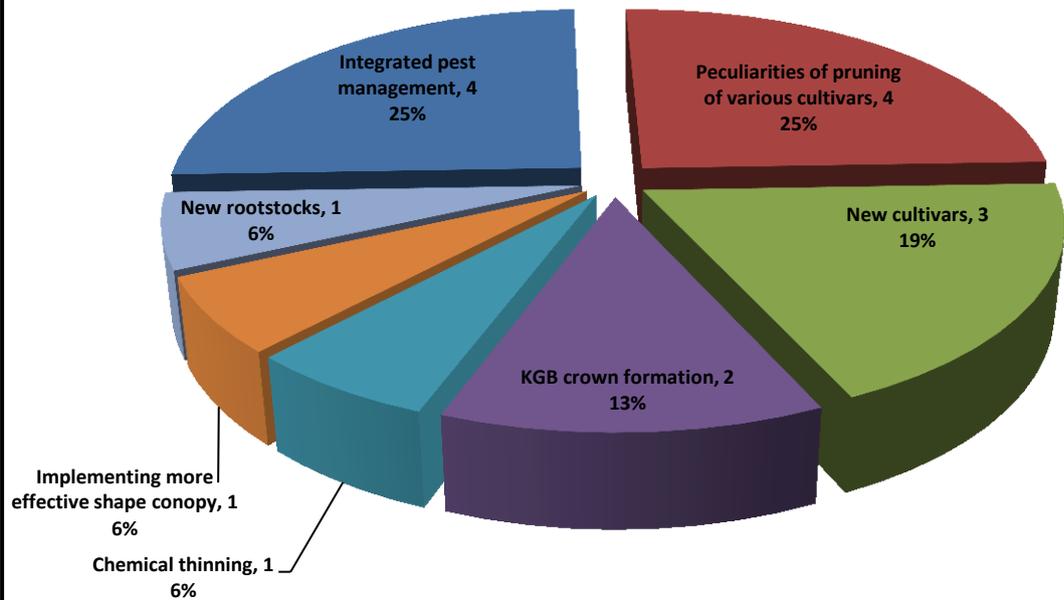


Fig. 6: T/Ps adopted on Table Grape VC

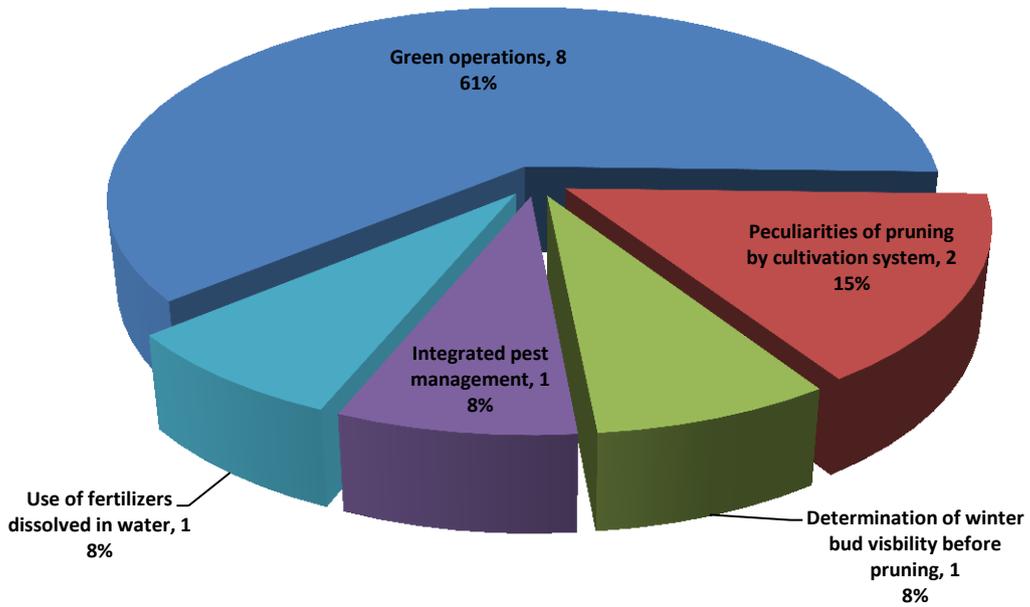
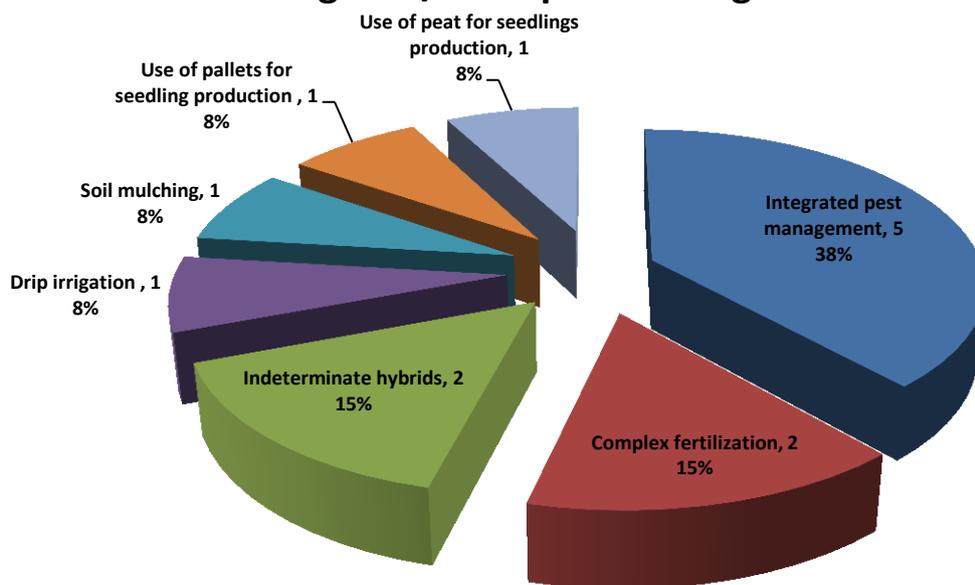
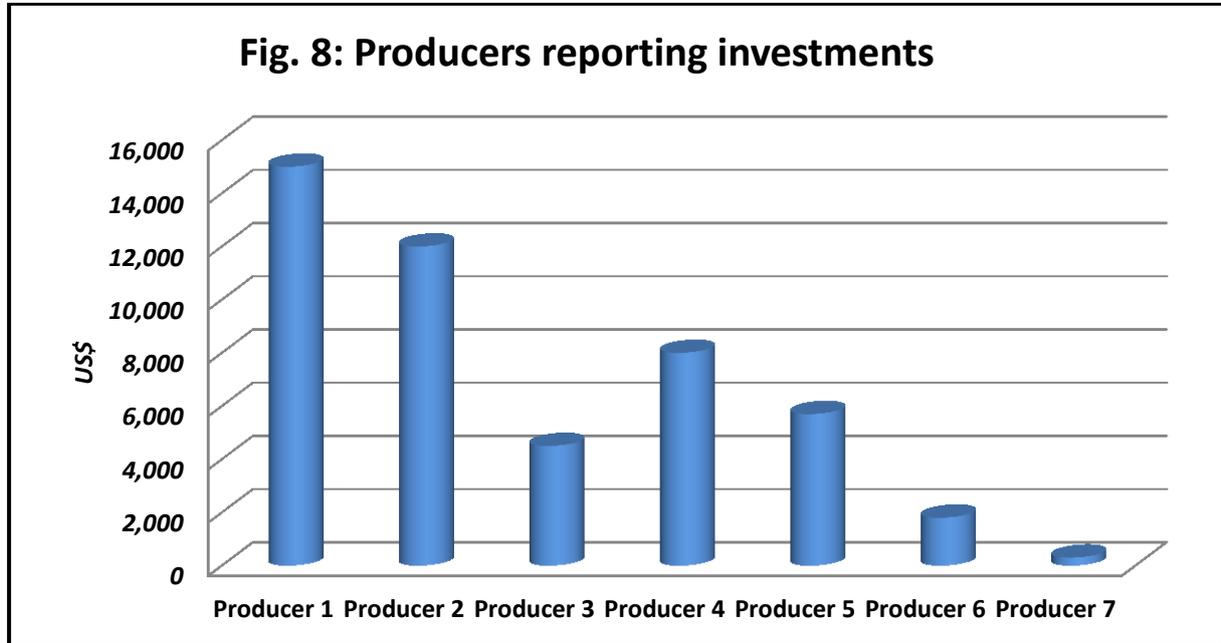


Fig. 7: T/P adopted on Vegetable VC



d) Investments by Value Chain

During the survey, seven participants reported making new investments, with the total value of these investments coming to \$47,300. These investments are linked to the techniques and practices these participants adopted.



Stone fruit and apple producers invested in seedling material, specifically new cultivars/ varieties for planting new, or extending existing, orchards. One vegetable producer reported investing in a drip irrigation system.

Fig. 9: Investments made by value chain

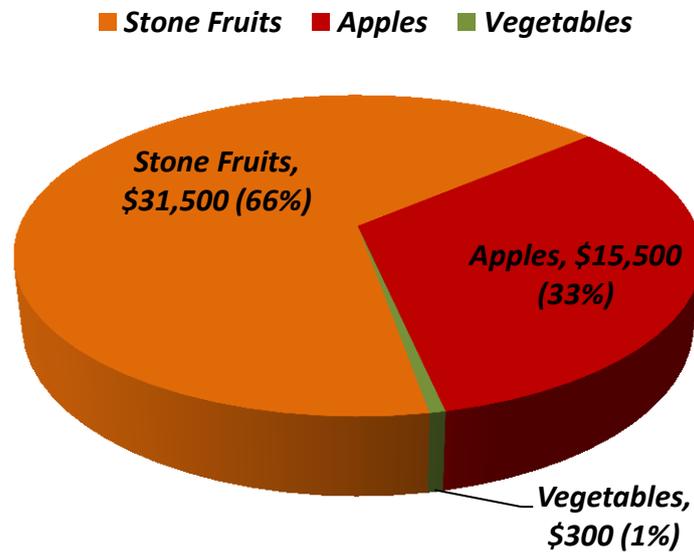
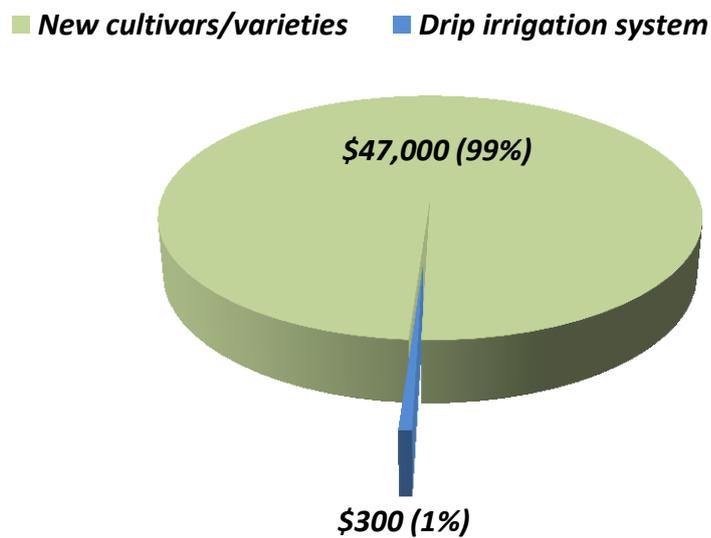


Fig. 10: Investments made by final aim



e) Sales Facilitated Data by Value Chain

In the ACED Performance Monitoring & Evaluation Plan (PMEP), the indicator "Sales Facilitated by ACED" is defined as follows (bold has been added for emphasis):

*"The **Dollar value of HVA sales** originating from Moldovan producers and producer groups **assisted by ACED**. The producers, producer groups, and/or consolidator/exporter sourcing from them will have received assistance from the project for it to be counted. Under this indicator, a "facilitated sale" is defined **more broadly than the usual linking of a buyer and a seller**. As ACED is learning market requirements and then providing training and TA based on those requirements, in the cases where producers **sell more as a result** (even if not specifically linked by ACED to the buyer), this falls under the broader definition of facilitated sales. As per contract footnote 16, facilitated sales are defined as those resulting from ACED's "direct assistance and follow-on sales". "This means that the project (staff member, hired BSP, STTA consultant, project activity/event, project communication tool such as newsletter or website):*

- *Linked a beneficiary to a buyer through e-mail, phone, meeting in person, supply of contact information, information gained in an end market study, the Marketing Information System (MIS) system; a Trade fair, a study tour, or other project event. After a linkage is created, all future sales between those two parties will be counted.*
- ***Provided training** or TA to value chain actor on marketing or market requirements (**including production**, certification, management and post-harvest handling) **that help them to increase their sales**.*
- *In the case that a **producer credits ACED with increasing their sales**, and the same producer has **adopted a technique or practice** trained by ACED, then ACED can count their monthly sales starting the month following practice adoption."*

While ACED staff regularly track sales facilitated by traders and consolidators who have been linked to buyers, one of the objectives of this annual survey was to look at sales facilitated at the producer level based on the definition contained in the ACED PMEP (shown above). Based on the definition above, sales are counted as having been "facilitated" based on two pre-conditions:

1. Respondents have had to have adopted at least one technique or practice based on ACED's training assistance, and;
2. When specifically queried, respondents have replied that ACED training assistance had led to an increase in their sales¹.

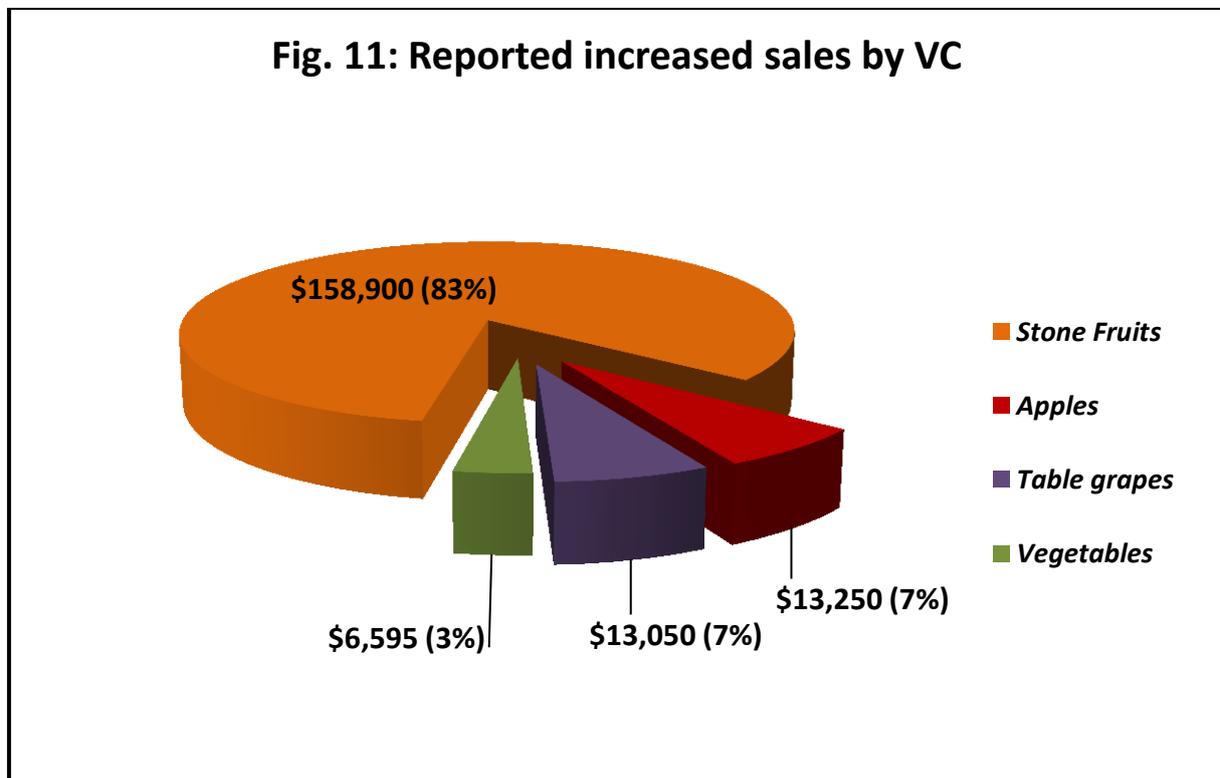
In cases where both prerequisites were met, sales revenues were counted beginning with the month following the month of practice adoption.

¹ Compared to what the sales would have been without ACED's assistance that same season.

Out of the 48 producers who adopted new techniques & practices:

- 16 reported increase sales thanks to ACED; and
- 32 reported no sales, each one stating several different reasons such as:
 - Couldn't or didn't want to share sales data – 22 participants
 - Didn't sell yet – 6 participants
 - Didn't have enough crop to sell, thus it was used only for personal consumption – 4 participants

Producers reported their sales data in Moldovan Lei (MDL). To convert the sales data to dollars ACED has used the National Bank's average exchange rates for July and August 2015 for Lei to Dollars to estimate the sales value in dollars. The total value of sales facilitated based on the methodology mentioned above was **\$191,795**. The sales data offered by the producers is shown by value chain in the chart below.



The biggest shares of sales are linked to the Stone Fruit value chain, due to the already transpired sale season for cherries, which usually lasts from May to July, and for peaches which lasts from July to September. Meanwhile, plums can either be sold during the current sales season, or stored for later sale. The share of apple and table grape sales is low because most of the surveyed producers had not managed to sell these products by the time of the survey, with many of them storing them for later sale at higher prices.

A total of 27% of the product sales occurred in the domestic (internal) market. Those mainly involved vegetables and early maturing varieties of apples. Meanwhile, cherries and table grapes were sold to Belarus and Russia.

Table 2: Sales share by market type

Market type	Apple	Stone Fruits	Table Grapes	Vegetables	Market share
Total sales	\$13,250	\$158,900	\$13,050	\$6,595	
Domestic	100%	18%	30%	100%	27.5%
Export	0%	82%	70%	0%	72.5%
TOTALS	100%	100%	100%	100%	100%

f) Other Findings

One question included on the survey questionnaire was whether or not the producers found ACED’s training and technical assistance useful or not. All 92 respondents said that the project was useful, regardless of whether or not they had implemented a technique or practice. When asked what did they did or did not like about the ACED activities, the more specific answers were as follows:

- They gained new information and knowledge – 17 producers
- They found the ACED consultancy services useful – 3
- They found the ACED Bulletins and guides useful – 4
- The field visits and experience exchanges were very useful – 2
- They found everything useful, including the seminars, training materials, field visits, practical sessions, and the trainers’ expertise in Q&A sessions, etc. - 35

4. Data Quality Assessment

a) Data Quality Issues

This annual end-of-year survey was a chance to check the data quality recorded so far in the project's TAMIS system. Although the regional training service providers, as well as the ACED staff, carried out a substantial share of the work related to following-up on the ACED trainings and events, the results of the survey showed that the results data are still under-reported, although less than in the previous annual project surveys. Out of 100 program participants surveyed, all of whom had no T/P results listed in the TAMIS system, nearly half of them (48) reported having had adopted practices they received training when they were queried in this survey.

There are multiple reasons that could result in the level of technique/practice adoption being under reported in the project's TAMIS system:

- 1) The pure scale of the number of farmers trained by ACED means that the limited number of ACED staff, and the training partners, is only in good regular contact with a small percentage of the total number of project participants.
- 2) The timing of the adoption post-M&E RTSP follow-up is likely one of the largest contributors to this under-capturing of results in TAMIS. The system is designed so that the RTSPs follow-up at a certain point after the training was conducted. However, the training participants can often implement new techniques/practices after the RTSPs carry out their monitoring and reporting. As an example, in some cases the RTSP has been "retired" as the training location may have received many rounds of training in 2013, but the RTSP is no longer engaged for additional trainings in 2014 and/or in 2015 when the practices might be adopted.
- 3) There are some ACED training events and forums that are organized directly by ACED, in which case there isn't an RTSP to carry out the M&E follow-up.
- 4) The M&E team also suspects that many RTSPs stay in good contact with their friends, family and personal networks, but they might not make a serious effort to reach out to those training participants that they know less well.

As instructed, the two team members who carried out the survey made note of data quality issues that arose during the survey. Below is a summary of the issues identified, related to data quality and contact information for producers in TAMIS:

- 1) Two participants had the wrong phone numbers listed in the system, and therefore they couldn't be reached. Wrong numbers are sometimes entered in TAMIS because of unclear handwriting or errors in the registration list (however, it is also possible that the participant changed their phone number, or wrote the wrong number);

- 2) There was one participant with a non-existent phone number (without recourse). As in the case above, this could either be a transcription error or because of an unrelated reason such as the producer leaving the country.

Any data collection effort will have inherent errors and an MIS system will always contain some small errors, flaws and/or incongruities regarding the actual results achieved. In line with this, the ACED project has a data collection system which doesn't collect 100% of the information regarding who adopted a practice (and all of the practices they adopted), rather ACED collects data from only those that report results, and then includes these data in the TAMIS system. ACED is also heavily dependent on the results reports from the Regional Training Service Providers (RTSPs) who are supposed to follow up with participants and submit reports on a quarterly basis.

In an effort to be more efficient and responsive to the indicators required by the contract, the system is designed to prioritize capturing the first practice adopted by a person, and then there is no institutional incentive to capture and note additional practices adopted by the same producers. ACED is only reporting on the number of producers who adopt practices and techniques, but not the numbers of techniques and practices adopted. It is interesting to note that in the first end of year survey, using a random sample, the adoption rate was 66% while in the second annual survey, also with a randomly selected sample, the adoption rate was 54%. Meanwhile, this year and last year's surveys were targeted so that the results could not be compared. However, all four surveys indicate that there is a much higher adoption rate than the rate captured in the TAMIS system, which is 33%. All of this supports the major finding of each of the end of year surveys related to data quality, which is that the results in the TAMIS system are likely under reported. In the meantime, carrying out the annual survey, and entering results into TAMIS as part of that survey, makes a significant step in rectifying this shortcoming.

Another finding is that as a result of the surveys, the phone interviewer discovered that many producers couldn't (or didn't want to) provide results data on sales. This reluctance can be related to how any taxes the producer could theoretically owe and/or that they didn't feel confident to share this data with a stranger. Apart from that, many small farmers are not keeping accurate records on their income and sales revenue so they can't easily say or recall what their sales were. This lesson learned should be taken into account for the impact assessment being carried out by the MCC sub-contractor. It also suggests that ACED's sales facilitated results are also likely under reported, despite the fact that they are already well above the life of project target in the PMP.

5. Annual Survey Conclusions

In summary, the ACED M&E Team believes that the project's final annual survey was a worthwhile effort that it has provided useful insights into the strong results being achieved by the project. Discrete results noted in the survey have been added into the TAMIS system and these results will be included in the project's final report.

Furthermore, the high level of reporting on the techniques & practices adopted, and the valuable sales and investment results reported, have been an encouragement to all of the project staff who have been working hard to assist Moldovan agriculture from day one.