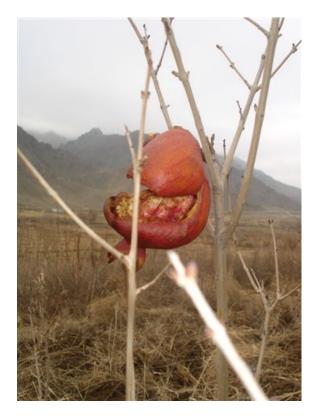






# Disaster Risk Reduction in the project Markets for Meghri



Short report on the DRR Workshop
21.-22 January 2013, Yerevan, Armenia

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# Introduction: Workshop objectives

A 2-day Workshop on Disaster Risk Reduction (DRR) for the SDC supported rural development project in Meghri, Markets for Meghri (M4M), took place between the 21st and 22<sup>nd</sup> January 2013 in Yerevan, just at the beginning of the second phase of the project.

The workshop was attended by the project staff of Phase II (CARD), representatives of SDC including the DRR Specialists of SDC for the South Caucasus region (Eveline Studer and Sergey Hovhannisyan). In addition, former staff of SHEN (the organization in charge of Phase I) were also partly present (Arthur Hayrapetyan) as well as invited guests like the Ministry of Emergency Situations (Nicolay Grigoryan), a project member of the other M4P project in Armenia from SDA (Karina Harutyunyan) and a representative of the AM Red Cross (Edmon Azaryan).

The event was facilitated by Nicole Clot, International Advisor in Disaster Risk Reduction and Vulnerability from HELVETAS Swiss Intercooperation.

The overall objective of the workshop was to look back and take stock of the main lessons learned during Phase I (2010-2012) in order to identify possible future intervention related to DRR phase II.

The specific objectives of the workshop were:

- 1. To identify main lessons learned and challenges of Phase I.
- 2. To identify DRR options according to the 4 main outcomes defined for Phase II.
- 3. To strengthen local capacities (especially of the new partner organisation for phase II).
- 4. To have a better understanding about SDC and their understanding of DRR in general and in the South Caucasus.

The workshop was organized according to the following sessions: (i) Looking back; (ii) strengthening of DRR capacities; (iii) looking forward - nail it down.

The workshop just took place at the beginning of the second phase to ensure that the lessons learned and experiences in regard to DRR could be considered in the second phase and activities could be well planned in advance to make sure that DRR is better integrated in the second phase which was only to a certain extent the case in the first phase.

# Approach and Methodology

The overall objective of the workshop was to identify DRR options according to the 4 main outcomes defined for Phase II.

For this reason, the workshop started with an **After Action Review** by looking back at the first phase in order to identify the main lessons learned and challenges which then should serve to identify the DRR interventions for Phase II.

In the context of DRR, a sound analysis of hazards and risks that are relevant to the project's activities, especially the ones which might negatively impact the horticulture production, is therefore crucial.

In case of this workshop, the **Climate, Environment and Disaster Risk Reduction Integration Guidance (CEDRIG)** developed by SDC was the main instrument used to conduct a risk assessment and to identify possible DRR intervention options according to the four outcomes defined for Phase II.

Based on the risk assessments conducted in the inception phase (June 2009), secondary literature on DRR and CC for Armenia and the South Caucasus as well as the experience of the staff during Phase I allowed the participants to conduct the risk/impact assessment for the Meghri region (Step 1, Module 3 of CEDRIG).

Based on the risk/impact assessment, possible DRR options were identified following the procedure of Step II, Module 3 of the CEDRIG Tool. Considering that it is a M4P project, the options identified had to be in line with an M4P approach, meaning that the project only facilitates the interventions and does not intervene directly.

The different exercises with the participants should at the same time fulfill the purpose to increase the awareness about DRR and its importance in development projects. This is indeed a precondition to ensure that DRR is addressed in a systematic manner at the operational level, which is in line with Action 1 of the Hyogo Framework for Action (c.f. UNISDR 2005).

# Part I: M4M Project Experience – Look back (Phase I)

Table 1: Main hazards in the Meghri region related to the horticulture production

Hazard	Impact	Severity	Period and frequency	Affected households
Frost damage	Loss of the current and next years' harvests Destruction of trees of subtropical varieties Withering of trees	fierce	January - April Once every second year	60-70% of producers of the villages along Araks River and 55 % of in the mountainous area and the villages between mountains and the riverside
Hail	Loss of the current and next years' harvests Reduction of marketing potential of fruits Destruction of new planted trees	average	May - August Once - twice a year	40 % of producers
Drought	Loss of the current and next years' harvests Reduction of marketing potential of fruits	low	May – September Once every 2 <sup>nd</sup> or 3 <sup>nd</sup> year	40-50% of producers of the villages along Araks River 30 % of producers in the mountainous area
Flood	Demolition of irrigation canals. Washing away and destruction of humus layer of soil Loss of harvest and demolition of young trees	low	May – June Once every other year	Only the riverside producers are affected, 30% producers of the villages along Araks River

After an overview about Phase I with a particular focus on DRR and its interventions, the participants discussed in group the main lessons learned and challenges which led to the following results:

## What was supposed to happen?

#### Frost and hail

- Improve cultivation technique and increase know-how among producers
- Piloting of adequate anti frost machinery, establishing protective nets
- Facilitate connections to appropriate and resistant varieties through collaboration with nurseries
- Promote access to advisory service providers and input suppliers

- Introduce adequate varieties which can cope ideally with both drought and floods
- Awareness raising campaigns
- Do not harm approach (soil pollution through extensive use of chemicals or risky specialised farming)
- Monitoring the use a) of water resources and threats on drinking water, b) of chemicals and management of residues in the soil, soil salinization.

According to the above mentioned hazards, this led to the following identification of <u>DRR options during</u> the inception phase:

- Introduce crop protection and nutrition practices through training, consultancies, demonstration events, exchange visits
- Introduce both local and imported varieties which can resist climatic conditions and hazards (drought, frost, etc.)
- Include DRR into training curriculum
- Establish services (spraying service) to increase productivity and decrease loses

## What actually happened?

- Awareness raising
- Establishment of some services (e.g. spraying services)
- Organization of DRR trainings
- Import of resistant variety of tress
- Organizing of demo events (e.g anti hail nets)
- Implementing the research and lobbing
- Analysis of water, soil and fruits
- Development of storages with cooling facilities

Only to a certain extent

- Coordination/cooperation with the Government
- Establishment of anti hail system

#### Lessons learned

### Pilot-testing of innovations:

- Trailed different mechanisms for spraying services against diseases, leading to the conclusion that smaller backpack units would provide a more viable option but takes a lot of time.
- The team has learnt that whilst testing new ideas is important, a clear pathway for crowdingin needs to be developed soon in order to achieve scale and sustainability.

### Understanding of target region and sector:

Several studies have been conducted but detailed sector analysis has not been conducted in a systematic manner. This has often led to a lack of a clear definition of project objectives and focus.

### Capacity in M4P

- The M4M project is still a pioneering how to operationalize the M4P approach and its principles. The application of the M4P approach should have been conducted in a more systematic manner;
- Capacity building from the side of the international backstopper was regarded as weak.

### Mainstreaming cross-cutting themes (CCT)

- CCTs have been insufficiently mainstreamed into project interventions but rather been treated as a separate subject.
- Overall team awareness and commitment towards gender, governance and DRR has been weak.
- Not enough efforts were made for changing the perceptions of the farmers regarding the importance of investing in preventive measures.

### Relationships to stakeholders

- Provincial governments have certain expectations towards the project (i.e. direct investment).
- SDC was not sufficiently informed about project activities and progress.
- Collaboration with other projects in the region was weak

### · Role of local authorities

- The key role local authorities play in regard to DRR
- The decentralized responsibility regarding DRR is still very weak or not existing in the Meghri region.

### Local presence

- The project was seen as driven from outside rather than promoting local ownership.

## Main challenges

- Lack of awareness (among the Government staff) regarding the M4P approach as well as DRR.
- From the point of view of the local authorities, the understanding of DRR is often limited to infrastructure intervention.
- Difficulties to move away from direct project intervention to a facilitation role as NGO; the lack of understanding of the stakeholders in the Meghri region is an additional constraint.
- Absence of separate budget line for DRR interventions.
- Lack of DRR expertise in the country and especially in the region.
- Direct response to DRR impacts rather than give focus on prevention.
- Limited community budget for DRR interventions.

## Suggestions regarding the intervention of DRR for Phase II

- Direct collaboration with the Ministry of Agriculture
- Communication is crucial for avoiding wrong assumption of project results
- Clear strategy and implementation of project activities
- Making analysis for getting useful information for making decisions (VCO, VCS, project)
- Continue good practices (spraying, new varieties, post harvesting)
- Introduction of an Integrated Production Management Approach (IPM)
- Development of a "common language" on DRR mainstreaming among the different stakeholders
- Better Coordination with stakeholders

In the following discussion, it has become clear that the project team is aware that investing in DRR pays off and the findings confirmed their willingness to invest and implement DRR in a more systematic way in the second phase (c.f. The Natural Hazards, Unnatural Disasters). Last but not least, the session strengthening of DRR capacities also contributed positively to a "shift of perspective" among project members.

# Part II: Strengthening of DRR Capacities

Having now a better understanding about DRR and its concepts allows the project team to implement DRR in a more systematic way, but also makes them better understand about the importance DRR and its role as a cross-cutting topic in the M4M, namely to avoid respectively to reduce adverse negative impacts on the project activities. The introductory presentation on DRR by the International Advisor for DRR and Vulnerability at HELVETAS Swiss Intercooperation (Nicole Clot) gave more clarity about the DRR concept and its objective, the international framework for DRR (Hyogo Framework for Action) and the importance of DRR in development projects. In short, risks can no longer be ignored and need to be systematically analysed at the beginning of a project in order to identify sound measures to reduce the impact of a possible hazard.

The presentation by the Ministry of Emergency Situation, Nicolay Grigoryan, showed the strong commitment by the government of Armenia for disaster risk management in the country and was a particular asset during the session "strengthening of capacities". Although DRR is not yet strongly decentralized, the government wants to put now additional resources to make it happen by strengthening the capacities of authorities at the mars and community level. In sum, the presentation strongly supported the argument that the M4M project is perfectly in line with the efforts undertaken by the Armenian government to strengthen the resilience within the country.

The presentation given by SDC (Eveline Studer and Sergey Hovhannisyan) also gave the participants a better understanding what SDC does in Armenia and in the South Caucasus region. The DRR network of SDC and in particular the subnetwork for South Caucasus was regarded as a useful platform to exchange with other practitioners in the region and to be informed about DRR.

Unfortunately, the presentation by SDA on their M4P projects in the Meghri region was rather short, but the teams will have other opportunities to exchange and share experience which is regarded as highly relevant.

## Part III: Look forward - Nail it down

The main focus on the second day was on planning the DRR interventions for Phase II. As previously mentioned, the CEDRIG Handbook was selected as the main tool to conduct a risk/impact assessment and to identify possible DRR interventions.

After a short introduction on the tool by SDC, which follows with its 4-step approach the logic by the OECD guideline on mainstreaming adaptation into development, the participants started to conduct the risk assessment giving the following result:

Table 2: Results Risk/Impact Assessment (Step 1, Module 3 of CEDRIG)

Module 3:	Step I: Risk/ I	mpact Assessme	nt		
Relevant hazards in the project region	Frequency and Intensity	Assets affected by these hazards (Vulnerability)*	Factors influencing current and future vulnerability and adaptive capacity (Enhancing and limiting factors)	Impacts of hazards today and in the future	Overall Risk estimation Risk (-)/ opportunities(+)
Hail	Several times per year in May-July	Crops, harvest, trees in all communities especially in Lehvaz, Kharchevan and Meghri, saplings, buildings	Lack of meteorological information (-) Information not translated for agricultural purposes (-) Lack of financial resources (-); Social behavior (cooperation, reliance on Government (-); No diversified income (-); Interest for new technologies (+); Alternative processing of products (vodka, wine, jam (+)	Reduced (quality and quantity) agricultural production (future); Reduced motivation; Reduced income (present) Damaged trees and samplings	High Risk Current copying strategies are limited>damage of harvest up to 70%
Frost	Once per two years (February- April; November- December); each three or four years (heavy frost)	Crops, saplings, trees in all communities especially in Shvanidzor, Alvank and Meghri	Lack of storage facilities (-) Lack of information (forecast) Lack of financial resources (-); Social behavior (cooperation, reliance on Government,(-); No diversified income (-); Interest for new technologies (+); Alternative processing of products (vodka, wine, jam; (+)	Reduced (quality and quantity) agricultural production (future); Frosted branches, reduced income and poverty increases (present)	High Risk Available/average opportunities>damage of orchard (average), harvest (high)
Heat waves	Once in two years (May- August)	Crops, trees in all communities; soil erosion; health issues among population	No dry-resistant varieties of trees (-) No dwarf (small trees) varieties of trees wind resistance (-) Limited or no access to water (-) Limited or no access to mulch cover (-) No diversified income (-) Quality of water (because of the mining, (-); corruption components (-); Lack of financial resources (-); Social behavior (cooperation, reliance on Government, (-);	Weakened physical condition of people Spread of insects (grass hopers)	Average Risk/ Low copying strategies is low >damage of orchard (low) harvest (average)
Mudflow	Once in a year in spring	Infrastructure, roads, buildings, orchards, plants	Lack of early warning system (-); Lack of protection measures (-); Lack of financial resources (-); Social behavior (cooperation, reliance on Government (-); No diversified income (-); Interest for new technologies (+); Alternative processing of products (vodka, wine, jam;(+)	Reduced agricultural production (destroying orchards, future); Reduced motivation; Reduced income (present)	Damage of orchard (potential) average
Flood	Yearly in spring, autumn, early summer	Trees, saplings, harvest, plants Especially in Shvanidzor			High risk (but only certain villages are affected) Damage of trees, harvest (low)
Mining pollution	Permanently	People Soil Water Quality of fruits	Lack of trustful information about current situation	Physical condition of people Sensitive political issue	Unclear risk at the moment Limited Strategy

<sup>\*</sup>When analyzing vulnerability, please consider all 6 dimensions: natural, physical, human, social, political and financial

The risk assessment confirmed that **hail** and **frost** are the major hazards in the project region and cause major damage on the horticulture production; in other words, the current results are in line with the first risk analysis conducted during the inception phase.

However, **mudflows/floods** and **mining pollution** were additionally mentioned during this risk assessment. In case of mining pollution, it seems important to do a sound analysis to better understand the possible risks and impacts it could have on the horticulture production. Once the results are available, the project team can decide on particular measures in this regard. Regarding mudflow or floods, it seemed that the team had different opinions about the causes and impacts so that exchanges at the field level would be highly recommended. Among 8 targeted communities in Meghri region, mudflows are mainly happen in Shvanidzor village.

Based on the risk/impact assessment, the participants identified the following DRR options according to the four outcomes defined for Phase II.

Table 3: Identification of possible DRR options (Step 2, Module 3)

Module 3	: Step 2: Brainsto	rming & identification of	of possible DRR options
Outcomes of Phase II	Main hazards	Additional impacts to consider	Possible DRR options
Outcome 1 Knowledge /Input	Hail, frost, heat waves, mud flows, insects/diseases Mining pollution	Increasing of productivity in a non-sustainable way would lead to soil degradation New planed orchard should not be placed under (near channel walls – it relates only to Shvanidzor)	Introduction of IPM for sustainable horticulture development Trainings for LF, active farmers increase of awareness about hazards Warning system Meteo observations in COTs Promotion of structural measures against hazards, improve awareness and know-how Micro insurance
Finance	waves, flood, mud flows, insects/diseases		Saving funds Awareness raising among farmers for necessary DRR measures,  Mapping of the vulnerable land plots with indication of relevant hazards to inform financial institutions when they develop their products or other stakeholders.
Outcome 3 Markets	Hail Frost Insects/Diseases Mining pollution	Balance between processors and traders	Contract relationship Updating market price information Storage capacities Insurance (Trade fund)
Outcome 4 Public- Private Partnership	Hail Frost Insects/Diseases Mining pollution		Strengthens of awareness of government structure about M4P approach and DRR activities Collaboration/coordination with local institutions Clear strategies to deal with hazard with local institutions Improved relationships between farmers and local government stakeholders like Water User's Association, ASC, etc. through awareness raising of farmers on their rights and on available opportunities and through capacity building/strengthening of local partners.

In the plenum, it was then decided not to go for Step 3 "Priorization of options" as the options identified at the outcome level need to be further elaborated. Before going in a priorization process, interventions at the output level shall be identified.

This particular step was then conducted the following day (Wednesday 23<sup>rd</sup> January 2013) in a smaller group together<sup>1</sup> with the international advisor of HELVETAS Swiss Intercooperation leading to the following results:

Table 4: DRR interventions per output level for each outcome

agricultural information and in	outs.		ess to up-to-date	
Specific outputs of interventions		DRR activities	Key partners	
Output 1: Facilitate the development of embedded information services between (lead) farmers and relevant service providers such as input suppliers which are based on commercial transactions and incentives.	<ul> <li>horticultural producers in Me</li> <li>Facilitate access of farmers to making decision about prever production;</li> <li>Develop Lead Farmers' capact Trainers regarding the use of horticultural purposes (preve etc.);</li> <li>Introduction of Integrated Pro Integrated Pest Management development in Meghri;</li> </ul>	Develop Lead Farmers' capacities in the Centres of Training of Trainers regarding the use of meteorological information for horticultural purposes (prevention measures, watering of orchards, etc.); Introduction of Integrated Production Management (incl. Integrated Pest Management) for sustainable horticulture		
Output 2: Promote and support the establishment of commercial retail networks for agricultural inputs in the Meghri region (directly through shops or through an agent model).		Explore the possibility of mobile-phone based information system for inputs and make use of the system as Early Warning System (EWS);		
Output 3: Support the start-up of commercial nurseries in the Meghri region that provide high quality trees and also new and more productive varieties, and link them to relevant suppliers and R&D organisations.	<ul><li>(e.g. anti-hail nets);</li><li>Explore new adapted varieti resistant).</li></ul>	Explore new adapted varieties (smaller-sized trees and frost-dry-resistant).  Support marketing of new varieties among horticultural producers		
Anticipated changes in service	es and supporting functions	Anticipated changes at s	sector level	
Specific changes at service market	evel would therefore include:	Changes at farm level would include:		
<ul> <li>established;</li> <li>Local Service Providers development in their practice</li> <li>Local Service Providers are all</li> </ul>	use sustainable horticulture;; le to make DRR assessment and ultancy, in collaboration with	producers in Meghri should be esta Shift from a reactive to a proactive preventive measures in practice;	ablished; ve attitude towards use of	
		illored advice to men and women fo	armers, processors and	
other private players in the hor Specific outputs of interventions Output 4: Promote and support the establishment financial services (e.g. through branch offices or agents of micro-	<ul> <li>Explore potential insurance of insurances for small-scale hor traders;</li> </ul>	s to capital for investments.  of DRR activities  ompanies in Armenia in offering  ticultural producers, processors and	Key partners  Micro-finance institutions, local and international ( Swiss Re) insurance	

<sup>&</sup>lt;sup>1</sup> Nicole Clot, Eugene Ryazanov and Hasmik Altynyan

which provide farmers,	and traders;		government grant
processors and other players in			schemes, farmer
the horticultural market system			groups
with sustainable access to capital			
for investments.			
Output 5: Facilitate the	Increase capacity of farmer	groups about saving funds;	Financial and business
development of (embedded)	I	he saving funds for interested farmer	management service
information and capacity	groups.	ŭ	providers, banks, lead
building services to improve	3 1		farmers
financial literacy and business			
management skills of			
entrepreneurial farmers,			
processors and other players in			
the horticulture value chain.			
Anticipated changes in service	es and supporting functions	Anticipated changes at s	sector level
Specific changes expected in service		Changes at farm level would include:	
therefore include the following:	0		
9	eption of insurance scheme for	<ul> <li>Some farmer groups have saving full</li> </ul>	
horticulture sector developm		<ul> <li>Farmer groups have an unders</li> </ul>	standing about insurance
	ance institutions express interest	scheme.	
	rrance scheme for horticulture		
production.	nance seneme for norticalture		
	cial linkagas hatwaan farmars	ı and buyers (processors, traders, retaile	ars avnortars) allow
access to higher value markets		and buyers (processors, traders, retain	ers, exporters) unow
,			Evanuatore astalle a
Output 6: Support the		seep a balance between delivery of	Exporters, retailers
establishment of improved	products to processors and		(supermarkets), traders,
commercial linkages between	<ul> <li>Encourage contractual part</li> </ul>	ties to fulfil their responsibilities;	processors, farmer
farmers and buyers (traders,			groups, lead farmers
processors, retailers or			
exporters) e.g. through a			
contracting model, which			
includes also a better exchange			
of information and other			
embedded services.			
Output 7: Support the	<ul> <li>Facilitate farmers through</li> </ul>	technical advice for construction of	Farmer groups, lead
development of better	storages with cooling facilit	ties in low risk areas;	farmers, small-scale
organisational structures and	<ul> <li>Develop capacities of the fa</li> </ul>	armers group to negotiate fare	processors, traders,
capacities (such as collection,	conditions of the contract v	with buyers;	municipalities
storage, bargaining skills, grading	<ul> <li>Explore businesses interest</li> </ul>	ed in promoting of preventive measures	
etc.) at farm level in Meghri in	(e.g. storages with cooling	facilities);	
order to improve access to	Create incentives among up	pstream business to make investment in	
higher value markets.	construction of big size sto	rages with cooling facilities (ensured in	
	full-time operation) in the	= :	
Anticipated changes in service	·	Anticipated changes at s	ector level
Anticipated changes in service	es and supporting functions	Anticipated changes at s	ector rever
As a result of project interventions	will be some specific changes:	Contractual relationships will result in so	me changes:
<ul> <li>Larger upstream busine</li> </ul>	sses make investments in	Investments into storage capacitie	s done by the business will
. 0	torages with cooling facilities	allow achieving better prices	s dolle by the business will
	_	allow achieving better prices	
(ensured in full-time operation	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Outcome 4: Local aovernment	(municipalities and provincial d	government) adopts and implements a	strategy towards
	· · · · · · · · · · · · · · · · · · ·	ent promotion in horticulture through p	- 1
partnership.		p. 1 dugii p	p
Output 8: Facilitate the			Syunik mare government
development and		pacities of government structures about	Syunik mars government,
implementation of an	DRR in the context of the N	N4P and concretely in M4M project;	municipalities, relevant
	Encourage and support loc	al government (municipalities and mars	service providers, private sector
investment promotion strategy for the horticultural sector in		to deal with hazards and environmental	SECTO
	risks in Meghri;	22.22.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	
Meghri of the local government	_	at to make investment in accounting	
(province and municipalities)		nt to make investment in preventive	
and other relevant agencies.	measures in the region;		
		es report to the project about increased	
	share of the local budget for pre	ventive measures in the region.	
	J - F -	<u> </u>	

Output 9: Facilitate improved cooperation between public and private sector player, including the strengthening of advocacy of private sector interests and the government's ability and capacity to respond appropriately.

Improve relationships among stakeholders involved in horticulture development in the region in the context of DRR activities

Syunik mars government, municipalities, business membership organizations, private sector – farmer groups, processor and traders

#### Anticipated changes in services and supporting functions

### Anticipated changes at sector level

Specific changes resulting out of these DRR activities include:

- Improved awareness and understanding of government about preventive measures in the horticulture sector;
- Increased capacity of local governments to contribute/implement to mars/national strategies on preventive measures in the region;
- Share of the local budget for preventive measures in the region has increased.

At the sector level:

- Improved coordination between government and private sector should lead to a decrease in losses due to disasters:
- Businesses are encouraged to make investment in horticulture production thanks to strategies on preventive measures against hazards in the region.

# Conclusion and next steps

The interventions of DRR in the project are based on the logical sequence of the Hyogo Framework for Action (HFA) and its five main activities. This means:

Awareness and strengthening of capacities: Priority will be given to awareness rising and capacity

building activities both for local authorities, farmers and other key stakeholders. This is a preliminary step so that DRR will be regarded as important for future interventions and becomes a priority (Action 1 of HFA). Concretely speaking this refers mainly to Outcome 1 – Knowledge and Input – and Outcome 4 – Public-Private Partnership – where in particular the local government shall play a key role in ensuring that DRR becomes a more important topic in the Meghri region.

Know the Risk and Take Action/Build Understanding and Awareness: The project will facilitate a better access to meteorological information, but will also ensure that farmers' capacities in the field of DRR are strengthened (Outcome 1). Further, the project will explore potential options to reduce risks (e.g.micro insurance, promotion of preventive equipment)

1 Make Disaster Risk Reduction a Priority

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

2 Know the Risks and Take Action
Identify, assess, and monitor disaster risks - and enhance early warning

3 Build Understanding and Awareness
Use knowledge, innovation, and education to build a culture of safety and resilience at all levels

4 Reduce Risk
Reduce the underlying risk factors

5 Be Prepared and Ready to Act
Strengthen disaster preparedness for effective response at all levels

(Outcome 2 and 3), but will also support local governments to invest in DRR

### **Next steps**

The next steps will be to validate the information collected during the two-day workshop with the various stakeholders involved in the M4M and to adjust and complete the current tables.

The present report shall be the guiding document for the elaboration of the DRR concept note which shall be handed in to SDC and a guidance booklet for the lead farmers and project partners in the region in the future. The booklet planned to be elaborated in the second half of 2013.

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# Annexes

# Annex 1. Workshop Programme

Venue: Conference hall of the CARD (Centre for Agriculture and Rural Development).

	21 January 2		Centre for Agriculture and Ru			
Time	Min.	Topic	Objective	Content activities	Methodology	Responsible
9:00	30'	Welcoming and official opening	Check expectations and validate with workshop objectives	Opening Introduction; Workshop program Expectation participants		Project Team / Zara Allahverdyan (Head SDC office AM) Nicole Clot (HELVETAS Swiss Intercooperation)
Part I: Lo	oking back (f	Phase I of the project)				
9:30	30'	Short overview about the Horticulture project in Meghri		Introduce the project Present the four main outcome areas		Hasmik Altynyan / Eugene Ryazanov
10:00	45'	Overview about the risk assessments and DRR interventions conducted during Phase I	Setting the scene for the two- day workshop	Present the methodology The main results of the risk assessment DRR intervention planned and implemented	Presentation based on the risk report during the inception phase The four main outcome areas identified in the Pro doc. for phase I	Arthur Hayrapetyan
	15'	Questions of clarification				Project Team / Nicole Clot , HELVETAS Swiss Intercooperation
11:00	15'	Coffee Break				
11:15	60′	Group Work (i)	Pts. identify major lessons learned (+/-) and challenges regarding DRR interventions	Pts have filled in the matrix Crystallisation of lessons learned and challenges	Work in 2 groups, ideally with Shen staff	Nicole Clot / Project Team
12:15	45'	Presentation of Group Work results and short discussion				Group Presenters / Nicole Clot
13:00	60'	Lunch				
Part II: St	rengthening	of capacities in the field of DRR				
14:00	30'	In a nutshell: Introduction to DRR	Pts understand the concept of DRR and its importance in development work	DRR concepts Hyogo Framework for Action DRR in development projects	Share DRR concept paper beforehand	Nicole Clot, HELVETAS Swiss Intercooperation
14:30	30'	DRR in Armenia		Overview Gov AM progress and efforts in DRR (considering the reporting of the HFA)		Nicolay Grigoryan Ministry of Emergency Situations
15:00	15'	Questions of clarification				Nicole Clot
15:15	30	Coffee Break				
15:45	45'	SDC and DRR (incl. questions of clarification		Role and significance of DRR for SDC SDC interventions of DRR in Armenia DRR Platform Caucasus		Eveline Studer, SDC Sergey Hovhannisyan, SDC
16:30	30'	Lessons learned M4P Project in AM		Lessons learned (what went well and what did not) and challenges		Karina Harutyunyan, SDA
17:00	15'	Community based DRR project experience				Edmon Azaryan, AM RedCross

17:15	15'	Questions of clarification		Nicole Clot
17:30		Closing of the day		Nicole Clot

Tuesday	22th Novem	ber 2013				
Time	Min.	Topic	Objective	Content activities	Methodology	Responsible
8:30	15	Wrap up (Monday) and introduction (Tuesday)				Nicole Clot, HELVETAS Swiss Intercooperation
8:45	30	Introduction to CEDRIG (Climate, Environment and Disaster Risk Reduction Guidance)				Eveline Studer, SDC
9:15	5′	Introduction to the Group Work: Step I, Module 3				Nicole Clot
9:20	60′	Group Work: Risk Assessment based on the CEDRIG tool (Module 3, Step I)	Pts revalidate and adjust the risk assessments in the inception phase. Pts revalidate and adjust the risk		2 groups	Nicole Clot/ Eveline Studer
10:15	60'	Presentation of Group Work Results and discussion Group	assessments in the inception phase.		2 groups	Nicole Clot/ Eveline Studer
11:15		Coffee Break				
Part III: N		Looking forward (Planning of Phase II)				
11:30	30'	Presentation of Phase II including the 4 main outcomes Questions of clarification			2 groups	Eugene Ryazanov
12:00	10'	Introduction to Group Work			2 groups	Nicole Clot
12:15	75'	Group Work: Identification of possible measures (Module 3, Step II)	Pts identify possible future interventions in the field of DRR according to the 4 outcome areas identified in the Pro Doc for Phase II		2 groups	Nicole Clot/ Eveline Studer
13:00		Lunch				
14:00		Finalisation of Group Work	Pts identify possible future			
14:30	45	Presentation of Group Work Results (Step II)	interventions in the field of DRR according to the 4 outcome areas identified in the Pro Doc for Phase II			Group Presenters/Nicole Clot
14:30	60'	Group Work (Step III Priorization of measures)	Pts. Have priorized a set of future measures in the project region			Nicole Clot/ Eveline Studer
15:30	30'	Coffee Break				
16:00	60′	Presentation of Group Work Results Followed by discussion				Group Presenter / Nicole Clot
17 00	15'	Conclusion and identify next steps				Project Team / Nicole Clot
17:15	15'	Evaluation and wrap up of the workshop			Visualised evaluation	Nicole Clot, HELVETAS Swiss Intercooperation

HELVETAS Swiss Intercooperation, 16 January 2013

# Annex 2: Workshop Participants

Participant	Organisation	Day 1	Day 2
Eugene Ryazanov	HSI	present	Present
Hasmik Altunyan	CARD	present	Present
Shaken Badalyan	CARD	present	Present
Albert Kandazyan	CARD	present	Present
Nara Aslanyan	CARD	present	Present
Elza Stepanyan	CARD	present	Present
Hrach Harutyunyan	CARD	present	present
Azman Khojoyan	CARD	present	Present
Director	CARD	partial	partial
Eveline Studer	SDC	present	Present
Sergey Hovhannisyan	SDC	present	partial
Nicole Clot	HSI	present	present

## Invited guests

Arthur Hayrapetyan	Shen	Partial (invited guest)	
Karina Harutyunyan	SDA	present	
Nicolay Grigorvan	Ministry of Emergency Situations	Partial	
Edmon Azaryan	AM Red Cross	partial	

# Annex 3: Important links in the field of DRR

### Prepared by SDC and HELVETAS Swiss Intercooperation

DRR Information (documents, links and networks)

### Reports, tools and documents (worldwide)

Hyogo Framework for Action HFA, one pager overview (UNISDR, 2005) <a href="http://www.preventionweb.net/english/professional/publications/?pid:50&pih:2">http://www.unisdr.org/we/coordinate/hfa</a>

UNISDR Terminology on DRR (UNISDR 2009)

http://www.preventionweb.net/files/7817\_UNISDRTerminologyEnglish.pdf http://www.preventionweb.net/files/7817\_UNISDRTerminologyRussian.pdf

Global Assessment Report on Disaster Risk Reduction (UNISDR 2011) http://www.unisdr.org/we/inform/publications/19846

Natural hazards, unnatural disasters: the economics of effective prevention (Worldbank, 2010) <a href="http://www.preventionweb.net/english/professional/publications/v.php?id=15136">http://www.preventionweb.net/english/professional/publications/v.php?id=15136</a> <a href="http://www.gfdrr.org/gfdrr.org/files/nhud/files/NHUD-Report\_Full.pdf">http://www.gfdrr.org/gfdrr.org/files/nhud/files/NHUD-Report\_Full.pdf</a>

Mainstreaming Climate Change Adaptation into Development Planning (Guide for Practitioners) <a href="http://www.unep.org/pdf/mainstreaming-cc-adaptation-web.pdf">http://www.unep.org/pdf/mainstreaming-cc-adaptation-web.pdf</a>

Disaster risk reduction in international cooperation (SDC, 2011) http://www.preventionweb.net/english/professional/publications/v.php?id=17901

Intergovernmental Panel on Climate Change Reports (IPCC), 4<sup>th</sup> Assessment Report: http://www.ipcc.ch/publications and data/publications and data reports.htm#1

Special Report on Managing the risks of extreme events and disasters to advance climate change adaptation (IPCC)

http://ipcc-wg2.gov/SREX/report/report-graphics/ch4-figures/

National Communications to the United Nations Framework Convention on Climate: Change (UNFCCC): http://unfccc.int/national\_reports/non-annex\_i\_natcom/items/2979.php

Integrating Climate Change Adaptation into Development Cooperation (OECD): http://www.oecd.org/dataoecd/0/9/43652123.pdf

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#### Info South Caucasus (documents / links)

Central Asia and Caucasus Disaster Risk Management Initiative (CAC DRMI) <a href="http://www.preventionweb.net/english/professional/publications/v.php?id=11641">http://www.preventionweb.net/english/professional/publications/v.php?id=11641</a> <a href="http://www.preventionweb.net/files/11641">http://www.preventionweb.net/files/11641</a> Central Asia Caucasus DR Management Init.pdf

Regional Climate Change Impacts Study for the South Caucasus Region (UNDP 2011) http://www.undp.org.ge/files/24\_11630\_552199\_SC-CC-2011.pdf

Climate Change in the South Caucasus (zoi 2012)

http://issuu.com/zoienvironment/docs/osce\_zwick-?mode=window&backgroundColor=%23222222

#### Links and networks), worldwide

National Platform of DRR in Armenia

http://www.preventionweb.net/english/policies/v.php?id=22118&cid=8

Prevention web (Country Risk profile, Disaster Statistics and Risk Profile) <a href="http://www.preventionweb.net/english/countries/statistics/risk.php?iso=AZE">http://www.preventionweb.net/english/countries/statistics/risk.php?iso=AZE</a> <a href="http://www.preventionweb.net/english/countries/statistics/?cid=11">http://www.preventionweb.net/english/countries/statistics/?cid=11</a>

EM-DAT, international Disaster database (per country)

http://www.emdat.be/result-country-profile

SDC DRR Network (forum, documents etc.)

http://www.sdc-drr.net/

SDC Climate Change and Environment Network

http://www.sdc-climateandenvironment.net

**UNDP Climate Change Country Profiles** 

http://www.geog.ox.ac.uk/research/climate/projects/undp-cp/

World Bank climate change data portal:

http://sdwebx.worldbank.org/climateportal/

CC Platform: <a href="http://weadapt.org/">http://weadapt.org/</a>

NatCatSERVICE of Munich Reinsurance

www.munichre.com/geo

Swiss Reinsurance (library on climate & natural catastrophes)

http://www.swissre.com/library/?searchByType=1010965&search=yes&searchByLanguage=851547&searchByCategory=1023435

### **Links South Caucasus**

SDC DRR Network / subgroup south Caucasus http://www.sdc-drr.net/node/360

CENN newsletter & monthly report http://w3.cenn.org/wssl/index.php?id=56

# Annex 4: Evaluation of the workshop

# **Evaluation Sheet**

# 21 – 22 January 2013 DRR Workshop for the Horticulture Project in the Meghri region, Armenia

Then	natic issues				
		yes	rather	partially	no
1	Did the event correspond to your expectations?	7	3	1	
2	Did the speakers share relevant experience?	8	3		
3	Did you get relevant inputs for your work?	7	4		
4	Was there a good balance between theoretical and practical work?	7	4		
5	Was the reference material adequate?	9	2		
Meth	odology				
6	Were the methods used appropriately?	6	5		
7	Were the speakers competent?	8	3		
8	Did the speakers manage to create a learning and trustful environment?	10	1		
9	Was there enough time for questions and discussion?	5	2	3	
10	Was there enough time to address the topic?	3	5	2	1
Diffe	rent Sessions				
11	Overview about Phase I	5	3	2	
12	Working Group: Identification of lessons learned	5	3	3	
13	Introduction to DRR	7	4		
14	DRR in Armenia	6	5		
15	SDC and DRR	6	5		
16	Experience by SDA	5	5		
17	Experience by AM Red Cross	6	4		
18	Introduction to CEDRIG	6	4		
19	Working Groups: Risk Assessment, Identification and Prioritization of possible DRR options	5	2	4	
Over	all				
20	Were you overall satisfied with the event	5		6	

Annex 5: Terms of Reference: Nicole Clot

Contract-no: 129

Project/mandate no: 12610130

Project/mandate name/country: Meghri Horticulture project/ ARMENIA

Employer: HELVETAS Swiss Intercooperation

Berne

E-Mail matthias.herr@helvetas.org

Name: Nicole Clot Contractor :

Helvetas Swiss Intercooperation

Team: E+CC

Function: Advisor DRR and Vulnerability

**+41** (0) 31 385 10 10

E-Mail Nicole.clot@helvetas.org

Contract duration From: December 2012 To: January 2013

## 1. Background

The Meghri project has DRR as a transversal topic in its project. During the inception phase a risk assessment was conducted with the technical backstopping support of NCL. During phase I, DRR activities were implemented according to the logframe.

After long discussion with SDC, DRR remain a transversal topic in the second phase. In this view, a DRR workshop will be organized between the 21 and 22 January 2013 to capitalize the lessons learned and to identify the future DRR intervention for phase II. At the same time, the team will get an introduction to DRR.

## 2. Objective(s) of the mission (or consultancy)

To take stock and look back on the last three years (phase I) in order to identify possible future activities for phase II.

## 3. Expected results (or Output)

- Identification of main lessons learned and challenges of phase I
- Identification of DRR intervention according to the 4 main outputs
- Strengthening of local capacities (especially of the new partner organisation for phase II)
- Better understanding about SDC and their understanding of DRR in the region

## 4. Main Tasks and Activities of the Assignee (or consultant)

- Elaborate programme for the day-day workshop
- Exchange and coordinate with project staff and SDC DRR focal point in the region
- Facilitate the event
- Prepare thematic inputs for the workshop
- Internal meeting (Wednesday 23<sup>rd</sup> January) to see how to operationalize DRR
- Short report with the main key findings (mainly analyzed and discussed during the internal meeting on the 23<sup>rd</sup> January 2013)

## 5. Working methodology

Workshop and internal team discussion how to operationalize DRR

### 6. Mission Team / (Responsibilities of the members of the mission team)

Nicole Clot, Advisor DRR and Vulnerability, conducts the workshop on design of DRR activities in the Meghri Horticulture project and provides consultancy to the project managers and project team;

Eugene Ryazanov, Project co-manager, supports the consultant to conduct the workshop,

Evelyne Studer, DRR Advisor, SDC, Tbilisi office, conducts presentations about SDC policy regarding DRR in South Caucasus.

#### 7. Time Frame of the assignment

Duration (period) of the consultancy including the preparatory work until the deadline for the final report. Dates of the mission abroad itself. Number of days/hours qualifying for a fee for the preparation, the mission plus days for international travel, the reporting and debriefing and possible follow-up or distant support by e-mail etc. Indicate how many days per week qualify for a fee when the mission abroad lasts over 10 days (normally there are 6 days/week for which a fee is paid).

Entire consultancy period: December 2012 to January 2013

Preparation: December 2012 to January 2013

Mission:  $19^{th} - 24$  January 2013

## 8. Programme/Mission Schedule

Also give flight schedule of the consultant.

Date	Activity	Number of days
	Preparation (including reporting)	3
19.01 and 24.01	Travel	2
20 – 23.01	Mission	4
	TOTAL	9

If there is a debriefing planned in the country of assignment, it should be also mentioned in the mission schedule.

## 9. Logistics

The project team is entirely responsible for the entire logistics of the 3-day workshop

## 10. Reporting / Debriefing

Short report with the main finding and a debriefing with the Programme Coordinator, Matthias Herr, Head office

### 11. Documents

Progress Report 2011
Project Document
Project planning document phase II
Risk assessment report (inception phase)

Place and date: Yerevan, 21 January, 2013	
Signatures:	
Eugene Ryazanov,	Nicole Clot
co-manager of the Meghri Horticulture project	Advisor DRR and Vulnerability