



USAID
FROM THE AMERICAN PEOPLE



ADVANCED RURAL DEVELOPMENT INITIATIVE (ARDI)

COMMUNITY COMPETITIVENESS ASSESSMENT ARTSVANIK



This study is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of ARDI and do not necessarily reflect the views of USAID or the United States Government.

Disclaimer: The contents of this publication express opinions of community focus groups and are of sole responsibility of the author(s). Heifer Armenia and Fuller Center for Housing grant permission to use this document as long as the text & title are not modified. The source and the author's name (Heifer Armenia) must be displayed.

This material is made available to readers under the provisions of "fair use" in an effort to advance a better understanding of economic and social resources and constraints in rural Armenia. This document is distributed without profit to those who have interest in using it for research and educational purposes.

Please use this suggested citation when referencing to the report or presented data: Heifer Armenia 2014. *Community Competitiveness Assessment: Report on Artsvanik*. United States Agency for International Development's Advanced Rural Development Initiative: Yerevan, Armenia.

INTRODUCTION



This report presents the results of the community competitiveness assessments conducted in the framework of the Advanced Rural Development Initiative (ARDI) program financed by the United States Agency for International Development. The ARDI project is implemented by Fuller Center For Housing Armenia (FCHA) in cooperation with Heifer International Armenian Branch Office (HA). The assessments are conducted using the methodology developed by HA. This is a part of series of assessments conducted in 20 rural communities.

ARDI sets out to increase rural employment by tackling constraints to rural economic development of communities in the Syunik, Vayots Dzor and Lori Marzes (provinces) of Armenia. The project forms partnerships with local governmental and non-governmental organizations (NGOs) to effectively and efficiently enhance value chains and increase incomes through participatory planning. ARDI builds the capacity of institutions and communities, promotes small businesses development and entrepreneurship and invests in select sustainable infrastructure and enterprise projects.

In the framework of the project 20 rural communities undergo community assessments which are aimed to identify the competitive advantages of target communities and high potential value chains in these areas. The evaluations are based on HA's Community Strategic Development Model (CSDM) Methodology and include strong community involvement. Based on the results of the community competitiveness assessments, 12 rural communities are eventually chosen for programmatic interventions and direct investment.

The community competitiveness assessments help us understand what resources a community has, how effective the community is in capitalizing its resources and evaluate the untapped potential of community to leverage its resources. Assessments also involve inventorying of all community assets including physical infrastructure and evaluations of the community environment for economic development, which we refer to as "enabling environment". As a result of the assessments a thorough image is created of the resources and capacities of a specific community.

The community competitiveness assessments and subsequent selection of communities in the framework of the ARDI program will be followed by more in-depth value chain assessments. These assessments will focus on the three main value chains targeted by the ARDI program namely dairy, fruit and rural tourism, and will identify the specifics and the potential of each value chain to create employment opportunities and community economic growth in targeted community clusters.

Table of Contents

INTRODUCTION	3
1. METHODOLOGY	5
2. COMMUNITY PROFILE	7
2.1. Community Territory	7
2.3. Economic Profile	9
2.4. Labor Force and Employment	10
2.5. Environmental Situation	12
3. COMMUNITY RESOURCES	13
3.1. Fruits Sector Capacity	13
3.2. Dairy sector capacity	14
3.3. Tourism Sector Capacity	14
3.4. Score of Community Resources	15
4. RESOURCE UTILIZATION	17
5. ENABLING ENVIRONMENT	19
6. CONCLUSIONS	20
7. ANNEX 1: APPRAISAL APPROACH	21
8. ANNEX 2: INFRASTRUCTURAL INVENTORY	24

List of Tables

Table 1 De facto Population by Age (number and % of total population).....	8
Table 2 Main Agricultural Outputs of Artsvanik.....	9
Table 3 Experts In non-agricultural and agriculture related fields.....	11
Table 4 Artsvanik Community Resources (on a scale of 1-5).....	15
Table 5 Artsvanik Community Resources Utilization	17
Table 6 Artsvanik's Enabling Environment	19

List of Figures

Figure 1 Community land Classification.....	7
Figure 2 Gender Classification of the community	8
Figure 3 Occupation of Working Age population	10
Figure 4 Direction of Self Employment.....	10
Figure 5 Community Education level	11
Figure 6 Field of Higher (Professional) Education	11
Figure 7 Types of Fruit Produced.....	13
Figure 8 Artsvanik Resource Map.....	16

1. METHODOLOGY

Traditional community development approaches have predominantly focused on community deficiencies and less on community strengths which often has contributed to lower impact and effectiveness of these initiatives.¹ Such an approach often also leads to narrow targeting of very specific community problems while missing more systematic solutions that may have resulted in more sustainable and effective outcomes.

With this in mind, Heifer Armenia developed the Community Strategic Development Model (CSDM) which is a unique approach to community development, combining the strengths of asset-based community development approaches with more traditional problem identification methods. Such a holistic approach allows identification of solutions that address existent issues effectively through factoring in the specific strengths of a community. Being fully participatory, HA's methodology allows:

- Effective collection of information on community resources and needs
- Identification and addressing/utilization of actual community problems and strengths, while avoiding the “perceived” vs. “real” problem trap
- Bottom-up community-driven development process along effective top-down planning approach and institutional and community capacity building

HA's model involves four distinct steps, which are logical and organic continuation of each other. These steps facilitate the process of taking the communities from strength and problem identification, assessment of economic development enabling environment, strategizing community development patterns, professional assessment of those patterns in terms of economic feasibility and environmental impact, to development of specific projects and implementation.

The first step of the CSDM model involves Community Competitiveness Assessments (CCAs) which form the primary focus of this report. For the CCA's a series of thorough workshops are conducted which are led by external facilitators and include representative focus groups from the community. The focus groups are formed from 10 to 12 people from the community, who represent different interest groups including local governance bodies, schools, business sector, farmers etc. This enables capturing a broad information base with different perspectives. The four steps of the model are as follows:

- Assessment of Capacity/Resources and Enabling Environment
- Assessment and mapping of community Strategic Direction/Development pattern
- Development and Initiation of specific projects
- Management and evaluation

As a result, CCAs involve discussion, analysis and inventory of community capacities and resources, such as human, physical, capital, natural, financial resources, explores Health, Education, Knowledge, Skill, Ability (KSA) capacities of the community, as well as main (previous and current) production patterns, employment situation, infrastructure conditions and major projects implemented in the community by Governmental and Public organizations.

Once the status quo of community resources and capacities is identified the focus group evaluates utilization level of these resources as low, medium or high. This step identifies how efficient the community is in capitalizing community resources and identifies the potential of the community to leverage and capitalize further on these resources.

Assessments also focus on the enabling environment for economic development in the community. This is a crucial point in community competitiveness assessment process, as the environment (government and policy and ability of the community to reach other) is an overarching issue which directly influences all

¹ McKnight, John L. and John P. Kretzmann. 1993. Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets. ACTA Publications: Chicago.

aspects of community development. Assessment of the environment is done through scoring with scores from one to five, “one” being the lowest and “five” the highest possible score. The scoring is done on selected features which can describe the level of environment supportiveness for community economic development. The features focus on variables, such as local government interest in strategies for community economic development, existing policies and their implementation, interactions between local government and business, existence and supportiveness of specialized economic and business support structures and also the (geographic) position of the community to play a positive role in the region. Communities that score high on these features are considered having enabling environment and having increased competitiveness and low risk for economic development initiatives.

As a result of the assessments a thorough image is created of the resources and capacities of a specific community. Communities that score high on the evaluated areas are considered competitive and communities which score high on enabling environment and score low in resource utilization are considered for economic development interventions and projects. This cross-referencing and cross-assessment allows better targeting of communities where ARDI interventions can have higher impact. This report presents the findings of community competitiveness assessment on Artsvanik community.

2. COMMUNITY PROFILE

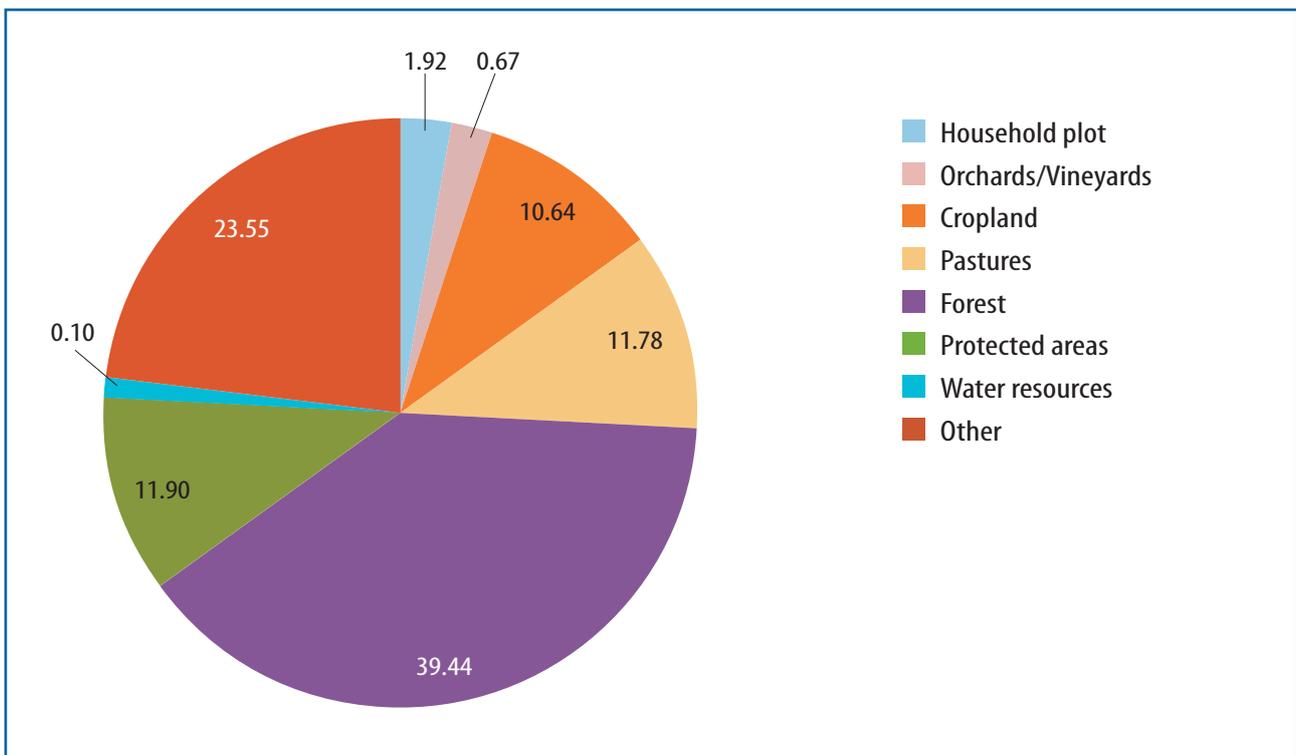
Artsvanik is located in Syunik Marz 14 km far from Kapan. Artsvanik is located on 1150 m above sea level altitude. Artsvanik formerly was called Yerets or Yeretsvank and was part of Baghk (Qashunik) province of Mets Hayq. Later it became part of Zangezur province in Elizavetpol state, police district of Kapan. Community is located in the neighboring area of Artsvanik reservoir. The neighboring communities are Chapni (4 km), Davit Bek (10 km), Kaghnut (7 km), Sevakar (6 km) and Syunik (8 km).

Currently, the population of Artsvanik community is engaged mostly in livestock breeding, horticulture (crops, fruit and vegetables) and beekeeping.

2.1. Community Territory

The total surface area of Artsvanik covers an area 2819.17 ha of land which includes various land classifications. The official classifications of the community land as registered in the community register are presented in the following chart.

Figure 1 Community land Classification



Source: Mets Parni Community Land Register

The major share of Artsvanik's territory involves forests which make up 39.44 percent of the total community territory. The remaining two large land classifications are croplands and pastures. Community has also huge industrial lands which are particularly used for sand mining. Those areas make up about 12 % of the community territory. Forests are good assets for developing beekeeping sector in the community.

2.2. Demographic Profile

Currently Artsvanik houses 201 families and has a de facto population of 679 people, of which 338 male and 341 are female.² Compared to de facto population figures of the community in 2004 which was 552 people the population of Artsvanik grew during the last decade despite the economic conditions and migration.

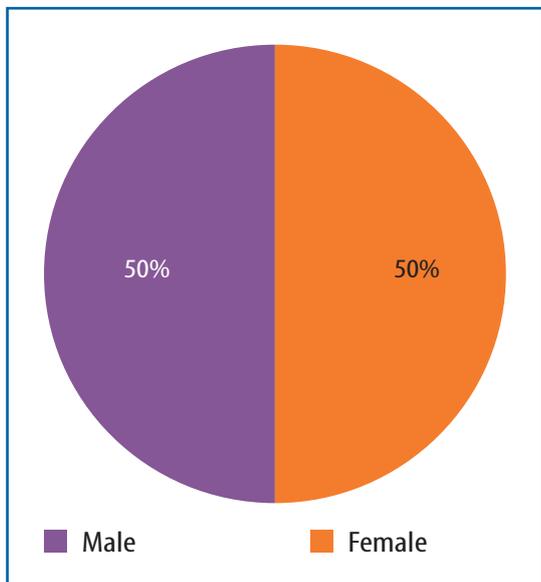


Figure 2 Gender Classification of the community

Source: CCA Workshop Data - Heifer Armenia Calculations

About 79 percent or 539 people of the population of Artsvanik are working age population aged 16-65. About 12.8 percent or 87 people of the total population are young individuals aged between 15-29 years old. This is a relatively low percentage compared to the Syunik Marz average as Marz level statistics reveal a 30.9 percent population share in this age group. Table 1 presents the age segmentation of young population groups at community and Marz level in more detail.

Table 1 De facto Population by Age (number and % of total population)

	15 - 19	20 - 24	25 - 29
Artsvanik	44 – 6.4%	17 – 2.5%	26 – 3.8%
Syunik province	9816 – 6.9%	13128 – 9.3%	12591 – 8.9%

Source: CCA Workshop Data - Heifer Armenia Calculations and NSS data³

The average share of the selected age groups of the total community population is below to marz level average. Artsvanik therefore does not have enough percentage of young individuals in the community which could allow planning and implementation of youth specific (long term and sustainable) interventions by the ARDI program.

² Heifer Armenia database of official statistics provided by community centers.

³ National Statistical Service of RA (2003), Results of 2001 Population Census OF RA (Figures of Marz Lori), available at: www.armstat.am

2.3. Economic Profile

Results of community assessments point that livestock breeding, crops production, horticulture and bee-keeping are the main economic sectors of Artsvanik community. The remaining share of the total income comes from salaries of civil servants and mining workers in the community. Community members may have income from irregular employment from other sources/sectors, which are not covered in this section.

As presented in Table 2, the total average output of Artsvanik in the livestock breeding sector is 606 tons of milk and 21 tons of meat per year. This is about 892 liters of milk production per capita which is relatively high compared to communities with an animal husbandry focus. Nevertheless, the total sale of dairy products does not exceed 10-20 percent of milk production, but some farmers sale dairy products (approximately 50%). This should result in an overall monetary output of about 24.2 mln AMD per year generated by the sales of dairy products. The remaining share is consumed by the households and is used for feeding the livestock. According to the community discussions animal husbandry has a huge potential to develop if problems with milk collection unit and access to the market are solved.

Farmers in Artsvanik also focus on meat production and produce about 21 tons of meat per year. About 50 percent of the produced meat is sold, tentatively generating about AMD 18.9 mln per year.*

Table 2 Main Agricultural Outputs of Artsvanik

Economic Sectors	Annual Agricultural output	Percentage Sold	Monetary Output (mln AMD)*
Livestock breeding	Milk 606 t	10-20%	24.2
	Meat 21 t	50%	18.9
Beekeeping	3,2 t	90%	8.6
Fruit	194 t (mulberry 150, pear 40, plum / cornelian cherry 3, walnuts 1)	18%**	13.6 (mulberry 12, pear 1.2, plum / cornelian cherry 0.12, walnuts 0.3)**
Agronomy	655t (wheat 582, barley 73)	80%	79 (wheat 69.8, barley 9.2)
Vegetable	135 t (potatoes 100, pepper 10, tomatoes 15, cucumber 10)	0%	0

* The output calculations are based on average (retail) sells prices of specific products and reflect retail prices (actual milk prices received by farmers are likely to be lower than official average retail prices.

** This is the average percentage of all sold fruits percentages (mulberry 10 %, pear 10%, plum / cornelian cherry 20%, walnuts 30%)

*** The calculation is done on the sold percentage of each type of the fruits

AMD prices per kg/l: ` milk 200, meat 1800, honey 3000, mulberry 800, pear 300, plum / cornelian 200, potates 100, pepper 200, tomatoes 150, cucumber 200, walnuts 1000, wheat 150, barley160

Source: CCA Workshop Data - Heifer Armenia Calculations

There are also 273 beehives in Artsvanik which in total annually produce about 3.2 t of honey. Honey is sold relatively easy as about 90 percent of the output reaches customers, generating AMD 8.6 mln income for community members.

The weather conditions of Artsvanik are very suitable for horticulture and fruit production. Although the community has very limited orchards, yet still different types of fruit are cultivated by community mem-

bers. Currently the community produces about 194 t of fruit of which about 18 percent is sold. The main types of produced fruits in Artsvanik are mulberries, pears, plums and cornelian cherry with 150, 40 and 3 tons of production of each type respectively. Besides the community members produce some 1 t of walnuts which are also sold. This generates monetary output of around AMD 13.6 mln annually and indicates a big potential in the community to further develop the fruit value chain. The remaining fruit grown in the community is mainly used for consumption (subsistence). The fruit value chain is explored in more detail in the following chapters.

Currently along fruit production the community also produces big quantities of vegetables. This mainly involves production of potatoes, tomatoes, peppers and cucumbers. All the produced vegetables are used for household consumption (subsistence).

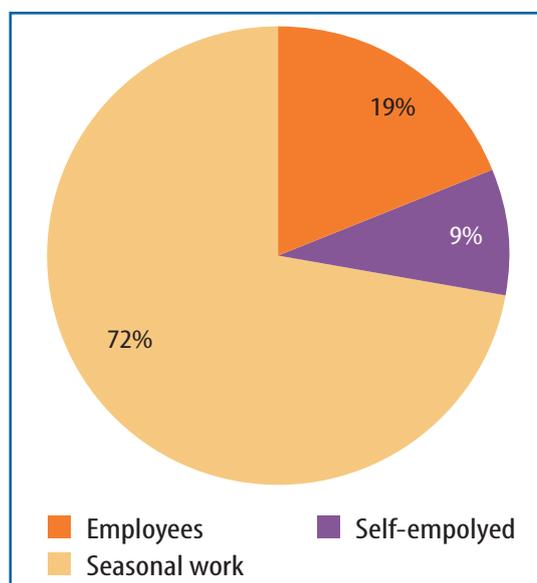
To identify possible alternative economic development directions, focus group members were also requested to highlight possible alternative economic sectors for their community. This includes sectors or fields of occupation which currently are not tapped into adequately. These sectors provide further opportunities for the community to capitalize existing resources, boost entrepreneurship and eventually generate higher community output, but the vast majority of community members stressed that they prefer to develop already existing sectors and make them more profitable.

2.4. Labor Force and Employment

Currently Artsvanik has a working age population of 539 people (de facto population between 16 and pension age 64). 101 individuals or about 19 percent of this group have permanent employment; this excludes the number of people who are self-employed and mainly involves civil servants and those who receive regular salary from private institutions/organizations, including mining workers, teachers and staff of the local school. The number of people who have permanent employment is quite high which

Figure 3 Occupation of Working Age population

Source: CCA Workshop Data - Heifer Armenia Calculations

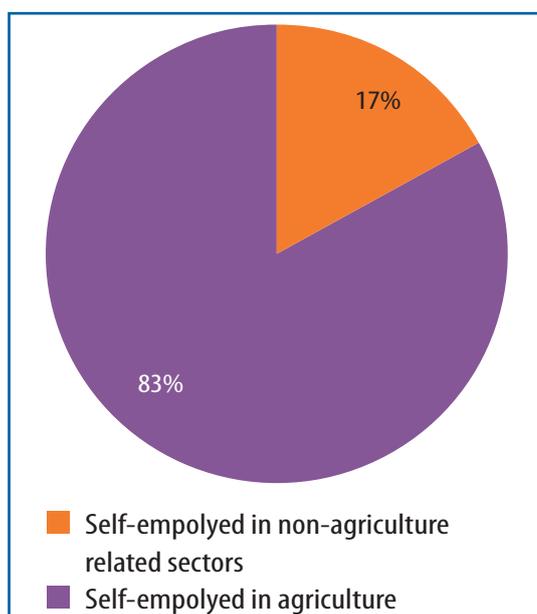


is due to the workers involved in mining sector. The occupation of the working age population in terms of regular employment, self-employment and or seasonal work is illustrated in the following figure.

As illustrated above, only 9 percent of the working age population is engaged in seasonal work which involves seasonal work in Armenia and outside. The community is mainly reliant on self-employment and entrepreneurship as there are no other job opportunities available. About 72% or 387 people in Artsvanik are self-employed. Of this group just 17 percent are occupied in non-agriculture related and 83 percent are self-employed in agriculture related fields of occupation (See Figure 4).

Figure 4 Direction of Self Employment

Source: CCA Workshop Data - Heifer Armenia Calculations



The vast majority of the community population is therefore self-employed in the agricultural sector. It is important to mention that many people are also engaged in mining sector. Self-employment however does not necessary mean regular income; this is made even more obvious by the results of community consultations. The results of the assessment revealed that 10 percent of the self-employed in agriculture have sufficient access to buyers in terms of regular sells with appropriate volumes and so the remaining minority is often mainly involved in subsistence farming.

In terms of education, 20 percent of the population of Artsvanik or 133 people have completed secondary education, and 13 percent or 88 people have completed secondary professional (college) and or university education.

Figure 5 Community Education level

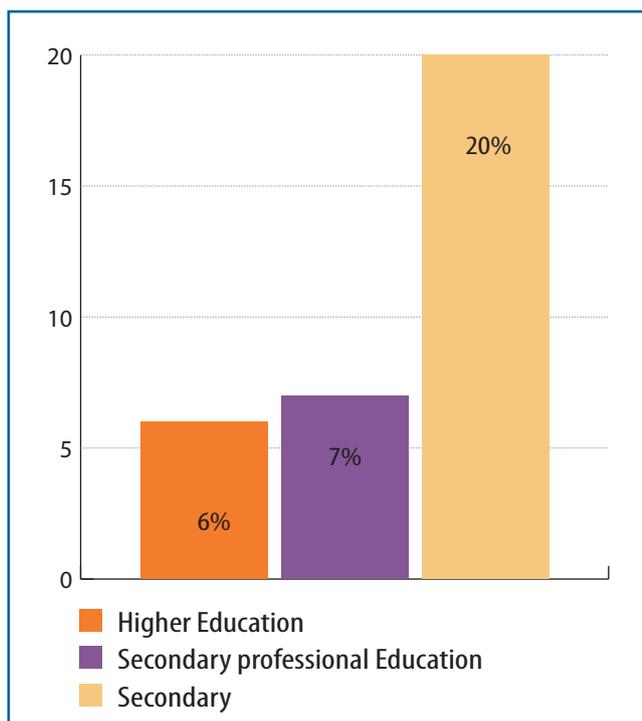
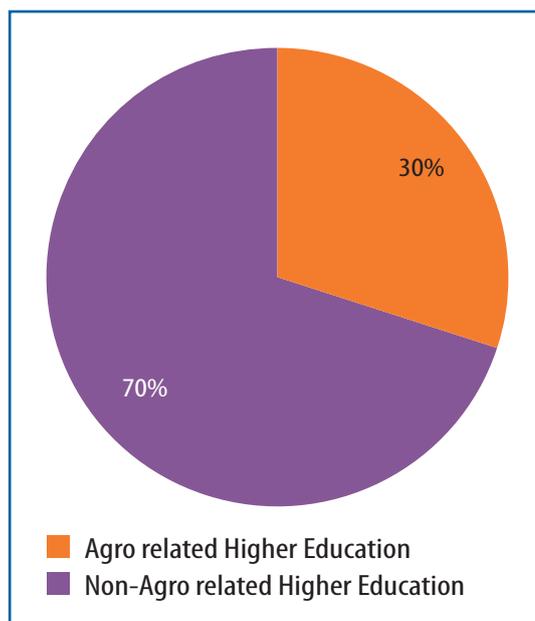


Figure 6 Field of Higher (Professional) Education



Source: CCA Workshop Data - Heifer Armenia calculations

As illustrated above, Artsvanik has considerable human resources. It is obvious, that of the population with professional education (secondary professional education and or higher education) about 30 percent has agriculture related education and the remaining 70 percent is educated in non-agriculture related fields such as engineering, languages, finances etc. The latter is particularly important for setting up/development of businesses and/or rural cooperatives where adequate financial management is crucial. There is only one person who has formal tourism related education.

Table 3 Experts In non-agricultural and agriculture related fields.

Non-agricultural related	Number of Experts	Agricultural fields	Number of Experts
Finance	12	(Milk) technicians	8
Engineering	40	Engineering	0
Management	9	Management	0
Tourism	1	Veterinarian	6
Other	0	Other	12

Source: CCA Workshop Data - Heifer Armenia calculations

With regard to agriculture related education and expertise, there are 8 milk technicians and 6 veterinarians. Existence of adequate number of vets in the community is significantly important for the development of a healthy cattle and animal husbandry. Milk technicians also can contribute to the development of milk collection and processing processes.

Thus, Artsvanik has quite big human resources in agriculture and non-agriculture related fields, moreover community has huge amount of members who have higher and secondary higher education.

2.5. Environmental Situation

This sub section of the assessment is mainly aimed at evaluating the exposure of the community to various kinds of environmental threats. Community members were given the opportunity to highlight the main issues that currently threaten the natural environment of the community and evaluate the impact level of these issues on Artsvanik's development. Focus group members highlighted the following issues as the main factors threatening the natural environment:

- Artsvanik Reservoir,
- Hail.

As the main issue threatening the natural environment of the community, focus group members mentioned Artsvanik reservoir. Zangezur copper and molybdenum combine is exploiting the mines and as a result the industrial waste is dumped into the Artsvanik reservoir. It is the biggest reservoir in Armenia and as focus group members mentioned it spoils the land in the neighboring areas a lot and those lands are almost not used.

The second issue threatening the natural environment of the community, focus group members mentioned the large risks of hail and the fact that there are no hail stations in the nearby Artsvanik.

3. COMMUNITY RESOURCES

This section of the community assessments focuses on the resources and capacities of target communities in the three main target sectors/value chains of the ARDI program. This involves the Dairy, Fruit and Rural Tourism value chains. The results presented in this sub-section will allow us to narrow down the focus of community assessments and evaluate the potential of a community to or community cluster to receive ARDI specific investments.

Community resource assessments also involve evaluation of community infrastructural resources. This will include inventory of community infrastructure in terms of existence and condition of community infrastructure including but not limited to drinking and irrigation water systems, community and intra community roads, educational cultural and community governance buildings, community centers, IT and communication infrastructure, leisure and sport facilities, agricultural resources and technologies such as anti-hail systems and other infrastructure. An overview of the existent infrastructural assets of the Artsvanik community is provided in ANNEX 2 of this report.

3.1. Fruits Sector Capacity

Fruit production volumes in Artsvanik are relatively high due to the huge land resources. Artsvanik produces mulberry (150 t), pears (40 t), plum and cornelian cherry (3 t) and walnuts (1 t). Below figure illustrates average volumes and shares of the fruits produced.

The major portion of the produced fruits is sold in the nearby markets to individual buyers and resellers. The fruit is also used for production of home-made liquors. For instance the major share of the produced mulberry is used for production of home made liquors.

However, as the community does not have any sector related infrastructures such as fruit cooling and storage equipment and this is also hampering fruit sector development

Members of the community focus group indicated the following issues as the key issues hampering fruit production and sales in Artsvanik:

- Lack of market access
- Poor irrigation system
- Climate, large risks of hail and absence of hail stations
- Lack of orchards
- Lack of related knowledge and experience

Though Artsvanik community and its surrounding lands are considered to be very rich and favorable, the existence of Artsvanik tailing dump and lack of community lands are hampering fruit production a lot. It is important to note that absence of hail stations and the large risks of hail is making fruit production quite uncertain sector. Thus, community members are not investing in fruit production sector much.

According to community members, previously Artsvanik has mostly been engaged in animal husbandry

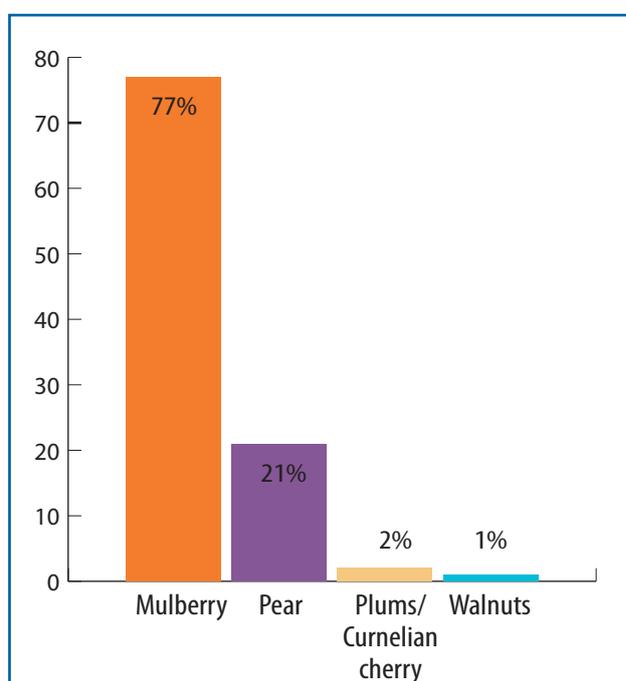


Figure 7 Types of Fruit Produced

Source: CCA Workshop Data - Heifer Armenia Calculations

and agronomy sectors. Consequently, community members do not possess sector related experience and skills.

Therefore, lack of experience and skills are the main reasons hampering fruit production.

3.2. Dairy sector capacity

As illustrated in the economic profile of the community, livestock breeding is currently one of the main economic sectors of Artsvanik.

Community members have about 404 cows and tentatively produce about 606 tons of raw milk annually. Sales of raw milk is however insignificant as only about 10-20 percent of the produced milk is sold as raw milk generating about AMD 24.2 mln annually at best (retail prices, please see Table 2).

The remaining part of the milk is processed by the households into cheese and other dairy products and is sold on an irregular basis. In Artsvanik such as in many other communities the inability of farmers to sell raw milk on a consistent basis, forces small holders to make much larger time and resource investments in to milk processing. This also results in higher sales related costs and much more irregular and unpredictable income from selling the dairy products.

Artsvanik has limited pastures and grasslands, yet the available land area provides the community with adequate fodder base for the existent and more cattle headcount. The community makes use of distant pastures which are rented out from different communities.

Currently one veterinarian is working in Artsvanik, which according to focus group members cover the need of the community in this regard and availability of veterinary services does not hamper operations of farmers in the community. Access to veterinary medication is somehow limited as community members need to travel to the nearest town to purchase medication and medication is quite expensive.

In terms of sector related infrastructure, there are currently no milk collection/cooling units in the community. This is also one of the main reasons why the community is not able to sell raw milk effectively. Only very small quantities of raw milk are sold to interested individuals who come to the community and the remaining part is processed into a cheese and other dairy products.

To conclude the community might have a potential to develop their dairy production and get engaged into respective value chain, however the lack of infrastructure such as milk collection / cooling units and lack of community owned pastures, grasslands and water points are hampering dairy sector development in Artsvanik.

3.3. Tourism Sector Capacity

Artsvanik currently attracts on average about 50 tourists every year who are mostly the former residents of Artsvanik currently living in Russia. Currently there are no B&Bs or any other formal accommodation services offered in Artsvanik. There are no professional tour agencies which promote the community and organize tours to Artsvanik and its surroundings.

Artsvanik has vast natural resources such as:

- Mountains
- Forests
- Water reservoir

"Raven's Ark" medieval structure and castle ruins (4-1 centuries BC) are located in Artsvanik community. The Yeritsavank monastery with its nearby church (6th century) and "Tshgnavor" chapel (6th century) is located 3 km north-east of the community

The village is located 3 km north-east of the Yeritsavanke` a nearby church (6th century) and "The Hermit" (6th century), the chapel, which are dilapidated, 1 km arevmutk.` 11th century. 991 of his small church and cross. Church (renovated in 1032). Besides an old hackberry tree is located in Artsvanik (450-500 years old).

Community members have some informal experience related to B&B services provision on a very irregular basis but currently there are no formal hospitality service providers in the community such as restaurants, hot water spas etc. There are also no established links with external tourism related markets and agencies which promote and link it with tourists. As the main issues hampering tourism development in the community focus group member indicated:

- Distance from the capital
- Lack of targeted advertisement.

Due to the above mentioned issues, community members do not believe that Artsvanik has any potential for development of tourism in the community.

3.4. Score of Community Resources

This sub section presents the quantitative summary of Artsvanik's resource assessment as evaluated in the framework of the ARDI Program. The evaluations are mainly based on primary data collection through community consultations. The following table presents the scores of Artsvanik community regarding various general and value chain specific resources.

The maximum possible score on community resources is 200. The scoring is done based on mathematical assessments and ratios and expert evaluations. The scores are on a scale of 1 to 5, where 1 is low and 5 is maximum high. The weights add up to a total of 10 in each category where 1 is low and 10 is high. The exact appraisal approach and relevant description is provided in ANNEX 1.

Table 4 Artsvanik Community Resources (on a scale of 1-5)

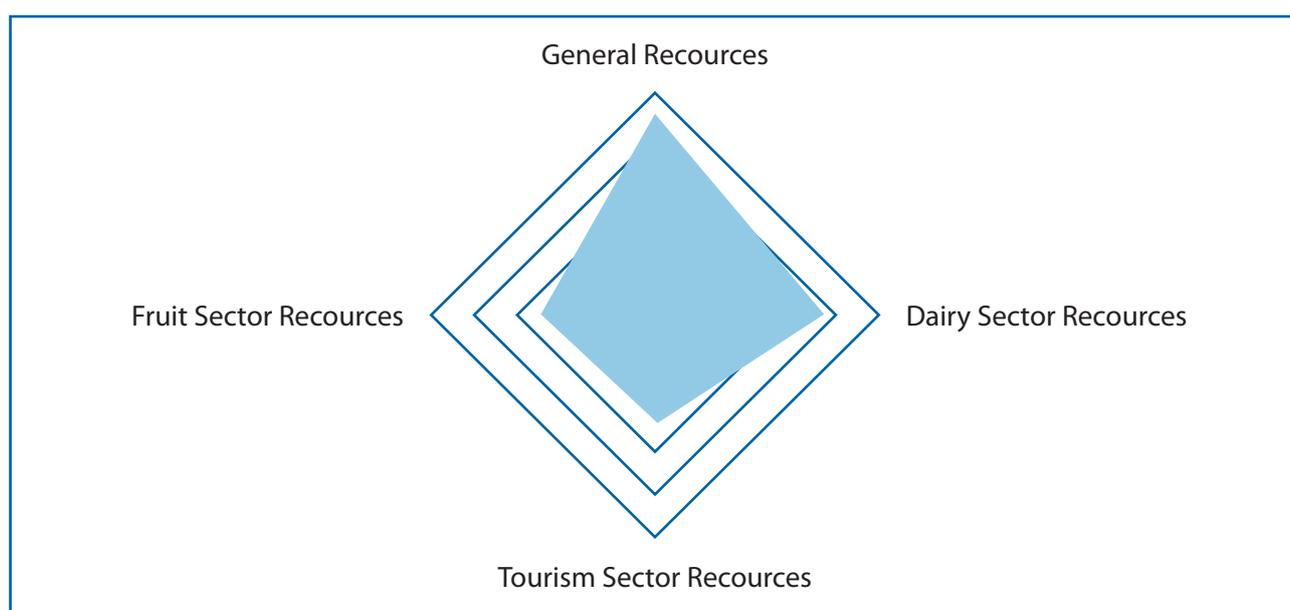
Indicator	Score	Weight	Weighted Score
General Community Capacity			
Community Educational level	3	3	9
Community vitality	3	3	9
Community infrastructure (existence and condition of roads, water, energy sewage etc.)	1	2	2
Community Natural resources	1	2	2
Total Score General Community capacity			22
Dairy sector capacity			
Milk Production (Milk production/per capita)	5	1	5
Milk Productivity (Milk production/animal head ratio etc.)	2	2	4
Fodder Availability (Animal/pasture)	1	3	3

Dairy sector related experience and infrastructure	2	4	8
Total Score Dairy Sector Capacity			20
Fruits sector capacity			
Ability to produce quality fruit	1	1	1
Fruit quality	2	3	6
Existence of Fruit infrastructure (hail centers etc.)	1	2	2
Fruit sector related experience and knowledge	1	4	4
Total Score Fruit Sector Capacity			13
Tourism Sector Capacity			
Tourism related resources as natural, cultural etc.	1	3	3
Current tourist visits to the community	2	2	4
Existence of tourism infrastructure (B&Bs, restaurants, spas etc.)	1	3	3
Existence of tourism related experience and knowledge	1	2	2
Total Score Tourism Sector Capacity			12
Total Score Community Resources			67

Source: CCA Workshop Data - Heifer Armenia Calculations

The highest scores of Artsvanik regarding Community Resources relate to dairy and general community capacity with respective scores of 20 and 22. The third highest score of the community in this evaluation involve fruit sector capacity which equaled to 13. With a weighted score of 12 the tourism sector related capacities of the community scored the lowest. The total weighted score of Artsvanik on community resources is 67. The following figure presents a visual illustration of the community resources in the four indicated areas.

Figure 8 Artsvanik Resource Map



4. RESOURCE UTILIZATION

As a main part of HA's community assessment model, this subsection of the assessment focuses on evaluating the utilization level of community resources. Evaluating utilization levels will allow us to better understand the need of the community for programmatic interventions in the evaluated areas.

The following table presents the resource utilization scores of Artsvanik community regarding various general and value chain specific resources. The scoring is again done based on objective mathematical assessments and ratios and expert evaluations. The utilization scores involve a scale of 1 to 5, where 1 is low and 5 is the maximum high. Consequently, low weighted scores on resource utilization indicate that resources of the community in a specific field are under-utilized. The included weights add up to a total of 10 in each category, where 1 is again low and 10 is high.

Table 5 Artsvanik Community Resources Utilization

Indicator	Score	Weight	Weighted Score
Dairy sector capacity			
Utilization of fodder base (Animal/pasture on a scale of 5-1)	1	3	3
Milk collection level (production/collection on a scale of 1-5)	2	4	8
Community milk Productivity	2	1	2
Overall dairy sector resource utilization *	4	2	8
Total Dairy Sector (Max 50)			21
Fruits sector capacity			
Utilization of quality production capacity	2	3	6
Current sells of quality fruit production	2	3	6
Professional Fruit processing	1	2	2
Overall fruit sector resource utilization	1	2	2
Total Fruit Sector (Max 50)			16
Tourism sector capacity			
Use of natural, cultural and other resources for community development)	1	4	4
Revenue generation through hospitality services (as B&Bs, restaurants, etc.)	1	3	3
Professional use of tourism related Knowledge and HR capacity	1	2	2
Overall Tourism sector resource utilization	1	1	1
Total Tourism Sector (Max 50)			10
Total Score Resource Utilization			47

* The general evaluations of each sector involve expert evaluation of various components of influence to sector capacity and its utilization. Regarding the dairy sector for example knowledge and experience of the community in this specific sector, willingness of the community to invest in the sector and other such factors were taken into account.

Source: CCA Workshop Data - Heifer Armenia Calculations

The total resource utilization score of Artsvanik community was 47 out of 150. The lowest score of the community in this regard related to the tourism sector resource as there is hardly any economic activity in this sector. Natural, cultural and other resources of the community with touristic value are not being utilized for commercial purposes. With a total weighted score of 10, tourism sector is the most under-utilized sector of the community evaluated in this framework.

The second underutilized sector of the community is the dairy sector which scored 21. As discussed in section 3.2, the capacities of Artsvanik in dairy sector are high due to natural climatic and geographical conditions and a rich soil. However there is still a potential to further develop dairy value chain, because the community hardly has any dairy value chain related infrastructure and cannot fully benefit from the dairy products that is produced.

Currently scores on milk collection levels are very low as there is hardly any raw milk collected/sold in the community. If the necessary conditions exist, Artsvanik has a potential for increased production.

5. ENABLING ENVIRONMENT



A very important factor for community development and consequently a focus point of the community competitiveness assessment is the environment. Enabling environment is an overarching factor that involves a set of broad issues which directly influence all aspects of community development. The factors assessed by our model involve five main indicators that assess the environment from different specific perspectives relevant to the ARDI program. These factors involve:

- Willingness of community members and local officials to commit and invest resources (time and money) in community development.
- Willingness of community members to cooperate with one another towards common gain and development.
- Coverage of the community by other development projects/initiatives.
- Linkage of community with existent (business) support structures, both public and private.
- Position of the community to serve surrounding communities

These factors are assessed by focus group members on a scale of one to five where “one” is the worst score and “five” the best. The total maximum score on enabling environment is 100. Communities that score high on these features are considered having enabling environment on the features that are of crucial importance for the ARDI program. Moreover these factors all have certain weights which to some degree stress the importance of each specific factor to the program. Table 6 presents the scores of Artsvanik in relation to the mentioned indicators and the total weighted score of the community regarding enabling environment.

Table 6 Artsvanik’s Enabling Environment

Source: CCA Workshop Data - Heifer Armenia Calculations

Indicators	Score (1-5)	Weight	Weighted Score
Willingness of community members and officials to invest and activity participate in the program	3	6	18
Willingness of community members to cooperate towards common gain and development	2	4	8
Coverage of the community by other development projects/ initiatives.	4	1	4
Linkage of community with existent (business) support structures	2	1	2
Position of the community to serve surrounding communities	4	8	32
Total Score Enabling Environment			64

The total score of Artsvanik on enabling environment is 64. The highest score (32) involved the position of the community to serve as a community cluster and thus to contribute to the development of nearby communities as well. The second highest score (18) of the community in this area relates to the motivation of the community to invest resources and actively participate in the program. This was also made obvious during community assessment sessions and focus group discussions as community members participated very actively in these meetings as focus group members and observers.

Artsvanik scores 8 regarding the willingness of community members to cooperate towards common gain and development. The ability to work with each other is important in case cooperative approaches such as milk producer or fruit processing cooperatives are to be established in the community. The community has limited links to existent (business) support structures and World Vision Armenia is actively implementing development programs.

6. CONCLUSIONS

Artsvanik is one of the communities located in Kapan region of Syunik Marz of Armenia nearby the Artsvanik water reservoir. The community houses 201 families and 679 residents of which the vast majority is mainly involved in animal husbandry and fruit production, followed by beekeeping activities. Animal husbandry and horticulture in Artsvanik is providing the main income source to the households.

The total competitiveness assessment score of Artsvanik was 84. In general, the community scored relatively high on community resources and enabling environment and relatively low on the resource utilization. Regarding general community resources, the community among others scored high on community education level and community vitality which relates to the relatively large population of young individuals that can get involved and contribute to the development of the community.

In terms of sector or value chain specific resources Artsvanik scored the highest on dairy sector capacity (20) which involved relatively big amount of produced milk in the community. Fruit sector related capacities of the community followed the dairy sector and the tourism sector related capacities of the community scored the lowest. Taking into account the resources of the community regarding animal husbandry, this sector has strong potential for contribution to Artsvanik's development.

With regard to resource utilization; similar to the surrounding communities in Kapan and Meghri regions, utilization of resources was the lowest in the tourism/hospitality sector as there are hardly any professional tourism services offered. The second underutilized sector was the fruit sector as Artsvanik has very limited potential to produce quality fruit. Therefore, community is fully utilizing fruit sector potential.

The next most underutilized sector of the community was the dairy sector as there is huge potential for milk production and organized sells of raw milk. The lack of sector related infrastructure such as small capacity collection/consolidation points in the community is the factor hampering sector growth.

Artsvanik scored quite high on enabling environment. Though the community has relatively limited links with existent business support structures, it has immense experience in working with international organizations. It has been already 6 years since Artsvanik community is partnering with World Vision Armenia and Counterpart Armenia. It is important to note that the community is very well positioned to serve as a cluster. The position of the community to serve surrounding communities has a large importance to ARDI program as the potential impact of the investments made by the program in a community is very much dependent on the ability of the community to serve surrounding communities and contribute to the development of these communities as well.

7. ANNEX 1: APPRAISAL APPROACH

Community Resources	
Indicator	Appraisal Measures
General Community Capacity	
Community Educational level	Level of education and agricultural targeting of education as percentage of population with Secondary professional and Higher education on a scale of 1-5 where [0-5%=1] – [5-10%=2] – [10-20%=3] – [20-40%=4] – [40%+=5]
Community vitality (number of people aged 15-29/community population)	Number of people aged 15-29/community population) on a scale of 1-5 where [0-5%=1] – [5-10%=2] – [10-20%=3] – [20-40%=4] – [40%+=5]
Community infrastructure (existence and condition of roads, water, energy sewage etc.)	Existence and condition of infrastructure as water, energy sewage etc.) on a scale of 1-5 where [no-infrastructure=1] – [inadequate infrastructure=2] – [Usable quality infrastructure=3] – [good quality infrastructure=4] – [excellent infrastructure=5]
Community Natural resources (stone, diamond and other precious metal reserves etc.)	Accumulated score of various resources such as forests, stone, diamond and other precious metal reserves etc.) on a scale of 1-5 where [no resources =1] – [forest and water=1] – [Stone mines=1] – [Precious metals=1] – [fossil fuel reserves as coal=1]
Dairy sector capacity	
Milk Production	(Milk production/per capita) on scale of 1-5 where [0-0.2=1] – [0.21-0.4=2] – [0.41-0.6=3] – [0.61-0.8=4] – [0.81+=5]
Milk Productivity	(Milk production/animal head ratio etc.) on scale of 1-5 where [0 - 1=1] – [1 - 1.5 =2] – [1.5-2=3] [2.1—2.5=4] – [2.5+=5]
Fodder Availability	(Animal/pasture ratio on scale of 1-5 where [0 - 1=1] – [1- 2 =2] – [2-3=3] [3-4=4] – [4+=5]
Dairy sector related experience and infrastructure	Accumulated score of various resources as educate people and people with professional experience on scale of 1-5 [Milk technicians =1] – [Vets =1] – [Experience in the sector=1] – [Consolidation units=1] – [processing plants=1]
Fruits sector capacity	
Ability to produce quality fruit	Quantity of quality fruit production in tons per capita on scale of 1-5 where [0 - 1=1] – [1 - 1.5 =2] – [1.5-2=3] – [2.1-2.5=4] – [2.5+=5]
Fruit quality	Share of high quality fruit of the total fruit production scale on a scale of 1-5 where [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]
Existence of Fruit infrastructure	Hail centers and consolidation units etc. on scale of 1-5 in terms of perceptual coverage [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]

Fruit sector related experience and knowledge	Existence of educated people and people with professional experience in this sector including landscape experts etc.
Tourism Sector Capacity	
Tourism related resources as natural, cultural etc.	Existence of attractive natural environments, culinary specialties, hospitality of the people etc. on scale of 1-5.
Current tourist visits to the community	Number of visitors visiting the community annually (international and locals) on scale of 1-5 where [0 - 10=1] – [10 - 100 =2] – [100-200=3] – [200-400=4] – [400+=5]
Existence of tourism infrastructure (B&Bs, restaurants, spas etc.	Existence of B&Bs, hotels, restaurants, spas etc. on scale of 1-5 where existence of all different services is one extra point so only B&B and or hotel =1 points, Restaurants = 1 points, Spas =1 points, leisure possibilities/night life =1 and if all of these points exists 5 points.
Existence of tourism related experience and knowledge	Previous formal and informal experience with tourism service delivery on a scale of 1-5 where only informal hospitality is 1, informal paid hospitality is 2, formal experience as registered business is 3, formal with established links to local tour operators is 4 and formal with established links with international tour operators is 5.

Resource Utilization	
Indicator	Appraisal Measures
Dairy Sector	
Utilization of fodder base	Ratio of number of animals divided by the existent pasture and grassland – minus 1.8 On a scale of 1-5 where [0 - 0.5=5] – [0.5 - 1 =4] – [2 - 3=3] [3-4=2] – [4+=1]
Milk collection level (production/ collection)	Raw milk production and regular collection ratio in percentage on a scale of 1-5 where [0-10%=1] – [10-20%=2] – [20-40%=3] [40-80%=4] – [80-100%=5]
Milk Productivity	Milk productivity compared to maximum productivity of Caucasian Grey (local breed of cows in Armenia which is 3.5. On a scale of 1-5 where [0 – 0.2=1] – [0.2- 0.5 =2] – [0.5-0.8=3] – [0.8-1=4] – [1+=5]
Overall dairy sector resource utilization	Independents expert evaluation of various components of influence to sector capacity and its utilization.
Fruits Sector Capacity	
Utilization of quality production capacity	Percentage of quality production compared to actual production of fruits on a scale of 1-5 where [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]
Current sales of quality fruit production	Percentage of quality production sales compared to actual production of high quality fruits on a scale of 1-5 where [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]

Professional Fruit processing	Professional (of farm) processing of fruit in the community as drying, juicing etc. where [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]
Overall fruit sector resource utilization	Independents expert evaluation of various components of influence to sector capacity and its utilization.
Tourism Sector Capacity	
Use of natural, cultural and other resources for community development.)	Regularity of tourist visits to the natural cultural and other resources of the community where very rare=1, rare 2, occasionally =3, often is 4 and very often is 5.
Revenue generation through hospitality services (as B&Bs, restaurants, etc.)	Contribution of tourism to community income generation on a scale of 1-5 where [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]
Professional use of tourism related Knowledge and HR capacity	Number of people working and utilizing their tourism related experience in this sector as percentage of total community population where [0-10%=1] – [10-20%=2] – [20-40%=3] – [40-80%=4] – [80-100%=5]
Overall Tourism sector resource utilization	Independents expert evaluation of various components of influence to sector capacity and its utilization.

8. ANNEX 2: INFRASTRUCTURAL INVENTORY

Economic infrastructure – including industrial areas and buildings suitable for the production, storage, processing factories, stores, food service outlets, markets, hotels, guest houses, mines and mining, etc.

Infrastructure	Operating / non operating	Belongs to (private-public)	Production capacity, if applicable.	Inner community / Outside of community (5 km radius)
Sewing industrial area	doesn't operate	public	-	inner community
Old school-building	doesn't operate	public	-	inner community
Teacher's house	operates	public	-	inner community
Post office	operates	public	-	inner community
Flour mill	doesn't operate	public	-	inner community
Community center	doesn't operate	public	-	inner community
Stores	don't operate	public	-	inner community
Old savings bank area	doesn't operate	public	-	inner community
Markets 3	operate	private	-	inner community
Market 1	doesn't operate	private	-	inner community
Food service outlet	operates	private	-	inner community
Bakery	operates	private	-	inner community
Sand mine located on the way to Kapan	operates	private	-	inner community

Transport infrastructure, including roads (intra and inter), bridges, tunnels, traffic direction, traffic lights, community transport, car service centers, gas stations, etc.

Infrastructure	Operating / non operating	Belongs to (private-public)	Inner community / Outside of community (15 km radius)	Comments
Road	operates	public	inner community	length 8km, normal
Road	operates	public	outside of community	length 50-60km, normal
Bridge	operates	public	inner community	on the interstate road
Illumination	operates	public	inner community	-

Energy infrastructure – including electrical substations, hydropower stations, network, gasification/natural gas coverage, gas substations, services, etc.

Infrastructure	Operating / non operating	Belongs to (private-public)	Coverage (%)	Comments
Electrical substation	operates	public	100%	Kapan AEN
Electrical substation	operates	public	100%	community
Electrical wires' network	operates	public	100%	-

Water infrastructure - including drinking and irrigation water network, sewerage, water drafting stations, drainage systems, water pumping stations, water meters, drainage systems, expansion basins, torrents, etc.

Infrastructure	Operating / non operating	Coverage (%)	Comments
Drinking water network	operates	80%	-

Telecommunications infrastructure – post office, fixed/landline telephone, mobile, Internet, TV, television towers, and so on.

Infrastructure	Operating / non operating	Coverage (%)	Comments
Post office	operates	100%	Located at the Haypost building
Fixed telephone	operates	50%	-
Mobile communication	operates	100%	all operators operate
Internet	operates	50%	-
Television	operates	100%	satellite
Television tower	operates	100%	-

Waste management infrastructure – organized waste management, centralized garbage shedding areas, biogas production, etc.

Infrastructure	Operating / non operating	Comments
Waste management	operates	performed once a week
Legally designated garbage collection place	operates	-

Geological infrastructure – hail stations, weather forecast stations and so on.

Infrastructure	Operating / non operating	Comments
-	-	-

Management infrastructure – village administration, police, fire station and so on.

Infrastructure	Operating / non operating	Comments
Village administration	operates	-
Police	operates	as required

Social infrastructure – community ambulance, hospitals, schools, kindergartens, gym, community center, museum, library, etc.

Infrastructure	Operating / non operating	Belongs to (private-public)	Comments
Medical center	operates	public	belongs to Kapan health center
School	operates	public	69 pupils
Nursing home	operates	public	10 people
Kindergarten	operates	public	12 children
Museum	operates	public	-
Library	operates	public	-

Inactive list of infrastructure, which can be used for the purposes of program.

Infrastructure	Condition (good, bad, medium)	Availability of other infrastructure				Usage possibility rating (1-5)	Comments
		water	gas	Electricity	Road		
Flour mill	medium	there is	not	there is	there is	1	-
Old school-building	bad	there is	not	there is	there is	5	-
Old farm building	bad	there is	not	there is	there is	2	-
Old community center	bad	there is	not	there is	there is	2	-
Branch of bank's building	bad	there is	not	there is	there is	3	-

ARDI is a 5-year program funded by the US Agency for International Development. Launched in September 2013; the program aims to increase rural employment by tackling constraints to rural economic development of communities in the Syunik, Vayots Dzor and Lori Marzes (provinces) of Armenia. The program will support interventions in three main rural economic sectors/Value Chains involving Dairy Processing, Fruit Processing and Rural Tourism.
