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# IMPROVING THE COMPETITIVENESS OF VALUE CHAINS IN MOLDOVA'S HIGH- VALUE AGRICULTURE (HVA) SECTOR

TARGETING BINDING REGULATORY CONSTRAINTS

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## Preface

Developed with USAID support, the CIBER (Competitiveness Impacts of Business Environment Reforms) process forms a critical part of designing and implementing competitiveness strategies for key value chains in an economy. CIBER involves a systematic assessment of the business environment for targeted value chains, identifies major competitiveness constraints, ranks them according to their cost in terms of competitiveness lost, and leverages that information to advocate targeted change. It complements Regulatory Impact Assessment (RIA) and other analytical tools used to identify binding policy constraints to growth, and design appropriate responses. The CIBER process engages value chain stakeholders to enumerate the business environment constraints they perceive, and subjects these perceptions to a rigorous economic analysis to rank needed reforms in terms of impact and feasibility. That approach stresses economic reasoning in the debate of appropriate policy responses.

As the CIBER process is applied in different countries, practitioners continually fine-tune procedures and methods. Each implementation has contributed to improved solutions for the structural and technical issues involved, with an emphasis on high-impact policy responses, including regulatory reforms. A reference guide reflects these evolving approaches.<sup>1</sup>

This report represents a significant milestone in adapting the underlying approach to the specific challenges of boosting the competitiveness of Moldova's high-value agriculture (HVA) sector. The Agricultural Competitiveness and Enterprise Development (ACED) project, supported by USAID and the MCC, has so far targeted three value chains—apples, table grapes and greenhouse tomatoes. In order to anchor the CIBER approach in the actual policy debate, the project engaged the services of a Moldovan NGO, AID (Alternative Internațională de Dezvoltare) in 2012. While the authors of the report followed the general CIBER approach, they introduced their own variants.

Notably, while CIBER normally carries out a triage of the identified business environment constraints, using a preliminary version of a strategic decision matrix (explained in the report), and then proceeds to a more rigorous economic analysis of the two or three top-ranked constraints, AID conducted an economic analysis of seventeen constraints identified by value chain stakeholders. The AID Team also provided more detailed comments for choosing their ratings on the other criteria of the strategic decision matrix. The assessment and ranking of constraints in the case of selected Moldovan HVA value chains thus represents a hybrid of the preliminary version of the triage stage and the detailed econometric appraisal for the top constraints. The more detailed economic analysis of the top constraints therefore is left to subsequent analysis, in particular the RIA for required changes in the respective laws and regulations.

This report on the HVA value chains in Moldova is strong regarding the strategy for the advocacy campaign. The identification of supporting institutions and individuals and of the likely opposition goes into considerable detail. The development of particular approaches to capitalize on that support and overcome any opposition now guides the implementation of targeted reforms.

This report is therefore of broader interest to the analysis of policy response options for the business environment to boost competitiveness and growth. The ACED project therefore decided to make it more broadly available. This edited report closely follows the original AID submission. There are questions about some of the details of the analysis, but the report marks a major milestone in the development of an effective CIBER process.

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<sup>1</sup> CIBER draft reference guide

## Executive summary

This report describes the first phase of a process to promote effective policies to strengthen the competitiveness of the high-value agriculture (HVA) sector in Moldova, conducted under the auspices of the Agricultural Competitiveness and Enterprise Development (ACED) project, funded by the U.S. Agency for International Development (USAID) and the Millennium Challenge Corporation (MCC). Using the perspective of selected value chains, the CIBER (Competitiveness Impacts of Business Environment Reforms) process is designed to identify and target constraints that undermine competitiveness. It brings together value chain stakeholders, primarily the firms at different stages in the value chain, and rigorous economic analysis to assess binding business environment constraints, and advocate change to address these constraints. The approach pinpoints high-impact policy responses to strengthen competitiveness and promote growth.

The CIBER process involves a series of interactions between two groups, value chain stakeholders and a team of analysts. It starts with the development of a comprehensive list of business environment constraints, as suggested by value chain stakeholders and industry experts. This list is then whittled down through a “triage” process, using a number of criteria summarized in a *strategic decision matrix* (SDM), currently comprising the following eight criteria:

- **Expected impact and risk:** What is the economic cost (in terms of lost competitiveness) associated with the constraint? What is the subjective reliability of the loss estimates?
- **Likely spillover effects:** How would other value chains gain from a policy response designed to address this constraint?
- **Magnitude of the action required** to alleviate the constraint: Does it require a new law? A new implementing regulation? Changes in administrative procedures? Fiscal policy responses?
- **Strength of implementing and supporting institutions:** Who needs to take action to alleviate the constraint? Do these institutions have the required capabilities to carry out these actions? What other institutions would be involved in implementing the particular policy response?
- **External incentives:** To what extent do international partners encourage action on the given constraint? How is such support offered—through treaty obligations, general policy dialogue, or likely implementation support?
- **Advocacy and support:** What institutions are likely to argue for the required policy response? How influential are they? How easy will it be to energize support operations?
- **Opposition:** What groups and institutions are likely to resist appropriate policy responses? How influential are they?
- **Resources needed** for any policy response to alleviate the constraint: What are the likely direct costs of preparing and implementing the policy responses? What are the secondary costs of action, such as shortfalls in government revenue?

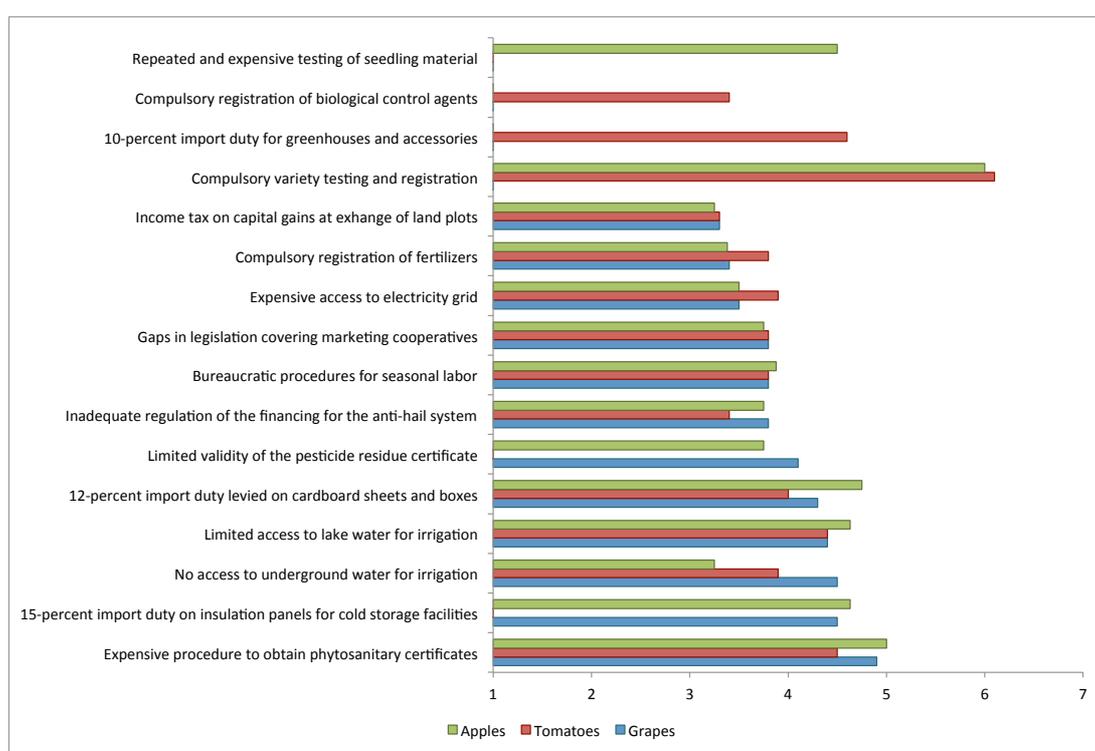
The individual constraints are scored on each of these criteria on a scale of 1 to 7, where 1 is worst and 7 is best; the scoring is in reverse order for the “negative” criteria—magnitude of action required, opposition, and resources needed.

The constraints are then ranked according to the overall score, typically some average of the scores on individual criteria. Focusing on the top-ranked constraints, the subsequent analytical step estimates the economic damage caused by them in terms of lost competitiveness.

The results of this analysis are vetted with value chain stakeholders to identify the constraints that should be tackled in the short term. The agreed-upon constraints then become the subject of an advocacy campaign designed to elicit a policy response that removes (or at least mitigates) the constraint. The ultimate objective of the CIBER process is to achieve changes in legislation, implementing regulations, or administration that can contribute to a more competitive performance in global markets.

To implement the CIBER process for selected HVA value chains (apples, table grapes, and greenhouse tomatoes), ACED engaged a Moldovan NGO, Alternative Internațională de Dezvoltare (AID). The AID Team began by compiling a comprehensive list of perceived obstacles to competitiveness through a series of workshops and individual interviews with producers and exporters in the three targeted value chains. This initial round produced a total of 125 problem areas. Combining related issues and putting others (on, say, subsidy policies) aside, the list shrank to 29 constraints. The AID Team then asked the value stakeholders to “vote” on the importance of each of the 29 issues (each participant had three votes). After eliminating constraints that did not get at least two votes, seventeen constraints remained.

The AID Team applied a version of the strategic decision matrix to these seventeen constraints. For each, the analysts sought to estimate the impact on the competitiveness of value chains, benchmarking against competitors (for example, with respect to high cost of seed as a result of limited competition) or against the absence of the constraint. The result of this analysis is summarized in the following graph that shows the average rating on a scale of 1 to 7 across the eight criteria for each of the constraints:



Not all of the constraints apply to all value chains. For example, mandatory testing and registration of new varieties, a major problem for tomatoes and apples, does not apply to table grapes. Grape producers are confident that they have the appropriate varieties, and have therefore not tried to register any new variety for the last three years. (A blank in the graph means the constraint does not apply to the respective value chain.)

The results of the analysis suggest that the seed registration and certification system represents a major hurdle to improving the competitiveness for at least two value chains, apples and tomatoes. Moreover, import duties on critical inputs (greenhouses, cardboard, and insulation panels) also demand attention to enable producers to compete in global markets.

The next step is critical: Based on the economic analysis and the assessment of the political and administrative feasibility of implementing the appropriate policy responses, value chain stakeholders will be en-

gaged in a focused advocacy campaign to achieve change. The report presents a careful analysis of the political landscape for formulating the appropriate message, mobilizing support and neutralizing opposition.

As the authorities respond to the needed changes, CIBER provides key inputs into the ex ante policy assessment. This appraisal is likely to involve a regulatory impact assessment (RIA). For all new laws, amendments or implementing regulations Moldovan law requires a RIA.

## Introduction

### Strengthening the competitiveness of Moldova's HVA sector

Seeking to encourage the competitiveness of Moldova's high-value agriculture (HVA) sector, the U.S. Agency for International Development (USAID) and the Millennium Challenge Corporation (MCC) funded the Agricultural Competitiveness and Enterprise Development (ACED) project. It is designed to support the development of improved production and marketing for HVA products aimed primarily at export markets in the east and west. The project also includes efforts to develop the small and medium-sized enterprise sector in Moldova's Transnistria region.

Ensuring appropriate reforms of the business environment forms part of strategies designed to boost the competitiveness of HVA value chains. That component of the ACED project includes two major elements—strengthening the quality infrastructure, in particular Moldova's ability to deal with the sanitary and phytosanitary (SPS) requirements of modern produce markets, and streamlining the legal, regulatory and administrative requirements for investors and operators in the HVA sector.

To lay out the regulatory and administrative procedures required for investors in HVA value chains, the ACED project has engaged a Moldovan consulting firm to prepare a comprehensive "*investor roadmap*." The project has also provided guidelines and training for staff of the Ministry of Agriculture and Food Industry (MAFI) to improve the quality of new laws and regulations by applying Regulatory Impact Assessments (RIA). And it has initiated a process to achieve targeted reforms of the legal, regulatory and administrative framework to advance the competitiveness of selected HVA value chains—the Competitiveness Impacts of Business Environment Reforms (CIBER) process.

### The CIBER process in a nutshell

The CIBER process forms an integral part of efforts to strengthen value chain competitiveness. It determines priorities for effective policy response by assessing the economic costs associated with business environment constraints, exploring the feasibility of change, and advocating change. Business environment constraints may include excessive charges or costs associated with regulatory and administrative compliance, barriers to access to markets or technology, or quality infrastructure weaknesses that may make it difficult to meet demanding quality standards.

To ensure that new laws and regulations provide the most rational course of action, most governments now employ some form of RIA. A RIA seeks to ascertain that the proposed law or regulation is in fact the best way to deal with a particular problem, and proceeds to evaluate all costs and benefits. Ideally, it is an open process, seeking information and opinions from a wide variety of affected parties, in particular businesses. RIA is a top-down mechanism, starting with a proposed law or regulations and tracing the likely effects on economic and other goals.

In principle, RIA can also be applied to the existing stock of laws and regulations. However, the sheer volume of these laws and regulations makes it all but impossible to apply it across the entire range. What is required is to determine priority targets for reform among existing laws and regulations as well as administrative practices. Adopting a value chain perspective, the CIBER process selectively explores key constraints on competitiveness as the basis for defining targets for reform.

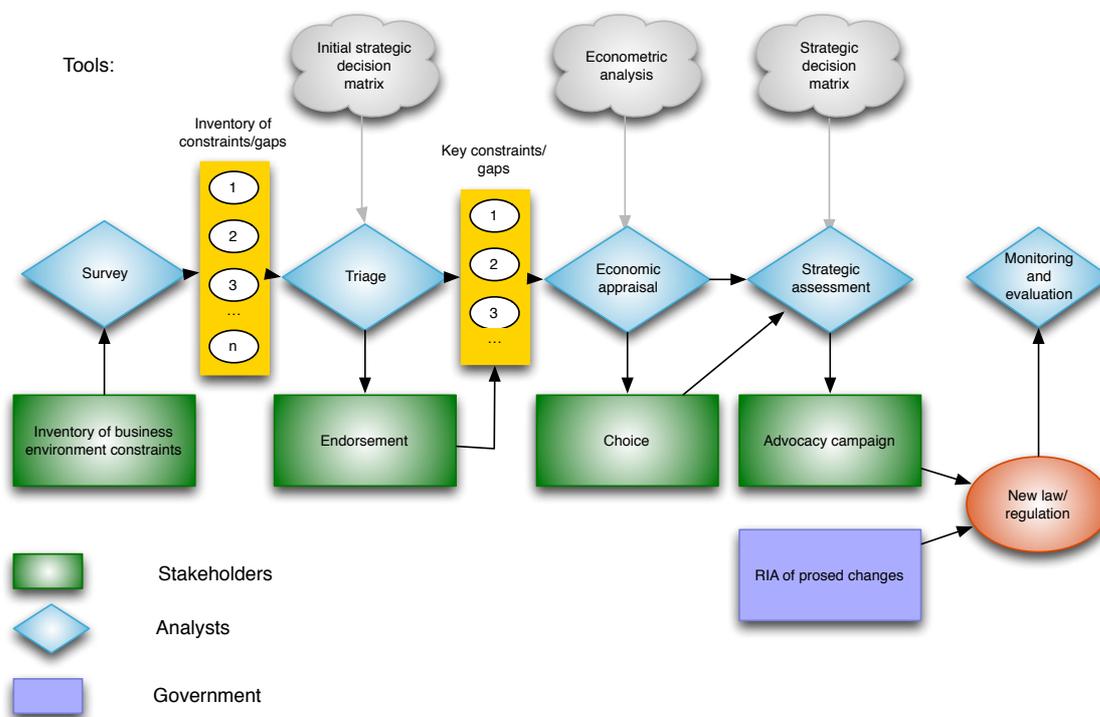
The CIBER process starts with the development of an inventory of potentially harmful business environment elements; these elements include the "black letter law" (published laws and regulations), formal or informal operating rules adopted by different levels of government, and administrative procedures. A preliminary appraisal serves to identify key constraints worthy of further analysis. The tool for this appraisal is a *strategic decision matrix* that applies a series of criteria to determine priorities for further examination. This list of ini-

tial targets for further attention needs to be vetted with the stakeholders, before any analysis is undertaken. The vetting process also should address the most appropriate analytical approach. Generally, the focus is on the costs in terms of competitiveness lost, and rigorous analysis is needed for estimating such economic costs.

Once the (economic) analysis has been carried out, the CIBER process moves to a review of the findings by the value chain stakeholders. That review may result in some revision of the analysis; however, it serves primarily as the basis for a strategy discussion of the most appropriate solution to alleviate key constraints. While that discussion is shown as an “analytical step”, it obviously needs to involve stakeholders to confirm and validate the assessments.

The strategy assessment then leads into the formulation of an appropriate advocacy strategy. Its implementation relies primarily on the stakeholders themselves. The final step in the CIBER process involves monitoring the process, and adjusting the advocacy campaign to reinforce progress, or provide course corrections as needed. Figure 1 provides an overview of the elements of the CIBER process.

**Figure 1: Overview of the CIBER process**



## Developing an inventory of business environment constraints

The initial task in the CIBER process is the development of an initial inventory of business environment constraints on competitiveness affect competitiveness. This effort draws on many sources, including existing agricultural policy documents regarding Moldova's HVA value chains:

- Individual value chain studies prepared under the ACED project;
- Resolution of the General Assembly of "Moldova-Fruct" Association (2012);
- Policy Book of the National Federation of Employers in Agriculture and Food Industry (2011);
- Resolution of the National Forum of Table Grape Sector Operators (2010);
- Resolutions of the several AGROinform conferences, workshops and roundtables held in 2010-2012 on cooperative development, gender issues in agriculture, organic agriculture, agricultural subsidies, and export marketing.
- the White Book by the Foreign Investors Association (2009).

In addition, the study team solicited the views of value chain stakeholders during a workshop for each of the targeted value chains—apples, table grapes and greenhouse tomatoes. In organizing these workshops, the team tried to ensure a representative mix in terms company size, gender, and value chain function. The discussions in the workshops and interviews were structured around the elements of the CIBER Regulatory and Administrative Checklist:

- Obtaining inputs (upstream providers);
- Paying taxes;
- Employing workers;
- Access to land;
- Access to finance;
- Dealing with licenses, including trade authorizations;
- Regulatory Transparency;
- Infrastructure quality and costs (including utilities);
- Quality standards infrastructure;
- Informal charges;
- Gender and youth issues.

All laws, regulations and administrative practices cited as competitiveness constraints by workshop participants and interviewees made up the **inventory of problem areas**. Altogether, the inventory phase found some 53 problem areas for the apple value chain, 49 for the table grape value chain, and 23 for tomato value chain. The tomato value chain appeared to face fewer problems in part because of its current focus on domestic markets. Most of the problems areas related to value chain inputs and resources (72 out of a total of 125), followed by production (37), and post-harvest handling and delivery (16).

## Selecting priority constraints for further analysis

A critical review of the initial inventory of problem areas suggested some adjustments, revisions and simplification. Some issues identified were basically different facets of the same problem and could therefore be combined. In other instances, value chain stakeholders named problems beyond the scope of business environment reforms, such as subsidy policies or criteria by the Government and the Millennium Challenge Account of Moldova related to a loan program; these issues were excluded. As a result of these revisions, the initial list of 125 problem areas shrank to 29 constraints.

The selection of priority problem areas used a two-stage process. Applying the criteria of the CIBER strategic decision matrix produced an initial priority ranking. Value chain stakeholders were then given the opportunity to vet these rankings, and express their own priorities. Within each value chain, respondents could select the three most important problems.<sup>2</sup> Only the constraints gathering at least two votes overall were considered for further analysis.

The results of this procedure are shown in • **Expected impact and risk:** What is the economic cost (in terms of lost competitiveness) associated with the constraint? What is the subjective reliability of the loss estimates?

- **Likely spillover effects:** How would other value chains gain from a policy response designed to address this constraint?
- **Magnitude of the action required** to alleviate the constraint: Does it require a new law? A new implementing regulation? Changes in administrative procedures? Fiscal policy responses?
- **Strength of implementing and supporting institutions:** Who needs to take action to alleviate the constraint? Do these institutions have the required capabilities to carry out these actions? What other institutions would be involved in implementing the particular policy response?
- **External incentives:** To what extent do international partners encourage action on the given constraint? How is such support offered—through treaty obligations, general policy dialogue, or likely implementation support?
- **Advocacy and support:** What institutions are likely to argue for the required policy response? How influential are they? How easy will it be to energize support operations?
- **Opposition:** What groups and institutions are likely to resist appropriate policy responses? How influential are they?
- **Resources needed** for any policy response to alleviate the constraint: What are the likely direct costs of preparing and implementing the policy responses? What are the secondary costs of action, such as shortfalls in government revenue?

Table 1 shows the seventeen retained constraints and the results of the voting by the value chain stakeholders.

<sup>2</sup> For each value chain, 15 value chain participants were interviewed by phone or through face-to-face meetings (in the case of phone interviews, the triage results were forwarded beforehand by email). Since each respondent could select three priority problems, the total for each value chain was 45 “votes.”

Table 1. Value chain stakeholders “voted out” 12 of the 29 problem areas, leaving 17 constraints for further analysis. Each value chain had its own specific issues. Overall, stakeholders cited as the most pressing issues, as shown in Table 1:

- access to water;
- taxes and import duties for a series of key inputs,
- compulsory variety registration; and
- the lengthy procedure to obtain the phytosanitary certificates and other supporting export documents.

Of the selected seventeen constraints, six are related to inputs/resources, six to production, two to post-harvest handling, and three to delivery. Table 2 shows that breakdown.

The CIBER process normally chooses only the two to five top constraints for a more economic analysis to determine the magnitude of likely competitiveness gains from any reforms. However, in the case of Moldova’s HVA value chains, the AID Team saw an opportunity to explore the dimensions of the problem by conducting an in-depth appraisal of the seventeen retained constraints, using the criteria of the strategic decision matrix, and rating each identified constraint on a Likert scale of 1 (best) to 7 (worst), with the possibility of weighting criteria differently:

- **Expected impact and risk:** What is the economic cost (in terms of lost competitiveness) associated with the constraint? What is the subjective reliability of the loss estimates?
- **Likely spillover effects:** How would other value chains gain from a policy response designed to address this constraint?
- **Magnitude of the action required** to alleviate the constraint: Does it require a new law? A new implementing regulation? Changes in administrative procedures? Fiscal policy responses?
- **Strength of implementing and supporting institutions:** Who needs to take action to alleviate the constraint? Do these institutions have the required capabilities to carry out these actions? What other institutions would be involved in implementing the particular policy response?
- **External incentives:** To what extent do international partners encourage action on the given constraint? How is such support offered—through treaty obligations, general policy dialogue, or likely implementation support?
- **Advocacy and support:** What institutions are likely to argue for the required policy response? How influential are they? How easy will it be to energize support operations?
- **Opposition:** What groups and institutions are likely to resist appropriate policy responses? How influential are they?
- **Resources needed** for any policy response to alleviate the constraint: What are the likely direct costs of preparing and implementing the policy responses? What are the secondary costs of action, such as shortfalls in government revenue?

Table 1 shows the seventeen retained constraints and the results of the voting by the value chain stakeholders.

**Table 1: Rating by value chain entities of the importance of the constraints**

Constraint	Total		Apple value chain		Grape value chain		Tomato value chain	
	# of votes	%	# of votes	%	# of votes	Share, %	# of votes	Share, %
1. Poor regulation of access to lake water for irrigation purposes	14	10.6%	3	7%	4	9%	7	16%
2. Compulsory variety registration	13	9.8%	5	12%	2	5%	6	13%
3. No access to underground water for irrigation purposes	13	9.8%		0%	8	18%	5	11%
4. Costly & complicated phytosanitary certification procedures for exports	12	9.1%	6	14%	4	9%	2	4%
5. 15 percent import duty for insulation panels used in cold storages	12	9.1%	4	9%	7	16%	1	2%
6. 12 percent import duty for cardboard sheets and boxes	12	9.1%	7	16%	5	11%		0%
7. Expensive access to electricity grid	10	7.6%	3	7%	4	9%	3	7%
8. Compulsory registration of fertilizers	9	6.8%		0%	3	7%	6	13%
9. Bureaucratic procedures for seasonal hiring	7	5.3%	4	9%	3	7%		0%
10. Expensive access to natural gas	6	4.5%		0%		0%	6	13%
11. 10 percent import duty on greenhouses and accessories	6	4.5%	1	2%		0%	5	11%
12. Income tax on capital gains at exchange of land plots	4	3.0%	3	7%	1	2%		0%
13. Poor regulation of the financing for the anti-hail system	4	3.0%	2	5%	2	5%		0%
14. Compulsory registration of biological control agents	4	3.0%		0%		0%	4	9%
15. Repeated and expensive testing of seedling material	2	1.5%	2	5%		0%		0%
16. Limited validity of the pesticide residue certificate	2	1.5%	2	5%		0%		0%
17. Gaps in legislation covering the marketing cooperatives	2	1.5%	1	2%	1	2%		0%
	<b>132</b>	<b>100%</b>	<b>43</b>	<b>100%</b>	<b>44</b>	<b>100%</b>	<b>45</b>	<b>100%</b>

*Note: The totals for some value chains are lower than 45 because some votes were cast for constraints that didn't pass the 2-vote threshold to be selected for further analysis.*

**Table 2: Mapping the priority regulatory constraints across value chain functions**

Value chain function	Regulatory constraint	Value chain		
		Apple	Table grape	Tomato
Inputs / resources	Compulsory variety registration	X	X	X
	Poor regulation of access to lake water for irrigation purposes			
	No access to underground water for irrigation purposes			
	Expensive access to electricity grid	X	X	X
	Expensive access to natural gas			X
	Repeated and expensive testing of the seedling material	X		
Production	10 percent import tax for greenhouses and accessories			
	Compulsory registration of biological control agents	X	X	X
	Compulsory registration of fertilizers	X	X	X
	Bureaucratic procedures for seasonal hiring	X	X	X
	Poor regulation of the financing for the anti-hail system	X	X	X
	Income tax on capital gains at exchange of land plots	X	X	X
Post-harvest handling	15 percent import duty for insulation panels used in cold storages	X	X	X
	12 percent import duty for cardboard sheets and boxes	X	X	X
Delivery	Costly and complicated phytosanitary certification procedures for exports	X	X	X
	Limited validity of the pesticide residue certificate	X	X	
	Gaps in legislation covering the cooperatives of entrepreneurs	X	X	X

## Assessing the importance of economic constraints

### Compulsory variety registration

#### Nature of the constraint

According to Article 8 of the Law on Seeds Nr. 659 of October 29, 1999, only seeds of varieties included in the official Register of Plant Varieties can be imported (with minor exceptions, such as a food crisis or for scientific research). Other legal acts deepen or broaden this limitation: for example, only plantations established with varieties included in the Register of Plant Varieties are eligible for state investment subsidies, according to Governmental Decision Nr. 57 dated Jan 31, 2012 regarding the agricultural subsidy fund for 2012 year.

Value chain stakeholders identified this constraint as a major issue. Variety choices play a critical role in shaping key competitiveness parameters, such as yields, unit costs, or quality. Globally, a large number of public and private breeders develop and release improved varieties, outperforming existing varieties on one of several traits that improve economic performance. The low number of varieties included in the Register and the extensive testing periods act as serious constraints on the competitiveness of Moldova's HVA producers and exporters, at least for apples and tomatoes.

**Table 3: Importance of variety traits for value chain competitiveness**

Variety trait	Competitiveness parameter	Specific examples of major importance for Moldovan value chains		
		Apples	Table grapes	Tomatoes
Disease resistance	Lower costs for inputs (pesticides) Higher share of fresh market fruit	Resistance to apple scab Resistance to powdery mildew Resistance to storage diseases	Resistance to mildew	Resistance to long-distance transport
Adaptation to Moldovan climate	Lower costs for re-planting		Cold hardiness (survival at low temperatures)	
Yield profiles	Higher and more predictable yields	Low susceptibility to biennial bearing		
Cosmetic appeal	Higher prices	Color intensity (red)	Black and red varieties	New forms (cherry tomatoes, tomatoes on vine, plum tomatoes) New colors (yellow, black)
Eating experience	Higher prices, access to new market segments		Seedless varieties	Non-leaking
Nutritional profile	Higher prices, access to new market segments			High-lycopene content

The number of varieties annually registered in Moldova is significantly lower than in the European Union. For grapes, no new varieties were registered in Moldova at all during last three years. Seven locally bred varieties were registered for apples, but no international variety—versus 56 varieties in the EU. The situation for tomatoes is more promising, with 42 registered in Moldova vs. 168 for the EU.

**Table 4: Number of registered varieties in EU and Moldova**

Year	Country	Crops		
		Apples	Grapes	Tomatoes
2009	Moldova	6	0	18
2009	EU	20	9	56
2010	Moldova	1	0	14
2010	EU	18	12	40
2011	Moldova	0	0	10
2011	EU	18	6	72
TOTAL 2009-11	Moldova	7	0	42
TOTAL 2009-11	EU	56	27	168
TOTAL 2009-11	Ratio MD/EU	12%	0%	25%

Source: MAFI (<http://maia.gov.md>) and EU CPVO (<http://www.cpvo.europa.eu>)

The comparison between the crops and the analysis of the breeders who have applied for registration indicate that the major cause of the problem is the small size of the Moldovan market. International breeders and seed companies lack the incentive to pursue registration in this country:

- The global apple and grape variety market is characterized by a high degree of fragmentation. There are many breeders, and no company having a significant market share. In contrast, the tomato seed market is characterized by the presence of several global players with significant market share (like Syngenta, Nunhems, RijkZwaan, or Monsanto);
- Moldova is a small market for varieties in comparison with the countries of the European Union. In the case of more fragmented market of apple and grape varieties, the international breeders are not interested in the Moldova market at all<sup>3</sup>!
- In the case of tomatoes, large international breeders register their varieties first in the EU, and only after that they might come to Moldova. Smaller international tomato breeders are registering their varieties in Moldova only rarely;
- The registration of tomato varieties by international breeders is made more attractive by several marketing factors:

<sup>3</sup> The fact that such renowned breeders as Better3fruit ([www.better3fruit.com](http://www.better3fruit.com)) and INRA ([www.pomme-ariane.com](http://www.pomme-ariane.com)) have applied for registration of their apple varieties in Ukraine ([sops.gov.ua](http://sops.gov.ua)), but neglected Moldova confirms the low attractiveness of Moldova for international breeders.

- ♦ Most of the seeds are hybrids (no farm saving possible), so the sales to the same customer are perpetuating from year to year, which does not apply to the cases of apples and grapes;
- ♦ Sales of tomato varieties improve the sales of other inputs marketed by the international company (such as pesticides), again not the case for apple and grape breeders.

**Table 5: Moldova seed market potential**

Crop	Ha planted annually	Seed/ha	Total seeds	Royalty per seed	Royalty market
<b>Apples</b>	3,000	1,500	4,500,000	€ 0.50	€ 2,250,000
<b>Grapes</b>	2,000	1,000	2,000,000	€ 0.50	€ 1,000,000
<b>Tomatoes</b>	1,800	40,000	72,000,000	€ 0.03	€ 2,160,000

In addition, international breeders are likely to view weak enforcement of plant variety protection legislation as another negative factor when assessing the Moldovan seed market.

Expected economic impact and risk

#### *Impact on apple value chain*

Impacts of the system of plant variety registration on the competitiveness of the apple value chain are the most complex, and probably the most difficult to estimate. Segmentation of buyers' and consumers' preferences is part of the reason: there are definitive consumer preferences for color (yellow, green, red, bi-color) and taste (acid, sweet, neutral). Buyers pay a lot of attention to suitability for transport and shelf-life. In addition, growers have to find the right balance between ease of growing, consistent yields, consistent coloring and sizing, susceptibility to production diseases and post-harvest disorders. In addition, the transition to intensive planting schemes, typically lowering unit costs and increasing overall quality, also calls for new varieties, since many older kinds are not suitable for this type of planting schemes.

A number of international breeders are trying to release improved varieties, a significant flow of new releases being clones and mutations of some older varieties. There are some typical examples relevant for Moldova:

- The standard Golden Delicious variety (the main global variety which accounts for 25 percent of apple production in Moldova) is very susceptible to russetting, while the Golden Delicious Reinders clone is totally immune to this issue;
- Gala and its clones are varieties very much appreciated by consumers for color and taste; its cultivation has increased significantly. It became popular in US in the 1970s and in worldwide in 1980s. Recently it became the world's second variety (18 percent of orchards). It is a variety growers have to have in their orchards. However, it was not until 2009 that an importer applied for its registration. The variety is still under official testing and cannot be legally imported and planted. Because the market is paying a big premium for this early vari-

ety (growers frequently sell it for MDL 8/kg, compared to others at MDL 5/kg), some Moldovan growers have disregarded legal risks and planted this variety under a different name;

- Green apples traditionally command a premium price on the Russian market, due to consumers associating green color and acidity with vitamins and health. The only green variety available to Moldovan growers is Reinette Simerenko, which was bred in the USSR. Granny Smith, an old international variety, is in official registration testing since 2006 and still not allowed to be planted. However, both these varieties are highly susceptible to scab (the main apple disease). International breeders have therefore recently released several scab-resistant clones (such as Smeralda by CIV from Italy). When Granny Smith will be finally legally available to Moldovan growers, in all likelihood all international competitors will be already growing the scab-resistant clones.

**Table 6: Variety registration case study for a 10 ha orchard (Golden Delicious)**

Cost items	10 ha Golden Reinders	10 ha Golden Delicious	Diff
Crop protection means	\$21,000	\$21,000	\$0
Materials	\$7,200	\$7,200	\$0
Labor (production)	\$13,200	\$13,200	\$0
Labor (harvesting)	\$3,900	\$3,900	\$0
Other production costs	\$14,100	\$14,100	\$0
<b>Total production costs</b>	<b>\$59,400</b>	<b>\$59,400</b>	<b>\$0</b>
Fresh market yield, MT/ha	30	27	3
Unit cost, \$/MT	\$198	\$220	-\$22
Sales price, \$/MT	\$424	\$424	\$0
Unit margin, \$/MT	\$226	\$204	\$22
Grower margin	\$67,800	\$55,080	\$12,720
Grower's sales	\$127,200	\$114,480	\$12,720

Source: Production budget from the ACED Apple Value Chain Study

In the orchards planted with the standard Golden Delicious variety, typically 10-15 percent of the production is severely russeted and has to be sold for processing, at a much lower price. If growers were able to switch to a russeting-resistant variety, they could increase the fresh market yields by 10 percent (equal to a unit cost decrease of over 9 percent). In the case of a 10 ha orchard, this would bring an additional income of USD 12,720. Extrapolating to the entire value chain exports of 200,000 MT, with Golden Delicious accounting for 20 percent of the total, this represents USD 1.7 million of lost competitiveness.<sup>4</sup>

**Scoring:** 7<sup>5</sup>

<sup>4</sup> These estimates should not be viewed as comprehensive appraisals of the economic costs of regulations. They are intended to rank the constraints, and single-period estimates of the direct impact are sufficient for that purpose. More detailed assessments of the exact magnitude of the economic costs call for more complex econometric models.

<sup>5</sup> This represents the score on the strategic decision matrix on a scale of 1 to 7.

*Impact on table grape value chain*

Moldova is situated at the northern limit of profitable table grape growing. As a result, growers are relying on local varieties. All popular international varieties have high risk of not surviving harsh winters, when temperatures could drop to  $-30^{\circ}\text{C}$ .

There were attempts to bring international seedless varieties, and official registration was initiated, but without success. The failure was not related to the variety registration procedures, but rather the need to adopt totally different production technologies to obtain quality grapes and mitigate the risk of freezing damage. Stakeholders in the table grape value chain therefore maintain that variety registration is not an issue in Moldova.

**Scoring: 1***Impact on tomato value chain*

The major impacts of the limitation imposed by the need to register tomato varieties are:

- For the market segment of round tomatoes for local market (where most of the registration occurs), the cost of seeds increases because of the relatively low number of suppliers;
- For market segments of round tomatoes for export, cherry tomatoes and plum tomatoes, lagging registration severely limits the choice of varieties, entailing a number of issues ranging from lower yields to barriers to profitable operations.

**High cost of seeds**

The need to register a variety acts as a barrier for small and medium-size international tomato breeders, limiting the intensity of competition among seed suppliers. As result, the cost of seeds is higher than in neighboring countries. For example, the cost of 1,000 seeds of the Abellus F1 hybrid by RijkZwaan (for greenhouse cultivation) is USD 135 in Moldova versus just USD 95 in Ukraine (70 percent of the Moldovan price).

**Table 7: Variety registration case study for a tomato greenhouse (500m<sup>2</sup>)**

Cost item	Current costs (MDL)	Share	Potential costs (MDL)	Diff
Installation of GH Structure	2,093	5%	2,093	0
Soil Preparation & Fertilization	6,300	16%	6,300	0
Seedlings	17,600	44%	16,513	1,007
<i>incl. seeds</i>	3,400	9%	2,393	1,007
Inputs (mulch, wires, irrigation system)	2,280	6%	2,280	0
Plant care	5,300	13%	5,300	0
Fertigation /during the harvesting/	1,207	3%	1,207	0
Harvesting	3,600	9%	3,600	0
Taking out plants	400	1%	400	0
Taxes	1,020	3%	1,020	0
<b>Total Production Costs</b>	<b>39,800</b>		<b>38,793</b>	<b>1,007</b>

Source: ACED Tomato Value Chain Study

The cost of seeds represents 8.5 percent of total production costs. If the price were reduced to the Ukrainian level, Moldovan growers would decrease their costs by 2.5 percent, or USD 1,007 per each for a greenhouse of 500 square meters. Extrapolating the issue to the entire production under protected area (around 300 ha), the total cost to the industry is USD 6.0 million per year.

For the open-field hybrids (for example, Bobcat F1 by Syngenta) similar differences in seed costs were noted (costs increase by USD 125 /ha). Using the conservative estimation of 1,500 ha open-field tomato production, the cost of the constraint to the industry is USD 187,500.

#### Lost export opportunities

The ACED Tomato Value Chain Study highlighted a strong link between the lack of varieties suitable for long-distance shipping and the small volume of tomato exports from Moldova. Indeed, neighboring Ukraine, with similar climatic conditions, was able to export 76,000 tons of fresh tomatoes in 2011 versus 2,200 tons of Moldova. Country size is a factor, of course, but not the decisive one: Moldova is exporting 200,000 tons of apples versus 100,000 tons from Ukraine.

In 2011, Moldova produced 57,800 tons of greenhouse tomatoes (overall grower profit margin of USD 7.4 million) and 28,300 tons of open-field tomatoes (overall grower profit margin of USD 2.8 million). Each 10 percent of output increase as a consequence of opening Moldova to new varieties would lead to an increase of USD 1.2 million profits to the Moldovan growers.

#### Scoring: 7

#### Likely spillover effects

A reform of the system of mandatory testing and registration of new plant varieties would have positive impacts beyond the three value chains that this study focuses on. For example, several fruit growers have identified sweet cherries as a potential target for diversification of their business. Training events and study tours are providing support; the Government has increased the subsidies to stimulate new intensive plantings. However, there is no registration of any dwarfing rootstock (such as Gisela, GF or MaxMa series) or modern sweet cherry variety adapted to dwarfing production technologies.

A reform of the current system also may have an impact on the value of actual registrations. The process to date does little to lower the risk for producers. With a more effective system, risk management is likely to benefit.

**Scoring: 7**

The magnitude of the action required to relieve constraint

An important milestone in the literature on variety registration is a document published by the World Bank, "Easing Barriers to Movement of Plant Varieties for Agricultural Development" (World Bank Discussion Paper nr. 367). The document recommends:

- "to encourage variety introductions by private companies... (1) make variety registration voluntary; in other words, allow companies to sell seed of varieties that government has not tested and approved".
- Alternatively, if "there is too much opposition to end compulsory variety registration, then (2) limit compulsory variety registration to a few major crops [our note: food security crops such as corn or wheat], allowing voluntary registration for other crops; and/or (3) make registration automatic for varieties that are already registered in a list of other countries."

Whatever the change adopted, it will require amendments to the Law on Seeds by the Parliament, and changes by the Government of several regulations that are implementing the Law. It may have also institutional consequences, as the role of lead institutions is likely to change.

**Scoring: 6**

Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Any of parties represented in Parliament, within specialized parliamentary commissions, when proposing changes to the Law on Seeds;
- the Government of Moldova: could present it as own Law modification proposal;
- the Ministry of Agriculture and Food Industry: could initiate the Governmental proposal and is critical in the implementation phase.

We do not expect any major barriers to introduce reforms that will harmonize the system in Moldova with that in member countries of the European Union.

**Scoring: 6**

External incentives

The World Bank has recommended the changes for several years already, and is mentioning the need for change in all its papers related to Moldovan agriculture. Changes in the system could also be viewed as part of the process of harmonization of Moldova legislation with that of EU, although it is currently not explicitly required.

**Scoring: 7**

Advocacy and support

There is strong support from fruit and vegetable growers; some key personnel of MAFI are also strong supporters of the idea. The World Bank or the ACED project could provide legal support in drafting the new framework and to share the best practices in the field.

**Scoring: 6**

## Opposition

The main opposition will come from the people and institutions that are playing key roles in the current system. Vested interests may include opportunities for informal charges for issuing some kind of permits circumventing the legal norms.

Another type of opposition could come from those looking at the proposed changes as an economic risk for farmers or a food security risk for the whole country. A careful review of the actual performance of the current system, which creates barriers to rapid innovation without effectively mitigating risks, is likely to transform that opposition into advocacy groups of the proposed changes.

**Scoring: 4**

## Resources required

The principal resources required for any changes will be related to the preparation of a sound RIA, comparing the implications of alternative ways of addressing the competitiveness constraints related to a dysfunctional variety testing and registration system.

**Scoring: 7****Poor regulation of access to surface water for irrigation purposes**

## Nature of the constraint

Water is a key ingredient for a competitive production of horticultural crops, because of its impact on yields and quality. Surface water basins are the major source of water for Moldovan HVA production. In many cases, the lakes are used simultaneously for several purposes by different entities. Moldova uses different arrangements for surface water management:

- The lake is owned by local authorities;
- The lake is rented to a company that established a fish farm;
- The lake water is used for irrigation purposes by the growers abutting the lake.

Frequently there are conflicts between water users; usually the lake lessee forbids any use of water. Such cases are poorly regulated by the current Water Code (Code nr. 1532 dated June 22, 1993) and its implementing regulations, although it seems that they to assign the priority to the user of water for irrigation purposes.

Recently the Parliament approved the new Water Law (nr. 272 dated December 23, 2011) that will replace the old Water Code starting with October 26, 2013. Article 24 of the Law clearly specifies the higher priority of the irrigation use versus all other uses, except drinking and household water use. However, no implementing regulations exist, and enforcement of existing regulation in the past has been less than robust.

### Expected economic impact and risk

Little is known about the incidence of water use conflicts; we assumed that they are more pertinent to the value chains that are located in the areas with a relatively higher number of lakes, and to the cases where value chain participants are relatively smaller (lower bargaining power).

**Scoring:** Apple value chain – 4  
Table grape value chain – 2  
Tomato value chain - 3

### Likely spillover effects

**Scoring: 5**

The magnitude of the action required to relieve constraint

The action calls for new regulations to be adopted by the Government of Moldova.

**Scoring: 4**

### Implementing and supporting institutions

The institutions to be involved:

- Government of Moldova;
- Ministry of Agriculture and Food Industry;
- Ministry of Environment;
- Apele Moldovei Agency.

**Scoring: 4**

### External incentives

The new Water Law was approved as part of Government obligations for MCC Compact implementation. Moldova's partners are interested in improving the systems used for irrigation.

**Scoring: 5**

### Advocacy and support

The Irrigation Sector Reform Activity (ISRA), a component of the MCC Compact, could provide implementation support. Strong support is likely from growers located in the central and northern part of the country.

**Scoring: 5**

### Opposition

**Scoring: 3**

## Resources required

Resource requirements appear moderate, limited primarily to studies and assessments.

**Scoring: 5**

## Restricted access to underground water for irrigation purposes

### Nature of the constraint

Water is a key ingredient for a competitive production of horticultural crops, because of its impact on yields and quality. Rains and surface water basins have been the major sources of water for Moldovan HVA production. Precipitation varies, and conditions may have become more unreliable as a result of global warming; there have been several droughts recorded officially in Moldova in recent years.

Moldova has a number of areas suitable for HVA production (soil conditions, workforce, supporting infrastructure, etc.), except for access to reliable and continuous source of surface water. The use of underground water could be the solution, but it is poorly regulated in the current legislation.

The article 46 of the current Water Code (Code nr. 1532 dated June 22, 1993) generally prohibits the use of underground water for purposes other than supply of drinking and household water. However, for the areas without sufficient surface water and with enough underground water reserves, competent Government water management institutions could allow other uses of underground water.

The lack of details in the Water Code and other regulations has translated into a “de facto” ban of the use of underground water for irrigation purposes. A side effect of poor regulatory oversight is the unaccounted existence of artesian wells drilled without Government authorization, although some of them could have been allowed to operate, since they comply with the spirit of the law.

Recently the Parliament approved the new Water Law (nr. 272 dated December 23, 2011) that will replace the old Water Code starting in October 26, 2013. The article 45 of the Law basically has the exact wording of article 46 from the Water Code, except for clear identification of the Government as the competent authority to allow the use of underground water for irrigation purposes. Still, no implementation regulations exist.

### Expected impact and risk

Little is known about the state of underground water reserves in Moldova and their suitability for irrigation purposes. Clearly, the removal of the “de facto” ban would have the most effect on the table grape sector: only 5 percent of the table grape cultivation area is currently irrigated. If we assume that underground water would be used to irrigate 15 percent of vineyards and the yield will increase by roughly 25 percent, the reforms would bring USD 1.8 million to the value chain.

The extent of the potential use of underground water by the apple sector is lower, because the apple orchards are mainly located in the Northern part of the country, where the surface water is more abundant.

**Scoring:**

- Apple value chain – 3
- Table grape value chain – 7
- Tomato value chain - 5

Likely spillover effects

**Scoring: 5**

The magnitude of the action required to alleviate the constraint

The action calls for new regulations to be adopted by the Government of Moldova.

**Scoring: 4**

Implementing and supporting institutions

The institutions to be involved:

- Government of Moldova;
- Ministry of Agriculture and Food Industry;
- Ministry of Environment;
- Apele Moldovei Agency.

**Scoring: 4**

External incentives

The new Water Law was approved as part of Government obligations for MCC Compact implementation.

**Scoring: 5**

Advocacy and support

The Irrigation Sector Reform Activity (ISRA), a component of the MCC Compact, could provide implementation support. Strong support is also likely from growers located in the southern part of the country.

**Scoring: 5**

Opposition

**Scoring: 3**

Resources required

Some resources would be required in terms of studies and assessments.

**Scoring: 5**

## Expensive access to electricity grid

### Nature of the constraint

Fruit and vegetable producers, in particular greenhouse operations, tend to be located at a distance to densely populated areas. Their relatively isolated location creates problems with respect to infrastructure, especially access to the electrical grid. Electricity distribution companies charge customers for the installation of connections to the distribution grid. The investment costs for the necessary electrical equipment—cables, transformers, pylons, etc.—can be substantial. At the same time, the electrical equipment remains the property of the distribution company.

Law of 23.12.2009 N124 on electricity regulates the activities of the electricity distribution companies. The legislative provisions are complemented by the Decisions of ANRE (National Agency for Energy Regulation): Decision nr. 393 of 15.12.2010 on the approval of the provision and use of electricity, and Decision nr.439 of 23.11.2011 on the approval of the extension of electricity distribution networks. In addition ANRE also regulates the extension of natural gas distribution.

Rural businesses also have maintenance responsibilities for the operation and maintenance of electrical equipment they bought and installed, and the observation of safety rules. The operator of the equipment must possess the necessary knowledge on rules of use of electricity and the security techniques, which is normally outside the expertise of agricultural producers. If they fail to meet their maintenance obligations, customers may be disconnected from the grid.

### Expected impact and risk

To the grower, the economic impact of the need to invest in the high voltage line adds to the cost of the initial investment. The maintenance obligations add to the cost of operations. The analysis focuses on the likely investment costs, since annual maintenance costs are likely to be proportional. (There is also a risk of losing access in case of some rule infraction.

#### *Apple value chain*

We estimate that annually twelve apple cold storage operations need to invest USD 150,000 each in high voltage lines. As a result, the capacity of the storage facilities is smaller than intended, because the access to long-term finance is limited. The investor intending to build a cold storage with a capacity of 1,000 MT will end up building only an 800 MT facility. The annual lost opportunity comes to around USD 76,000 per cold storage facility, or USD 922,000 for the value chain.

#### *Table grape value chain*

We estimate that annually six table grapes cold storage operations need to invest USD 50,000 each in high voltage lines. The impact reasoning is similar to that for the apple value chain: the grower intending to build a 300 MT storage will end up building only a 245 MT facility. The annual lost opportunity is around USD 51,000 per cold storage, or USD 306,000 for the entire value chain.

#### *Tomato value chain*

We assume that investors will build annually 25 ha of greenhouses, and they will need to invest USD 50,000 each in high voltage lines. Based on the same reasoning as above, we assume that the grower intending to build 1ha of greenhouse space will end up building only 0,928 ha. The annual lost opportunity is estimated at USD 28,174 per 1 ha green house, or some USD 700,000 USD for the value chain as a whole.

### **Scoring: 3**

### Likely spillover effects

We do not see any likely spillover effects.

**Scoring: 3**

The magnitude of the action required to address constraint

According to article 40 of Law No. 124 on electricity, the supplier is held *responsible for expanding* networks, and for *the cost of expansion*. The provisions of ANRE Decision nr.439 p.6, the procedure to increase the electricity distribution network, described in this Regulation shall apply in case of *new towns, neighborhoods and industrial areas or new areas of growing towns*, existing under the general urban plans, zoning approved by local authorities. In practice, the ruling is interpreted as *not* applying to individual installations. Potential customers are therefore refused in terms of network expansion.

But given that the definition of agricultural consumer is provided in p. 4 of the Regulation for the provision and use of electricity, and on p. 6 of Regulation on the extension of networks, it may be possible to add as *beneficiary agricultural producers* as well to the list of potential expansion targets. This legal adjustment also should include the case when investment is already done by the farmer, imposing the distribution company to compensate all investment costs, since the distribution company will become the owner of the new equipment.

**Scoring: 3**

### Implementing and supporting institutions

The required legislative changes of Law No. 124 on electricity and ANRE Decision nr.439 call for a wide range of institutions that could be responsible for taking the lead on this policy response:

- Any of the parties represented in Parliament, within the specialized parliamentary commission;
- Government of Moldova, which could present its own legislative amendments;
- ANRE.

**Scoring: 1**

### External incentives

Some external support could be obtained for this constraint.

**Scoring: 4**

### Advocacy and support

**Scoring: 5**

### Opposition

Opposition would be strongly expressed by the distribution companies, and most likely from ANRE itself.

**Scoring: 3**

## Resources required

Some resources would be required in terms of studies and assessments.

**Scoring: 5**

## Repeated and expensive testing of seedlings

### Nature of the constraint

Local apple producers are facing problems related to the imports of rootstocks. They are obliged to perform repeated testing of the rootstocks, even though imported rootstock is already accompanied by certified European laboratory testing. As a result, apple producers pay a fee of USD 2,000 for the import of each batch (truck) of seedlings, rootstocks or cuttings.

### Expected impact and risk

Strengthening the presented hypothesis will lead to the following calculation:

Annual # of imported seedlings	450,000
Annual # of imported batches	50
Testing cost per batch	USD 2,000
Total cost due to testing	USD 100,000

Thus, the annual losses for the apple value chain as a result of the constraint amount to approximately USD 100 000.

**Scoring: 5**

### Likely spillover effects

Abolishment the requirement for the repeated testing could be extended to other fruit crops, such as plums and sweet cherries.

**Scoring: 4**

The magnitude of the action required to alleviate the constraint

The following are the legislative provisions governing the requirements for producers and traders on safe planting material and technical conditions of quality, which include provisions calling for the repeated testing of the certified rootstock:

- Decree approving Technical Regulation "Propagating material and fruit tree seedlings, berries and strawberry. C" no. 51 of 19.03.2007 Official Gazette of 17.08.2007 and nr.127-130/497

- Decree on approval of the production, testing, certification and marketing of propagating, planting fruit trees no. 198 of 22.08.2005 Official Gazette of the Republic of Moldova nr.47-50/168 of 24.03.2006

These regulations are effectively outdated. The Ministry of Agriculture and Food Industry is in the process of preparing a draft Government Decision on approving Technical Regulation regarding the "production, testing, certification and marketing of propagating material and fruit plants." That revision needs to include provisions to eliminate regulatory constraints.

**Scoring: 6**

Implementing and supporting institutions

The Ministry of Agriculture and Food Industry could initiate the Government's proposals, and is critical in the implementation phase.

**Scoring: 5**

External incentives

The proposed changes could be presented as required by the process of Moldova legislation harmonization with that of EU, although that may not be technically correct.

**Scoring: 4**

Advocacy and support

There is strong support from apple and MAFI representatives.

**Scoring: 6**

Opposition

The main opposition will come from the people and institutions that operate the current system, including those that used it for personal advantage (for example, receiving of bribes when issuing some kind of permits circumventing the legal norms).

Another type of opposition could come from those looking at the proposed changes as an economic risk for farmers or a food security risk for the whole country. A careful assessment of the impact of the proposed changes on the food safety situation—given performance of the current system—is likely to meet these arguments, and may turn the opposition into support.

**Scoring: 4**

Resources required

The resources required for this change are negligible.

**Scoring: 7**

## Import duties: 10 percent on greenhouses and accessories

### Nature of the constraint

Moldova imports 85 percent of vegetables consumed in late fall, winter and spring. There is therefore every incentive to extend the growing season. Growing vegetables can be competitive only when there is adequate investment in agricultural technologies, especially greenhouse facilities.

Greenhouses that once occupied an area of thousands of hectares in Moldova are now unused. Turkey, as Moldova's main competitor for the Russian market has more than 53,000 hectares under greenhouses. At the same time, Turkey exported only 5 percent of total domestic production of vegetables, yet is still among the largest suppliers to the European and CIS markets. Moldova cannot afford the luxury of imposing additional cost for potential entrepreneurs who want to invest in greenhouses.

However, the Law on Customs Tariff No. 1380-XIII of 20 November 1997 levies an import tariff of 10 percent on greenhouse structures. Entrepreneurs who want to invest in greenhouses and import new technologies are thus faced with a 10-percent surcharge compared to their competitors elsewhere. The tariff cannot be viewed as some kind of protection, since there is no greenhouse production in Moldova. Subsidies provided by the state, no matter how significant, will be either wasted or misappropriated, or be used just to ensure survival.

### Expected impact and risk

In 2011 in the country was imported about 22,000 m<sup>2</sup> of greenhouse structures. The cost of a Multispan type of greenhouse is USD 70/m<sup>2</sup>. The total cost of imported greenhouses in 2011 was USD 1,540,000, thus the total additional cost to farmers amounted to USD 155,000, and USD 28,000 in lost opportunities. We estimate that a 10-percent increase in imports of greenhouse structures which would imply a USD 2 million investment in the sector for 2012 or USD 200,000 in paid import taxes, which translated into lost opportunities is equivalent to almost USD 280,000.

### Scoring: 3

### Likely spillover effects

Lifting the tax would have rather low or medium affect to other value chains, with low multiplier effect for the rest of the economy.

### Scoring: 3

### The magnitude of the action required to relieve constraint

Removing this constraint involves changing the Customs Code. Procedural change may be easier during the adoption of the annual national budget. It is therefore reasonable to assume that changes could take place on December 31, 2013, e.g. 2014 budget adoption.

### Scoring: 5

### Implementing and supporting institutions

Since we are discussing legislative changes, which take place within the budgetary process, here a wide range of institution could be responsible for supporting the necessary changes:

- Any of the parties represented in Parliament, within the specialized parliamentary commissions, once negotiating the draft budget received from the Government.
- Government of Moldova: could present it as own proposal, within the draft version of the budget, which is developed by Government.
- Ministry of Agriculture/Ministry of Finance: During the preparation of the draft budget, all Ministries would submit their proposal to the Ministry of Finance, which ultimately will determine if any of these proposals are accepted.

**Scoring: 3**

External incentives

The required action is entirely domestic.

**Scoring: 1**

Advocacy and support

**Scoring: 4**

Opposition

The Ministry of Finance may oppose these changes, given Government obligations to the IMF. Any action that is likely to lower tax revenues side should normally be matched by corresponding increases elsewhere. While the amounts may not be all that significant, it may be possible to suggest options for raising revenues that could be activated at the same time.

**Scoring: 4**

Resources required

The resources required for implementation are insignificant.

**Scoring: 7**

## Compulsory registration of biological control agents

Nature of the constraint

In order to be marketed in Moldova, any biological control agent (BCA), such as microorganisms, should pass the official registration procedures, as regulated by the Law on Crop Protection nr. 612 dated October 1, 1999. The BCA registration procedure is identical to that for synthetic pesticides. It does not take into consideration the specificities of micro-organisms or natural extracts (which already exist in nature). Since Moldova represents a very small market for BCA, BCA manufacturers have little incentive to obtain registration here. As result, the number of registered BCA is extremely small.

However, this issue is relevant even for large markets, such as European Union. For example, the International Biocontrol Manufacturers' Association (IBMA) has asked the EU Commission to review BCA regulations:

- BCA are frequently highly specific (e.g. semiochemicals and many micro-organisms), and they are used to control just one or a few target species or pathogens in a limited number of crops. Consequently, these products are generally developed for relatively small markets.
- At the same time manufacturers of biocontrol products, in the majority small companies with limited resources, are confronted with long lists of data requirements and a complex, time consuming and expensive registration process. Data requirements are the main hurdle for the registration of biocontrol products, and especially requirements for risk assessment are generally inadequate and too strict. The registration process as a whole is considered as “too heavy.”

Expected impact and risk

*Impact on the apple value chain*

No significant impact.

**Scoring: 1**

*Impact on the table grape value chain*

No significant impact.

**Scoring: 1**

*Impact on the tomato value chain*

Most BCAs are developed for the production systems in confined spaces, such as greenhouse tomato production. For some pests, BCA is the main protection tool in modern greenhouses. Replacing BCAs with chemical pesticides is problematic because they have a waiting period when tomato harvesting is not allowed. This results in a decrease of the yield sellable to the fresh market or, if the grower disregarded the waiting period, a product which could be harmful to the final consumer.

The use of microorganisms is realistic mainly for the large greenhouse tomato growers, as defined in the ACED Tomato Value Chain Study. For a grower managing 2 ha of greenhouses, each 5 percent loss of yield means an annual loss of USD 9,500. Extrapolating to 80 ha managed by large growers, we arrive at USD 380,000 of lost opportunities for the value chain.

**Scoring: 5**

Likely spillover effects

The biological control products are major tools for organic production systems. Integrated production, as a key part of a sustainable agriculture, is unthinkable without BCA.

**Scoring: 5**

The magnitude of the action required to relieve constraint

A potential solution is to accept BCAs that are registered in countries with a reliable official testing procedures and infrastructure, such as European Union. This requires change in the existing regulations, with direct involvement by the Parliament and Government.

**Scoring: 3**

## Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Any of the parliamentary parties, within the specialized parliamentary commission, when proposing changes to the Law on Crop Protection;
- Government of Moldova: could present its own Law modification proposal;
- Ministry of Agriculture and Food Industry: could initiate the Governmental proposal and is critical in the implementation phase.

### **Scoring: 2**

## External incentives

The proposed changes could be viewed as required by the process of Moldova legislation harmonization with that of EU, even though that is technically not correct

### **Scoring: 5**

## Advocacy and support

There is strong support from some large growers and some input suppliers.

### **Scoring: 4**

## Opposition

The main opposition will come from the people and institutions that operate the current system, including those that used it for personal advantage (for example, receiving of bribes when issuing some kind of permits circumventing the legal norms or knowingly ignoring the limitations imposed by the regulations).

### **Scoring: 3**

## Resources required

Resource requirements are minimal for the implementation of the recommended solution. It involves mainly a system to check registration status in other countries.

### **Scoring: 2**

## **Compulsory registration of fertilizers**

### Nature of the constraint

In order to be marketed in Moldova, any fertilizer is required to pass the official registration procedures, as regulated by the Law on Crop Protection nr. 612 dated October 1, 1999. The registration procedure for fertilizers is identical to that applied to synthetic pesticides.

The requirement to comply with the same rules as for synthetic pesticides is viewed as an error by international fertilizer manufacturers. Most other countries (such as EU member countries) require the manufacturers only to comply with product quality and product label standards (such as “EC Fertilizer”). Moldova also represents a small market for fertilizers; most manufacturers are neglecting Moldova and not applying for registration of their products. As result, the number of registered fertilizers is small, especially for those in liquid form (most suitable for HVA).

#### Expected impact and risk

##### *Impact on the apple value chain*

Apple growers do not feel that their crop yield or quality are affected by the limited availability of liquid fertilizers. However, they would like to have the number of available fertilizers increased, in order to increase the competition on the market and reduce liquid fertilizer costs.

A comparison with the prices for the same products in the neighboring countries showed a price disadvantage for Moldovan apple producers of 11-15 percent. Currently, a typical Moldovan apple grower spends USD 200/ha for fertilizers. A 10 ha apple grower would therefore save about USD 30/ha, or USD 300 per farm. Extrapolated at the entire value chain, we can estimate the annual impact on competitiveness as USD 450,000.

##### **Scoring: 5**

##### *Impact on the table grape value chain*

Similarly, table grape growers do not feel that their crop yield or quality are affected by the limited availability of liquid fertilizers. However, they would like to have the number of available fertilizers increased, in order to increase the competition on the market and reduce liquid fertilizer costs.

A comparison with the prices for the same products in the neighboring countries showed a price disadvantage for Moldovan grape producers of 11-15 percent. A 4 ha table grape grower would save about USD 15/ha, or USD 100 per farm. Extrapolated at the entire value chain, the annual impact on competitiveness can be estimated as USD 120,000.

##### **Scoring: 4**

##### *Impact on tomato value chain*

Because the market of fertilizers for tomato production is the smallest as size, the problem is more intense for this value chain. For the tomato value chain, the problem is not higher costs for fertilizers, but the lower yields because of missing supply of fertilizers appropriate for greenhouse tomato production.

The use of liquid fertilizers is realistic mainly for the medium and large greenhouse tomato growers, as defined in ACED Tomato Value Chain Study. For a grower managing 2 ha of greenhouses, each 5-percent loss of yield means an annual loss of USD 9,500. Extrapolating to 152 ha managed by medium and large growers, we arrive at an estimated USD 1,150,000 of lost opportunities for the value chain.

##### **Scoring: 6**

#### Likely spillover effects

The proposed changes will be beneficial for all agricultural value chains.

##### **Scoring: 5**

The magnitude of the action required to relieve constraint

A potential solution is to introduce a system similar to that of EU (monitoring compliance, without prior registration). This requires change in the existing regulations, with direct involvement by the Parliament and Government.

**Scoring: 3**

Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Any of parties represented in Parliament, within the specialized parliamentary commission, when proposing changes to the Law on Crop Protection;
- Government of Moldova: could present its own Law modification proposal;
- Ministry of Agriculture and Food Industry: could initiate the Governmental proposal and is critical in the implementation phase.

**Scoring: 2**

External incentives

As in the other cases, the proposed changes could be presented as required by the process of Moldova legislation harmonization with that of EU, even though that is not entirely correct.

**Scoring: 5**

Advocacy and support

There is strong support from some large growers and some input suppliers.

**Scoring:4**

Opposition

The main opposition will come from the people and institutions that operate the current system, including those that used it for personal advantage (for example, receiving of bribes when issuing some kind of permits circumventing the legal norms or knowingly ignoring the limitations imposed by the regulations).

**Scoring: 3**

Resources required

Resource requirements are minimal for the implementation of the recommended solution. It involves mainly a system to check registration status in other countries.

**Scoring: 2**

## Bureaucratic procedures for seasonal hiring

### Nature of the constraint

The procedures currently in effect do not distinguish between regular (full time) and seasonal employees. Employers have sometimes failed to comply with the law, resulting in illegal seasonal employment throughout the agricultural sector.

As a rule, individual employment contracts are concluded for an indefinite period. By exception, the individual may contract limited term employment only in cases prescribed by law, which is the case of the seasonal workers. Labor legislation provides for different treatment only for the period of contracts, indefinite versus limited, with no simplification of rules and labor evidence.

The conclusion and termination of seasonal individual contract is the same as in the case of simple individual contract for an indefinite term. A breach of these legal provisions may entail serious consequences for employers.

According to article 55 c) Labor Code, the employment contract may be signed as for temporary workers, and under art. 54. (2), only for the performance of temporary work in the following cases: b) for the period for up to two months, and in case of seasonal work under weather conditions and other natural conditions, is performed in a certain period of the calendar year, not exceeding 6 months.

### Expected impact and risk

Simplifying payroll employment of temporary workers by adopting a special law would bring some private and social benefits. Employers would benefit by being given the opportunity to legalize employment and labor remuneration. Thus, the economic benefits to the employer would reduce costs related to labor records, the reduction of fines imposed by the Labor Inspectorate and savings to pay income tax, determined by deducting the payroll costs.

At the same time, workers would benefit significantly. They would be treated fairly and remunerated accordingly. The reforms would bring legal guarantees for their work.

Under the current situation, more than 90 percent of seasonal employment is estimated to be illegally contracted. The public budget would benefit: the reforms would presumably shrink the informal economy, and raise revenues..

**Scoring: 7**

### Likely spillover effects

Obviously, elimination of this constraint would have a wide range effect on all value chains and SME sector as overall.

**Scoring: 7**

### The magnitude of the action required to relieve constraint

Overcoming this constraint is possible by adopting a special law, as in the case of Romania and Hungary, as derogation from Existing Labor Code. The main changes would relate to:

- A relationship between the agricultural company and seasonal worker is established without concluding a labor contract.

- Labor accounting would be simplified by introducing a simple work-out register of employees—a special register prepared by the farmer to keep track of daily laborers.
- No employee would provide activities for the same beneficiary for a period longer than 90 cumulative days during a calendar year.
- Income taxes due shall be paid by the farmer on behalf of the employee.
- The activity under this law does not confer the status of the insured employee in the public pension system, unemployment and social security system nor health insurance system. It may conclude an optional health insurance and / or pension.
- Seasonal employment is not subject to any compulsory social contributions by employee, or by the farmer.
- The legislation should provide a minimum wage per hour for the seasonal employee.

**Scoring: 1**

## Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Any of the parliamentary parties, within the specialized parliamentary commission, when proposing changes to the existing Labor Code;
- Government of Moldova: could present its own Law modification proposal;
- Ministry of Agriculture and Food Industry: could initiate the Governmental proposal and is critical in the implementation phase.

**Scoring: 1**

## External incentives

This initiative could be supported by OECD, IFC and IMF, since it would bring additional benefits to the state budget and would decrease informal employment in the economy.

**Scoring: 6**

## Advocacy and support

**Scoring: 5**

## Opposition

It is difficult to assess which specific institution or decision maker would serve as major opposition, but since it is the case of modifying the Labor Code, it would be considered as reasonable that this constraint would generate strong opposition.

**Scoring: 1**

## Resources required

We see moderate resource requirements for the design and implementation of these reforms; in particular, resources would be required for studies, or assessment for Labor Code modifications.

**Scoring: 5**

## Poor regulation of the financing for the anti-hail system

### Nature of the constraint

Hail is a major risk for Moldovan agriculture. Long-term statistics show that in Moldova hail events occur in April-September period, the average number of days with hail events being 21 per year (max – 50, min – 6). On average, 26,000 ha of agricultural crops are damaged annually.

To reduce the risk, the country is running a specialized Antihail System (Serviciul Special pentru Influențe Active asupra Proceselor Hidrometeorologice [SSIAPH]), managed by MAFI. (based on Government Decision 1120 dated October 27, 2005). The system uses silver iodide rockets that inject many extra ice-forming nuclei into the cloud at the right time and at the right place, where in weak updrafts hail formation is beginning. This approach allows reducing the average size of fully-grown hailstones. Small hailstones may melt on the way down and are less damaging anyway.

SSIAPH manages twelve special units that coordinate the activity of 108 rocket launching sites. Currently, only nine of these units are operational. The system covers 1.4 million ha (down from 2.5 million ha in 1990), or about 46 percent of the country's territory. The average annual cost for hail protection is MDL 45/ha. On average, the system needs to have a stock of 7,560 rockets per year (rocket cost ranges from USD 400 to USD 470). However, during the last three years it had financing to procure annually only around 3,000 rockets.

Government Decision 1120 defines two major ways to finance the capital and operational costs: payments from the Annual State Budget and coverage fees from farmers. The annual contributions from the State Budget (average MDL 44 million) do not cover the needs. And the revenue from the coverage fees SSIAPH cannot close the funding gap from farmer coverage fees because they are poorly regulated:

- The Government Decision Nr. 1120 stipulates a coverage fee of MDL 26/ha, which is roughly 58 percent of the actual costs of the protection;
- Collection of the coverage fee is not regulated at all.

The system is not operating in the areas located in the 15-km stretch along the borders of the country. This restriction is not imposed by GD 1120, but rather by internal SSIAPH technical regulations left from the Soviet times that were not revised since then and could disregard the recent technology advancements that mitigate some potential risks. This is a special worry for Moldovan HVA sector, as several strategic HVA development projects (such as MCC Irrigation Project) are located in these areas.

### Expected impact and risk

#### *Impact on apple value chain*

A significant part of apple production is located in Briceni, Ocnita and Soroca rayons, in the 15-km area from the border of the country. These areas have a relatively high incidence of hail, but are not protected at all by the anti-hail operations.

If a hail storm strikes an apple orchard, it is a catastrophic event for the farmer:

- Even in the best case scenario with a relatively small yield reduction, the hail will severely damage the appearance of apples, and they cannot be sold on the fresh market. All alternative uses of the crop command significantly lower prices;
- Hail will imperil the yields for the next two years, as the tree is healing from the damages incurred.

A typical 10 ha apple farm will incur a loss of USD 90,000 (USD 9,000/ha) in the year of a hail storm event, and additional yield losses of USD 25,000 in the subsequent period (USD 2,500/ha). Assuming a hail probability of 5 percent (one incidence during the life of the vineyard) for one third of the Moldovan apple crop, the annual cost of the problem for the apple value chain is at least USD 2,875,000.

**Scoring: 7**

*Impact on table grape value chain*

The table grape production is located in the Center and South of the country, in areas that are not protected at all from the hail events (except for a part of UTA Gagauzia), while having a relatively high probability of hail events.

A hail storm strike is a catastrophic event for table grape vineyards:

- Even in the best case scenario with a small degree of total yield reduction, the hail will severely damage the appearance of grapes, and they cannot be sold on the fresh market. All alternative uses of the crop command significantly lower prices;
- Hail damage will imperil the yields for the next two years, as the vine is healing from the damages incurred.

For a typical 4 ha table grape farm, the hail event will result of loss of USD 16,000 (USD 4,000/ha) in the year of the event, and additional yield losses of USD 6,000 in the subsequent period (USD 1,500/ha). Assuming a hail probability of 3 percent (one incidence during the life of the vineyard) for all existing 8,000 ha of table grape vineyards, the annual cost of the problem for the table grape value chain is at least USD 1,320,000.

**Scoring: 7**

*Impact on tomato value chain*

The major tomato producing areas of Moldova are located in areas with low incidence of hail events. The construction of the greenhouse or tunnel provides additional protection for the crop. As a result, the estimated impacts for greenhouse tomato growers are insignificant.

**Scoring: 3**



### Likely spillover effects

An improved anti-hail system will provide protection to all HVA crops that are grown in open field.

**Scoring: 7**

The magnitude of the action required to relieve constraint

To make the required changes, the Government should drastically improve the regulations covering SSI-APH (such as Government Decision 1120). For farmer coverage fees to be compulsory (equivalent of a tax), Parliamentary involvement and approval will be needed.

Alternatively, improvements in crop insurance systems could mitigate the risks associated with hail damages.

**Scoring: 3**

### Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Government of Moldova: review of SSIAPH regulations;
- Ministry of Agriculture and Food Industry: could initiate the Governmental proposal and is critical in the implementation phase;
- Parliament, if compulsory coverage fees will be introduced.

**Scoring: 2**

### External incentives

The World Bank is has recommended against any additional investment by the Government of Moldova in the anti-hail system. The neighboring countries (Romania and Ukraine) could object to SSIAPH activity in the bordering regions.

**Scoring: 1**

### Advocacy and support

There is strong support from fruit and grape growers, but also field crop growers. SSIAPH and MAFI are already looking for solutions (a draft policy was issued in January 2012).

**Scoring: 6**

### Opposition

The Ministry of Finance could resist any increase in the funding of SSIAPH. If farmer coverage fees will start to be collected, there is the risk that the Government will start reducing its contributions from the State Budget.

**Scoring: 3**

## Resources required

The improvements in the system or alternative solutions will need investments evaluated at millions of USD.

**Scoring: 2**

## Income tax on capital gains at exchange of land plots

### Nature of the constraint

Successful farm operations tend to expand, seeking to acquire more land. Land reform in Moldova has resulted in a high degree of fragmentation of agricultural land ownership. That situation makes it difficult to consolidate land holdings as farms expand. Many farmers in Moldovan HVA value chains own several plots of land, sometimes quite far away from each other. When a farmer wants to extend his business (for example, plant another 5 ha of grapes adjacent to the existing vineyard), one way to get access to additional land is to exchange the land plots with his/her neighbor.

A recent change to the Fiscal Code (Law nr.267 dated December 23, 2011) has imposed a capital gains tax on the sale of agricultural land. Since the exchange of land plots is considered as two sales operations, the land exchange is taxable, even when the total area and land quality hasn't changed (just the location).

One example may illustrate this problem: One hectare of land exchanged for one hectare. The cost of land at privatization (and reform) was USD 250, while the current market price is USD 2,000. The capital gain is USD 1,750, and the corresponding income tax is USD 131 (USD 1750 x 15% / 2).

### Expected impact and risk

Currently Moldovan farmers annually establish about 4,000 ha of new fruit orchards and 2,500 ha of new table grape vineyards. Up to 10% of these plots resulted from exchange of land plots. The income tax on capital gains at land exchange means USD 52,400 of additional costs for the apple value chain and USD 32,750 for the table grape value chain.

<b>Scoring:</b>	<b>Tomato value chain</b>	<b>1</b>
	<b>Table grape value chain</b>	<b>3</b>
	<b>Apple value chain</b>	<b>3</b>

### Likely spillover effects

The abolishment of the income tax on capital gains at land exchange will be beneficial for all agricultural value chains, especially field crops (where the areas exchanged is much larger).

**Scoring: 5**

### The magnitude of the action required to relieve constraint

The improvement requires a change in the existing regulations, with direct involvement by the Parliament and Government.

**Scoring: 3**

## Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Any of the parliamentary parties, within the specialized parliamentary commission, when proposing changes to the Fiscal Code;
- Government of Moldova: could present its own Law modification proposal;
- Ministry of Agriculture and Food Industry or Ministry of Finance: could initiate the Governmental proposal.

### **Scoring: 2**

## External incentives

None

### **Scoring: 1**

## Advocacy and support

Some support from HVA value chain companies, strong backing from field crop growers.

### **Scoring: 4**

## Opposition

The proposed changes are likely to reduce revenues to the State Budget.

### **Scoring: 3**

## Resources required

Resources required for implementation are minimal.

### **Scoring: 7**

## 15-percent import duty on insulation panels used in cold storages

### Nature of the constraint

According to the Customs Code of the Republic of Moldova, an import duty of 15 percent on the declared value is levied on imported polyurethane insulation panels. Currently, Moldova does not produce the polyurethane panels locally, which deliver the best thermal insulation in cold storage rooms. The import duty is therefore solely a revenue measure, and in all probability putting producers at a competitive disadvantage.

## Expected impact and risk

*Impact on the apple value chain*

The business case for a typical company that builds a 1,000 MT cold storage using borrowed funds with a 7-year tenor and paying this import duty shows the following results:

- The money borrowed allows to build only 948 tons of storage capacities (5 percent decrease);
- The sales and export volumes of products with high added value decrease;
- Producers face USD 175,000 cumulative lost profits over 7 years because of this tax;
- The reimbursement period for the investment project expands.

As a result, producers may be tempted to buy cheaper insulation panels from local producers (not polyurethane), which are of lower quality, and may jeopardize apple quality. Less efficient panels from local production increase energy costs, and their lifespan is shorter. According to agricultural producers who have used panels produced in Moldova, they had quality problems when opening cold storage rooms since these panels could not maintain the correct temperature and atmosphere inside the rooms.

In order to calculate the impact of insulation panel tax on agricultural producers, the following cases were analyzed: The company builds a cold storage facility with a capacity of 1,000 MT to store its own apple production. The resources are borrowed from a bank for 7 years. **Case 1** – The company does not pay any insulation panel tax. Therefore it manages to build the cold storage with a capacity of 1,000 tons. **Case 2** – the company pays the 15 percent duty tax, and will therefore sufficient resources to build a cold storage with only 948 MT.

**Table 8: Apple value chain case study of the import duty  
for insulation panels**

*Assumptions*

Item	Value
Cost for 1,000 MT of cold storage	USD 750,000
Insulation panels cost from total cost of cold storage, 40 percent	USD 262 500
15% tax on panels to be paid	USD 39 375
Number of MT volume not constructed because of duty	52,5

**Lost profit calculation**

Net Profit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Case 1	169 741	175 268	188 575	209 295	230 770	253 036	275 953
Case 2	148 244	152 697	164 876	184 410	204 641	225 601	247 146
Lost profit (Case 1 - Case 2)	21 496	22 571	23 700	24 885	26 129	27 435	28 807
Cumulative Lost Profit in 7 years	<b>175 023</b>						

**Project profitability assessment**

	Case 1	Case 2
Reimbursement period	4,2 years	4,8 years
Net Present Value	\$494 122	\$348 540
Internal Rate of Return	26%	22%

The calculations show that 52 tons of unconstructed cold storage spaces will produce a cumulative loss of profit of USD 175.023 over 7 years, taking into consideration of selling 52 tons of apples at a lower price from the orchard. The duty decreases the reimbursement period for the implemented project and lowers the internal rate of return.<sup>6</sup>

**The global impact on the sector over the next 10 years**

Statistics show that the apple sector will produce on average 400,000 MT of apples for cold storages. At the moment there is cold storage space for about 130,000 MT. There's a deficit of 270,000 MT of cold storage space to be built over the next 10 years.

If the 15% tax will persist over the analyzed period then the economic impact will be the following:

Investment Article	Unit price	Total sum, USD
Cold storage construction cost (1,000 MT)	USD 750,000	303,750,000
Apple production in Moldova, tons	USD 400,000	

<sup>6</sup> Note that this calculation represents a departure from our usual focus on the first-year impacts; the explanation is the incorporation of borrowed funds.

Investment Article	Unit price	Total sum, USD
Yearly increase in production	10%	
Operational Cold storages in 2011, tons	USD 130,000	
Apples sold from the field	USD 270 000	
Cumulative nr. of cold storages needed in 10 years to cover the apple production in Moldova (1000 tons each)	405	
Sandwich panels cost from total price of cold storage	40%	USD 121,500,000
15% taxes paid at customs from sandwich panels total price	15%	USD 18,225,000
Number of cold storages not built in 10 years because of tax	27	
Volume of apples not stored in those cold storages (MT)	27,000	
Yearly missed sales of panel producers	USD 8,100,000	
Price of apples sold from orchards	USD 0.33/kg	
Price of apples sold from cold storage	USD 0.65/kg	
Profit lost at sector level in 10 years	USD 8,550,000	

If we assume that in 10 years 405 more businesses will build cold storages, because of the need to cover annual production of fresh apples, then the impact will be a major economic cost to the value chain and to the economy.

Indicator	Value
Lost Profit for one build cold storage, USD	USD 175 023
Cold storages to be built in 10 years	405
Estimated lost profit at value chain level, USD	USD 70,875,000

**Market access:** Lifting the duty on insulation panels in Moldova could have a significant effect on the business environment in general. An analysis of the data over 10 years suggests that we could have missed opportunities to increase our apple storage potential. If we take into consideration the estimated

27,000 MT of storage volumes *not* built, the producers will not be able to break on new markets on demand for fresh fruits. There is an urgent need for developing Moldova's post-harvest infrastructure in order to engage in long term contracts and deliver apples from November till May.

**Costs (and prices):** For the same level of investment cost, abolishing this constraint is likely to contribute to an increasing production capacity for fruits. The economic analysis suggested that with the duty, apple operations would be characterized by a profitability index of 1.46; after removing this duty, this index would increase to 1.66. For each lei invested, there would be a missed profit of MDL 0.20. For an estimated investment of USD 300 million over 10 years, the overall assumed lost profit for the value chain as a whole would be of about USD 70 million.

**Quality:** A main obstacle for Moldova's producers to access and maintain new and existing markets is the poor state of post-harvest infrastructure. Having a well-developed infrastructure and using it correctly can improve fruit quality and consistency.

### Scoring: 7

#### *Impact on grape value chain*

The business case for a typical company that builds a 300 tons cold storage and pays this tax shows us the following interesting facts:

- Financial resources allow the company to build only 282 MT of storage capacities (a 6-percent decrease);
- The sales (and export) volumes of products with high added value decline;
- Producers face USD 226,402 cumulative lost profits over 10 years because of this tax;

Major risks related to this issue are:

- Producers can be tempted to buy cheaper insulation panels from local producers with a lower quality;
  - ◆ Local panels increase energy costs;
  - ◆ The lifespan of panels is shorter;
- Agricultural producers who use locally produced panels report quality problems when opening cold storage rooms because these panels could not maintain the correct temperature and atmosphere inside the rooms;

In order to calculate the impact of insulation panel tax on agricultural producers, we analyzed the following cases: The company builds a cold storage with a capacity of 300 MT to store its own grape production with its own resources. **Case 1:** The company does not pay the insulation panel duty. Therefore it manages to build the cold storage with a capacity of 300 MT. **Case 2:** The company pays the 15-percent duty, therefore it will have financial resources to build a facility with only 282 MT.

Cost for 1 ton of cold storage	USD 900
Insulation panels cost from total cost of cold storage, 40%	USD 108 000
15% tax on panels to be paid	USD 16 200
Number of tons volume not constructed because of tax	18

The calculations suggest that 18 tons of not constructed cold storage spaces will produce a cumulative loss of profit of USD 226,402 over 10 years. The company will sell 18 tons of table grapes with lower price from the field.

**Impact on the sector over the next 10 years:** Statistics show that the table grape value chain produces 60,000 MT of table grapes per year; 10,000 MT are sold from existing cold storages; the rest is sold from the field. In other words, there is a deficit of 50,000 MT of cold storage spaces. If we assume that the volumes produced will grow by 10 percent each year, the sector will need almost 376 cold storages to be built over the next 10 years. That means:

- USD 6.1 million additional costs for producers (duties for import panels);
- These payments correspond to 25 cold storages that could be built, and 7,500 tons of table grapes that could be stored;
- USD 6.6 million in lost profits.

If we assume that in 10 years 376 more businesses will build cold storages, because of the need to cover annual production of fresh table grapes, then the impact will be significant.

Lost Profit for one build cold storage	USD 226,402
Cold storages to be built in 10 years	376
Assumed lost profit at value chain level	USD 85,127,152

**Scoring: 7**

*Impact on the tomato value chain*

Not significant

**Scoring: 1**

Likely spillover effects

An increase in cold storage capacity will have a direct impact on other value chains that deal with fresh agricultural products. The cold chain can be used for other products as well. Addressing this constraint could be therefore have a direct impact on other value chains, such as vegetables.

**Scoring: 5**

The magnitude of the action required to alleviate the constraint

Addressing this constraint will involve changing the Customs Code. Procedural changes may be introduced during the adoption of the annual national budget. The most likely target for the removal of this constraint is therefore December 31, 2013, that is, the launch of the 2014 budget.

**Scoring: 5**

Implementing and supporting institutions

Since we are discussing legislative changes, which take place within the budgetary process, here a wide range of institution could be responsible for supporting the necessary changes:

- Any of the parties represented in Parliament, within the specialized parliamentary commission, when negotiating the draft budget received from the Government.
- Government of Moldova: could present it as own proposal, within the draft version of the budget which is developed by Government.
- Ministry of Agriculture/Ministry of Finance: During the preparation of the draft budget, all ministries would submit their proposal to the Ministry of Finance, which ultimately will determine if any of these proposals are accepted.

We do not consider any difficulties in adoption of this legislative modification. It could be done by any of the above-mentioned stakeholders.

**Scoring: 4.9**

External incentives

The required action is entirely domestic.

**Scoring: 1**

Advocacy and support

**Scoring: 4**

Opposition

The problems refer to the Ministry of Finance and Government obligations to the IMF.

**Scoring: 4**

Resources required

Resource requirements are moderate.

**Scoring: 7**

## 12-percent import tax for cardboard sheets and boxes

### Nature of the constraint

In other countries of Europe, many agricultural products are packed in cardboard boxes, including tomatoes and table grapes (about 50 percent cardboard, 25 percent in wood boxes, and 25 percent in plastic). According to Moldova's Customs Code, a duty of 12 percent of the declared value is levied on imported cardboard. At the moment, in Moldova there is one major producer of cardboard, and the import duty may provide some protection of the domestic market.

However, the cardboard produced locally is generally of lower quality. Exporters report that locally produced cardboard boxes are more fragile, and can be susceptible to water infiltration. As a result more apples cannot arrive at the same premium quality they were loaded at shipment. Consequently, agricultural producers see little choice but to import higher-quality cardboard from abroad. Thus, they pay extra duties for better quality and increase their cost per kg produce sold.

### Expected impact and risk

#### *Impact on the apple value chain*

There are major risks associated with this particular situation. Producers may be inclined to buy cheaper boxes from local producers of cardboard. They may pay a price for this decision, since buyers in export markets may have problems with poor packaging, which may influence the decision is taken whether to work with a particular producer/exporter.

In order to calculate the impact of cardboard duty on agricultural producers, we analyzed the following case: The grower already owns a cold storage with a capacity of 1,000 MT and stores apples for export. Based on this assumption we obtained the following numbers:

	12% import tax	No import tax
Stored quantity of apples, kg	1,000,000	1,000,000
Sold quantity after sorting them, kg	990,000	990,000
Volume of apples to be stored in 1 cardboard box at export	14 kg	14 kg
Nr. of cardboard boxes needed, units	70,714	70,714
Import price for 1 cardboard box from EU	USD 0.70	USD 0.70
Import tax for the cardboard box	12%	
20% V.A.T. paid at import, USD	9,900	9,900
Money paid for the cardboard boxes	USD 49,500	USD 49,500
Import duty total	USD 5,940	USD 0
Transport costs, USD	USD 1,800	USD 1,800
12% tax for the transport	USD 216	USD 0
Total price for imported cardboard + taxes paid at customs + transport	USD 67 356	USD 61,200
TOTAL SUM of TAXES PAID at CUSTOMS BY THE OWNER OF A 1000 TONS COLD STORAGE FOR 1 YEAR	USD 6 156	
Additional Cost over 1 kg of apples sold	USD 0,01	
Total volume of exported apples from Moldova, kg	200,000,000 kg	
Estimated additional costs at sector level because of import tax on cardboard boxes for 1 year	USD 1,243,636	
Estimated additional costs at sector level because of import tax on cardboard boxes in 10 years	USD 1, 436,364	

An agricultural producer, who operates a 1,000 MT cold storage facility, will lose an estimated USD 6,200 as a result of the import duty, or will add USD 0.01 to the selling price of the apples.

The economic analysis suggests that 1kg of apples sold from the cold storage brings additional USD 0.17 profit for the producer. This result implies that USD 0.01 is equal to 6 percent of lost profit out of total

profit gained from exporting. This margin of lost profit is unlikely to have a big influence on the profitability index for a company or influence the payback period for an investment project.

By lifting this constraint. In this way, the economy will obtain greater benefits:

- Better quality exports of apples;
- Better packages;
- Improved opinion about Moldavian producer's packaging;
- Increased volumes of exports over the next periods;
- More taxes paid by producers out of the profit obtained;

Statistics show that the apple value chain will produce and export on average 400,000 tons of apples from cold storages. That means over USD 20 million paid additionally to the Moldovan State Budget by our apple producers and exporters in order to keep them present in the rapid developing Russian markets, and maintain (not increase) the low-medium price range for our sold production.

**Market access:** Lifting the duty on cardboard import in Moldova could have a significant effect on the business environment in general. Increasing competition may encourage the local cardboard producer to increase its quality standards in order to stay on the market.

Improved packaging in turn could influence the access to other key players on the fruit import market in Russia. Moldovan exporters could gain access more easily to big supermarket networks in big cities in Russia.

**Costs (and prices):** While a USD 0.01 difference may appear insignificant at first glance, it can contribute to a price advantage in competitive markets.

**Quality:** The main obstacle for Moldovan producers to access and maintain new and existing markets is the weakness of the current post-harvest infrastructure and appropriate packaging. Having a well-developed infrastructure and using the correct packaging, Moldovan exporters can improve and control fruit quality, respectively deliver the best quality fruits for the clients.

#### **Scoring: 7**

##### *Impact on the table grape value chain*

The economic analysis of the impact of this constraint on the grape value chain follows the same structure as that for the apple value chain. If we assume that 1kg of table grapes sold from the cold storage brings additional USD 0.50 profit for the producer, we can estimate that that USD 0.01 is equal to 2 percentage points lost profit out of the total profit gained at export. We can easily conclude that this margin of lost profit cannot have a big influence on profitability index for a company or influence that much the payback period for an investment project.

Statistics show that the table grape value chain will produce and export on average 30,000 MT of table grapes from cold storages. That means over USD 0.7 million in revenue to the Moldovan State Budget by our table grape producers and exporters in order to keep them present in the rapidly developing Russian markets, and maintain (not increase) the low-medium price range for Moldova's sold production.

#### **Scoring: 7**

##### *Impact on the tomato value chain*

We estimate that the exporters of tomatoes will lose some USD 174,000 per year because of this tax.

Statistics show that the value chain is likely to produce and export on average 5,000 MT of tomatoes from cold storage. That means almost USD 0.2 million in additional revenue to the state budget from this source.

**Scoring: 5**

Likely spillover effects

Lifting the 12-percent duty on cardboard can decrease costs for apple producers and will certainly have a spillover effect on the table grapes and tomatoes value chains. Addressing this particular constraint therefore should be expected to have a direct impact on all three value chains and others that are using such type of packaging for export.

**Scoring: 5**

The magnitude of the action required to relieve constraint

Lifting this constraint will involve changing the Customs Code. Procedural changes may be introduced during the adoption of the annual national budget. It is reasonable to expect that any changes would not take place before December 31, 2013, that is, with the implementation of the 2014 budget.

**Scoring: 5**

Implementing and supporting institutions

Actions require legislative changes that take place within the budgetary process, there is a wide range of institutions that could be responsible for supporting the necessary changes:

- Any of the parties represented in Parliament, within the specialized parliamentary commission, when negotiating the draft budget received from the Government.
- Government of Moldova: could present it as own proposal, within the draft version of the budget which is developed by Government.
- Ministry of Agriculture/Ministry of Finance: During the preparation of the draft budget, all ministries would submit their proposal to the Ministry of Finance, which ultimately will determine if any of these proposals are accepted.

**Scoring: 3**

External incentives

The action is entirely domestic.

**Scoring: 1**

Advocacy and support

**Scoring: 4**

Opposition

The problems relate primarily to the Ministry of Finance and Government obligations to the IMF.

Any changes in the revenue articles of the budget, considering lowering any of the taxes should be offset by additional revenue to the budget, which could take place as a result of such modification. In this case it would be crucial to demonstrate immediate income to the budget as a result of the changes.

**Scoring: 4**

Resources required

Resource requirements for this action are moderate.

**Scoring: 7**

### Costly and complicated export certification procedure

Nature of the constraint

During the value chain workshops, stakeholders identified two aspects of export certification procedures as constraints:

- ♦ Lack of clarity in sanitary and phytosanitary export documentation procedures, especially regarding exports to Russia. This problem is especially relevant to smaller exporters or the companies that are thinking about launching export operations. Some of those companies reported to be confused by the complexity and uncertainty. Many of them hire specialized companies for the documentation (for a certain fee), or are abandoning export operations;
- ♦ Delays in obtaining the export clearance documents.

One of the most vexing cases of delays and costs is the procedure to obtain the “Safety Certificate” for Russia concerning compliance with Russian norms regarding pesticide residues.

Typically during or after the harvest, the grower asks for its products to be tested at pesticide residues by authorized institutions (say 200 tons of apples tested on September 20). Currently there is a list of six Moldovan laboratories that were accepted by Россельхознадзор to issue Safety Certificates for Moldovan fresh produce exported to Russia, including 4 in Chisinau (Central region), 1 in Balti (Northern region) and 1 in Ceadir-Lunga (Southern region).

Expected impact and risk

Since the laboratories in the regions do not have the entire set of equipment to perform the required tests, they are unable to issue Safety Certificates and all growers have to send their products and documents to Chisinau. If the residues comply with Russian maximum residue levels (MRL), the grower obtains the Safety Certificate for the entire tested batch (in our sample case, 200 tons).

Any subsequent export shipment must be accompanied by its own Safety Certificate. The exporter has to apply for a new Safety Certificate such shipments based on the original Safety Certificate obtained around harvest time. In most of the cases, no additional tests are done and the information is simply copied and pasted.

Safety Certificates are issued only in Chisinau. Each producer, from any part of the country, must prepare a list of documents to be sent in Chisinau for checking and Safety Certificate issuance. Documents can be delivered personally or by courier. Each method implies a cost of USD 30 per issued Certificate.

It can take up to three days from the moment the truck is loaded and sealed to the issuance of the Safety Certificate. Failure to present the documents in time incurs costs of USD 150/day payable to the transport companies.

The major elements related to this issue are:

- The procedure to obtain the Safety Certificate is too complex;
- The lack of the necessary laboratory equipment in the regions, which limits Certificate issuance to Chisinau only, imposes additional costs on exporters;
- Truck delays mean production losses because fresh produce deteriorates quite rapidly;
- Exporters may incur contract penalties because of time and quality constraints.

In order to calculate the impact of the Safety Certificate constraint, we analyzed the case of apples for export. The conclusions apply to the other two value chains as well:

Annual export of apples, MT	200,000
Nr. of trucks with apples exported, units	10,000
Time to obtain one truck certificate for producers near Chisinau	3
Time to obtain one truck certificate for producers from North where almost all apples are produced (days)	5
Delays to issue certificate (days)	2
Certificate is issued only when truck loaded. One day delay cost for producer	USD 150
Additional costs paid as penalties for transport companies because the export certificate is issued only in Chisinau	USD 3,000,000
To order certificate, producers must go to Chisinau capital. Most producers come from the north. Medium distance to travel = 150km.	
Yearly producers travel to Chisinau to submit these export documents, unit times	10,000
Yearly producers travel to Chisinau to take the export certificate, unit times (50% can wait in Chisinau for the certificate)	5,000
Cost of 1 travel distance by car, USD	USD 15
Total additional costs for traveling, USD	USD 225,000
Potential loss of apples at destination because of delays (3%), USD	USD 3,480,000
Total additional costs per truck	USD 895
Total additional costs for apple sector	USD 6,705,000

**Apple value chain:** The procedure to obtain Safety Certificates is too complex and costly. The additional costs per truck are estimated at USD 895 (5 cents per kg), and include transport penalties, transport costs to Chisinau to obtain the Certificate, courier costs, and potential losses of fruits at destination because of quality losses and other issues.

**Grape value chain:** The additional costs per truck are estimated at USD 790 USD (4 cents per kg)

Total additional costs for the grape value chain USD 1,185,000 USD

Tomato value chain: The additional costs per truck are estimated at USD 765 (4 cents per kg).

Total additional costs for the tomato value chain USD 164,500

**Scoring:**

**Tomato value chain:** 5

**Table grape value chain:** 7

**Apple value chain:** 7

Likely spillover effects

Although Россельхознадзор is asking for Safety Certificates only for apples, tomatoes and potatoes, Moldova has implemented these requirements for all fresh produce exported to Russia, which means that any improvement obtained for the ACED targeted value chains is likely to benefit other crops.

**Scoring: 6**

The magnitude of the action required to relieve constraint

In order to remove this constraint it will involve changing the methodology of issuing the certificates, open regional offices by the state, and implementing other procedures.

The improvement requires a change in the existing regulations and methodologies, with direct involvement by the Government.

**Scoring: 3**

Implementing and supporting institutions

Since we are discussing legislative or financing changes at the Government level, this would imply the involvement of the MAFI and the Government.

- Ministry of Agriculture and Food Industry or Ministry of Health could initiate the Governmental proposal;
- Government of Moldova: adoption of necessary provisions.

**Scoring: 4**

External incentives

Any reforms would be endorsed and supported by OECD, IFC, and the Ministry of Economy, within the regulatory reform which is currently under way.

**Scoring: 6**

Advocacy and support

**Scoring: 6**

## Opposition

Likely problems relate to the Ministry of Agriculture and Government.

**Scoring: 4**

## Resources required

The resource requirements for implementing a reform of the Safety Certificate procedures will be significant.

**Scoring: 4**

## Limited validity of the pesticide residue certificate

### Nature of the constraint

According to legislation in force in the Republic of Moldova, each apple and grape producer has to carry out laboratory tests for pesticide residues. These tests are designed to ensure that the produce is safe for human consumption, staying below the maximum residue levels. This test implies costs for the producer. After the fruits are harvested and tested, they certainly will not change its chemical composition later. Even so, the law stipulates that producers must repeat the test every two months.

### Expected impact and risk

The repeated tests are useless when the products are stored in cold storage facilities, and no one can influence somehow the chemical composition of the product in a locked storage room.

This laboratory test implies costs related to:

- Additional paperwork;
- Transport costs;
- Costs to open cold storage rooms unnecessarily premature;
- Labor costs.

The economic analysis performed showed that at sector level the impact is moderate, but still implies unnecessary costs. For the apple value chain the estimated costs are USD 330,525, and for table grapes are USD 37,200.

**Scoring: 4**

### Likely spillover effects

Reforms in this area will not only result in lower costs for producers in the targeted value chains, but will also extend to other agricultural products.

**Scoring: 5**

The magnitude of the action required to relieve constraint

In order to remove this constraint it will involve changing the methodology of issuing the certificates, open regional offices by the state, other procedures. The improvement requires a change in the existing regulations, with direct involvement by the Parliament and Government.

**Scoring: 3**

Implementing and supporting institutions

Since we are discussing legislative changes at the Government level, this would imply implication of the MAFI and the Government.

- Ministry of Agriculture and Food Industry or Ministry of Finance: could initiate the Governmental proposal.
- Government of Moldova: adoption of necessary provisions.

**Scoring: 4**

External incentives

Reforms are likely to be supported by OECD, IFC, Ministry of Economy, as part of the ongoing regulatory reform process.

**Scoring: 5**

Advocacy and support

**Scoring: 5**

Opposition

The Ministry of Agriculture and other parts of the Government may be resistant to change.

**Scoring: 4**

Resources required

Resource requirements for these reforms are moderate.

**Scoring: 6**

## Gaps in legislation covering the cooperatives of entrepreneurs

Nature of the constraint

The Law on Cooperatives of Entrepreneurs nr. 73 dated April 12, 2001 provides the legal framework for cooperatives of entrepreneurs (including marketing cooperatives). Article 6 of the law stipulates that it is mandatory to sell at least 50 percent of its products (services) to its members and/or buy at least 50 percent of products (services) from its members. It has three months to comply with these requirements.

However, the law does not stipulate the period assessed to determine the compliance with the 50-percent requirement, thereby increasing the business risks for the cooperative. The same question applies to a fiscal advantage offered to the cooperatives by the article 103, line 25 (no VAT for services delivered to its members, in case of compliance with a 75-percent requirement).

#### Expected impact and risk

To date, the number of marketing cooperatives active in the Moldovan HVA value chains is small, and some of them already had litigations stemming from the uncertainties in the legal framework and the Fiscal Code. Amendments to the cooperative legislation should address these gaps, given Government and donors' efforts to promote cooperation in marketing of Moldovan HVA products.

<b>Scoring:</b>	<b>Tomato value chain</b>	<b>4</b>
	<b>Table grape value chain</b>	<b>5</b>
	<b>Apple value chain</b>	<b>4</b>

#### Likely spillover effects

The proposed changes will be beneficial for all key value chains in agriculture and elsewhere.

#### **Scoring: 5**

The magnitude of the action required to relieve constraint

The improvement requires a change in the existing regulations, with direct involvement by the Parliament and Government.

#### **Scoring: 3**

#### Implementing and supporting institutions

Since we are discussing legislative changes at the highest level, a wide range of institution could be responsible for supporting the necessary changes:

- Any of the parliamentary parties, within the specialized parliamentary commission, when proposing changes to the Law on Cooperatives of Entrepreneurs;
- Government of Moldova: could present its own Law modification proposal;
- Ministry of Agriculture and Food Industry or Ministry of Finance: could initiate the Governmental proposal.

#### **Scoring: 2**

#### External incentives

None.

#### **Scoring: 1**

### Advocacy and support

There is strong support from the existing cooperatives and AGROinform that has the largest experience in supporting marketing coops in Moldovan HVA value chains.

**Scoring: 4**

### Opposition

None

**Scoring: 7**

### Resources required

The resource requirements for the implementation of these reforms are moderate.

**Scoring: 7**

## Ranking of priority regulatory constraints

### Summary of Apple value chain Strategic Decision Matrix Analysis

Rank	Regulatory constraint	Impact	Overall scoring	Expected impact and risk	Likely "spillover" effects	Magnitude of the action	Implementing & supporting institutions	External incentives	Advocacy & support	Opposition	Resources required
1	Compulsory variety registration	1,700,000	6.00	5	6	6	7	6	4	7	7
2	Expensive procedure to obtain the phytosanitary certificate	3,705,000	5.00	7	6	3	4	6	6	4	4
3	12% import tax for cardboard sheets and boxes	1,243,636	4.75	5	5	5	3	5	4	4	7
4	15% import tax for insulation panels used in cold storages	855,000	4.63	5	4	5	5	3	4	4	7
5	Poor regulation of access to lake water for irrigation purposes	600,000	4.63	4	7	7	5	1	3	5	5
6	Repeated and expensive testing of the seedling material	100,000	4.50	3	1	6	5	4	6	4	7
7	Bureaucratic procedures for seasonal hiring	1,100,000	3.88	5	7	1	1	6	5	1	5
8	Limited validity of the pesticide residue certificate	330,525	3.75	3	5	3	4	3	3	3	6
9	Gaps in legislation covering the marketing coops		3.75	1	5	3	2	1	4	7	7
10	Poor regulation of the financing for the anti-hail system	2,875,000	3.75	6	7	3	2	1	6	3	2
11	Expensive access to electricity grid	922,000	3.50	4	3	3	1	4	5	3	5
12	Compulsory registration of fertilizers	450,000	3.38	3	5	3	2	5	4	3	2
13	No access to underground water for irrigation purposes	350,000	3.25	5	7	1	1	3	7	1	1
14	Income tax on capital gains at exchange of land plots	52,400	3.25	1	5	3	2	1	4	3	7

### Summary of table Grape value chain Strategic Decision Matrix Analysis

Rank	Regulatory constraint	Impact	Overall scoring	Expected impact and risk	Likely "spillover" effects	Magnitude of the action	Implementing & supporting institutions	External incentives	Advocacy & support	Opposition	Resources required
1	Expensive procedure to obtain the phytosanitary certificate	1,185,000	4.9	6	6	3	4	6	6	4	4
2	15% import tax for insulation panels used in cold storages	684,000	4.5	5	5	5	5	1	4	4	7
3	No access to underground water for irrigation purposes	1,880,000	4.5	7	7	1	4	4	7	4	2
4	Poor regulation of access to lake water for irrigation purposes	75,000	4.4	2	7	7	5	1	3	5	5
5	12% import tax for cardboard sheets and boxes	700,000	4.3	5	5	5	3	1	4	4	7
6	Limited validity of the pesticide residue certificate	37,200	4.1	1	5	3	4	5	5	4	6
7	Poor regulation of the financing for the anti-hail system	1,320,000	3.8	6	7	3	2	1	6	3	2
8	Bureaucratic procedures for seasonal hiring	292,000	3.8	4	7	1	1	6	5	1	5
9	Gaps in legislation covering the marketing coops		3.8	1	5	3	2	1	4	7	7
10	Expensive access to electricity grid	306,000	3.5	4	3	3	1	4	5	3	5
11	Compulsory registration of fertilizers	120,000	3.4	3	5	3	2	5	4	3	2
12	Income tax on capital gains at exchange of land plots	32,750	3.3	1	5	3	2	1	4	3	7

### Summary of Tomato value chain Strategic Decision Matrix Analysis

Rank	Regulatory constraint	Impact	Overall scoring	Expected impact and risk	Likely "spillover" effects	Magnitude of the action	Implementing & supporting institutions	External incentives	Advocacy & support	Opposition	Resources required
1	Compulsory variety registration	1,200,000	6.1	6	6	6	7	6	4	7	7
2	10% import tax for greenhouses and accessories	280,000	4.6	5	5	5	3	4	4	4	7
3	Expensive procedure to obtain the phytosanitary certificate	164,500	4.5	3	6	3	4	6	6	4	4
4	Poor regulation of access to lake water for irrigation purposes	75,000	4.4	2	7	7	5	1	3	5	5
5	12% import tax for cardboard sheets and boxes	174,000	4.0	3	5	5	3	1	4	4	7
6	Expensive access to electricity grid and natural gas network	1,700,000	3.9	7	3	3	1	4	5	3	5
7	No access to underground water for irrigation purposes	300,000	3.9	4	7	1	3	3	7	3	3
8	Compulsory registration of fertilizers	1,150,000	3.8	6	5	3	2	5	4	3	2
9	Bureaucratic procedures for seasonal hiring	416,000	3.8	4	7	1	1	6	5	1	5
10	Gaps in legislation covering the marketing coops	50,000	3.8	1	5	3	2	1	4	7	7
11	Compulsory registration of biological control agents	380,000	3.4	3	5	3	2	5	4	3	2
12	Poor regulation of the financing for the anti-hail system	250,000	3.4	3	7	3	2	1	6	3	2
13	Income tax on capital gains at exchange of land plots	NS	3.3	1	5	3	2	1	4	3	7

## Validation workshop

After performing the economic analysis of the priority constraints and assessing the feasibility of proposed actions, the constraints were ranked based on the criteria of the strategic decision matrix. The results of the analysis were presented to value chain stakeholders and representatives of MAFI during a workshop organized in ACED office on June 28, 2012. The participants generally agreed with the analysis carried out and the ranking of constraints.

## Recommended constraints for further analysis

The study team selected the following regulatory constraints for feasibility assessment:

- Compulsory variety registration;
- Import tax for key inputs (insulation panels, greenhouses and cardboard);
- Costly and complicated export certification procedure.

[Subsequent discussions replaced the third issue (export certification procedures) with the two constraints related to access to key inputs, water and electricity.]

## Required steps to lift or relax constraints

### Compulsory variety registration

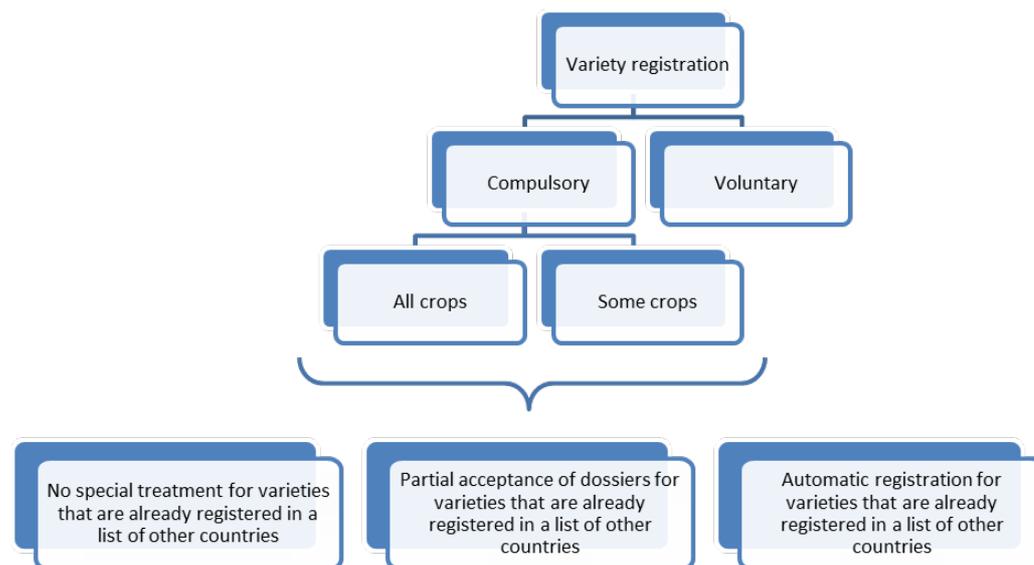
The issue of regulatory constraints for the adoption of improved varieties by the Moldovan farmers has a long history. For example, the issue is clearly identified by the Country Economic Memorandum of the World Bank with the Government of Moldova “Moldova: Opportunities for Accelerated Growth” (September 2005):

*“At present an important constraint to improved seed adoption by farmers is that the state institutes for plant breeding and variety selection largely control the market based on counterproductive procedures that impede the certification of imported seeds. This reduces access and increases costs for farmers. Moldova should be more easily able to take advantage of the existence of catalogs of certified seeds developed by the world’s leading agricultural companies and research organizations. The Government should jumpstart technology improvement by radically simplifying and accelerating the seed certification process, and allowing importers to obtain expedited certification by presenting evidence of approval of new seed varieties in North America, the EU and certain other countries”.*

We think that the World Bank Discussion Paper #367 “Easing Barriers to Movement of Plant Varieties for Agricultural Development” gives a very good advice for the potential improvement actions in Moldova and namely:

*“to encourage variety introductions by private companies... (1) make variety registration voluntary; in other words, allow companies to sell seed of varieties that government has not tested and approved”. Alternatively, if “there is too much opposition to end compulsory variety registration, then (2) limit compulsory variety registration to a few major crops (our note: food security crops such as corn or wheat), leaving other crops with voluntary registration; and/or (3) make registration automatic for varieties that are already registered in a list of other countries”.*

Basically any proposed action should be defined in following parameters:



Currently, there is an ongoing process of changes made to the seed legislation as part of the harmonization of the Moldovan legislation with that of the European Union. Unfortunately, the proposals made by the Ministry of Agriculture and Food Industry and approved by the Parliament and Government tend to be limited to some formal issues (such as renaming the Register into Catalogue) and do not address the actual problems faced by the Moldovan growers.

There is a draft of the regulation regarding testing and registration of varieties into the Catalogue of Plant Varieties (Regulamentul privind testarea și admiterea soiurilor în Catalogul Soiurilor de Plante al Republicii Moldova)<sup>7</sup> that “liberalizes” the registration process. It is proposed to accept:

- the Distinctiveness, Stability and Uniformity (DUS) test carried by an UPOV<sup>8</sup> country (to be validated by the State Commission for horticultural crops);
- the Value for Cultivation and Use test (valoarea agronomică și de utilizare) carried out and accepted in any other country.

Even if these changes are passed, the breeder (that is, the holder of plant variety rights) still has to initiate registration of a variety. Yet the small Moldovan market is simply not attractive enough to attract breeders.

Considering all environmental factors, the study team believes that the best solution to tackle the problem, at least for the three value chains, is to promote the automatic registration of varieties approved by EU countries:

- For fruit and grape varieties – automatic registration of varieties that have been granted EU Community Plant Variety Rights<sup>9</sup>;
- For vegetables – automatic registration of varieties included in the EU Common catalogue of registered plant varieties for vegetable species<sup>10</sup>.

Under the proposed scenario, the current regulation for agricultural plant species (such as corn and wheat)<sup>11</sup> would not be changed. This restriction would address the strongest opposition to changes in the seed legislation, from the State research institutions working with these crops.

Changes are needed in the following regulations:

- Law on Seeds (Legea despre Seminte);
- Law on Fruit and Berry Growing (Legea despre Pomicultura);
- Law on Vineyards and Wines (Legea Viei si Vinului).

There are several ways to initiate legislative changes in Moldova—amendments can be proposed by the Government, members of Parliament, or the Presidential Administration. Probably the best approach is to work on this issue with the Ministry of Agriculture and Food Industry and other stakeholders as part of the implementation of the Horticulture Development Program, such as holding one or several workshops, with proposal for ACED to bring an international expert on the topic.

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<sup>7</sup> Not yet published for public discussion (September 2012)

<sup>8</sup> International Union for the Protection of New Varieties of Plants, head quartered in Geneva.

<sup>9</sup> <http://www.cpvoextranet.cpvo.europa.eu/WD150AWP/WD150AWP.exe/CONNECT/ClientExtranet>

<sup>10</sup> <http://ec.europa.eu/food/plant/propagation/catalogues/database/public/index.cfm?event=SearchForm&cat=H>

<sup>11</sup> [http://ec.europa.eu/food/plant/propagation/catalogues/comcat\\_agri\\_2008/index\\_en.htm](http://ec.europa.eu/food/plant/propagation/catalogues/comcat_agri_2008/index_en.htm)

The proposed changes should be clearly defined in the Horticulture Development Program that will be sent for Governmental approval. The approval of HDP with the right wording on variety registration procedure will greatly contribute to a quick development by MAFI of concrete proposals for modification of variety registration regulations.<sup>12</sup>

### Import duties for key inputs: insulation panels, greenhouses and cardboard

For polyurethane insulation panels and greenhouses, here are no domestic suppliers that might justify (temporary) protection. Even for cardboard, the domestic producer does not compete in the same quality category as imports. In the recent past, the Government has frequently taken steps to reduce or eliminate tariffs for the Republic of Moldova (see, for example, Government Decision 1403 dated March 15, 2012 to ask the Parliament for eliminating the import duty for premixes).

Unfortunately, the Customs 8-digit HS (Harmonized System) codes that cover the targeted items<sup>13</sup> refer to broader categories and include items manufactured in Moldova. For example, it covers all insulation panels, including the non-polyurethane manufactured in Moldova. As result, concerned manufacturers could mount considerable opposition.

We recommend acknowledge the potential opposition of these manufacturers, but go ahead with proposed zeroing of import taxes for the identified customs codes, and reducing the opposition with the following reasoning:

- The changes will not reduce the sales of existing manufacturers, because the items in question are not manufactured in Moldova and the local products are not acting as substitutes because they do not meet the required performance criteria;
- Imports of these items from Ukraine, Russia and other CIS countries enter the country duty-free; unfortunately, the items do not meet the quality criteria of the Moldova HVA sector;
- The proposed DCFTA with EU anyhow will zero all import taxes for goods originating in EU.

Alternatively, the scope of the tariff reduction could be limited to the product positions not currently produced in Moldova, they could be separated into a separate customs category and the tariff reduction could be applied to only one of them. For example, two 10-digit HS codes could be added to the current 8-digit code for insulation panels:

- 7308 9051 Panels comprising two walls of profiled (ribbed) sheet with an insulating core
  - ◆ 7308 9051 10 – of polyurethane *not produced in Moldova*
  - ◆ 7308 9051 90 – of other materials *currently produced in Moldova*

The recommended approach is to work on this issue with the Ministry of Agriculture and Food Industry and other stakeholders. The proposed changes should be clearly defined in the Horticulture Development Program that will be sent for Governmental approval. The approval of HDP with the right wording—review of import tariffs for key imported inputs—will greatly contribute to a quick development by MAFI, Ministry of Economy and Ministry of Finance of concrete proposals for tariff modification.

<sup>12</sup> The HDP has been elaborated with a Working Group and support from ACED, but it may not provide the platform for pursuing reform of the mandatory variety testing and registration process in the Republic of Moldova.

<sup>13</sup> 94060031 Greenhouses (prefabricated buildings from iron and steel), 73089051 Panels comprising two walls of profiled (ribbed) sheet with an insulating core, 4808 1000 Corrugated paper and paperboard, whether or not perforated, 4819 1000 Cartons, boxes and cases, of corrugated paper or paperboard

## Costly and complicated export certification procedure

### Problem statement

Currently there are six approved laboratories accredited by the Moldovan and Russian authorities for the sanitary certification of exported goods of plant origin. Four are located in Chisinau, the other two in Balti and Ceadir-Lunga. These six laboratories are subordinated to three different ministries: three to the Ministry of Health (including the two regional laboratories), two to the Ministry of Agriculture and one to the Ministry of Economy. Russian authorities The regional laboratories in Balti and Ceadir-Lunga are not able to perform the pesticide residue tests required for exports to the Russian Federation, as required by Россельхознадзор.

### Potential solutions

In principle, the problem could be resolved by either one of these two investments:

- Install additional equipment at Balti and Ceadir-Lunga laboratories to allow for pesticide residue testing closer to the orchards. From personal communication with the managers of these laboratories, the investment is estimated at USD 200,000 for each laboratory—a value significantly lower than the *annual costs* incurred by the growers and exporters. The investment could come from the State Budget or through a public-private partnership;
- Connect the regional phytosanitary inspection offices with the pesticide residue laboratories through a secure network. Once a laboratory enters the test into the system, that is, issues a Safety Certificate for the *entire* harvest of the grower, subsequent the phytosanitary inspection could issue “subordinated” Safety Certificates for each shipment from that harvest. A rough calculation suggests that the cost of the ICT investment is comparable to the investment in laboratory equipment.

### Sustainable solution

Unfortunately, the problem is much more complex, and the potential risks to the industry are much greater than the costs of delays. The Center for Pesticide Registration is not included in the list of laboratories accredited by Россельхознадзор, although it appears to have the best technical abilities to carry out the pesticide residue tests<sup>14</sup>.

The documentation required for an export shipment of fresh produce from Moldova is regulated by:

- A series of Laws and Governmental Decisions (such as the Law #228 on plant protection and phytosanitary quarantine, Law # 119 on crop protection means and fertilizers, Government Decision #1004 regarding the sampling methods for official controls of pesticide residues, etc.) that are available from official sources and have a clear legal status;
- A series of memoranda and similar documents signed by MAFI and Phytosanitary Inspection with the Russian Phytosanitary Inspection (Россельхознадзор) that are not (easily) available to the public;

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<sup>14</sup> This laboratory was proposed to carry out the National Residue Monitoring activity in the Action Plan developed by the “Development of Sanitary and phytosanitary systems regarding non-animal origin food exports from the Republic of Moldova” EU-funded project. The Action Plan notes that even this laboratory does not meet EU requirements for test accuracy (<0.01 mg/kg).

- A series of MAFI and Phytosanitary Inspection orders implementing the agreements with Россельхознадзор that weren't officially published in "Monitorul Oficial" and are not fully available to the public (such as Joint Order of MAFI and Health Ministry #71/75 dated March 17, 2009 and Joint Order of MAFI and Health Ministry #598/175 dated August 25, 2010);
- A series of customs norms concerning the activity of Customs and Phytosanitary Inspection.

A recent Court of Accounts report<sup>15</sup> noted the following:

The export certification procedure is complicated because it involves laboratories subordinated to different central authorities

*Distribuirea Centrelor de standardizare în subordinea mai multor autorități centrale de specialitate din diferite domenii complică procedurile de certificare a calității produselor de origine vegetală destinate exportului.*

The accredited laboratories of the Ministry of Health are not sufficiently equipped to meet the requirements

*Echiparea insuficientă a laboratoarelor Serviciului de Supraveghere de Stat a Sănătății Publice al Ministerului Sănătății nu permite realizarea sarcinilor la nivelul cerințelor actuale*

The Ministry of Health and MAFI haven't developed the planned Joint Order regarding methods to determine pesticide residues in food products, leading to lack of coordination in the activity of the accredited laboratories

*Nu a fost elaborate în termenul stabilit Ordinul comun al Ministerului Sănătății și MAIA privind aprobarea listei metodelor de încercări pentru determinarea reziduurilor de pesticide în produsele agroalimentare, ceea ce determină riscul necoordonării activității Centrelor de certificare subordonate diferitor instituții de stat, precum și al nevalorificării tuturor metodelor de determinare a reziduurilor de pesticide în produsele pomi-legumicole, inclusive asigurarea cu reagenți chimici și soluții-standard de determinare.*

The Ministry of Health and MAFI didn't carry out a technical and competency audit of the accredited laboratories

*De asemenea, MAIA și Ministerul Sănătății nu au prezentat auditului informații privind măsurile întreprinse întru efectuarea unui audit tehnic și de competență asupra capacităților laboratoarelor de încercări desemnate sau acreditate în domeniul certificării produselor alimentare, cu preponderență cele pomilegumicole; prezentarea recomandărilor de rigoare și retragerea desemnărilor în cazul lipsei tuturor criteriilor de competență.*

MAFI didn't developed and approved the criteria for the selection of laboratories to perform the residue testing for the exports to Russian Federation

*La fel, MAIA nu a elaborat și nu a aprobat criteriile pentru desemnarea laboratoarelor de încercări pentru testarea produselor pomilegumicole destinate exportului în Federația Rusă.*

As some of these changes could be tackled by the ongoing creation of the Food Safety Agency, it is proposed to discuss the issue during the elaboration of the Horticulture Development Program, and decide on the next steps accordingly.

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<sup>15</sup><http://www.ccrm.md/hotarireview.php?idh=191&l=ro>

## Broad outlines of an advocacy campaign

### Introduction

This chapter outlines an advocacy campaign focusing on the key constraints derived and analyzed as part of the CIBER process:

- Compulsory variety registration;
- Import tax for key inputs (insulation panels, greenhouses and cardboard);
- Costly and complicated export certification procedure.

The advocacy campaign should be viewed as a *strategic* series of actions designed to influence the decision makers, who are empowered to draft/promote/adopt necessary legislative provisions or initiate other policy responses. The principal focus of the stakeholders in the apple, table grape and greenhouse tomato value chains is to lift business environment constraints on their competitiveness. In this context, the stakeholders themselves drive the advocacy campaign. With the CIBER process, advocacy by private sector interests and civil society organizations goes beyond unfocused lobbying to target reforms that are expected to bring the highest payoff from the perspective of the value chain. In accordance with the bottom up approach of the CIBER methodology it is obvious that the Advocacy Campaign is to be conducted by the private sector and the civil society in order to change a government policy or practice and advance the public interest.

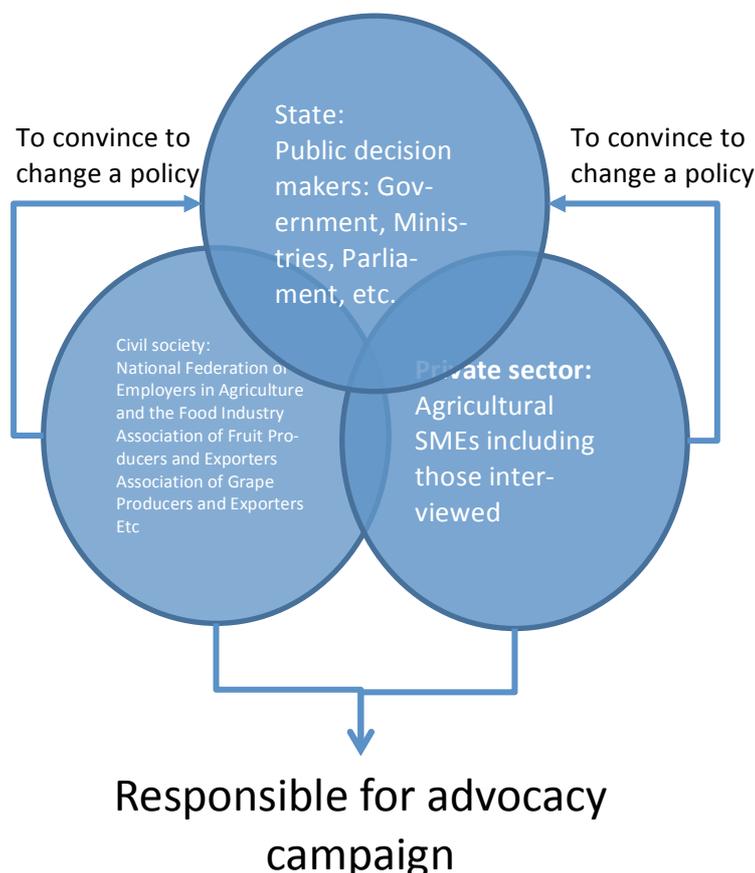
### Advocacy campaign objective

The objectives will define for each of the three constraints what will be accomplished, with whom, how, and in what period of time. In this report of the outlines of an advocacy campaign have more than one objective that guides different activities. Thus in this sense the objectives will be defined through the SMART chart:

SPECIFIC	The objective should be defined clearly and unambiguously, without vagaries and platitudes. The formulation should address the five “W” questions: <ul style="list-style-type: none"> <li>• What: What do we want to accomplish?</li> <li>• Why: Specific reasons, purpose or benefits of accomplishing the goal.</li> <li>• Who: Who is involved?</li> <li>• Where: Identify a location.</li> <li>• Which: Identify requirements and constraints.</li> </ul>
MEASURABLE	The objective should be defined to allow for assessing progress—how far are we along to accomplishing it?
ACHIEVABLE	It is assumed that ACED has necessary internal financial resources to support the work on the objective.
REALISTIC	The objectives will reflect how the constraints are to be removed considering the current social and political conditions.
TIME-BOUND	The statement of objectives should provide a clear and realistic time-frame or deadline to remove the constraints.

## Stakeholders

Stakeholders comprise anyone who has a direct interest in the outcome of the advocacy campaign and its objectives. That includes the people directly affected by the problem, groups responsible for creating the problem (decision makers), and groups interested in solving the problem: target agricultural producers, civil society, ACED, decision makers.



The stakeholders fall into three groups: allies, neutrals and opponents. The distinction is important, since they have different degrees of influence or control over the problem in the affected group. Understanding their power over the problem is a critical part of attaining the objectives of the advocacy campaign.

The template matrix for stakeholder’s separation for each of the three constraints has the following form:

ALLIES	NEUTRALS	OPONENTS
Current International projects/International Agencies	Some politicians	Government/Ministries/State Agencies
Civil Organizations	Some International Agencies	Large Local Companies/monopolists
Agricultural producers	Local Level Government	Large land owners
etc	General Population	etc

Identification of neutral stakeholders who have not yet formed a strong opinion on our issue is very important. Neutrals are important to the advocacy campaign because they can often quickly become allies or opponents.

When identifying allies and opponents, for future advocacy campaign ACED shall try considering the degree of influence each stakeholder has over the problem.

- Any stakeholder who will be listed with high influence over the problem, regardless of their level of agreement with our position should be declared as a target.

## Stakeholders for compulsory variety registration

Allies

Name of allies	Comments
<b>Current International projects/International Agencies</b>	
World Bank office in Moldova, including all relevant agencies (IFC).	<p>Strong support expressed repeatedly: the issue is clearly identified by the Country Economic Memorandum of the World Bank with the Government of Moldova "Moldova: Opportunities for Accelerated Growth" (September 2005).</p> <p>The support could be also materialized through the following IFC project: Investment Climate Reform Moldova Project.</p>
<b>Civil society</b>	
<ol style="list-style-type: none"> <li>1. National Federation of Employers in Agriculture and Food Industry.</li> <li>2. National Union of Agricultural Producers "Uniagroprotect"</li> <li>3. Association of Fruit Producers &amp; Exporters "Moldova-Fruct"</li> <li>4. Association of Grapes Producers &amp; Exporters (APESM)</li> <li>5. National Federation of Farmers of Moldova</li> <li>6. National Federation "Agroinform"</li> <li>7. Sector and products Associations and NGOs (vegetables, sunflower, sugar beet, etc.)</li> </ol>	<p>All stated civil institution expressed and proved strong support to elimination of the constrains, thus it mandatory must be included in the advocacy campaign</p>
<b>Agricultural producers</b>	
Non-members and members of the nongovernment organization stated above	<p>All of them have a direct benefit out of removing the constrain, thus it mandatory must be included in the advocacy campaign</p>
<b>Public sector</b>	
Minister of Agriculture and Food Industry	<p>Expressed positive position towards removing the constrain</p>

## Neutrals

Name of neutrals	Comments
<b>Current International projects/International Agencies</b>	
UNDP	As to date UNDP could be considered as neutral for the issue
<b>Civil society</b>	
Mass media	Most of them are unaware of the problems. Developing and conducting specialized media programs or shows on the constrain topic, would form their opinion in the favor of elimination of the constraint and transform them into the allies.
<b>Public sector</b>	
Members of the parliamentary Committee of Agriculture and Food Industry	No evidence if they expressed any support or willing to address the issue. Mainly depend on political conjecture and their party prescription. The issue of the constrain could be brought as some political points for election campaign
Members of the Government who would vote for the draft law within the Government	They would vote if the draft project would be submitted to the Government by the Minister of Agriculture
Head of the State Chancellery	All the draft law or government decision is endorsed by the State Chancellery before voting by the Government.

## Opponents

Name of opponents	Comments
<b>Current International projects/International Agencies</b>	
None	
<b>Civil society</b>	
Some scientists	To be identified, inclusive through the meeting and workshops within the development of Horticulture

Development Program.	
<b>Agricultural producers</b>	
None	
<b>Public sector</b>	
State Commission for Variety Testing	Expressed strong opposition
General Inspectorate for Phytosanitary Supervision and Seed Control	It is the allied with the State Commission for Variety Testing
Horticulture Research Institute and other public R&D institutions	

### Stakeholders for import tax for key inputs (insulation panels, greenhouses and cardboard)

Allies

Name of allies	Comments
<b>Current International projects/International Agencies</b>	
None	
<b>Civil society</b>	
<ol style="list-style-type: none"> <li>1. National Federation of Employers in Agriculture and Food Industry.</li> <li>2. Association of Fruit Producers &amp; Exporters "Moldova-Fruit".</li> <li>3. Association of Grapes Producers &amp; Exporters (APESM).</li> <li>4. National Federation of Farmers of Moldova.</li> <li>5. Sector NGOs</li> </ol>	All stated civil institution expressed and proved strong support to elimination of the constrains, thus it mandatory must be included in the advocacy campaign
<b>Agricultural producers</b>	
Non-members and members of organizations stated above	All of them have a direct benefit out of removing the constrain, thus it mandatory must be included in the advocacy campaign

<b>Public sector</b>	
Ministry of Economy, including through the Working Group of State Commission for regulating entrepreneurial activity	Expressed positive position towards removing any tax constrain which affect the business environment
Prime Minister office	Prime Minister at one of the meeting with agriculture producers after an request of the Association of Fruit Producers & Exporters "Moldova-Fruct" promised he will contribute to the elimination of the constrain

## Neutrals

Name of neutrals	Comments
<b>Current International projects/International Agencies</b>	
World Bank office in Moldova, including all relevant agencies (IFC).	Any changes to the budget in terms of reducing the taxes may be rejected by the Bank. Categorized as neutrals, since if convinced that elimination of tax would bring a greater benefit to the budget may change their opinion.
International Monetary Fund	Any changes to the budget in terms of reducing the taxes are rejected by the Fund. Categorized as neutrals, since if convinced that elimination of tax would bring a greater benefit to the budget may change their opinion.
<b>Civil society</b>	
Mass media	Most of them are unaware of the problems. Developing and conducting specialized media programs or shows on the constrain topic, would form their opinion in the favor of elimination of the constraint and transform them into the allies.
<b>Public sector</b>	
Members of the parliamentary commission of Agriculture and Food Industry	No evidence if they expressed any support or willing to address the issue. Mainly depend on political conjecture and their party prescription. The issue of the constrain could be brought as some political points for election campaign

Members of the Government who would vote for the draft law within the Government	They would vote if the draft project would be submitted to the Government by the Minister of Agriculture
Head of the State Chancellery	All the draft law or government decision is endorsed by the State Chancellery before voting by the Government.

## Opponents

Name of opponents	Comments
<b>Current International projects/International Agencies</b>	
None	
<b>Civil society</b>	
None	
<b>Public sector</b>	
Minister of Finance	Expressed strong opposition
Customs	It is the allied with the Ministry of Finance
Parliamentary Committee on Economy, Budget and Finance	

### Stakeholders for costly and complicated export certification procedure

## Allies

Name of allies	Comments
<b>Current International projects/International Agencies</b>	
World Bank office in Moldova, including all relevant agencies (IFC).	Expressed strong support for elimination of any administrative barriers to the business. Same opinion supported in the annual report of Cost of Doing Business in Moldova financed by the Bank.

OECD	Expressed strong support for elimination of any administrative barriers to the business. Same opinion supported in the annual report of "Assessment of the SME sector in the republic of Moldova".
<b>Civil society</b>	
<ol style="list-style-type: none"> <li>1. National Federation of Employers in Agriculture and Food Industry.</li> <li>2. Association of Fruit Producers &amp; Exporters "Moldova-Fruct".</li> <li>3. Association of Grapes Producers &amp; Exporters (APESM).</li> <li>4. National Federation of Farmers of Moldova.</li> <li>5. SectorNGOs</li> </ol>	All stated civil institution expressed and proved strong support to elimination of the constrains, thus it mandatory must be included in the advocacy campaign
<b>Agricultural producers</b>	
Non-members and members of organizations stated above	All of them have a direct benefit out of removing the constrain, thus it mandatory must be included in the advocacy campaign
<b>Public sector</b>	
Ministry of Agriculture and Food Industry	Expressed positive position towards removing the constrain
Ministry of Economy, including through the Working Group of State Commission for regulating entrepreneurial activity	Expressed positive position towards removing any tax constrain which affect the business environment
e-Government Center	Set up as a public institution by the Government in 2010
Court of Accounts of Moldova	In one of the reports has stated that the State Supervision Service of Public Health of the Ministry of Health does meet the requirements to undertake their tasks imposed by the law

## Neutrals

Name of neutrals	Comments
<b>Civil society</b>	

Mass media	Most of them are unaware of the problems. Developing and conducting specialized media programs or shows on the constrain topic, would form their opinion in the favor of elimination of the constrain and transform them into the allies.
<b>Public sector</b>	
Members of the parliamentary commission of Agriculture and Food Industry	No evidence if they expressed any support or willing to address the issue. Mainly depend on political conjecture and their party prescription. The issue of the constrain could be brought as some political points for election campaign
Members of the Government who would vote for the draft law within the Government	They would vote if the draft project would be submitted to the Government by the Minister of Agriculture
Head of the State Chancellery	All the draft law or government decision is endorsed by the State Chancellery before voting by the Government.

## Opponents

Name of opponents	Comments
<b>Current International projects/International Agencies</b>	
None	
<b>Civil society</b>	
None	
<b>Public sector</b>	
Minister of Finance	Expressed strong opposition on increase in financing any state agencies or institutions
Parliamentary Committee on Economy, Budget and Finance	It is the allied with the Ministry of Finance

## Targeting

**Primary target:** These include the persons with the greatest power to directly address removal of the constraints. However, the project may not have access to these persons, or there may face too great a political risk for them to openly support the issue.

**Secondary target:** These include the persons who cannot solve the problems directly but have the ability to influence the primary target. If the advocacy campaign can influence such persons, they can influence the primary target.

Creating a chart is an easy way to identify primary and secondary targets. Below is a target tables which should be used for each of the three constrain.

## Compulsory variety registration

Target name	Contact person	What do they know about the problem?	What is their attitude about the problem?	Who has influence over them?	What is important to them?
PRIMARY TARGET			SECONDARY TARGET		
Government	All Members of Parliament Committee of Agriculture and Food Industry	They are aware of the problem but it is not a priority	One of the thousands of issues to be solved	International Donors Their parties Mass media Civil society	Political points from the voters
	Minister of Agriculture	Need support from the project and other stakeholders to address the issue	Understands the issue and expressed will to address it	General public International Donors Own political party Mass media Civil society	Attainable results Recognition of results by Prime Minister
	Head of the State Chancellery	They are aware of the problem but it is not a priority	One of the thousands of issues to be solved	Prime Minister	Recognition of results by Prime Minister
	State Commission for Variety Testing	They are aware of the issue but consider this as not a problem	No major changes to be done	Government, Prime Minister, Parliament	Keeping their job and usefulness
International Institutions	World Bank/IFC	Aware of the problem, know all details	Try to solve it	NA	Adopting new legislation in the sector
	UNDP	Not aware of	No attitude	NA	Governance & Institutional Development

Civil society	National Federation of Employers in Agriculture and Food Industry. Association of Fruit Producers & Exporters "Moldova-Fruct". Association of Grapes Producers & Exporters (APESM). National Federation of Farmers of Moldova. Sector NGO's	Aware of the problem, know all details	Try to solve it, they are direct beneficiaries	Their members, agricultural producers	Adopting new legislation in the sector
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Import tax for key inputs (insulation panels, greenhouses and cardboard)

Target name	Contact person	What do they know about the problem?	What is their attitude about the problem?	Who has influence over them?	What is important to them?
PRIMARY TARGET			SECONDARY TARGET		
Government	All Members of Parliament Committee of Agriculture and Food Industry	Even if they were aware of the problem but it is not a priority	One of the thousands of issues to be solved	International Donors Their parties Mass media Civil society	Political points from the voters
	Minister of Agriculture	Need support from the project and other stakeholders to address the issue	Understands the issue and expressed will to address it	General public International Donors Own political party Mass media Civil society	Attainable results Recognition of results by Prime Minister
	Head of the State Chancellery	They are not aware of the problem but it will become a priority after Prime Minister promise	One of the thousands of issues to be solved	Prime Minister	Recognition of results by Prime Minister
	Ministry of Economy, including through the Working Group of State Commission for regulating entrepreneurial activity	They are not yet aware of the issue, must be informed	Make changes which could contribute to business climate	Government, Prime Minister, Parliament	Results in the area
	Minister of Finance	Is not aware of the problem.	Against any reduction of taxes	Prime Minister	Budget deficit
	Prime Minister	Is aware of the problem	Promised to solve it	NA	Agricultural producers as voters

	All Members of Parliament Committee of on Economy, Budget and Finance	Even if they were aware of the problem but it is not a priority	One of the thousands of issues to be solved	International Donors Their parties Mass media Civil society	Political points from the voters
International Institutions	World bank/IFC	Is not aware of the of the problem	May be against reduction of taxes, but could be convinced	NA	Enabling good business environment in the sector
	International Monetary Fund	Is not aware of the of the problem	May be against reduction of taxes, but could be convinced	NA	Avoiding any budget deficit. Increase in budget revenues
Civil society	National Federation of Employers in Agriculture and Food Industry. Association of Fruit Producers & Exporters "Moldova-Fruct". Association of Grapes Producers & Exporters (APESM). National Federation of Farmers of Moldova. Sector NGO's	Aware of the problem, know all details	Try to solve it, they are direct beneficiaries	Their members, agricultural producers	Reduction of the tax burden to the business

Costly and complicated export certification procedure

Target name	Contact person	What do they know about the problem?	What is their attitude about the problem?	Who has influence over them?	What is important to them?
PRIMARY TARGET			SECONDARY TARGET		

Government	All Members of Parliament Committee of Agriculture and Food Industry	Even if they were aware of the problem but it is not a priority	One of the thousands of issues to be solved	International Donors Their parties Mass media Civil society	Political points from the voters
	Minister of Agriculture	Need support from the project and other stakeholders to address the issue	Understands the issue and expressed will to address it	General public International Donors Own political party Mass media Civil society	Attainable results Recognition of results by Prime Minister
	Head of the State Chancellery	He is not aware of the problem	One of the thousands of issues to be solved	Prime Minister	Recognition of results by Prime Minister
	Ministry of Economy, including through the Working Group of State Commission for regulating entrepreneurial activity	They are not yet aware of the issue, must be informed	Make changes which could contribute to business climate	Government, Prime Minister, Parliament	Results in the area
	Minister of Finance	Is not aware of the problem.	Against any increase in financing of public institutions	Prime Minister	Budget deficit
International Institutions	World bank/IFC	Is not aware of the of the problem	May be against reduction of taxes, but could be convinced	NA	Enabling good business environment in the sector
	OECD	Is not aware of the problem but if informed would support it	Reduction of tax burden to the business	NA	Business environment in Moldova

Civil society	National Federation of Employers in Agriculture and Food Industry. Association of Fruit Producers & Exporters "Moldova-Fruct". Association of Grapes Producers & Exporters (APESM). National Federation of Farmers of Moldova. Sector NGO's	Aware of the problem, know all details	Try to solve it, they are direct beneficiaries	Their members, agricultural producers	Reduction of the tax burden to the business
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## Activities

Once the objectives have been specified, the next step is to select the advocacy campaign activities. The activities that will be chosen in the future will depend to some extent on ACED project resources dedicated to this campaign, and the relationship with the targets. The best methods to be considered for the CIBER process are participatory, cost-effective, and reach as many people as possible particularly the civil society and decision makers.

Type of advocacy activities: Press conference, workshop, lobbying, training, demonstrations, tv or radio, flyers, letter writing, website, surveys, interviews, networking, meetings, court cases, press release, newsletter, mediation, petitions, talk show, round table, press briefing, etc..

## Advocacy campaign action plan

After a thorough analysis of objectives, stakeholders, targets, and activities the ACED project team shall develop the advocacy campaign action plan. This plan will help to consolidate all thoughts and efforts into a concise framework to guide interventions under the ACED project and beyond in the future.

Compulsory variety registration: Conceptual approach

- (1) As the principal actor, MAFI is expected to develop the draft law with all the necessary amendments for the law currently on the books. The proposed amendments will be sent to the Government for approval, and the Government will submit it to the Parliament for adoption as a law.
- (2) MAFI has expressed a willingness to address the constraints associated with compulsory testing and registration of new varieties. However, the Ministry lacks the institutional capacity to prepare such amendments to the legislation in a reasonable timeframe. The Ministry therefore requires some outside assistance to develop these legislative changes, which would allow MAFI to promote these amendments to the Government and Parliament. It would be necessary to develop an analytical document on how the varieties should be approved in Moldova, with necessary justification. Producer associations will be working closely with the MAFI. USAID, World Bank and other stakeholders will have the opportunity to vet the proposals and provide additional inputs.
- (3) The Parliamentary Committee of Agriculture and Food Industry needs to approve the proposed amendments (draft law) before it is brought to the floor. Their involvement may be at the stage of developing the analysis as well as the draft law.
- (4) Professional associations are essential in the development of the policy response. They need to be involved in the all stages of the new draft law development, including participation at the public debates within the Government and Parliamentary Committee of Agriculture and Food Industry.
- (5) A specialized consultancy company with a solid reputation among agricultural producers and MAFI can provide guidance in the process of developing the amendments. It will organize workshops with all key players, public debate, support the international expert who is expected to play a role in the development of the analytical backup justifying the changes, and will manage and supervise the entire process.

The following matrix summarizes the actions to be taken as part of the advocacy campaign.

Actions	Responsible	Expected output
Carry out a RIA of the new law	ACED subcontractor for RIA activities, all relevant stakeholders	Draft law approved and endorsed by the involved stakeholders
Create a database of stakeholders (allies, neutrals and opposition), including names and contact information	ACED subcontractor	Improved communication with stakeholders
Develop the "Access to high-performance seeds" white paper, a justification document describing the current situation, explaining the problem, present solution and provide the image of the bright future	ACED subcontractor	Clear description of the issue
As an annex to the white paper, develop case studies of countries that successfully adopted EU seed catalogues or adopted voluntary seed registration	International expert(s) and ACED subcontractor	Tool to calm down concerns about potential chaos in the industry
Organize a meeting with all allies to present the white paper and the case studies in order to develop a common understanding of the problem, solution and advocacy plan	ACED subcontractor	Common platform and synergies
Organize a meeting with top MAFI officials (Minister, vice-ministers and heads of key departments) to present the whitepaper and record all questions and objections. Try to identify a champion (preferably Minister or one of vice-ministers)	ACED subcontractor and industry associations	Champion within MAFI identified and assured of full ACED and industry support
If significant concerns are raised about the side effects of proposed changes (such as difficulties certifying the seedling material produced by local nurseries), develop counter-measures (such as limiting the scope of proposed change to the imported seedling material only)	ACED subcontractor international specialist(s)	Tool to calm down concerns about potential chaos in the industry
Improve the whitepaper and the case studies to cover the key issues addressed by MAFI officials	ACED subcontractor	
Disseminate the whitepaper to all stakeholders	ACED subcontractor	All stakeholders are exposed to the issue raised by the industry
Organize a TV debate of the issue ("Bastina" program on the Public Television)	ACED subcontractor	Gain large, public support

Actions	Responsible	Expected output
Organize a large meeting with all involved stakeholders (allies, neutrals and opposition) to present the whitepaper. The meeting is to be chaired by the champion from MAFI.	ACED subcontractor	Need for change is realized by all key decision makers
Develop the draft of new law changing the laws that make variety registration compulsory: Law on Seeds (Legea despre Seminte), Law on Fruit and Berry Growing (Legea despre Pomicultura), and Law on Vineyards and Wines (Legea Viei si Vinului). The draft of the new law should contain a provision requesting the Government to adjust all supporting regulations within 12 months.	ACED subcontractor	
Approval of the new law by the Government of Moldova	Government of Moldova	
Organize a meeting with members of the parliamentary Committee of Agriculture and Food Industry and other interested members of Parliament to urge for quick adoption of the new Law	ACED subcontractor and MAFI	The adoption is included in the agenda of the Parliament
Adoption of the new law by the Parliament of Moldova	Parliament of Moldova	
Support Government of Moldova (MAFI) in developing the supporting legislation	International specialists	
Approval of the new supporting legislation by the Government of Moldova	Government of Moldova	

Import tax for key inputs (insulation panels, greenhouses and cardboard):

Conceptual approach

- (1) MAFI will be the principal actor in developing the amendments to existing legislation, but will consult with other agencies in the government. The amendments are to be sent to the Government for approval, and the Government will submit it to the Parliament for adoption as a law.
- (2) Prime Minister has made a verbal commitment to promote the changes with respect to the *cardboard* constraint. Because of this commitment, Prime Minister's advisers or the State Chancellery may take a more active role in the process regarding this input. Even so, the draft law is to be developed and submitted to the Government by MAFI, which should include the following:
  - To reduce the scope of the tariff reduction only to the product positions not currently produced in Moldova, they could be separated into a separate customs category and the tariff reduction could be applied to only one of them.
  - For example, two 10-digit sub-codes could be added to the current 8-digit code for insulation panels to avoid confusion; HS category 7308 9051 (Panels comprising two walls of profiled or ribbed sheet with an insulating core) can be split up into two subcategories:
    - 7308 9051 10 – of polyurethane—not produced in Moldova
    - 7308 9051 90 – of other materials—currently produced in Moldova
  - The proposed amendments would also cover It should be tried to include in the draft law changes regarding the insulation panels and greenhouse structure.
- (3) The timeframe is crucial. Everything should be done before the adoption of the new budget for the year of 2014.
- (4) The Parliamentary Committee on Economy, Budget and Finance needs to review and approve the draft amendments before they reach the floor.
- (5) Engagement by professional association and other civil society organizations is critical at all stages of developing the draft amendments, draft law development, including participation at the public debates within the Government and the Parliamentary Committee on Economy, Budget and Finance, as the amendments are being drafted.
- (6) A specialized consultancy company with solid reputation among agricultural producers and MAFI needs to guide the process of new law development. This consultant will organize workshops with all key players, public debate, will facilitate development of the new law and will manage and supervise the entire process.

The following matrix summarizes key actions of the development of draft amendments addressing issues of import duties on key inputs.

Actions	Responsible	Expected output
Carry out a RIA of the new law	ACED subcontractor for RIA activities, all relevant stakeholders	Draft law approved and endorsed by the involved stakeholders
Create a database of stakeholders (allies, neutrals and opposition), including names and contact information	ACED subcontractor	Improved communication with stakeholders
Develop the "Remove the tax for key inputs", white paper	ACED subcontractor	Clear description of the issue
Organize a meeting with all allies to present the whitepaper and the case studies in order to develop a common understanding of the problem, solution and advocacy plan	ACED subcontractor	Common platform and synergies
Organize a meeting with top MAFI officials (Minister, vice-ministers and heads of key departments), Prime Minister Advisors and the State Chancellery to present the whitepaper and record all questions and objections. Try to identify a champion (preferably Minister or one of vice-ministers)	ACED subcontractor and industry associations	Champion within MAFI identified and assured of full ACED and industry support
Improve the whitepaper and the case studies to cover the key issues addressed by MAFI officials	ACED subcontractor	
Disseminate the whitepaper to all stakeholders	ACED subcontractor	All stakeholders are exposed to the issue raised by the industry
Organize a mass media debate (TV, radio, other dissemination) of the issue	ACED subcontractor	Gain large, public support
Organize a large meeting with all involved stakeholders (allies, neutrals and opposition) to present the whitepaper. The meeting is to be chaired by the champion from MAFI.	ACED subcontractor	Need for change is realized by all key decision makers
Develop the draft of new law changing the laws. The draft of the new law should contain a provision requesting the Government to adjust all supporting regulations before the adoption of the budget for the year 2013.	ACED subcontractor	
Approval of the new law by the Government of Moldova	Government of Moldova	

Actions	Responsible	Expected output
Organize a meeting with members of the parliamentary Committee of on Economy, Budget and Finance and other interested members of Parliament to urge for quick adoption of the new Law	ACED subcontractor and MAFI	The adoption is included in the agenda of the Parliament
Adoption of the new law by the Parliament of Moldova	Parliament of Moldova	

### Costly and complicated export certification procedure

- (1) As the principal actor, MAFI will develop the draft amendments to current legislation. These amendments will be sent to the Government for approval, and the Government will submit it to the Parliament for adoption as a law.
- (2) The Ministry of Economy is another important player, since it supervises one of the six existing laboratories, and is designated to take the lead on all activities related to trade. The regional laboratories supervised by the Ministry of Health are not able to determine the residue of the active ingredients required by the Russian authorities (Россельхознадзор), thus at this stage this should be excluded from the policy response.
- (3) The draft law, to be developed and submitted to the Government by MAFI in collaboration with the Ministry of Economy, may be designed to amend existing provisions or replace them with a new law (Government Decision) which sets out clearly the new mechanism and responsibilities for each of the institutions involved.
- (4) An analytical document (option paper) should examine the costs and benefits of the new export certification procedures. This regulatory impact assessment would serve as a basis for the development of the new Government Decision, which would presumably include:
  - Install additional equipment at the laboratories in Balti and Ceadir-Lunga, which would allow pesticide residue testing in closer proximity to the orchards. This option might be considered for donor financing as a long-term solution to the constraint.
  - Connect the regional phytosanitary inspection offices with the pesticide residue laboratories through a secure network. It may be possible to get started on this option with support from ACED to facilitate the procedure for export certification.

The option paper should also consider the institutional development of the National Food Safety Agency.

- (5) Professional associations and other civil society organizations need to participate actively in the development of the new draft law, including contributions as part of the public debates within the Government as the draft law approaches approval.
- (6) A consultancy company should be engaged to guide the process of new law development. This consultant will organize workshops with all key players, public debate, will facilitate development of the new law and will manage and supervise the entire process.

The following matrix provides an overview of the actions to be undertaken as part of the development of a new draft law to address the constraints related to the costly and tedious procedures of certifications for exports.

Actions	Responsible	Expected output
Carry out a RIA of the new law	ACED subcontractor for RIA activities, all relevant stakeholders	Draft law approved and endorsed by the involved stakeholders
Create a database of stakeholders (allies, neutrals and opposition), including names and contact information	ACED subcontractor	Improved communication with stakeholders
Develop the “export certification” whitepaper, a justification document describing the current situation, explaining the problem, present the solution and provide the image of the bright future	ACED subcontractor	Clear description of the issue
As an annex to the whitepaper, develop analytical document (solution paper) on how the new mechanism of export certification procedure should look like and which will serve as a basis for development of the new Government Decision. It may be proceed with p. “4 b” to facilitate the procedure for export certification, as the first action for ACED involvement. Point “4 a” may be considered as a next step of constrain removal.	ACED subcontractor	Tool to calm down concerns about potential chaos in the industry
Organize a meeting with all allies to present the whitepaper and the case studies in order to develop a common understanding of the problem, solution and advocacy plan	ACED subcontractor	Common platform and synergies
Organize a meeting with top MAFI/Ministry of Economy officials (Minister, vice-ministers and heads of key departments) to present the whitepaper and record all questions and objections. Try to identify a champion (preferably Minister or one of vice-ministers)	ACED subcontractor and industry associations	Champion within MAFI identified and assured of full ACED and industry support
Improve the whitepaper and the case studies to cover the key issues addressed by MAFI officials	ACED subcontractor	
Disseminate the whitepaper to all stakeholders	ACED subcontractor	All stakeholders are exposed to the issue raised by the industry
Organize a mass media debate (TV, radio, other dissemination) of the issue	ACED subcontractor	Gain large, public support

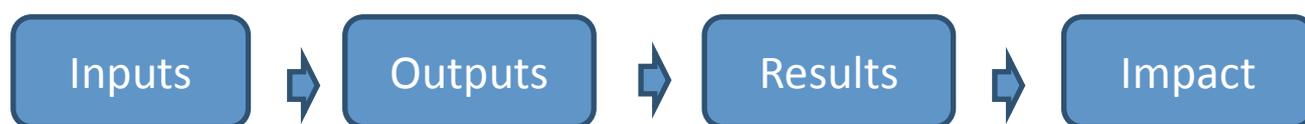
Actions	Responsible	Expected output
Organize a large meeting with all involved stakeholders (allies, neutrals and opposition) to present the whitepaper. The meeting is to be chaired by the champion from MAFI.	ACED subcontractor	Need for change is realized by all key decision makers
Develop the draft of new law changing the. The draft of the new law should contain a provision requesting the Government to adjust all supporting regulations within 3 months.	ACED subcontractor	
Carry out a RIA of the new law	ACED subcontractor for RIA activities	
Approval of the new law by the Government of Moldova	Government of Moldova	
Organize a meeting with members of the parliamentary Committee of Agriculture and Food Industry and other interested members of Parliament to urge for quick adoption of the new Law	ACED subcontractor and MAFI	The adoption is included in the agenda of the Parliament
Adoption of the new law by the Parliament of Moldova	Parliament of Moldova	
Support Government of Moldova (MAFI) in developing the supporting legislation	ACED subcontractor	
Approval of the new supporting legislation by the Government of Moldova	Government of Moldova	

## Monitoring

Monitoring of the advocacy campaign shall assess the resources used (human, material and financial resources), outputs (activities, products), and results (achievements) against the proposed action plan, and especially the SMART objectives of the program. In order for monitoring to be effective it must be completely integrated into all phases of the advocacy campaign.

A successful monitoring program will provide with a rich source of information about the campaign and ensure accountability. For example, to see if the media campaign (if such would be done by the project) is successful, it will be necessary to keep a record of press coverage.

The monitoring of the future advocacy campaign could be governed by the following monitoring scheme:



Inputs	Outputs	Results	Impact
<p>The resources (human, material, and financial), which shall be put by ACED and other stakeholders into the campaign.</p>	<p>The direct results of combining and utilizing the inputs to create a capacity for producing results.</p> <p>Number of workshops</p> <p>Number of meetings with decision makers</p> <p>Number of TV shows, media programs, etc.</p>	<p>The achievements resulting from the use or action of the outputs.</p> <p>Following constrains removed:</p> <ul style="list-style-type: none"> <li>▪ Compulsory variety registration;</li> <li>▪ Import tax for key inputs (insulation panels, greenhouses and cardboard) abolished;</li> <li>▪ Costly and complicated export certification procedure improved.</li> </ul>	<p>The improvement in doing business, increase in profits and revenues, time spend, etc. by the agricultural businesses from these three value chains.</p> <p>Quality of life, which can be measured objectively and contributes to a larger social goal.</p>

## Evaluation

Periodically during the advocacy campaign it will be necessary to analyze the information that has been gathered during the monitoring process. Using the indicators from the Advocacy Campaign action plan, assessing what has been accomplished and how well the resources have been used. The monitoring data might also indicate changes in power structures, allies and opponents, or even the problem itself.

## Annexes

### Annex 1: Scoring Rating for CIBER strategic decision matrix

Economic impact scoring rating for apple value chain

0-50.000	1
50.000-100.000	2
100.000-500.000	3
500.000-1.000.000	4
1.000.000-2.000.000	5
2.000.000-5.000.000	6
> 5.000.000	7

Economic impact scoring rating for grape and tomato value chain

0-50.000 USD	1
50.000-100.000 USD	2
100.000-250.000 USD	3
250.000-500.000 USD	4
500.000-1.000.000 USD	5
1.000.000-2.000.000 USD	6
> 2.000.000 USD	7

“Action required” scoring rating

#### Passing new legislation

Passing a new Code	1
Passing a new organic law	2
Passing a new ordinary law	3
Passing a new Government Decision	4
Passing a new decision of the Ministry	5

#### Modifying existing legislation

Modifying existing Code	3
Modifying existing organic law	4
Modifying existing ordinary law	4
Modifying existing Government Decision	5
Modifying existing decision of the Ministry	6

#### Adjusting the score

If new legislation adjustment would require changing the state budget allocation it could be extracted 1 point out of original scoring, since the Government is limited by IMF provisions.

“Responsible organization” scoring rating

Parliament	3
Government, national	4
Government, local	5
State agencies	6
Private sector associations	7

#### “Likely spillover effects” scoring rating

Action triggered by one value chain may affect others; it may also impact broader economic objectives, such as the promotion of small and medium-sized enterprises (SMEs).

- 1 = solution applies only to the particular value chain and little effect on national economic objectives;
- 7 = expected impact will address a range of value chains and sectors and promote broader development impacts.

#### Advocacy scoring rating

No supporters except the project developers	1
Some supporters are present but with no lobbying power	2
Previous plus a strong support from farmers as individual companies (no consolidation)	3
Previous plus professional bodies	4
Previous plus international institutions	5
Previous plus representatives of ministries or state agencies	6
Previous plus full political decision making support	7

#### Opposition scoring rating

Political decision making opposition / International institution opposition	1
Ministerial opposition	2
State agencies and academic experts opposition	3
Some of the existing professional bodies opposition	4
A narrow range of farmers opposition	5
Some experts in domain opposition	6
Opposition from people with no chance of decision making resistance	7

#### Resources required/cost scoring rating

Cost of advocacy campaign; investments required in response to regulatory or administrative changes (for example, in new ICT infrastructure):

- 1 = small resource requirements;
- 7 = significant resources required to design and implement the solution.

**Annex 2: Stakeholder workshops and interviews**

Activity	Value chain	Location	Date (2012)	Notes
Workshop	Apple	Edinet	April 17	18 participants
Workshop	Table grape	Chisinau	April 24	9 participants
Workshop	Tomato	Criuleni	May 3	12 participants
Interview	Apple	Chisinau	May 4	Constantin Furculita (supplier of fruit seedlings)
Interview	Apple & TG	Chisinau	May 4	Ion Chilianu (apple and table grapes grower)
Interview	Apple	Rezina	May 5	Leonid Anghel (apple producer)
Interview	Apple & TG	Orhei	May 5	Petru Stratan (apple and table grapes grower)
Interview	Multiple	Chisinau	May 6	Artiom Doros (exporter)
Interview	Multiple	Sangera	May 6	Oleg (Marketing Cooperative Premium Fruct)
Interview	Multiple	Stauceni	May 6	Tudor Ungureanu (apple grower and exporter, supplier of concrete poles & anti-hail systems)
Interview	Multiple	Chisinau	May 10	Mihai Zagorodnii (supplier of cold storage equipment)
Interview	Multiple	Chisinau	May 10	Victor Avram (producer association)
Interview	Tomato	Speia, Ane-niiNoi	May 10	Gonccearuc Serghei (greenhouse tomato grower and exporter)
Interview	Multiple	Colicauti, Briceni	May 11	Vlad Gamureac (apple grower and exporter, supplier of cardboard packaging)
Interview	Multiple	Colicauti, Briceni	May 11	Mihai Lupu (apple grower and exporter, supplier of cardboard packaging)

Activity	Value chain	Location	Date (2012)	Notes
Interview	Apple	Cotuijeni, Briceni	May 11	Aliona Vornices (fruit grower, cold storage and exporter)
Workshop	Multiple	Chisinau	June 7	20 participants
Workshop	Multiple	Chisinau	Sept. 7	40 participants