



**Programme Coordination Platform for Sustainable Management of RA's Natural Fodder Areas:
Pastures and Grasslands**

Concept Paper on Sustainable Management of RA's Pastures

(Implemented by “ADWSIE Business and Legal Consulting” LLC)

November, 2019



Summary description

In the contemporary conditions of disruption of natural ecosystems, the maintenance of existing natural landscapes and ecosystems is essential for ensuring human living conditions, so as ecosystem services provided by them. From this perspective, the sustainable management of natural fodder areas is of great importance, consequently, the provision and maintenance of ecosystem services provided by them.

Natural fodder areas are unique natural ecosystems, and, in addition to their economic significance, they have also great social and environmental significance. Therefore, proper management of natural fodder areas is very important.

The main goal of the Concept Paper is to introduce and launch an effective and integrated pasture management mechanism in the Republic of Armenia, the accomplishment of which will result in:

- Sustainable development of the cattle breeding sector, including the increase of productivity in the sector.
- Sustainable use, maintenance, rehabilitation of pastures, reduction of vulnerability of biodiversity, as well as will ensure the sustainable development of natural ecosystems.

In particular, the Concept Paper presents the general description and current problems in the natural fodder areas (pastures based on their operational significance) management sector, the study of local and international experience in management of pastures, as well as proposes to introduce effective mechanisms for management of pastures in the RA based on these studies.

Table of Contents

Summary description	2
1. General Provisions.....	4
2. Introduction.....	5
2.1 Defining of Goals of the Concept Paper	5
2.1 Approach and methodology	7
3. General Description and Problems Existing in the Natural Fodder Areas Management Sector in the RA	9
3.1 Legislative Framework and Existing Problems	9
3.2 Institutional Systems and Current Problems	19
3.3 Required Resources and Existing Problems	24
4. International and Local Experience of Pastures Management	26
4.1 International Experience in Pasture Management	26
4.2 Local Experience in Pasture Management	27
5. Possible Mechanisms of Management Natural Fodder Areas (Pastures) in the RA	28
Appendixes.....	38
Appendix 1: List of institutions provided representatives in working group	38
Appendix 2: List of Beneficiaries Conducted Individual Meetings during the Work.....	39
Appendix 3: Problems Existing in the Sector and Proposals on Potential Solutions Presented during Meetings	40
Appendix 4: Minutes of Meetings held with the Working Group Members.....	42
Appendix 5: Current Problems in the Sphere of Pasture Management in Central Asian Countries	57
Appendix 6: Local Experience in Management of Natural Fodder Arreas	61
Appendix 7: International Experience Aimed at Solution of Sector-Specific Problems	66
Appendix 7.1: Institutional System and Powers of Different Bodies Functioning in Kyrgyzstan	71
List of Literature	77

1. General Provisions

This Concept Paper presents the general description and problems existing in the natural fodder areas (pastures based on their operational significance) management sector in the Republic of Armenia (hereinafter RA), the study of local and international experience in the pastures management, as well as proposes, based on these studies, to introduce effective mechanisms for management of pastures in the RA.

Basic Concepts and Abbreviations used in the Concept Paper

The terms and abbreviations used in this Concept Paper shall have the following meanings:

- **Pasture** – an agricultural land covered by natural plant which is used for organizing pastoral (grazing) period of farm animals, as well as for other purposes (hunting, beekeeping, herb collection, tourism and recreation).¹
- **Natural grassland** - a meadow covered with perennial, mostly moderate moisture-loving high stem grasses, which is mainly used for the purpose of collecting coarse-grained feed (grass) by reaping, necessary for the crib season.¹
- **Natural fodder areas** – ecosystems covered mostly with perennial grasses, as well as with semi-shrubby and shrubby vegetation, which are used as pastures and grasslands based on their production-economic purpose and operational significance.
- **Management of Natural fodder areas** - implementation of such complex activities, in particular, ensuring of legislative regulations, institutional infrastructure and required resources, due to which it will be possible to ensure sustainable development of the natural ecosystem, provision of ecosystem services, to reduce the vulnerability of biodiversity of pastures.
- **Guideline** – “Guideline on Development and Implementation of Sustainable Management Plans of Pastures and Grasslands”, Gagik Tovmasyan, 2015. The document was prepared within the framework of the “Integrated Biodiversity Management, South Caucasus” program, supported by GIZ and funded by Federal Ministry of Economic Cooperation and Development of Germany.
- **Manual** – “Pasture Monitoring Manual: Armenia”, Gagik Tovmasyan, 2015. The document was prepared within the framework of the “Integrated Biodiversity Management, South Caucasus” program, supported by GIZ and funded by Federal Ministry of Economic Cooperation and Development of Germany.
- **Research** – “Research on Problems Existing in the Pasture Management Sector in the RA and Their Causal Links”, April 30, 2019. The research was carried out by the Strategic Development Agency (SDA) NGO under the framework of Platform within the scopes of the “Livestock Development in the South of Armenia” program, funded by the Swiss Agency for Development and Cooperation.

¹ The definition is extracted from the Guideline presented in “Basic Concepts and Abbreviations used in the Concept Paper” section.

- **Platform** – “Coordination Platform for Sustainable Management of RA’s Natural Fodder Areas”, established in 2018 in the Republic of Armenia, the founders of which are the Strategic Development Agency (SDA) NGO, “Integrated Biodiversity Management, South Caucasus” program supported by German Agency for International Cooperation (GIZ) and the 2nd program on “Community Agricultural Resource Management and Competitiveness” of the former Agricultural Development Fund.
- **CLU**-Conventional Large Unit.
- **SCREC** - State Committee of Real Estate Cadastre.
- **NSS** - National Statistical Service.
- **NSC** – National Statistical Committee.
- **LSGB** - Local self - government body.

2. Introduction

2.1 Defining of Goals of the Concept Paper

The main goal of the Concept Paper is to introduce and exercise an effective and integrated mechanism for management of pastures in the Republic of Armenia, the implementation of which will result in:

- Sustainable development of the cattle breeding sector, including the increase of productivity in the sector of cattle breeding.
- Sustainable use, maintenance, rehabilitation of pastures, reduction of vulnerability of biodiversity, as well as ensuring sustainable development of natural ecosystems.

Importance of Sustainable Pasture Management in RA

The Republic of Armenia is a mountainous country. It covers an area of 29,743 square km and is 1700 meters above the sea level in average. 76.6% of the territory of the Republic is 1000-2500 m above the sea level and 13.5% is above more than 2500 m.

Natural fodder areas are unique natural ecosystems, and, in addition to their economic significance, they have also great social and environmental significance. In particular,

- Natural ecosystems (including natural fodder areas) provide a number of ecosystem services of various values such as related to security (food, clean water, fresh air, fuel, raw materials), regulation (climate, natural disasters and epidemics, soil erosion prevention, shelters, habitat), culture (aesthetic, religious, scientific, social and spiritual values, recreational resources) and support (soil formation, photosynthesis, circulation of nitrogen, carbon, oxygen, water).²

² The information is extracted from GOA decision N-1059-A on “Approval of the Strategy of the Specially Protected Natural Areas of the Republic of Armenia, the State Programs and Measures of Their Protection and Use” from 25.09.2014.

- Natural ecosystems are the habitat for various animals, plant species and microorganisms, including genetic resources for wild species of cultivated plants. They prevent soil erosion, mitigate landslides, floods and droughts, and regulate the microclimate.³
- They are a natural storage of carbon.³

Natural fodder areas have also an aesthetic significance and serve as places of recreation.

With the view of assessing the importance of sustainable management of natural fodder areas in the Republic of Armenia, some statistical data and analytical conclusions concerning the country's agriculture will be presented later. In particular:

- Agriculture is considered as one of the main branches of the RA economy and public administration bodies promote the development of the sector through various programs and initiatives during many years. Nevertheless, the cattle breeding sector still has numerous challenges, the most significant of which is to ensure the growth of production volumes of cattle products through the intensive methods.³
- More than 68% of the RA land fund (2 044 464.2 ha) are agricultural lands. 51% and 6% of the above-mentioned lands are pastures and natural grasslands, respectively.⁴ It should be noted that 97% of pastures and 55% of grasslands are the property of the state and communities, and the rest is private property.⁵
- Natural fodder areas are the basic source ensuring the feed for cattle and small cattle. More than 50% of meat, approximately 70% of milk and almost 100% of wool are produced per annum due to pastoral feed.⁶
- As of January 2019, the number of registered livestock in the country is 572,000, of which 254,000 are cows, as well as there are 638,000 heads of sheep and goats, 11,000 horses.⁷
- The quantitative comparison of natural fodder areas and heads of cattle (conventionally large) of different marzes (regions) shows that all marzes, except Armavir and Yerevan, fail to utilize the full potential of their natural fodder areas, i.e., the areas of available pastures sometimes exceed twice the areas necessary for ensuring the feed of existing heads of cattle. It is worth mentioning that the estimation does not include the areas of degraded pastures or those lacking infrastructure, and the restrictions related to them.³

³ The information is extracted from "Research on Problems Existing in the Pasture Management Sector in the RA and Their Causal Links" (SDA NGO, 2019).

⁴ GOA decision N 1379-N on "Approval of Availability and Distribution of Land Fund in the RA, 2019 Report (balance of land)" from 03.10.2019

⁵ SCREC, 2018

⁶ RA Ministry of Natural Environment, 2014

⁷ NSS/NSC, Statistical Yearbook 2019

- Approximately 57% of pastures of the Republic are degraded. The country has 150,000 h of non-usable natural fodder areas.³

The above-mentioned statistical data and analytical conclusions show that despite of the existence of natural fodder areas with rather favorable economic conditions in the country, they are not used to their full potential. At the same time, the country has a large number of degraded natural rangelands, as well as natural fodder areas which have no necessary infrastructures. It should be noted that nowadays the biggest challenge in the cattle breeding sector is to ensure the growth of livestock production volumes, based on the growth of productivity by organizing efficient behavior and ensuring the feed, rather than on the increase of number of livestock.

Thus, by taking into consideration the economic, environmental and aesthetic significance of natural fodder areas and analyzing the above-mentioned statistical data and analytical conclusions, there arises the necessity and importance of introducing sustainable management mechanisms of pastures in the country.

2.1 Approach and methodology

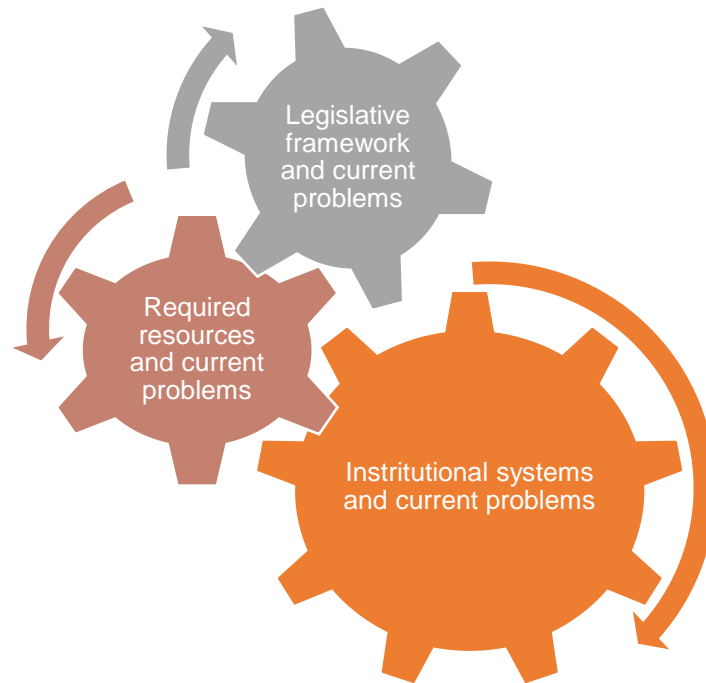
This section presents the approaches and methodology applied for preparation of the concept paper by distinguishing them with the view of:

- Analyzing the general description and problems existing in the natural fodder areas management sector in the RA;
- Studying local and international experience, and
- Introducing effective mechanisms for sustainable management of natural fodder areas in the RA.

The information on all documents, studied for the purpose of preparing the concept paper, is presented in the section “List of Literature” in this Concept Paper.

Analysis of the General Description and Current Problems in the Natural Fodder Areas Management Sector in the RA

The analysis of the current situation and current problems in the management of natural fodder areas in the RA is conducted within the framework of three interconnected sectors:



With the view of analyzing **the legislative framework and current problems**, we studied all acting legislative acts of Armenia, which refer to issues related to natural fodder areas management to some extent, as well as other acts, which generally refer to:

- Land management;
- Protection of environment;
- Powers and duties of local self-government bodies;
- Supervisory powers of different authorized bodies in the land management sector.

The results of the Research were taken as a ground for analyzing the current situation and problems existing in **the spheres of institutional systems and required resources**.

In addition to studying the aforementioned documents, both individual and group meetings and discussions are held with members of the working group established for the development of this Concept paper. The problems existing in the natural fodder areas management sector and their possible solutions were presented to beneficiaries during the meetings. As a result, the beneficiaries were provided with the opportunity to present their viewpoints about the existing problems and potential solutions in the sector, which served as a ground for developing this Concept Paper. The attached appendices include:

- List of institutions provided representatives in working group (Appendix 1);
- List of beneficiaries who held individual meetings in the course of work (Appendix 2);
- Problems existing in the sector and proposals on possible solutions presented during individual meetings (Appendix 3);

- Minutes of meetings with the working group members (Appendix 4).

The study of Local and International Experience

The information, presented in the Research, served as a ground for the study of local experience, in particular, the policies and programs implemented in the sector by the state, as well as the experience and outcomes of programs accomplished by local and international organizations.

In relation to the study of **international experience**, the practices, programs and reforms conducted in both developed and developing countries, as well as successes in this sector and lessons learned were taken into account. In particular, the experience of the following countries was examined:

- Central Asia (Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan, Kyrgyzstan);
- Mongolia;
- Nigeria;
- Switzerland;
- China.

Presentation of Effective Mechanisms for Sustainable Management of Natural Fodder Areas in the RA

With the view of presenting effective mechanisms for sustainable management of natural fodder areas in the RA, the following were compared:

- Current problems detected in the sector;
- Conclusions of the analysis of local and international experience;
- Sector related information disclosed during the meetings with the working group members.

As a result, both local and international experience have been considered as a ground for various components related to sustainable management of the sector, by adapting them to the current requirements of management of natural fodder areas in the RA.

3. General Description and Problems Existing in the Natural Fodder Areas Management Sector in the RA

3.1 Legislative Framework and Existing Problems

RA has no single comprehensive legal act regulating the management issues of natural fodder areas. Instead, there are two legal acts which exclusively refer to the use of natural fodder areas, and, to a certain extent, management issues, and partially regulate their sector. These documents are:

- GOA Decision N 1477-N on “Defining the Procedure of Use of Pastures and Grasslands” from 28.10.2010, and
- GOA Decision N 389-N on “Defining the Procedure of Use of Pastures and Grasslands” in the Republic of Armenia” from 14.04.2011.

At the same time, the country has a number of other legal acts, which, to a certain extent, cover the issues of natural rangelands, the powers of local self-government bodies, and issues related to land use. These documents are:

- RA Land Code;
- RA Law on “Local Self-Government”;
- RA Law on “Control over Use and Maintenance of Lands”;
- RA Law on “Flora”;
- Other legal acts.

Areas of regulation of the above-mentioned documents will be presented below.

GOA Decision N 389-N on “Defining the Procedure of Use of Pastures and Grasslands in the Republic of Armenia” from 14.04.2011. The document establishes the procedure of management and effective use of natural fodder areas, although it refers to natural fodder areas located only on the state owned lands and does not address any natural fodder areas owned by communities, as well as those which are private property. It is important to note that the Government has no jurisdiction to regulate the use of property owned by communities or natural/legal persons, and the use of community property can only be regulated by law. In particular, the document defines:

- The necessity of preparing a plan on the pasture use prior to using pastures;
- Principles of effective use of pastures;
- Duration of pastoral period in different zones of the country, as well as the number of circular grazing during the entire pastoral period;
- Procedure for calculation of permissible load of pastures;
- Principles of applying rotation grazing as an effective grazing method;
- General principles of building enclosures and watering places in pastures;
- General rules of management of natural grasslands.

GOA Decision N 1477-N on “Establishing the Procedure of Use of Pastures and Grasslands” from 28.10.2010. The document establishes the process of using natural fodder areas on the state owned lands. The document specifically established:

- The process of signing contracts for use of natural pastures, according to which the contracts are signed in a simple written form for a period of up to 3 years. It should

be noted that prior to adoption of the said decision it was required to sign a land use contract, which led to additional costs related to notarization and registration of the right of ownership.

- The template contract on the use of natural fodder areas to be used in signing such contracts.
- The size of fee for using natural fodder areas which is defined as the amount equal to the rate of land tax rate of the land plot under which the natural fodder areas is located.

RA Land Code. The Code establishes the legal grounds for improvement of the state regulation of land relations, development of various organizational and legal forms of land economy, fertility of land, land use efficiency raise, protection and improvement of an environment - favorable for human life and health, protection of the rights on land, based on the important environmental, economic and social significance of the land, due to which the land is used and maintained as the livelihood condition in the Republic of Armenia. The Code addresses some issues related to management of agricultural lands, including natural fodder areas. In particular:

Article	Interpretation of the Article
<u>Article 9 of the Code</u>	Natural fodder areas considered an agricultural land. At the same time, the procedure for use of agricultural land, including natural fodder areas, is defined by landowners and users, in conformity with schemes of natural agricultural division of lands, use of land and other earth engineering documents and normative legal acts. Accordingly, each owner, including the community, must determine the procedure for use of the owned natural fodder areas, which must comply with the aforesaid documents and legal acts.
<u>Article 55 of the Code</u>	Lands that do not belong to citizens, legal entities or communities, are considered the state property lands. Hence, according to the type of property right, lands, including agricultural lands, may be the property of citizens, legal entities, communities or the state.
<u>Article 56 of the Code</u>	The Community Leader and the Community Council manage and dispose community owned lands, according to the manner prescribed by procedures, the Civil Code, this Code, other laws and normative legal acts.
<u>Article 60 of the Code</u>	The citizens and legal entities are forbidden to use their property rights for transferring the state and community owned lands which

	are occupied by pastures of general use, cattle pathways, roads, natural wells, springs and, upon the decision of local self-government bodies, other objects which are outside the administrative borders of the community.
<u>Article 91 of the Code</u>	The agricultural land is provided to citizens and legal entities with the right of ownership or use, including for the purposes of hay-mowing and livestock grazing.
<u>Article 94 of the Code</u>	The minimum rent amount for the state and community owned agricultural land is defined by an amount not less than the annual quota of the tax for that land.
<u>Article 96 of the Code</u>	Plots of lands from the state and community owned lands shall be provided for rent to citizens and legal entities for agricultural activities, including hay collection and cattle livestock pastures for periods defined by the Land Code. The pastures are provided for rent on cattle breeding purposes. The necessary land norm for one head is defined by the State authorized body in the field of agriculture.

RA Law “On Local Self-Government”. The law sets out the role of local self-government in the RA, the notion, bodies, general principles, powers, their legal, economic, financial bases and guarantees, as well as regulates relations between the state authorities and local self-government bodies. In its essence, the Law is the basic document which defines the powers of local self-government bodies. It does not contain direct provisions on natural rangelands; however, it defines the personal and/or state delegated powers of the Community Leader in the spheres of land use, agriculture, veterinary services and phytosanitary, as well as environmental protection. In particular:

Article	Interpretation of the Article
The Sphere of Land Use	
<u>Part 1 of Article 43 of the Code</u>	<p>The Community Leader, among other powers in this field, shall personally exercise the following powers:</p> <ul style="list-style-type: none"> • Develop and compile annual and five-year programs on management of community-owned lands, which shall be a component to the community's five-year program, and submit them to Community Council for approval; • Conduct supervision over the appropriate use of land within

	<p>the administrative borders of the community, and the observance of requirements of the land legislation by land users;</p> <ul style="list-style-type: none"> • Prevent, suspend and eliminate illegal land use in the cases and manner prescribed by law; • Exercise improvement activities of the community-owned lands.
<u>Part 2 of Article 43 of the Code</u>	<p>The Community Leader shall exercise the following powers delegated by the State:</p> <ul style="list-style-type: none"> • Compile current documentation of inventory of lands, current classification of the land covered areas located within the administrative borders of the community and compile the balance of community lands in the manner prescribed by law and normative legal acts; • Alienate or provide for use, in compliance with the urban development program documents and land use schemes, the state-owned lands located within the administrative borders of the community in the cases and manner prescribed by law; • Ensure protection of geodetic points and border milestones located within the territory of the community in the manner prescribed by law.
The Sphere of Agriculture	
<u>Article 49 of the Code</u>	<p>The Community Leader shall personally exercise the following powers:</p> <ul style="list-style-type: none"> • Manage the operation and maintenance of community-owned irrigation networks, their construction and repair; • Grant permits, in compliance with the city rules, for keeping pets in the territory of the city and conduct their annual inventory; • Exercise the inventory of agricultural resources of the community, the manner of which is defined by the RA Government; • Carry out agricultural development programs, support the organization and implementation of programs on account of the state funds and other funds in the agriculture sector.
The Sphere of Veterinary Services and Phytosanitary	
<u>Part 1 of Article 50 of the Code</u>	<p>The Community Leader shall personally exercise the following powers:</p>

	<ul style="list-style-type: none"> • Provide information on livestock anti-epidemic measures, detected infectious and non-infectious diseases to the authorized body; • Ensure the organization of veterinary service by a veterinarian who serves the community.
<u>Part 2 of Article 50 of the Code</u>	<p>The Community Leader shall exercise the following powers delegated by the State:</p> <ul style="list-style-type: none"> • Support the activities related to implementation of annual livestock anti-epidemic measures under the state program; • Support the veterinary service activities by limiting or prohibiting their use according to the infection risk, based on the livestock anti-epidemic situation; • Assist in the activities related to the fight against pest harmful for agricultural plants cultivated in the territory of the community; • Assist in the activities related to the phytosanitary inventory in the territory of the community, by providing data on land users to the authorized body in the sphere of phytosanitary, if necessary; • Assist in the activities conducted in the quarantine zone declared within the territory of the community.
The Sphere of Protection of the Environment	
<u>Part 1 of Article 51 of the Code</u>	<p>The Community Leader shall personally exercise the following powers in this sphere:</p> <ul style="list-style-type: none"> • Organize the protection of community-owned lands and specially protected areas and community forests located thereon.
<u>Part 2 of Article 51 of the Code</u>	<p>In this sphere the Community Leader shall exercise the following powers delegated by the State:</p> <ul style="list-style-type: none"> • Conduct supervision over implementation of the nature protection measures on the community-owned lands in the manner prescribed by law; • Ensure the protection of lands against erosion, flooding, marsh, contamination with chemical, radioactive materials, industrial and domestic wastes.

RA Law on “Supervision over Use and Protection of Lands”. The Law defines the issues and types related to effective use and maintenance of lands, problems, methods of supervision over the fulfilment of requirements of the land legislation, supervision conducting bodies, rights and duties of inspection conducting bodies and inspected persons, procedures of conducting supervision. In particular, pursuant to Article 4 of the Law, within the scopes of their powers, the supervision over maintenance and use of lands is conducted at three levels:

- The professional control conducting supreme body as established by the RA Law on “Local Self-Government”. According to the RA Prime Minister's decision on “Approval of the Charter on RA Urban Development, Technical and Fire Safety Inspectorate”, this body is the RA Urban Development, Technical and Fire Safety Inspectorate.
- Marzpets (governors)
- Community leaders.

Supervising Body	Scopes of Supervision
<p><u>The professional control conducting supreme body</u></p>	<p>The latter shall supervise:</p> <ul style="list-style-type: none"> • The intended use of the land fund; • Observance of the requirements of land legislation; • Activities of the territorial administration bodies conducted in the sphere of land relations; • Appropriation of new lands. <p>They are also entitled to impose administrative penalties in case of detected inconsistencies.</p>
<p><u>The Marzpet</u></p>	<p>The Marzpet shall supervise:</p> <ul style="list-style-type: none"> • Activities of Community Leaders in the sphere of land relations; • Use of land zoning schemes of community lands, master plans of settlements, implementation of zoning projects. • Issuing and taking back the state owned and community owned land plots within the administrative borders of communities, collection of rents for land plots and land taxes, prevent, suspend and eliminate illegal use of lands in areas outside the administrative borders of communities, submit reports to the authorized bodies on holding accountable perpetrators as established by law, impose administrative sanctions against officials of the marz communities in the cases and manner prescribed by law;

	<ul style="list-style-type: none"> • Implementation of the earth engineering republican and territorial projects within the territory of the marz; • Intended use of land fund located outside the administrative borders of communities, the observance of requirements of land legislation by land users; • Maintenance of the border milestones of administrative borders of the marz, geodetic and other special informative signs and points located in the territories outside the administrative borders of communities.
<u>Community Leaders</u>	<p>The Community Leader, within administrative borders of the community, shall exercise supervision over:</p> <ul style="list-style-type: none"> • The observance of requirements of land legislation by land users, prevent, suspend and eliminate illegal land use within administrative borders of the community and ensure the elimination of their consequences in the manner prescribed by law, submit reports to the authorized bodies on holding accountable perpetrators, impose administrative sanctions against officials of the marz communities in the cases and manner prescribed by law; • Intended and operational use of land plots; • Implementation of land maintenance measures; • Maintenance of border milestones, borders of land use and geodetic and other special informative signs and points of the administrative borders of community.

RA Law on “Flora”. The law defines the state policy of the Republic of Armenia on scientifically motivated protection, maintenance, use and reproduction of natural flora. In particular:

Article	Interpretation of the Article
<u>Article 12 of the Law</u>	The state monitoring of flora is exercised with the view of protection and continuous use of the flora. Monitoring is also conducted with regard to conditions of habitats of plants and status of ecosystems.
<u>Article 13 of the Law</u>	The Article defines the necessity of maintaining the state inventory and cadaster of the flora, the purpose of which is to detect quantitative and qualitative changes in species, symbiosis and habitats of plants. According to the Law, the state inventory of the

	flora is conducted on a regular basis, not later than once every ten years.
<u>Article 16 of the Law</u>	All objects of flora are subject to legal protection in the Republic of Armenia.
<u>Article 18 of the Law</u>	With the view of protection of the flora objects, it is forbidden to: <ul style="list-style-type: none"> • Burn them; • use mineral fertilizers and pesticides without observing rules; • import plant species illegally into the Republic of Armenia, adapt them to climatic conditions and use for breeding purposes; • Voluntary use the living modified organisms generated through biological technologies; • Breach of requirements on sizes and species of green zones in settlements.
<u>Article 27 of the Law</u>	The user of the flora objects in the Republic of Armenia, among other measures, must: <ul style="list-style-type: none"> • Ensure the protection of flora objects, assigned to him; • Not violate the integrity of natural symbiosis of plants; • Take necessary measures for reproduction and protection of the flora objects. <p>Assist in the activities of state bodies to conduct control, state inventory and monitoring of the flora objects.</p>

Other legal acts. In addition to the above-mentioned documents, there are a number of other documents that refer to the powers of local self-government bodies in relation to land management and environmental processes in general, but as they are not directly related to the management of natural fodder areas, they are not presented in details within the scopes of this Concept paper. These documents are:

- RA Constitution;
- RA Civil Code;
- RA Water Code;
- RA Forest Code;
- RA Subsoil Code;
- RA Tax Code;
- RA Law “About Protection of Atmospheric Air”;
- RA Law on the “Environmental Impact Assessment and Expertise”;
- RA Law on “Waste”;

- RA Law on “Specially Protected Nature Areas”.

Problems existing in the legislative framework. As mentioned, there is no single document in the country which will regulate the entire process of management of natural fodder areas. The only documents regulating the sector are the Government decisions N 1477-N on ***“Establishing the Procedure of Use of Pastures and Grasslands”*** from 28.10.2010 and N 389-N on ***“Defining the Procedure of Use of Pastures and Grasslands in the Republic of Armenia”*** from 14.04.2011, in relation to which it is necessary to single out the following problems:

- These documents regulate the processes of use and management of exclusively state owned natural fodder areas, and propose the community leaders only to use community owned natural fodder areas according to requirements of the decision. Accordingly, the issues concerning the use and management of community owned natural fodder areas are left uncovered, and a non-uniform approach is applied in the management of natural fodder areas, based on their property form. This is reflected also in the contractual relationship on the use of natural fodder areas. Due to absence of contractual requirements with regard to community owned natural fodder areas, there are cases where the community council decides not to charge rent for natural fodder areas nearby to communities and permit free grazing on them. However, when proposing ways to resolve the issue, it should be taken into consideration, that the Government has no jurisdiction to regulate the use of community property; the use of community property may only be regulated by law. Moreover, the community, as a legal entity, is free to dispose its property and the prohibition on providing a pasture with the right of free use, even if it is proposed by law, may be problematic in terms of the protection of property right guaranteed by Article 60 of the Constitution.
- The documents were adopted in 2010 and 2011 respectively and were not revised since then, which implies that the principles of natural fodder areas management defined at that time may not be applicable at present.
- According to the GOA decision N 389-N on ***“Defining the Procedure of Use of Pastures and Grasslands”*** from 14.04.2011, the size of fee for using state owned natural fodder areas is defined as equal to the rate of the land tax of the land plot located under that natural rangeland. This arises the following problems:
 - First, this provision restricts charging more than the land tax rate permitted by the Land Code, as according to the Land Code the size of fee for the use of state owned natural fodder areas is defined as not less than the land tax rate of that land plot.
 - The last modification of cadastral value of the land located under the pasture was in 2007, as a result of which there are cases when the fees established in

conformity with the land tax rate do not correspond to the real value of natural fodder areas given their real conditions.

- As the only documents regulating the sector, they are written in a very general way, by setting out only general principles, which may lead to applying different principles of natural fodder areas management by different communities. For example, the powers and scopes of responsibilities of bodies in charge for management of natural fodder areas at local and national levels, requirements for conducting monitoring and etc. are not defined.

The RA Land Code implements the classification of lands according to their importance, defines the forms of land ownership, as well as the principles of using and renting of agricultural lands, including pastures. However, the document fails to directly address the processes of natural fodder areas management. At the same time, the Code does not prohibit citizens and legal entities to transfer pastures within the administrative borders of the community with the right of ownership, which, actually, implies that citizens and legal entities may privatize such pastures. However, this does not refer to foreign nationals, stateless persons (except persons with special residency status in the Republic of Armenia), who may not have the right of ownership over the land plot serving as a pasture. They may be only users of land/tenants.

At the same time, it should be noted that the prohibition, established by Article 60 of the Code, in relation to the privatization of land plots outside the administrative borders of the community, is no longer applicable, since according to the RA Law on “**Administrative - Territorial Division of the Republic of Armenia**”, there are no longer land plots outside the administrative borders of the communities.

RA Law on “**Local Self-Government**” defines that the powers of local self-government bodies in the spheres of lands under general use, agriculture, veterinary services and phytosanitary, as well as protection of environment, while the RA Law on “**Supervision over the Use and Maintenance of Lands**” defines the spheres of supervision of different authorized bodies in the field of land use. Nevertheless, the documents are again very generic and fail to specifically address the issues related to management of natural fodder areas.

3.2 Institutional Systems and Current Problems

Acting institutional systems: As mentioned in the “Definition of Concept Paper Objectives” section, the natural fodder areas, in particular, pastures based on their operational significance, are mainly owned by communities and state, and, in accordance

with the acting legislative regulations, the LSGBs are in charge of managing and disposing of natural pastures. Accordingly, the LSGBs should exercise certain functions directed to the sustainable management of natural fodder areas, in particular, the LSGBs, according to the GOA decision N 389-N on “***Defining the Procedure for Use of Pastures and Grasslands***” from 14.04.2011, must:

- Define the beginning and end of the pastoral period;
- Regulate the ways of using natural fodder areas in communities;
- Define rest periods of natural fodder areas for the purpose of rehabilitation of the latter;
- Supervise the observance of conditions and procedure of using natural fodder areas by pasture users.

Below we represent the summary results of the interviews, focus group discussions and analysis of quantitative data conducted within the framework of the Research, which provide a general picture of the institutional systems operating in the communities.

Questions raised within the scopes of the Research	Summary presentation of answers/analysis
<u><i>To what extent the pasture use process is supervised by the LSGBs?</i></u>	<ul style="list-style-type: none"> • Lack of supervision – 30,1% of survey respondents; • Partial supervision – 58,8% of survey respondents; • Full supervision - 11,1%.
<u><i>Which professional directives are issued by the LSGBs in the sphere of pasture management?</i></u>	<ul style="list-style-type: none"> • The LSGBs do not issue directives - 39,3%; • Define the beginning and end of the pastoral period - 29,4%. <p>The remaining responses were distributed among other 5 professional directives, with low percentages.</p>
<u><i>To what extent the conditions of pastures is supervised by the LSGBs?</i></u>	It is not exercised or is exercised upon necessity, when signing rent agreements.
<u><i>Are there any pasture management plans in the communities?</i></u>	<ul style="list-style-type: none"> • 31% of communities and settlements participated in the survey have management plans; • Some communities have adopted

	<p>procedures for using pastures of their communities upon decisions of communities councils, which are reproductions of the GOA decision N 389-N on “Defining the Procedure of Use of Pastures and Grasslands Republic of Armenia” from 14.04.2011 and are abstract documents in their nature;</p> <ul style="list-style-type: none"> • Management plans mainly exist in those communities where programs on protection of environment or cattle breeding development are implemented; • Management plans are mostly not updated, and their availability does not imply the implementation of the latter.
<p><u>How is the cattle grazing process exercised?</u></p>	<p>The process varies from community to community and is conditioned with the circumstance of having a herdsman, possessing specialized knowledge of cattle owners. In particular:</p> <ul style="list-style-type: none"> • Communities mainly apply the scheme of free use of pastures; • The scheme of grazing according to pasture rotation is exercised in a few cases.
<p><u>How nearby and remote pastures of the communities are used?</u></p>	<p>80% and more of the surveyed communities use more than 50% of nearby pastures. 82% of the same communities use less than 50% of remote pastures.</p> <p>Main reasons which restrict access to nearby pastures according to communities:</p> <ul style="list-style-type: none"> • Shortage of drinking water for herds and flocks - 73.9%; • Deteriorated and almost impassible roads leading to pastures - 69,6%; • Relief of pastures - 43,5%; • Degraded pastures - 29,6%. <p>Main reasons which restrict access to</p>

	<p>remote pastures according to communities:</p> <ul style="list-style-type: none"> • Deteriorated and almost impassible roads leading to pastures to pass - 74,5%; • Deterioration or lack of camping infrastructures – 66%; • Insufficient opportunities for milking, milk processing or transferring milk to communities – 67%; • Grazing cattle in remote pastures is not economically viable due to long distance from the community and a small number of cattle owned by some households - 56,6% and 49,1% of the communities, respectively.
<p><u>What is the condition of infrastructures necessary for using pastures?</u></p>	<ul style="list-style-type: none"> • Watering places and roads are in a relatively good condition. • The condition of enclosures and herdsmen shelters is poor or they are lacking – 83,3% and 82,7% of the surveyed communities, respectively. <p>Moreover, the conditions of roads and watering places of the nearby pastures are better as compared to those of remote pastures.</p>
<p><u>Are pastures available at administrative areas meet the demand of pastoral feed for the livestock registered in the community?</u></p>	<ul style="list-style-type: none"> • Pastures are sufficient for the livestock registered in the community – 52% of communities; • Pastures are not sufficient for the livestock registered in the community – 18%, and in case of 20% out of this there is no opportunity to use pastures of other communities.

<p>Problems Existing in Institutional Systems</p>
<p>Incomplete institutional maturity of local self - government bodies</p>
<p>One of the main problems of sustainable management of natural fodder areas is the low level of capability of institutional maturity of local self - government bodies. In particular:</p>

- Communities have no definite institutional format and structure for the management process of natural pasture rangelands, due to which the process varies from community to community.
- The LSGBs do not recognize obligations reserved to them and fail to undertake activities aimed at natural fodder areas management with the assumption that many functions are the duties of the state or livestock owners. For example, the activities on rehabilitation of drinking bowl in pastures.
- The LSGBs do not consider the management of natural fodder areas as priority in comparison to other problems of communities (lack of drinking water, public transport, etc.).
- The LSGBs have no positions for necessary specialists: agronomist, veterinarian, soil engineer, as well as field watchmen. As a result, in some cases the only persons in charge of the management process, are the community leader and his/her deputy, without having necessary tools, due to which it is impossible to exercise appropriate management.
- The community enlargement process undertaken in the recent years has not yet been fully perceived by residents of enlarged communities in terms of the natural fodder areas management. As a result, in many cases community residents continue to keep the former borders of pastures of former communities. At the same time, due to the enlargement, the natural fodder areas management plans, compiled by the communities, have not been revised and adapted according to the enlarged communities.

It should be also noted that during the working group discussions the issue of frequent improper use of privately owned pastures was raised, which leads to their degradation. Poor supervision mechanisms were mentioned as the main reason of the situation.

Lack of tools and formats necessary for collaboration between communities

Another institutional problem is the lack of collaboration between communities in terms of the use and management of natural fodder areas. In particular, there are communities where natural fodder areas are much more than the existing livestock and vice versa. Therefore, the collaboration between communities would lead to the mutually beneficial use and sustainable management of natural fodder areas of such communities.

Lack of information flows

Up to now, no inventory of natural fodder areas is conducted in the Republic. Therefore, although 051,1 h of types of soils is registered in the Republic as pastures, it is not known which part of them are:

- Pastures suitable for use;
- Territories which are degraded, stony, have cut reliefs.
- On which slopes are the pastures located in which community?
- What infrastructures exist and in what condition?

At the same time, no proper monitoring of natural fodder areas is conducted in the republic,

thus, there is no reliable and complete information for making decisions on natural fodder areas at the national, regional and community levels.

Lack of infrastructure necessary for management of natural fodder areas

All communities face problems related to infrastructures. In particular:

- Absence of watering places, which makes it impossible to keep animals in pastures during summer months. Together with this, the scarcity of watering places in comparison with the pasture area leads to degradation of pastures near to watering places, as the main livestock is gathered in that area.
- Lack of roads/poor condition, due to which animals spend longer time and more energy to reach to and return from pastures, and, on the other hand, it becomes difficult to transfer the collected milk, communicate with the herdsman, the opportunities of rapid response are limited in emergency situations and etc.
- Deteriorated condition or absence of camping infrastructures, including enclosures, herdsman shelters, as well as problems related to infrastructures necessary for milking, milk storage and processing.

3.3 Required Resources and Existing Problems

Availability of the required resources: Resources required for sustainable management of natural fodder areas are:

- Human resources;
- Necessary knowledge and skills;
- Financial resources.

The current situation of each resource in the communities is presented below:

Resource Required	Current Situation
<i>Human resources</i>	<ul style="list-style-type: none"> • There is no requirement of having positions of an agronomist, soil engineer or any other specialist related to the use and management of natural fodder areas in staff lists of the LSGBs. Accordingly, the entire process of natural fodder areas management is conducted by the community leader and his/her deputy. • The position of a field watcher exists in very few communities, where the function of the field watcher is to supervise, guide the pastures management process, as well as to ensure the maintenance of sowing areas and

	<p>grasslands. In some communities, the functions of the field watcher are limited to preventing the entrance of animals from the other communities to that community.</p>
<p><u>Knowledge and skills</u></p>	<p>The participants, within the framework of Research, evaluated the necessity of having knowledge about management of natural fodder areas with regard to:</p> <ul style="list-style-type: none"> • Sustainable pasture management; • Development of pasture management plan; • Efficient organization of behavior in nurseries and solution of feeding problem; • Organizing effective grazing of the animals. <p>50-53% of the respondents needed knowledge in relation to all proposed topics. Moreover, as compared with rural family households, the greater part of representatives and specialists of the LSGBs consider that they need knowledge on all the mentioned topics.</p>
<p><u>Financial resources</u></p>	<p>With the view of analyzing the budget allocations directed to development of management of natural fodder areas, the following appropriate legislative acts on formation of budgets of local self - government bodies we studied:</p> <ul style="list-style-type: none"> • RA Law on “Local Self-Government”, according to which the main sources for formation of community budgets are tax revenues, duties, other incomes, including rents for community owned land, as well as for the state owned lands within the community's administrative area or payments charged for the right of development, funds gained from disposal of non-financial assets, allocations received as official grants, sources of funding the budget deficit of the community. • RA Law on “About the Budget System of the Republic of Armenia”, according to which the budgets of LSGBs have clearly defined expenditure lines, which, however, do not contain separate provisions on natural fodder areas. Still, there are separate expenditure lines for agriculture, forestry, water economy and fish farming. <p>The share of income received from natural fodder areas and the share of expenditures related to natural fodder areas in the revenues and expenditures of the RA community budgets in 2018 were also studied. As a result, it turned out that although</p>

	<p>revenues gained from the use of natural fodder areas constitute a small part of the community budget, yet the expenditures for agriculture, forestry, water economy and fish farming from the same budget are much less than the incomes received.</p> <p>The Research results also show that cattle-breeding is mainly practiced by small livestock owners, who in many cases refuse to sign contracts and pay rents for using pastures. At the same time, it should be noted that the regulation of the use of pastures by this group by local self-government bodies implies deepening of social problems in the community, which may lead to additional emigration and poverty. However, the dual approaches of charging of rents from small and large livestock owners leads to the situation when large livestock owners start to refuse paying rent fees.</p>
--	---

Problems Related to Resources Required
Shortage of human resources
The local self-government bodies lack sufficient number of specialists for proper organization of the management of natural fodder areas.
Lack of the necessary knowledge and skills
One of the most important factors of sustainable natural fodder areas management is the availability of relevant knowledge and skills. The Research results show that both LSGBs representatives and rural family farms feel the lack of knowledge and skills necessary for management of natural fodder areas.
Scarcity of financial resources
The Research results show that the LSGBs almost always experience scarcity of funds for exercising activities related to sustainable management of natural fodder areas.

4. International and Local Experience of Pastures Management

4.1 International Experience in Pasture Management

The study of international experience led to the following conclusions about the management of natural fodder areas:

- Problems related to pasture management in the RA are mainly typical for the countries of Central Asia.
- Main problems in the sphere of pasture management are grouped around the following issues:
 - Type of property right;
 - Management systems;
 - Renting mechanisms;
 - Rent charging mechanisms.

4.2 Local Experience in Pasture Management

Various projects were implemented in the sphere of pasture management in the Republic of Armenia by the following structures:

- Government of the Republic of Armenia, represented by the Ministry of Agriculture;
- Strategic Development Agency;
- United Nations Office;
- GIZ.

The following results were fixed within the scopes of abovementioned projects:

- Committees and cooperatives were established;
- Support was provided to communities: Pasture management plans were developed and trainings on the development and implementation of the plans are conducted;
- Watering of pastures were carried out;
- Assessment on the condition of degraded pastures was carried out and programs aimed at their rehabilitation were developed;
- Technical support was provided;
- Pastures infrastructures were built and repaired;
- Thematic courses were organized.
- A guideline and a manual on compiling of management plans and exercising monitoring were developed, as well as a guideline on improving degraded natural fodder areas;
- Activities on human capacity building were conducted.

The appendices attached to this Concept Paper present in details:

- Problems existing in the sphere of pasture management in Central Asian countries (Appendix 5);
- Local experience in pasture management (Appendix 6);
- International experience aimed at solution of the sector-specific problems (Appendix 7).

5. Possible Mechanisms of Management Natural Fodder Areas (Pastures) in the RA

The solutions proposed for each problem described in “General Description and Problems Existing in the Natural Fodder Areas Management Sector in the RA” section of this Concept Paper, as well as legislative changes required for the proposed solutions (if applicable) are presented below:

Problems Existing in the Legislative Framework	
Respective legal documents fail to regulate the use of community owned and privately owned natural rangelands in a sufficient way	
<u>Proposed changes</u>	<p>To make respective legislative changes so as the use and management of the state owned, community owned and privately owned natural rangelands shall be exercised through one uniform mechanism.</p> <p>However, it must be taken into account that the coercion of a certain management mechanism on privately owned and community pastures causes restrictions, namely:</p> <ul style="list-style-type: none"> • The property right of an individual is guaranteed by Article 60 of the Constitution and its restrictions must be consistent with the principle of proportionality. <p>At the same time, it should be noted that some general regulations in relation to privatized pastures are already defined in the RA Land Code, in particular, the requirement of using the land for its intended purpose. Thus, additional requirements may also be envisaged for preventing the deterioration of soil, if necessary. In particular, it is possible to consider restrictions excluding the overload of lands in the RA Land Code, by authorizing the RA Government to adopt normative acts on permissible load for each category of pastures, to envisage norms on encouraging private owners to transfer the unused pastures for the use by other persons in conformity with grazing plans.</p>

<p><u>Required</u> <u>legislative</u> <u>changes</u></p>	<p>As we already mentioned in proposing ways to resolve the problem, it should be taken into account that the Government has no jurisdiction to regulate the use of community and privately owned property and the use of community and private property may be regulated only by law. Besides, the community, as a legal entity, and the private owner, as a natural or legal entity, are free to dispose their property, which is guaranteed by Article 60 of the Constitution. Therefore, the regulation of management of the community owned and privately owned natural fodder areas must be exercised by law, and the restrictions envisaged therein must be proportional in terms of protection of the property right guaranteed by the Constitution (according to Article 78 of the Constitution “The means chosen for restricting basic rights and freedoms must be suitable and necessary for achievement of the objective prescribed by the Constitution. The means chosen for restriction must be commensurate to the significance of the basic right or freedom being restricted”).</p> <p>Based on the above-mentioned, we propose to:</p> <ul style="list-style-type: none"> • Define the general principles of management of the state owned, community owned and privately owned natural fodder areas in the RA Land Code, including for the state owned and community owned natural fodder areas, the principles, coefficients, etc. for calculation of the rangeland rents, as well as obligations of the state and community bodies. The details of the changes, required in the Code will be presented below, separately for each problem. • Recognize void the GOA decision N 389-N on “Defining the Procedure of Use of Pastures and Grasslands in the Republic of Armenia” as of 14.04.2011. To embrace the acceptable principles established by decision in the Land Code, in particular: <ul style="list-style-type: none"> ➤ Necessity of preparing a plan on the pasture use prior to using pastures; ➤ Principles of effective use of pastures; ➤ Duration of the pastoral period in different zones of the country, as well as number of circular grazing during the entire pastoral period; ➤ Procedure for calculation of the permissible load of pastures; ➤ Principles of applying rotation grazing as an effective method of grazing;
--	--

	<ul style="list-style-type: none"> ➤ General principles for building enclosures u watering places in the pastures; ➤ General rules for management of natural grasslands. • Recognize void the GOA decision N 1477-N on “Defining the Procedure of Use of Pastures and Grasslands” from 28.10.2010. To embrace the acceptable principles established by the decision in the Land Code, in particular: <ul style="list-style-type: none"> ➤ Timeframes of signing contracts on using pastures and grasslands; ➤ Template contract for using grasslands. ➤ Template Contract for using pastures, which must be revised on the basis of the below presented pricing mechanism of rents.
<p>There are inconsistencies related to pricing mechanism of rents for use of pastures in the respective GOA decision and Land Code, at the same time the established cadastral values do not always coincide with the real economic values of pastures</p>	
<p><u>Proposed changes</u></p>	<p>It is proposed to review the mechanism of calculation of rent for the use of pastures, as well as the periodicity of payment:</p> <ul style="list-style-type: none"> • Rather than charging the rent per hectare, to charge the rent according to heads of cattle of the conventional large units (CLU), in the case of which the pasture users make payments for each conventional large unit. In particular, the norm of permissible load of pasture (PLP), quantitative data of the pasture using livestock (transformed CLU) and the tariff of land tax for 1 ha of the pasture should be taken as the base for calculation of the pasture rent 1 CLU in order to find out the pasture area necessary for each CLU during the pastoral period, for which the rent for 1 CLU will be charged. • The minimum value for calculation of the fee per hectare of pasture shall be defined as the rate of the land tax of the land plot located under the pasture, which, in its turn, is calculated on the basis of the cadastral value. Where the cadastral value does not comply with the economic condition of the pasture, the LSGBs, in the prescribed manner and with justified proposal, shall submit proposals to the corresponding authorized bodies on changing the cadastral value of pastures. At the same time, the LSGBs are eligible to change the minimum value defined per hectare of the pasture, by taking as a base also the economic condition,

location of the pasture and availability of infrastructures necessary for sustainable usage of the pasture.

- The following equation is proposed for calculating rents:

$$(CLU: PLP \times \text{land tax per ha}) : CLU$$

- For example, the livestock registered in the community is 100 CLU, the applied norm of the permissible load of pasture, i.e., PLP is 0,8 head/ha (PLP = 0,8 head/ha), and the land tax per hectare of pastures is 1200 AMD. In this case the pasture fee per CLU head for the entire pastoral period shall be:

$$(100 CLU : 0.8 PLP \times 1200 AMD) : 100 CLU = 1500 AMD$$

- It is clear from the calculation that each CLU needs 1.25 ha of pasture area (1 CLU: 0.8 PLP) during the pastoral period, for which 1500 AMD is calculated (CLU pasture fee). It should be taken into consideration, that the lower is the calculated value of PLP (conditioned with the pasture productivity), the bigger is the pasture area necessary for 1 CLU and the size of fee charged respectively.
- To define the fee according to the pastoral period or the duration of pasture use. The definitions of pastoral period and duration of pasture use should be distinguished clearly. In many cases the pasture areas, available in the administrative territory of the community, are suffice to feed the livestock, CLU, registered in the community only partially: for example for the period of only 3 months out of the 6-months' pastoral period. In this case, the quantity of livestock, as a rule, exceeds twice the PLP norm. In this case, if all livestock (200 heads of CLU) uses the pasture areas (before moving to remote pastures or alternative areas for feeding) for the duration of 3 months, the pasture fee calculated for each CLU will be decreased by 50%:

$$200 CLU : 0.8 PLP = 250(\text{ha}) \times 1200 (AMD) : 200 CLU \times 50\% = 750 AMD$$

- Thus, the pasture user in case of using the pasture for 100 CLU heads for 6 months must pay 1500 AMD for each CLU in pastoral period, whereas the pasture user in case of using same pasture area (125 ha) for 200 CLU heads for 3 months must pay 750 AMD for each

	<p>CLU in pastoral period.</p> <p>➤ Flexible mechanisms may be defined for charging the pasture fees. For example, to provide an opportunity to charge monthly fees, define lower monthly price in case the rent is paid for the entire pastoral period fully.</p>
<u>Required legislative changes</u>	<p>To implement the proposal, it is necessary to make changes to the RA Land Code, by establishing:</p> <ul style="list-style-type: none"> • Mechanism of calculation of pasture rents; • Mechanism of collection of pasture rents; • Template contract for using pastures; • Principles of using amounts generated from the pasture payments (details are described below); • Authorized bodies for defining, collecting and using pasture rents (details are described below).
The change of intended use of lands and types of lands located under pastures, as well as the privatization processes of lands are not regulated sufficiently	
<u>Proposed changes</u>	<p>With the view of solving the problem related to land privatization located under pastures, it is proposed to prohibit the transfer of state and community owned lands to natural and legal persons with the property right.</p> <p>As for the change of the intended use of lands and types of lands, these problems are regarded beyond the scopes of activities related to development of this Concept Paper, and require more systematic solutions.</p>
<u>Required legislative changes</u>	<p>For implementation of the proposal regarding the prohibition of privatization of pasture lands, it is necessary to make respective changes in the RA Land Code.</p>

Problems Related to Institutional Systems	
Institutional maturity of local self-government bodies	
<u>Proposed changes</u>	<p>With the view of improving the maturity of the LSGBs, it is proposed to introduce a clear format and tools, in particular:</p> <ul style="list-style-type: none"> • To foster the creation of non-commercial cooperatives, as well as formal and non-formal groups in communities, where the pasture users of the community will be embraced

	<p>with the view of sustainable management of pastures, presentation and protection of their interests.</p> <ul style="list-style-type: none"> • To foster conducting of discussions for discussing annual plans of pasture use in communities, as regulated in conformity with the GOA decision N-1146-N on “Defining the Procedure of Conducting and Holding Public Hearings” from October 10, 2018. • With the view of ensuring the sustainable management of pastures, to introduce the position of an agronomist in the LSGBs’ staff as a mandatory position, as well as the requirement of the field watcher service, the binding nature of which may be fixed in the LSGBs’ budget, with the requirement of envisaging a respective line for it. In case of making this position as mandatory, they must be funded through subsidies and collected pasture payments. • To clarify the areas of responsibilities of all bodies in charge of exercising the management and supervision over rangelands at national and community levels. In particular: <ul style="list-style-type: none"> ➤ LSGBs, which are in charge of organizing public discussions, compiling and approving of annual plans of pasture use, supervising the execution of annual plans, monitoring of economic condition of pastures, as well as adopting respective decisions based on the monitoring results, defining rents for pastures, collecting of rents, disposing incomes gained from the payments, solving of disputes related to pastures. ➤ At the national level the legal and professional supervision over the management of natural fodder areas, within the framework of acting legislation, must be conducted by the Ministry of Territorial Administration and Infrastructure, whereas the supervision over the protection of environment must be conducted by the Inspectorate of Nature Protection and Mineral Resources under the Government. At the same time, the sector is under the RA Ministry of Economy; hence, the latter is respective policy maker. • To clarify the principles related to compiling of pasture management plans and monitoring the use of pastures. In particular, it is proposed to incorporate the general principles defined in Manual and Guideline into the RA Land Code. At the same time, it is proposed to approve the
--	--

	aforementioned documents by separate normative order.
<u>Required legislative changes</u>	<p>For fulfillment of the proposal, it is necessary to introduce changes in the following documents:</p> <ul style="list-style-type: none"> • RA Law on “Self-Government Bodies”, which should define: <ul style="list-style-type: none"> ➢ Areas of responsibilities of all bodies in charge of conducting management and supervision over natural fodder areas at national and community levels; • RA Law on “Community Service”, which should define the position of an agronomist in the LSGBs staffs; • RA Law on “Budgetary System”, which must contain a respective line for the field watcher’s in the LSGBs budgets; • RA Land Code, which must clarify the principles related to compiling of pasture management plans and monitoring the use and condition of pastures.
Insufficient level of appropriate tools and formats for collaboration between communities	
<u>Proposed changes</u>	<p>The following two approaches are proposed for the solution of the problem:</p> <ul style="list-style-type: none"> • Non-formal approach, in the case of which the plans of using community pastures must be considered also by other community leaders. Thus, in future in case of shortage of pastures in any community, the community councils may offer the opportunity of using pastures of other communities to their residents. This approach will enable the pasture users to deal and negotiate with their community councils; • Formal approach, in the case of which communities may provide non-used pasture areas upon rent to each other based on contracts. This approach, in conformity with the acting legislation, must be conducted according to the following process: <ul style="list-style-type: none"> ➢ To transfer the land plot with the rent right, it is necessary to measure the land plot and submit the rights over it for the state registration; ➢ The land provided for rent pursuant to Article 76 of the RA Land Code must be exercised through a tender. Moreover, in this case there may be other winner. <p>The introduction of this mechanism may require essential financial expenses. For simplification of the process it is proposed to provide the community’s pastures to other</p>

	communities with the rent right, as an exception to providing land plots for rent through tenders.
<u>Required legislative change</u>	<p>For simplification of the process, it is necessary to make changes in the following document:</p> <ul style="list-style-type: none"> GOA decision N 286 on “Approval of the Procedure of Disposal, the Right of Development and Use of State and Community Owned Land Plots” from 12.04.2011, which should define the provision of the community’s pastures to other communities with the rent right as an exception to providing land plots for rent through tenders.
Insufficient level of trustworthy and full information for adopting decisions on natural fodder areas at community, national and marz levels	
<u>Proposed changes</u>	<p>To ensure trustworthy and full information about natural fodder areas, it is proposed to exercise the following measures:</p> <ul style="list-style-type: none"> To prepare inventory of natural fodder areas; To compose on-line and/or off-line maps of natural fodder areas, where information required for adopting decisions about natural fodder areas are enclosed; To update regularly the information contained in the said maps based on the results of monitoring conducted with the view of evaluation of ecological and economic conditions of pastures. <p>At present, the RA has initiated the creation of information system of pastures and grasslands, which, according to the preliminary feasibility study, will enable, in case of downloading respective data, to analyze the following information about natural fodder areas:</p> <ul style="list-style-type: none"> Total area of the RA pastures and grasslands; Status of pastures and grasslands; Non-used natural fodder areas; Information about users of natural fodder areas (name, family name, patronymic name, natural/legal person, ownership/rent/provided for use, as well as cadastral code); Areas of natural fodder areas with/without water; Availability of drinking bowls/watered; Degree of degradation of natural fodder areas; Heads of cattle in each community;

	<ul style="list-style-type: none"> Distance of natural fodder areas from community/height from sea level, slopes, etc.
<u>Required legislative change</u>	<p>To implementation of the proposal, it is necessary to make changes in the following documents:</p> <ul style="list-style-type: none"> RA Land Code, in which, in particular, it is necessary to define: <ul style="list-style-type: none"> ➤ Necessity of creation of informative maps and persons in charge (currently the responsible body is considered the RA Ministry of Economy); ➤ Necessity of updating of the aforementioned information and respective maps and the periodicity of updates;
Insufficiency of infrastructures required for sustainable management of natural fodder areas	
<u>Proposed changes</u>	<p>It is proposed that the LSGBs should direct the greater part of the pasture use payments to the development and maintenance of infrastructures, by, as well as operational expenses related to effective management of pastures (e.g. for financing the position of a herdsman).</p> <p>At the same time, it is necessary to define a separate expenditure line in the LSGBs budgets for measures related to rehabilitation, improvement and management of natural fodder areas.</p>
<u>Required legislative change</u>	It is necessary to make changes in the RA Law on “RA Budget System” for implementation of this proposal.

Problems Related to Required Resources	
Scarcity of budget allocations and investments	
<u>Proposed changes</u>	See the changes proposed in the “Insufficiency of infrastructure required for sustainable management of natural rangelands” section.
Insufficient level of human resources professional skills	
<u>Proposed changes</u>	Following the implementation of the proposed changes in the sector, it is proposed to organize capacity building trainings, including training courses for all bodies involved in the activities

	of natural rangeland fodder areas.
<u>Required</u> <u>legislative</u> <u>changes</u>	Not applicable

Appendixes

Appendix 1: List of institutions provided representatives in working group

1. German Agency for International Cooperation (GIZ)
2. Strategic Development Agency (SDA) NGO
3. Secretariat of the Program Coordination Platform for Sustainable Management of the RA Natural Fodder Areas
4. RA Ministry of Economy
5. RA Ministry of Economy/CARMAC-2 program
6. RA Ministry of Territorial Administration and Infrastructure
7. RA Ministry of Environment
8. Armenian Territorial Development Fund
9. RA NA Standing Committee on Territorial Administration, Local Self-Government, Agriculture and Environment
10. United Nations Development Program
11. “Center for Agribusiness and Rural Development” Foundation
12. Towards Sustainable Ecosystems NGO
13. Armenian National Agrarian University
14. “Union of Pasture Users” of Sarukhan village cooperative
15. Shirak Regional Municipality
16. Syunik Regional Municipality
17. Gegharkunik Regional Municipality
18. Tegh Community Municipality
19. Areni Community Municipality
20. Sisian Community Municipality
21. Goris Community Municipality

Appendix 2: List of Beneficiaries Conducted Individual Meetings during the Work

Name of the structure	Person(s) in charge
RA NA Standing Committee on Territorial Administration, Local Self-Government, Agriculture and Environment	Ashot Harutyunyan, Expert
RA Ministry of Environment	<p>Ashot Vardevanyan, Deputy Head of Bioresources Management Agency</p> <p>Voskehat Grigoryan, Head of Division of Biodiversity and Forest Policy of the Biodiversity and Forest Policy Department</p> <p>Gayane Nikoghosyan, Deputy Head of the Division of Plant Resources Management</p>
RA Ministry of Territorial Administration and Infrastructure	Shant Harutyunyan, Leading Specialist of the Division of Management of Community Information Flows of the Department of Local Self – Government Policy
RA Ministry of Economy	Tigran Gabrielyan, Deputy Minister
Armenian Territorial Development Fund	Tatev Yeghiazaryan, Training and Professional Support Specialist
Secretariat of the Program Coordination Platform for Sustainable Management of the RA Natural Fodder Areas	Vardan Hambardzumyan, Coordinator of the Coordination platform
Strategic Development Agency (SDA) NGO Armenian National Agrarian University	<p>Gagik Tovmasyan, Natural Resources Management Specialist</p> <p>Chair of Crop Cultivation and Soil Science</p>

Appendix 3: Problems Existing in the Sector and Proposals on Potential Solutions Presented during Meetings

1. *The goal of the Concept Paper*

Introducing and launching of an effective and uniform mechanism for management of natural fodder areas in the Republic of Armenia, the implementation of which will lead to:

- Sustainable development of the cattle breeding sector, including productivity of the cattle breeding sector;
- Sustainable use, maintenance, rehabilitation of natural fodder areas – pastures and grasslands, reduction of vulnerability of biodiversity, as well as ensuring sustainable development of ecosystems in future.

2. *Problems existing in the sphere natural fodder areas management in Armenia*

2.1 Legislative framework and existing problems

The only documents regulating the sector:

- GOA decision on ***“Defining the Procedure of Use of Pastures and Grasslands”***;
- GOA decision on ***“Establishing the Procedure of Use of Pastures and Grasslands in the Republic of Armenia”***.

The problems detected:

- The documents regulate exclusively the processes of use and management of the state owned natural fodder areas, by proposing community leaders to exercise the use of community owned natural fodder areas in conformity with requirements of the decision.
- The regulatory framework of the documents fail to cover the distribution of roles and functions, description of principles of effective pricing (the size of fee for using natural fodder areas is defined as equal to the rate of land tax of the land plot located under the natural fodder areas, which usually does not reflect their economic value, is not deemed as a very effective mechanism), technical requirements necessary for effective management of the sphere.
- As the only documents regulating the sphere, they are written in a very generic way, by defining only common principles.
- The documents were adopted in 2010 and 2011, respectively and were never revised afterwards.

Other documents:

- **RA Land Code, RA Law on “Local Self-Government Bodies”, RA Law on “Supervision over the Use and Maintenance of Lands”** address the issues concerning the common use of lands to a certain extent; however, these documents are very generic and they do not refer to management issues in relation to pastures and grasslands.

2.2 Institutional systems and existing problems

- Institutional maturity of local self-government bodies;
- Readiness of collaboration between communities;
- Information flows;
- State administration problems;
- Lack of infrastructures;
- Structural and organizational problems.

2.3 Required resources and existing problems

- Shortage of budget allocations and investments;
- Shortage of human resources;
- Low level of knowledges and skills;
- Geographical location/natural conditions.

3. *Preliminary proposals regarding the strategy of management of natural fodder areas in Armenia*

Preliminary proposals regarding main changes required in the sector:

- Defining the rent for use of natural fodder areas according to the number of livestock instead of the current rent per square meter. At the same time, to define different rents depending of the location and status of pastures;
- Exercising a uniform approach towards the state owned and community owned pastures;
- Clarifying the scopes of powers and responsibilities of the LSGBs;
- Defining the requirement of including certain positions in communities, in charge of management of natural fodder areas;
- Creating cooperatives or other formal groups in communities, where all pasture users of communities will be embraced. Clear definition of powers and obligations of these groups;
- Defining the requirement of minimum budgetary allocations with the view of improving infrastructures;
- Making inventory of natural fodder areas in the republic and creating of the respective information system;
- Increasing awareness of separate groups about the effective management of natural fodder areas.

Appendix 4: Minutes of Meetings held with the Working Group Members

THE 1ST MEETING OF THE WORKING GROUP TASKED WITH ELABORATION OF THE CONCEPT FOR SUSTAINABLE MANAGEMENT OF THE RA'S NATURAL FODDER AREAS: PASTURES AND GRASSLANDS

MINUTES OF THE MEETING

The 1st meeting of the working group for elaboration of the concept for sustainable management of RA's natural fodder areas: pastures and grasslands, was held on 30 July 2019 in the VIP hall of the "Elite Plaza" Business Center (address 15 Movses Khorenatsi street, Yerevan 0010, RA).

Agenda of the Meeting:

14:00 – 14:10	Arrival of the participants Registration and coffee break
14:10 – 14:25	Presentation of the draft outline of the Concept for the RA's natural fodder areas <i>«Adwise Business and Legal Consulting» LLC</i>
14:25 - 16:25	Discussion of the initial outline of the Concept <i>«Adwise Business and Legal Consulting» LLC</i>
16:25 – 17:10	Discussions with the members of the working group <i>«Adwise Business and Legal Consulting» LLC</i>
17:10 – 17:30	Wrap-up of the meeting, agreement on next steps <i>Secretary of the coordination platform</i>

Attendees:

1. Rudik Nazaryan – RA Ministry of Economy
2. Gayane Nikoghosyan – RA Ministry of Environment
3. Ashot Vardevanyan – RA Ministry of Environment
4. Shant Arakelyan – RA Ministry of Territorial Administration and Infrastructures
5. Tatev Yeghiazaryan – Armenian Territorial Development Fund
6. Movses Manoukyan – Shirak Marz Administration
7. Gagik Khachatryan – Syunik Marz Administration

8. Nerses Shadunts – Local Municipality
9. Vardan Shahinyan – Areni Municipality
10. Karen Aghababyab – “Towards Sustainable Ecosystems” NGO
11. Mesrop Qolozyan – Chair of the “Pasture users’ association” consumer cooperative of Sarukhan village
12. Davit Navasardyan – Center for Agro business and Rural Development (CARD) Foundation
13. Karen Torosyan – RA Ministry of Economy (CARMAC -2)
14. Gagik Tovmasyan – Strategic Development Agency, ANAU
15. Vardan Hambardzumyan – Secretariat of the coordination platform for the “Sustainable management of RA’s natural fodder areas: pastures and grasslands” Projects
16. Victoria Ayzazyan – Strategic Development Agency
17. Arevik Sargsyan – Adwise Consulting
18. Lilith Gharayan – Adwise Consulting
19. Yeranuhi Hakobyan – Adwise Consulting



The objective of the 1st meeting was to inform the members of the working group tasked with elaboration of the Concept of



Sustainable Management of the RA’s Natural Fodder Areas: Pastures and Grasslands (hereinafter “Concept”), set up under the coordination platform for

the projects focusing on sustainable management of the RA’s natural fodder areas – pastures and grasslands - about the launch of the process of elaboration of the Concept and to discuss with them and approve the outline of the Concept proposed by Adwise. The meeting was opened by Vardan Hambardzumyan, coordinator of the Platform Secretariat, who introduced the objective and expected results of the meeting. This was followed by a presentation about the proposed outline of the Concept made by Yeranuhi Hakobyan, Partner of the Adwise

Consulting (See Annex No 1). During the presentation the attendees asked their questions to the representatives of “Adwise”, as well as raised their concerns regarding the content of the Concept and shared their vision about the focus of the Concept. In particular:

- Lilith Gharayan, CEO of Adwise Consulting asked the representative of the Ministry of Economy about the current state of development of the Agriculture Development Strategy. It turned out that the process of elaboration of the Strategy is yet in the initial phase of development, however it was highlighted that the Concept should not in essence deviate from the general agriculture development strategy and should be a part of it.
- Karen Torosyan introduced CARMAC and CARMAC-2 projects to the counterparts who were less aware of the works of the platform, and Gagik Tovmasyan, presented the need for the State policy for the formation of the Platform and the bio-resources, specifically for the pasture and grasslands management sector.
- It was confirmed that the preface of the Concept will include a background on the sector-specific projects implemented in the RA and the challenges of implementation, as a rationale for elaboration of the Concept.
- Ashot Vardevanyan suggested to take into consideration the commitments of the Republic of Armenia in restoring degraded pastures or addressing these challenges in order to transform 20,1% of Armenia’s territory into forest covered area, since afforestation of degraded pastures is a measure of soil restoration. The attendees responded that inclusion of forest planting in the Concept is not appropriate and is beyond the scope of sustainable pasture management. However, it was highlighted that development of agriculture (cattle breeding) and the potential environmental challenges caused thereby should be considered in the Concept in parallel, and neither the nature protection nor agriculture should be prioritized over the other.
- Ashot Vardevanyan noted that pasture management is a part of land management and they should not be separated. In response Rudik Nazaryan emphasized that the advantage of the planned concept should be in its targeting (specificity), and detailed



consideration of the existing problems. Mr. Vardevanyan summed up that the Concept should take into consideration the laws, as well as strategies and policies governing related sectors.

- The attendees confirmed that the SWOT analysis to be conducted under the Concept should be performed from the perspective of national interest focusing on the sustainable management and sustainable development as a target.
- Mesrop Qolozyan presented their community's experience in managing the pastures through the cooperatives, where the model didn't work out because of the unfavorable taxation, and lack of understanding of the idea and the role of the cooperative by the members. Issues related to misunderstanding of the division of roles in pasture management between the community based cooperatives of pasture users and the municipality were also pronounced.



- Vardan Hambardzumyan informed the group members that a study visit to Kyrgyzstan was planned through the platform to study the local model of pasture management. Limited number of representative from the working group and Advise Consulting will be able to take part in the study visit.
- Karen Aghababyan highlighted that the need to conduct periodic monitoring of the biodiversity in the pastures should be included in the “Recommendations” section of the Concept.
- Nerses Shadunts shared his considerations on the pasture management in Armenia and NKR and on the differences of utilization thereof by the pasture users. Its turns out that the same pasture user easily pays for pasture utilization in Hadrut region, whereas

refuses to pay for the pastures in Togh settlement, since the oversight mechanisms are weak and administration is not in place.

- Representatives of Adwise Consulting indicated that the work is planned to be completed by the end of November, and the initial version of the Concept should be ready in September.

In the end the next steps for elaboration of the Concept were summed up. Representatives of Adwise indicated that they plan to do desk research and prepare some of the sections in August, and in September they plan to have an active round of deliberations with individual or sector specific groups, to work with the representatives of the working group.



Annex 1

Concept for management of natural fodder areas CONTENT

1. Preface

1.1 Defining the Concept goals

Introduction and operationalization of a common efficient mechanism for managing the natural fodder areas in the Republic of Armenia, enforcement whereof will lead to:

- Sustainable development of livestock sector, including enhancement of the productivity of the livestock sector;

- Sustainable utilization, conservation, restoration of the natural fodder areas – pastures and grasslands, reduction of biodiversity vulnerability risks, as well as securing future sustainable development of natural ecosystems.

1.2 Approaches and Methodology

- Analysis of the report on the study conducted by the SDA NGO;
- Review of other references related to management of natural fodder areas in the RA;
- Analysis of the report regarding the study conducted by the NGO;
- Analysis of the international practice;
- Analysis of the Armenian legislation;
- Deliberations with the experts from relevant sectors;
- Deliberations with the working group.

2. Overview of the sector of natural fodder area management in Armenia and existing challenges

2.4 The legal frameworks and existing challenges

- Review of the Armenian legislation pertaining to the sector and elaboration of legal issues that might be barriers to the development of the sector.

2.5 Institutional framework and existing challenges

- Infrastructures, form of the object of ownership, willingness to collaborate with each other, information flows, etc.

2.6 Existence of required resources and existing challenges

- Geography, landscape and climate, human resources, knowledge and skills, technical facilities, access to finance, etc.

2.7 SWOT Analysis

- Analysis of strengths, weaknesses, as well as opportunities and threats of the sector.

3. The international practice of natural fodder area management

- Where information is available, review of the international practice is envisaged in accordance with the outline given in para 2;
- The plan is to review the practice of developed and developing countries;
- These countries should be comparable to Armenia in terms of geography, biology and climate and in terms of form of ownership;
- Based on the said review (benchmarking), the practice of the country which will be most appropriate for adoption in Armenia will serve as a basis for development of the Concept for efficient management of natural fodder areas in the RA.

4. Recommendations on the Strategy for Management of Natural Fodder Areas in the RA

4.1 Determine the priorities among the goals of the natural fodder area management in the RA

- Given the problems identified, priority goals should be determined. It is envisaged to set primary/short-term and secondary/long-terms goals.

4.2 Defining the strategic goals and result-based indicators for the natural fodder area management in the RA

- Define qualitative and quantitative indicators that will enable measuring the expected results. It is envisaged to present in form of a recommendation that will be possible to include in the corresponding strategy in the future.

4.3 Assessment of potential social, economic and environmental impact of the proposed Concept

THE 2ND MEETING OF THE WORKING GROUP TASKED WITH ELABORATION OF THE CONCEPT FOR SUSTAINABLE MANAGEMENT OF THE RA'S NATURAL FODDER AREAS: PASTURES AND GRASSLANDS

MINUTES OF THE MEETING

The 2nd meeting of the working group for elaboration of the concept for sustainable management of the RA's natural fodder areas- pastures and grasslands, was held on 29 October 2019 in the GIZ Office (address: 4/1 Baghramyan Ave., Yerevan, RA).

Agenda of the Meeting:

<i>Time</i>	<i>Topic</i>
14:20 - 14:30	Arrival of the participants, registration and coffee break
14:30 - 14:35	Welcome speech, presentation of the meeting objective <i>V. Hambardzumyan, Strategic Development Agency NGO</i>
14:35 - 16:15	Problems exceeding in Management of the RA's Natural Fodder Areas and Solutions Proposed for the Problems <i>Speaker: E. Hakobyan, Adwise LLC</i>
16:15 - 16:45	Proposals, remarks, Q&A
16:45 - 17:00	Wrap-up of the meeting, agreement on next steps

Attendees:

20. Gayane Nikoghosyan – RA Ministry of Environment
21. Ashot Vardevanyan – RA Ministry of Environment
22. Voskehat Grigoryan – RA Ministry of Environment
23. Hripsime Babayan – RA Territorial Administration and Infrastructures
24. Varsenik Martirosyan – RA Ministry of Economy
25. Sylva Hakobyan – RA Ministry of Economy
26. Hovik Sayadyan – UNDP
27. Davit Navasardyan – Center for Agro Business and Rural Development (CARD) Foundation

28. Hrachya Zakoyan – Armenian National Agrarian University
29. Astghik Danielyan – GIZ
30. Karina Harutyunyan – Strategic Development Agency, ANAU
31. Gagik Tovmasyan – Strategic Development Agency, ANAU
32. Victoria Ayvazyan – Strategic Development Agency, ANAU
33. Vardan Hambardzumyan – Secretariat of the Coordination Platform for the “Sustainable Management of the RA’s Natural Fodder Areas: Pastures and Grasslands”
34. Arevik Sargsyan – Adwise Consulting
35. Lilith Gharayan – Adwise Consulting
36. Yeranuhi Hakobyan – Adwise Consulting
37. Hayk Malkhasyan – Adwise Consulting

The objective of the 2nd meeting was to inform the members of the working group tasked with elaboration of the Concept of Sustainable Management of the RA’s Natural Fodder Areas: Pastures and Grasslands (hereinafter: “the Concept”), set up under the Coordination Platform for projects focusing on sustainable management of the RA’s natural fodder areas, about the activities conducted by “Adwise” Consulting during recent months.

The main focus of the meeting was to present and discuss proposals related to possible solutions of *problems detected in the management of the RA’s natural fodder areas*, being a part of the Concept.

Astghik Danielyan (GIZ) opened the meeting by welcoming speech and stressed the importance of participation of the attendees in the working group’s activities. Then the floor was taken by Karina Harutyunyan (SDA), who encouraged the attendees to be proactive during the discussion as the discussed document would be a result of the joint work.

It was followed by the brief presentation of the process of accomplished activities represented by Lilith Gharayan, the representative of Adwise Consulting, who also called the attendees to be active. Then Yeranuhi Hakobyan, the representative of Adwise Consulting, spoke about the problems detected and respective solutions proposed for them, which were grouped according to solutions proposed in the legislative framework and those proposed for resources required. In addition to the aforementioned, considerations raised by different beneficiaries were also presented to the working group for discussion.

During the presentation the participants voiced their proposals, questions and their concerns regarding suggestions, wordings. In particular:

- The Concept proposes modification of the legislative framework by ensuring a uniform approach for the state and community owned pastures. The current legislative problem (legislative ban) in terms of ensuring the same approach for private owned pastures as for the state and community owned pastures was discussed, since despite of possibility

of regulating limitations related to the use/management of private pastures in the formal senses, however, the limitations of the private ownership must not limit the owner to use efficiently his/her right of ownership. A private economic operator may not be enforced to organize grazing in the pasture. The participants noted that the non-use of private pastures coincides with its unintended use. It was suggested to leave this issue for further discussion and additional study by Adwise Consulting (the experience of other countries). It was also mentioned that should it turn out that the legislative regulation of ensuring of the use of privately owned pastures is impossible maybe the further privatization of private pastures should be prohibited, as there is a possibility that the number of private pastures may be increased.

- The issue of importance of incorporating the elaborated Concept into the Strategy of Agriculture was discussed. It was mentioned that the issue was discussed with the Ministry of Economy, but the format of incorporating into the Concept is still unclear, as the issue is within the decision field of the Ministry of Economy.
- It was proposed to take into account the productivity of pastures (ecological and economic status) and accessibility (distance, availability of infrastructures, etc.) in relation to the rent charging mechanisms. The cadastral value (which encloses numerous factors) of pasture must be taken as a base for defining the rent, but the levy will be at the rounded price of 1 conventional cattle. At the same time, it is important to differentiate rents established for animals using only remote pastures and those using as remote as well pastures nearby to communities.
- It was proposed to grant flexibility to communities for setting rents, to set rents higher than the minimum threshold (land tax).
- It was also discussed whether the rents must be defined for 1 year, 1 pastoral season, or 1 month. It was emphasized that it would be correct to define the rent for a pastoral season, and it is logical that a person must pay only for the period during which his/her animal used the pasture, if the animal does not use the pasture during the entire pastoral season. For example, if the pastoral season is 6 months and the animal uses it only for 3 months, only half of the established rent must be charged. However, it was underscored that irrespective of using or not using the land, there is a tax for it, which means that whether a pasture is used for 1 day or the entire pastoral period, the defined fee must be paid. Besides, charging of fee according to the actually used months contains corruption risks. It was proposed to discuss the issue with communities.

- That according to the provisions approved by the GOA decision on “THE PROCEDURE OF CHANGING TYPES OF AGRICULTURAL LANDS OF THE REPUBLIC OF ARMENIA” from September 17, 2009, it is possible to make changes in the types of agricultural lands in conformity with the provisions of procedure of activity of the commission for changing types of lands approved by Annex 2 in case of a positive conclusion of the Commission (not by the government, but rather in conformity with the procedure approved by the government).
- The issue of revision of cadastral values and their harmonization with the real price was underscored once more. H. Babayan mentioned that in conformity with the provisions approved by the GOA decision N-1066 from September 17, 2009, it is possible to make changes in the types of lands.
- It was stressed that there is no need to create additional bodies for exercising the management and planning, and the LSGBs with their staff are able to exercise this function. To make the process participatory, community meetings, discussions, etc., may be held.
- The requirement of defining professional positions of an agronomist, veterinarian in the LSGB staff by law was also considered as important. If elaboration and application of a management plan becomes a mandatory obligation, necessary financial funds for their provision will be from the state budget.
- Methodological guidelines are important for elaboration of a management plan, which will help the LSGBs to elaborate management plans for pastures.
- In terms of collaboration between communities for pastures, it is necessary to take as a ground the pasture management plans already elaborated by communities. 3 options were proposed for efficient collaboration: intra-community agreement (to compile a generic plan), lease and non-formal collaboration (making announcement about excessive pastures). However, the aforementioned options do not cover the entire scope of collaboration and other options may also work.
- The participants also discussed the issue of directing a sum from payments, charged against the use of pastures, to creation and maintenance of the pasture infrastructures, care and improvement of pastures. They discussed which would be the minimum size of the collected payments to be directed to creation and maintenance of pasture infrastructures as the most expedient. It was decided to discuss this issue with communities.

At the end the further steps of finalization of the Concept were summarized. The participants discussed the issue of revising the chapter of proposals, by taking into account the comments received and circulating it among the working group members.

The full version of the Concept will be presented at the 6th workshop of the Platform, which is anticipated to hold during the third decade of November.

THIRD MEETING OF THE WORKING GROUP ON THE DEVELOPMENT OF A CONCEPT FOR SUSTAINABLE MANAGEMENT OF THE RA NATURAL FODDER AREAS - PASTURES AND GRASSLANDS

MINUTES OF THE MEETING

On November 8, 2019, third meeting of the working group on the development of a concept for sustainable management of the RA natural fodder areas - pastures and grasslands was held at the GIZ Country office (address: Marshal Baghramyan Avenue, 4/1, Yerevan, RA).

Agenda of the Meeting:

<i>Time</i>	<i>Topic</i>
14:00 - 14:05	Arrival, registration, coffee
14:05 - 14:10	Welcome speech, introduction of the meeting objective
14:10 - 14:15	Objectives of the Concept <i>Presenter - Y. Hakobyan, Adwise LLC</i>
14:15 - 14:20	Activities of the development of concept and applied methodology <i>Presenter - Y. Hakobyan, Adwise LLC</i>
14:20 - 14:50	Lunch break
14:50 - 15:00	Overview of the outcomes from reviewing international experience in the management of natural fodder areas <i>Presenter - Y. Hakobyan, Adwise LLC</i>
15:00 - 16:15	Existing issues in the area of management of natural fodder areas in the RA and recommended solutions to those issues <i>Presenter - Y. Hakobyan, Adwise LLC</i>
16:15 - 17:15	Recommendations, comments, question and answer
17:15 - 17:30	Wrap-up of the meeting, identification of further steps

Attendees:

1. Martin Petrosyan - Gegharkunik Regional Municipality
2. Andranik Nalbandyan - Shirak Regional Municipality
3. Gagik Khachatryan - Syunik Regional Municipality
4. Husik Sahakyan - Areni Community Municipality
5. Vardan Shahinyan - Areni Community Municipality
6. Nerses Shadunts - Tegh Community Municipality
7. Armen Khachatryan - Sysian Community Municipality
8. Andranik Harutyunyan - Sysian Community Municipality
9. Armen Beglaryan - Sysian Community Municipality
10. Vahan Ghazaryan - Sysian Community Municipality
11. Spartak Minasyan - Goris Community Municipality
12. Ararat Ordyan - Goris Community Municipality
13. Astghik Danielyan - GIZ
14. Karen Torosyan - CARMAC 2, Agricultural Project Implementation Unit, RA
Ministry of Economy
15. Victoria Ayvazyan - Strategic Development Agency
16. Vardan Hambarzumyan - Secretariat of the Program Coordination Platform for
Sustainable Management of the RA Natural Fodder Areas - Pastures and
Grasslands
17. Arevik Sargsyan - ADWISE Consulting
18. Lilit Gharayan - ADWISE Consulting
19. Yeranuhi Hakobyan - ADWISE Consulting
20. Hayk Malkhasyan - ADWISE Consulting

The objective of the third meeting was to present the work of ADWISE Consulting implemented over the last few months to the regional/Marz representatives of the working group on the development of a concept for sustainable management of the RA natural



fodder areas - pastures and grasslands (hereinafter referred to as Concept), which was established within the scope of the program coordination platform for sustainable management of the RA natural fodder (hereinafter referred to as Platform), and to discuss most challenging issues.

The key focus of the meeting was to present and discuss *the recommendations on the potential solutions to the issues identified in the natural fodder area management in the Republic of Armenia*, constituting part of the Concept.

The meeting was opened with a welcome speech by Vardan Hambardzumyan (SDA) and Astghik Danielyan (GIZ), who emphasized the importance of the participants' involvement in the working group activities.



Afterwards, the representative of ADWISE Consulting - Yeranuhi Hakobyan presented brief overview of the progress of implemented activities, identified issues and recommended respective solutions. They were classified according to solutions recommended for the legislative framework, solutions recommended for the institutional framework and solutions recommended on required resources.

During the presentation the participants raised their suggestions, questions and also their concerns over the raised recommendations and formulations. In particular:

- The Concept recommends changing the legislative framework ensuring uniform approach to the pastures considered as the community and state ownership. The suggestion on expressing the same approach to privately owned pastures and the one for state and community owned pastures was also discussed. The participants emphasized that privately owned pastures and grasslands create numerous issues. Despite the fact that according to the Armenian Land Code, it is not permitted to lead the lands to degradation regardless of their form of ownership, however, supervision over degradation of lands are raised only in case of alarm, and the aforementioned mechanism cannot help to prevent degradation of pastures with any type of ownership. It was also mentioned that the function of supervision can be granted or delegated to the communities as prescribed by the law.
- A suggestion was made on determining the rentals according to the grazing season and define the charge according to the cattle units and the period of using the given pasture. Nevertheless, it was highlighted that charging for a shorter period (Armenian text missing)
- It was suggested not to discuss the pasture management plans since they had been developed by the specialists, but rather the grazing schemes included in those management plans. However, the participants did not object to hold discussions on the management plans in their entirety.
- The requirement on having special staff necessary for the sector/area - agronomist, veterinary, herdsman, within the LSG personnel, was further accentuated.
- It was pointed out that the issue regarding those cases when a tender was announced for a pasture, and the winner turned out to be a resident of another community rather than the resident of the same community, has never been addressed so far.
- It was also mentioned that collection of pastures fees are not mandatory under the law. The question on renting the pastures with available infrastructures at higher

prices would be rather problematic.

At the end, further steps on finalisation of the Concept were summarised. It was decided to review the chapter on recommendations in the light of the received comments and to circulate it among the members of the working group.

Appendix 5: Current Problems in the Sphere of Pasture Management in Central Asian Countries

Kazakhstan	
<u>Total pasture areas</u>	182,6 million ha (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Degraded pasture areas</u>	26,83% (Community Based pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Number of livestock</u>	<ul style="list-style-type: none"> • Cattle: 4,5 million • Sheep and goats: 10,6 million • Horses and camels: 1 million (Community based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Main reasons of degradation</u>	Due to the absence of required resources and infrastructures the remote pastures mainly are not used, while nearby pastures of communities are overused. Hence, the degradation of pastures.
<u>Legislative framework</u>	Kazakhstan is the only country in the Central Asia where pastures are not fully owned by the state yet, and the acting Land Code allows privatization of arable lands and pastures by individuals. As a result, a large number of natural rangelands are the property of individuals or organizations. This, in its turn, has led to the following problems: <ul style="list-style-type: none"> • Decrease of mobility of animals and effective use of pastures; • Impact negatively on the environment, as in case of individual privatization as a rule, the users care less about the environment.

Tajikistan	
<u>Total pasture areas</u>	3,5 million ha (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Degraded pasture areas</u>	More than 90% (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)

<u>Main reasons of degradation</u>	The main reason of degradation is the overuse. At the same time, due to the lack fuel the grass of pastures served as fuel for local population during many years.
<u>Number of livestock</u>	<ul style="list-style-type: none"> • Cattle: 1 million; • Sheep and goats: 3 million (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Legislative framework</u>	<p>Pursuant to the Land Code, all agricultural lands are the property of the state in Tajikistan. At the same time, the Code enables individuals to acquire pastures with the right of permanent rent and exclusive use. Theoretically this opportunity assumes that individuals may use pastures as their property by restricting their accessibility for other users.</p> <p>At the same time, the main part of householders has the right of permanent use of the so-called common use pastures (collective dekhan farms). This means that each household may use the common use pasture and pay the defined tax for using the pasture, irrespective of the number of livestock owned by the household. Here, again, we see the unfair system of tax charging, due to which many community leader, despite of the acting legislative requirements, distributed the taxes among households proportionally, by taking into account the number of livestock owned by the latter.</p>

Turkmenistan	
<u>Total pasture areas</u>	38,47 million ha (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Degraded pasture areas</u>	46% (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Main reasons of degradation</u>	Due to scarce financial resources, infrastructures are lacking, in the result of which remote pastures are not used, while the nearby communities are overused. As a result, there is degradation of pastures.
<u>Legislative framework</u>	All pastures in Turkmenistan are state owned and are provided to farmers by the right of use, free of charge. At the same time, the

	legislation enables to privatize lands. However, actually, there is no difference of farmers which have the right of ownership and the right of use. Both of them may use pastures, but the legislation prohibits the owners to disposal the pastures owned by them. Due to free use of pastures, there arises the scarcity of financial resources.
--	---

Uzbekistan	
<u>Total pasture areas</u>	25,5 million ha (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Degraded pasture areas</u>	42% (Community Based Pasture management in Kyrgyzstan, a pilot project in Naryn region)
<u>Main reasons of degradation</u>	The main reason of degradation is that the share of households in pasture areas is very small compared to the livestock they own. As a result, these pasture areas are overused, while the territories under the disposal of the state owned enterprises are underused.
<u>Legislative framework</u>	Pursuant to the Land Code, pastures are the state property. The farmers may rent specific pasture areas (which have clear boundaries) by the right of use. The process of renting of pastures is exercised through tenders. The farmers pay for the used pastures in the form of taxes. The main problem here is that the greater part of pastures are under disposal of state enterprises still existing in Uzbekistan, due to which the share of households in pasture areas is very small. This, in its turn, leads to reduction of mobility of animals.

Kyrgyzstan (before the implementation of the 2009)	
<u>Total pasture areas</u>	9,1 million ha (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Degraded pasture areas</u>	25% (Community Based Pasture Management in Kyrgyzstan, a pilot project in Naryn region)
<u>Main reasons of degradation</u>	Due to the gaps in legislative framework and lack of respective infrastructures (watering places, roads, etc.) the remote pastures are not used, and nearby pasture are overused. As a result, there is degradation of pastures.

Legislative framework

Prior to implementation of the reform, the management of pastures was conducted at three levels: different state bodies were in charge of management of near village, communal-intensive u remote (distant) pastures:

- Management at the province (oblast) level, which was in charge of distribution, maintenance and rent of remote pastures, as well as the boundaries of nearby pastures;
- Management at community (provincial) level, which was in charge of distribution, maintenance and rent of intensive pastures, as well as confirmation of boundaries near village pastures;
- Management at village level, which was in charge of distribution, maintenance and rent of near village pastures, as well as regulation of those pastures of the village which yet were not provided for rent.

Despite of availability of these 3 bodies, none of them was conducting its functions in a proper manner. This, in its turn, resulted in the fact that the farmers used pasture areas without any control. As a result, as a rule, the pastures located inside the village were used, since they were easily accessible.

Appendix 6: Local Experience in Management of Natural Fodder Areas

The summary of programs implemented by interested bodies are presented below

RA Government represented by the RA Ministry of Agriculture (currently – Ministry of Economy)	
<u>Name and implementation term of the project</u>	<p>First and second projects on “Management and Competition of Agricultural Resources of Communities”, which were implemented:</p> <ul style="list-style-type: none"> • First project: in 2011-2016; • Second project: was launched in 2015.
<u>Total cost of the project</u>	64 million USD, of which 48,67 USD is loan provided by the World Bank and its financial structures
<u>Project goal</u>	<p>The aim of the first project is:</p> <ul style="list-style-type: none"> • To improve productivity and sustainability of pastures and cattle breeding systems in 55 communities of 6 marzes of Armenia: Aragatsotn, Lori, Shirak, Gegharkunik, Tavush and Syunik, and • To increase the marketed product of the selected livestock and high value agro-food chains. <p>The aim of the second project is:</p> <ul style="list-style-type: none"> • To improve productivity and sustainability of pastures and cattle breeding systems in 100 targeted communities of 8 marzes of Armenia: Aragatsotn, Lori, Shirak, Gegharkunik, Tavush, Syunik, Kotayk and Vayots Dzor, and • To increase the marketed product of the selected livestock and high value agro-food chains.
<u>Project outcomes</u>	<p>The first project:</p> <ul style="list-style-type: none"> • “Management of Pastures and Development of Cattle Breeding Systems” commissions and “Union of Community Pasture Users” consumer cooperatives were established in 81 communities (instead of envisaged 55) in the aforementioned marzes; • Degraded nearby pastures in 79 communities were evaluated, measures aimed at their rehabilitation were developed, development works of approximately 350 ha were accomplished and evaluation of the rehabilitated pastures was conducted. • Nearly 125 000 ha pastures, previously not used or underused,

	<p>were watered.</p> <p>The second project:</p> <ul style="list-style-type: none"> • In 109 communities (instead of 100) in the aforementioned marzes “Pasture Management and Livestock Development Systems” commissions and “Union of Community Pasture Users” consumer cooperatives were established; • Plans for “Management of Pastures and Development of Cattle Breeding Systems” were developed for 109 communities; • Approximately 90 000 ha pastures, previously not used or underused, were watered.
--	---

Strategic Development Agency NGO	
<u>Name and implementation term of the project</u>	<p>Project 1: “Livestock Development in South of Armenia” (2014-2020)</p> <p>Project 2: “Livestock Development in Armenia: South-North” (2017-2020)</p>
<u>Project financing</u>	<p>Project 1: Swiss Agency for Development and Cooperation</p> <p>Project 2: Austrian Development Agency and Swiss Agency for Development and Cooperation</p>
<u>Project goal</u>	<p>The task of both projects is to strengthen capacities of the LSGBs to support the economic development of rural settlements, in particular, through introducing improved capacities for effective use and management of pastures.</p>
<u>Outcomes of the projects</u>	<p>In 200 rural settlements of Syunik, Vayots Dzor, Shirak, Lori, Tavush and Gegharkunik marzes with the total of 160 000 population:</p> <ul style="list-style-type: none"> • Due to close collaboration with the LSGBs and improvement of their capacities, plans of sustainable management of pasture are developed and schemes of rotation grazing of pastures are launched in 155 settlements of the targeted marzes. In addition, technical assistance is provided to the targeted settlements to introduce the procedures of sustainable management of pastures. • Up to now nearly 500 pasture infrastructures are built or repaired in full, due to which approximately 106,000 ha pastures are now available for cattle breeding farms. • Due to conducting surface improvements of rehabilitation nature, the ecological and economic situation is improved on more than

	<p>500 ha degraded pastures and their productivity and qualitative composition of vegetation cover of pastures is increased, by making these territories accessible for pasture using economic operators.</p> <ul style="list-style-type: none"> • In the targeted marzes approximately 1130 ha were sown with perennial and juicy fodder crops, such as sainfoin, alfalfa, mangelwurz, maize, which positively impact on solution of the feed problem in the nursing period and reduces the early spring and late autumn pressure on natural rangelands, increases the productivity of animals. • Up to now, within the scopes of projects on increasing the productivity of pasture management, more than 1100 people participated in thematic training courses on monitoring, effective use and sustainable management schemes of pastures and in trips made for exchanging experience. <p>In addition to the aforementioned, the main achievement of the implemented projects may be considered the introduction of culture of pasture management and increase of recognition of its importance among population.</p>
--	---

UNDP Project	
Project 1	
<u>Name and implementation term of the project</u>	Climate East pilot project, which was implemented in 2013-2017
<u>Project financing</u>	European Union
<u>Project goal</u>	Implementation of actions aimed at fostering of economic benefits through rehabilitation of degraded mountainous pastures and forests, as well as sustainable management of lands in beneficiary communities.
<u>Measures to be performed within the scopes of the project</u>	<p>In Karchaghbyur, Tsovak, Lchavan and Tsapatagh, Makenis, Pambak and Daranak communities (currently – settlements) of Vardenis region of Gegharkunik marz:</p> <ul style="list-style-type: none"> • Infrastructures of remote pastures were rehabilitated and improvement works were performed in nearby degraded pastures; • Rotation grazing plans were developed and trainings courses on

	implementation of these plans were conducted. The developed plans serve to improve the management of 7 500 huw pastures.
Project 2	
<u>Name and implementation term of the project</u>	“Mainstreaming Sustainable Land and Forest Management in Mountain Landscapes of North-Eastern Armenia”, which was launched in 2016
<u>Project goal</u>	To mitigate the dependence of forest neighboring communities from forests
<u>Actions envisaged within the scopes of the project</u>	The project is implemented in Tavush and Lori marzes and envisages to implement the following actions related to pastures: <ul style="list-style-type: none"> • Rehabilitation of nearly 90 huw pastures and sowing of feed crops on nearly 140 h; • Training courses.

German Agency for International Cooperation

Project 1	
<u>Name and implementation term of the project</u>	“Sustainable Management of Biodiversity” which was implemented in 2009-2015
<u>Measures envisaged within the scopes of the project</u>	<ul style="list-style-type: none"> • Guideline and Manual were developed. • 32 communities were trained how to develop and implement plans on monitoring and management of pastures; • Pasture monitoring was conducted in 32 communities; • Pasture monitoring plans were developed and revised in 27 communities.
Project 2	
<u>Name and implementation term of the project</u>	“Integrated Biodiversity Management in the South Caucasus” regional program, which was implemented from 2015 to November of 2019.
<u>Project goal</u>	To support the sustainable inter-sectoral management of biodiversity and ecosystem services.

**Actions to be performed
within the scopes of the
project**

- To support pilot measures and coordinate processes aimed at sustainable management at local level;
- Strengthening of capacities of the state administration bodies and increase of public awareness at local and national levels;
- Public awareness about the importance of management of biodiversity and ecosystem services;
- Fostering the exchange of professional experience and collaboration in the spheres of biodiversity and ecosystem services at international level;
- The guideline on improving the degraded rangelands (pastures and grasslands).

Appendix 7: International Experience Aimed at Solution of Sector-Specific Problems

The study of international experience aimed at solution of problems specific for pasture management sector was conducted in the following 3 aspects, as different countries consider these aspects as the most important and basic indicators of pasture management:

- **Equality/accessibility**, within the scopes of which it was studied the extent of ensuring the accessibility of pastures for different users' groups through the pasture management systems and which mechanisms are applied for increasing the pasture accessibility for vulnerable groups in different countries.
- **Economic efficiency**, within the scopes of which the efficiency of investments made in the pasture management sector was studied.
- **Protection of environment**, within the scopes of which different mechanisms of sustainable pasture management functioning in different countries were studied in terms of ensuring the sustainable use, rehabilitation of pastures, reduction of vulnerability of biodiversity, as well as sustainable development of ecosystems.

Equality/Accessibility
Goal
<ul style="list-style-type: none"> • To detect users' groups which have the minimum accessibility to pastures and to propose mechanisms which will improve the accessibility of these groups; • To propose mechanisms for ensuring the representation of different groups of pasture users in the pasture management process; • To define standards on identification of potential users of the given pasture area, by providing, concurrently, the opportunity of movement of animals between different pastures.
Which are vulnerable groups
<ul style="list-style-type: none"> • Financially vulnerable groups. Even in case of mechanisms of the common use of property, financially vulnerable groups have a limited accessibility to pastures due to expenses related to reaching and using pastures. • Women and single mothers. Families with single mothers in China and Southern Asia have limitations in reaching remote pastures. In Kyrgyzstan many men left the country to find jobs abroad, and women are involved in cattle breeding, who mainly are not represented in associations of pasture users. • Youth. Sometimes it is difficult for young pasture users to negotiate about getting equal access to pastures with experienced pasture users. • Ethnic minorities. In many countries, e.g., in Afghanistan, ethnic minorities have problems

with local pasture users.

Which institutional and legal changes may be introduced to increase the accessibility of vulnerable groups

- **Central Asia, China, Nigeria, Mongolia.** The use of mechanism of individual rent of pastures was singled out by these countries as the main reason of the problem, and as solution they shifted/anticipate to shift from the individual rent mechanism to the principle of common use of property.
- **Kyrgyzstan.** The law defines the requirement for creation of Pasture Users' associations, which are deemed as officially registered legal persons by law. Such groups embrace all groups of the community, including pasture users from vulnerable groups, thus ensuring the interests of all groups.

With the view of efficient introduction of the new mechanism of pasture management and increase of awareness of local populations, appropriate training courses were organized in the form of simulation games, during which participants played different roles and underwent the stages necessary for organizing efficient management of pastures, including preparation of a pasture plan, monitoring of the pasture status, necessity of evaluation of respective infrastructures, etc.

The institutional system functioning in Kyrgyzstan and the powers of different bodies, as well as the composition of bodies and members in charge of pasture management are presented at the end of this Appendix.

- **Mongolia.** Associations of Pasture Users are created here as well; however, they are non-formal groups and unite when necessary. These groups also embrace all groups of the community, including vulnerable groups of pasture users, thus ensuring the interests of all groups by doing so.
- **Switzerland.** With the view of sustainable management of natural rangelands and representing the interests of all groups of pasture users, Switzerland created cooperatives, the members of which are all residents living in that community. The cooperative members select members of Management Committee (comprising at least of 3 members). Functions of Management Committee are as follows:
 - Monitoring the use of pastures;
 - Approval or rejection of access of outside pasture users to that area;
 - Defining the duration of pasture use;
 - Informing the cooperative members about legislative changes.
- **Central Asia.** As the fairest and most efficient mechanism for collection of pasture use rents, it is proposed to define the rent per head and to apply the system of rent discount for groups

with unfavorable conditions of accessibility. At the same time, it is proposed to apply discounts for communities located at far distance from pastures, where the required infrastructures are lacking.

The details of mechanism for collection of rent per head applied in **Kyrgyzstan** are presented at the end of this Appendix.

How the pasture users' groups are determined in case of the mechanism of common use of property

To determine groups of pasture users the following 2 principles are mainly applied:

- **According to economic importance.** The group members, according this principle, may be only the economies involved in cattle breeding, by excluding other users, such as bee keepers, or those who collect firewood, mushrooms and other resources from pastures.
- **According to territorial belonging.** In determining the group members, according to this principle, the priority must be given to local residents, rather than, e.g., urban businesses which occupy the community pastures. This assumes that persons, not involved in cattle breeding, may also become members of the group, who, however, use pastures for other purposes.

Many countries propose to apply a combination of the aforementioned 2 principles. For example, in **France** the groups of pastures users embrace also local residents and, in case of availability of free pastures, also residents of other communities.

Organizing of the movement of animals mobility between pastures in case the mechanism of common use of property is applied

Ensuring the free movement of animals between different pastures is important as very often there are cases when the number of cattle in the community exceeds the capacity of the pasture areas, while another community has insufficient number of cattle. The proposed mechanisms are as follows:

- **Kyrgyzstan.** The country allocates certain seasonal pasture areas, which may be located also outside that community, to each Pasture Users' Associations. The borders of allocated pasture areas are determined by the Border Commission. At the same time, the law establishes an opportunity of signing formal agreements between Pasture Users' Associations on movement of animals. Thus, unused pasture areas, based on agreements signed between the Pasture Users' associations, are provided to pasture users of other communities.
- **Mongolia.** There is no demarcation of pasture areas in the country and usually the movement of animals is organized through non-formal agreements between the groups of pasture users. As a rule, the opportunities of movement are foreseen when plans of the use of pastures are compiled.

Efficiency

Goal

To detect the main sources and efficiency of investments made in the pasture management sector.

Which are the main sources of investments in this sector

Different countries have identified the following sources as the main sources making investments in this sector:

- Rents paid for the use of pastures. Following the implementation of the reform in **Kyrgyzstan**, it is established by legislation that at least 60% of annual budgets of Pasture Committees must be directed to measures of the pastures improvement, and the remaining 40% to wages and other expenses;
- Membership fees paid by members of cooperatives/associations;
- Providing of pasture areas for rent for the tourism purposes.
- Projects implemented in this sector by international donor organizations.

Which investments made in the sector are considered as the most efficient

Central Asian countries singled out the building of watering places as the most important investment in the sector. In particular, it was mentioned that the shortage of watering places is the main reason for partial mobility of animals and, in particular, degradation of remote pastures.

Protection of Environment

Goal

- To detect methods of improving the sustainability of environment within the scopes of pasture management, such as encouraging of the animal mobility and limitation of the number of heads of cattle in pastures;
- To detect mechanisms of efficient management of pastures in different countries.

How to increase mobility of animals as the main tool of sustainable management of pastures

Ensuring the mobility of animals is one of the main mechanisms of sustainable management of pastures. As a rule, different countries use the following 3 tools for the animal mobility:

- **Financial tools:**
 - Applying the collection mechanism of different rents/taxes for use of pastures. In particular,

applying lower rents/taxes for remote pastures as compared to pastures nearby to communities;

- Collection of rents for the pasture use per head, rather than per square meter;
- Direct investments made for the development of infrastructures. For example, improvement of roads, building of watering places, enclosures and shelters in remote pastures.
- **Legislative tools**, which assumes the creation of such legislative framework which will ensure the opportunity of free movement of animals. In particular, shifting from the mechanism of individual rents of pastures to the principle of common use of property, in the case of which the right of use of pasture is distributed between all users, which, in its turn, increase the mobility of animals.
- **Mapping activities**, which assume activities related to the inventory of pastures and creation of respective information base, which will enable communities to be informed about available pastures and conditions of the latter. This information will enable to organize the utmost efficient use of pastures.

How different countries manage the limitation of heads of cattle in pastures

- **Mongolia.** The country envisages introducing a system due to which the pasture users' groups, which exceed the permissible heads of cattle established by the pasture plan, will pay higher taxes as compared to those groups which observe the established requirement for the heads of cattle.
- **Turkmenistan.** The country applies encouraging tools to reduce the number of heads of cattle. In particular, within the scope of the program implemented by the German Agency for International Development, additional land plots were proposed to farmers for planting fruit trees should they reduce the number of heads of their cattle.
- **China.** The country also agreed to reduce the number of heads of cattle, which was reached through a religious institution. In particular, in 2 communities facing the danger of eradication of pastures, the local residents agreed to keep the number of heads of cattle equal to maximum 70 heads of sheep. To observe the agreement, the residents held an oath, and the supervision is conducted twice in a year through making the inventory of animals.

Which are acting mechanisms for monitoring the protection of environment and whether pasture users are involved in the monitoring process

- **Kyrgyzstan.** 2 monitoring systems function here:
 - At community level, where Pasture Committees participate in the monitoring groups created by local self-government bodies. The monitoring is exercised on the basis of traditional experience and knowledge.
 - At national level, in the case of which the Institute of Land Management conducts scientific assessment of key land plots. At present, the Pasture Committee has no access to scientific assessments and the 2 systems are not integrated. It is anticipated to create a new system, which will embrace as the assessments made at community level, as well

scientific assessments at national level.

- **Mongolia.** Here, again, 2 systems of monitoring function:
 - At community level, when the monitoring is exercised by pasture users within the scopes of pastures used by them.
 - At national level, where scientific assessment of pastures is conducted throughout the country with the view of detecting the conditions of pastures. The 2 monitoring systems are not integrated here as well.
- **Switzerland.** The following monitoring system functions here:
 - The country has the uniform information base of all available pastures, which also contains information about the maximum number of heads of cattle permissible for each pasture.
 - Monitoring is exercised at community level by the Management Committee. The pasture data base is updated based on the monitoring results.

Appendix 7.1: Institutional System and Powers of Different Bodies Functioning in Kyrgyzstan

Local self-government body

- The LSGBs are bodies in charge of management and supervision of the state owned pastures, without the right of their alienation;
- The LSGBs have a right to delegate the power of management and supervision of pastures to the Pasture Users' Association;
- The LSGBs must approve the Pasture Use annual plans.

Pasture Users' Association

- Community residents may create associations of pasture users, which will represent the interests of animal owners and other pasture users in connection with the use and improvement of pastures;
- Pasture Users' Associations may be created as territorial non-governmental self-government bodies, in the case of which they are subject to the state registration as legal persons;
- All members of the Pasture Users' Associations have a primary right of using pastures attached to their communities according to the Pasture Use Plan.

Pasture Committee

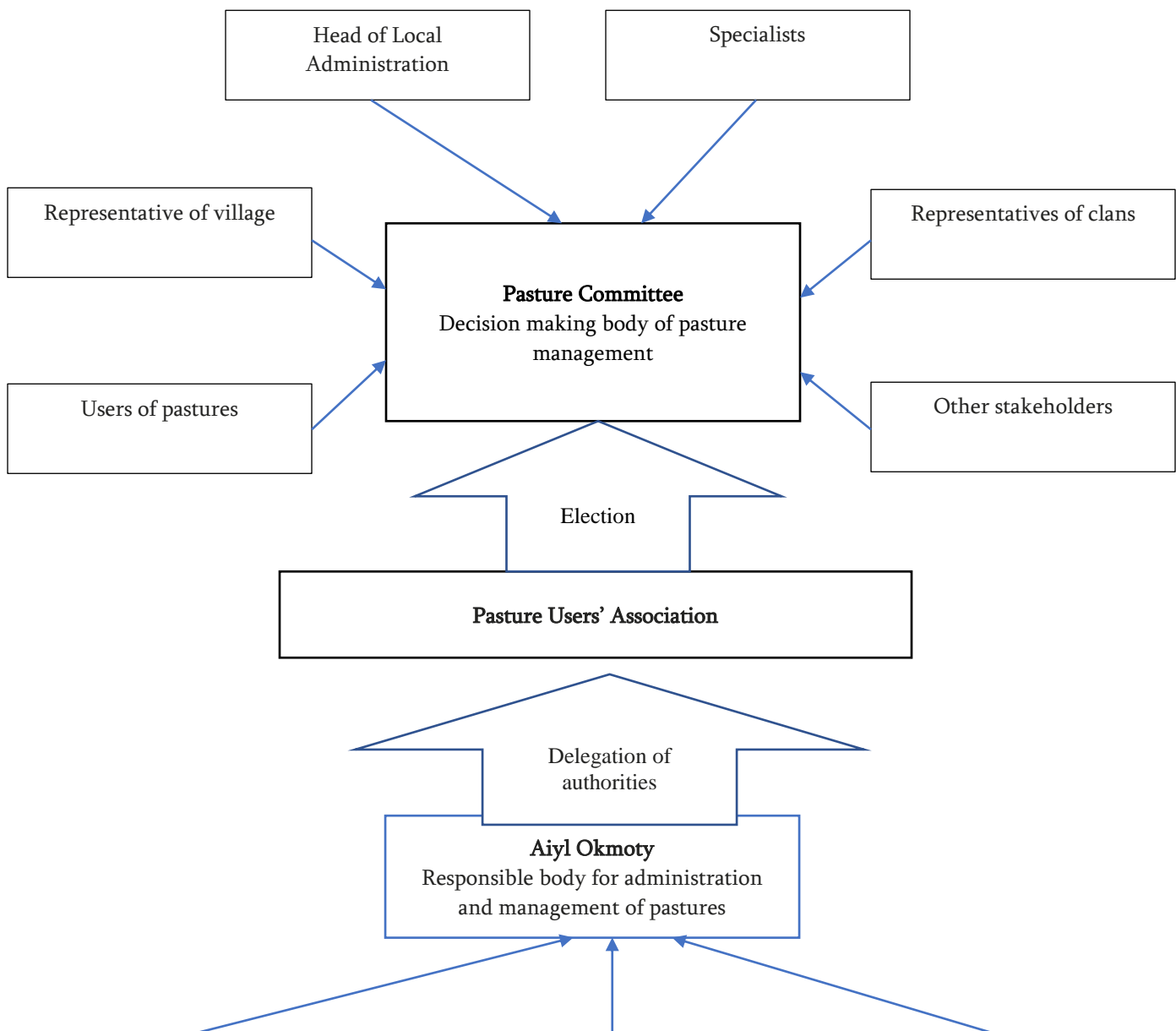
- The Pasture Committee is considered as the executive body of the Pasture Users' Association.
- Pasture users must elect their representatives to be included in composition of the Committee.
- The number of the Committee members should be odd and the representatives of the Pasture Users' Association must be the majority.
- Powers of the Committee include:
 - Developing plans on the use and management of community pastures;
 - Developing annual plans of the pasture use;
 - Exercising the provisions provided for by the aforementioned plans;
 - Monitoring of economic conditions of pastures;
 - Issuance of pasture tickets in conformity with the Pasture Use Plan;
 - Collection of pasture fees;
 - Settlement of disputes related to the pasture use;
 - Management of profits gained from the collection of pasture fees, which must be invested for operation and maintenance, management and improvement of pasture infrastructures.
 - Provisions on creation and organization of activities of the Pasture Committee, the Use and Management Plan of the Community Pastures and the procedure of the Use of Pasture Annual Plan, as well as the procedure of providing pastures for rent must be developed by the state authorized body in the pasture management sector and approved by the government of Kyrgyzstan.

The Authorized Body in the Pasture Management Sector

- The Government of Kyrgyzstan must appoint an authorized body in the pasture management sector, which will be in charge of developing the pasture management policy.
- The powers of the authorized body include:
 - Developing proposals on fulfilment of the country's legislative requirements concerning the pasture management;
 - Defining standards and methods for assessment of economic conditions and monitoring of quality of pastures;
 - Conducting supervision over monitoring of economic conditions of pastures;

- Developing instructions, rules and other legislative acts, as well as methodological materials about the problems related to the use of pastures;
- Monitoring of execution of the pasture use plan of the community and Pasture Users' annual plan by the Pasture Users' Association;
- Provision of technical and other assistance to the LSGBs and Pasture Users' Association in connection with the use of pastures.

The Structure of Bodies and Members in Charge of Pasture Management in Kyrgyzstan



Winter pastures

Summer pastures

Autumn and spring pastures

Pricing Mechanism of Pasture Use Rents in Kyrgyzstan

In the result of reforms conducted within the scopes of management of natural rangelands in Kyrgyzstan, the mechanism of calculation of pasture rent per head is proposed. According to the proposed mechanism, pasture tickets must be issued for each pasture area, which will be adequate to the number of heads permissible for grazing in pasture area for that year. The issued tickets must be sold to pasture users, based on the estimation of 1 ticket per each user.

The respective pricing mechanism for pasture tickets was also proposed, the calculation of which is based on the budget required for the given year and seasonality. In particular, for application of the proposed pricing mechanism it is necessary to:

- To calculate the annual budget required for the community;
- To calculate annual budget it is necessary to predict expenses required for measures envisaged in the Plan of the Use and Management of Community Pastures. This covers the expenses related to measures aimed at improving pastures, required monitoring, payable wages.
- To calculate the price per pasture ticket envisaged for the given season it is necessary:
 - To divide the budget necessary for that season on the heads permissible for that pasture area.
 - To have the budget necessary in the given season, it is necessary to divide the annual budget of the community on the number of days of the year and multiple by the grazing days set for each season.

Below is an example of calculation of the pasture ticket the required budget of community is 550 800 som. According to the presented example:

- The budget necessary for winter pasture was calculated as follows:
 $550,800/365*145=218,811$
- The price of 1 winter pasture ticket was calculated as follows: $218,811/4,659=47$

	Winter pasture	Spring pasture	Summer pasture	Autumn pasture	Total
Number of grazing days	145	40	110	70	365
Allowed livestock in the grazing area	4,659	9,876	8,734	7,121	
Cost of one grazing unit in each season	<u>47</u>	<u>6</u>	<u>19</u>	<u>15</u>	<u>87</u>

Total amount paid in each season	218,811	60,362	165,995	105,633	550,800
---	---------	--------	---------	---------	----------------

List of Literature

1. «ՀՀ արոտավայրերի կառավարման ոլորտում առկա խնդիրների և դրանց պատճառահետևանքային կապերի հետազոտություն», ապրիլ 30, 2019թ.: Հետազոտությունն իրականացվել է «Ռեզնանսային կազմակերպության կողմից՝ «Անասնապահության զարգացում Հայաստանի հարավում» ծրագրի շրջանակներում, որը ֆինանսավորվել է Շվեյցարիայի զարգացման և համագործակցության գործակալության կողմից:
2. «Տեղական ինքնակառավարման մարմինների գործառույթները և պարտականությունները հողերի կառավարման և բնապահպանական գործընթացներում», նոյեմբեր, 2017թ.: Փաստաթուղթը մշակվել է «Կենսաբազմազանության կայուն կառավարումը Հարավային Կովկասում» ծրագրի շրջանակներում, որը ֆինանսավորվել է Շվեյցարիայի զարգացման և համագործակցության գործակալության կողմից:
3. «Արոտավայրերի և խոտհարքների կայուն կառավարման պլանների կազմման և իրականացման ուղեցույց»: Փաստաթուղթը մշակվել է «Կենսաբազմազանության ինտեգրված կառավարումը Հարավային Կովկասում» ծրագրի շրջանակներում, որը ֆինանսավորվել է Շվեյցարիայի զարգացման և համագործակցության գործակալության կողմից:
4. «Արոտավայրերի մշտադիտարկման ձեռնարկ. Հայաստան»: Փաստաթուղթը մշակվել է «Կենսաբազմազանության ինտեգրված կառավարումը Հարավային Կովկասում» ծրագրի շրջանակներում, որը ֆինանսավորվել է Շվեյցարիայի զարգացման և համագործակցության գործակալության կողմից:
5. “Community Based Pasture Management in Kyrgyzstan”. A pilot project Naryn region.
6. “Pasture management in Central Asia”. Lessons from the First Practitioners’ Conference on Advancement of Sustainable Pasture Management in Central Asia.
7. “South-South Cooperation Trends and Examples of Home-grown Innovative Solutions in the Arab States, Europe and the Commonwealth of Independent States”, pasture management.
8. “Law of the Kyrgyz Republic on Pastures”, passed by the Kyrgyz Jogorku Kenesh, December 18, 2008.
9. “Sustainable Land Management in Kyrgyzstan and Tajikistan”, a research review September 2013.
10. “Conflicts over Pasture Resources in Kyrgyz Republic”, research report, June 2013.
11. “The Management of Dry Grassland in Switzerland. A Swiss federal program and its local practical application”, Guido Mase.