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**CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND
NATURAL HABITATS**

**GROUP OF SPECIALISTS – EUROPEAN DIPLOMA OF PROTECTED AREAS
26 MARCH 2013, STRASBOURG
ROOM G04, AGORA**

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**APPLICATION
KHOSROV FOREST STATE RESERVE
ARMENIA**

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BACKGROUND

The mission aimed to appraise the **Khosrov Forest State Reserve (KFSR)** suitability for the award of the European diploma.

The visit took place from the 2nd to the 6th of April 2012 (**Annex 1**); according to the Council of Europe requirements¹, the appraisal was based on the Regulations of the European Diploma of Protected areas (**Rés. (98)29, annex 3**).

The expert spent 3 days on visiting the area and meeting with local experts and officials; he was accompanied by Iva Obretenova from the Bern Convention secretariat.

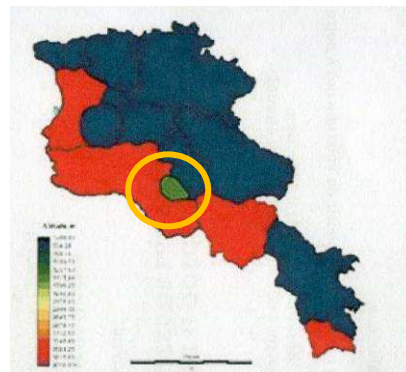
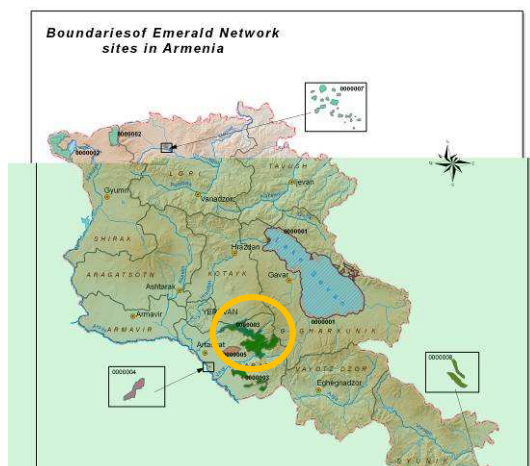
INTRODUCTION

KFSR is located in central part of Southern Armenia, on the South East of Yerevan, districts of Garni, Kakavaberd, Khosrov, Khachadzor and Urts (**Map 1**).

It covers around 23 213 ha² of primeval oak and *juniperus* forests, as well as mountain ecosystems and spreads over semi-desert areas at low elevation to sub-alpine meadows in the highest elevation ; it includes also wetlands of international importance.

KFSR territory stretches from 900 m to 2 500 m above the sea level and is surrounded by high mountains, Mts Yeranos, Irist and Khosrovasar that culminate at 3 200 m.

Located at the crossroad between two floristic provinces, the Alpine and Anatolian provinces (**Map 2**), it is a unique mosaic of very various landscapes and habitats for flora and fauna, many of them being rare, endangered and/or endemic from this Eastern part of Europe and not represented, to date, in any other existing diplomated areas.

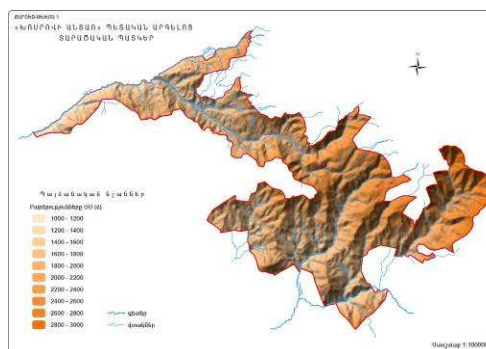


Map 2 – KFSR, floristic districts (Source : MNR).

¹ Mail dated 20 February 2012.

² 29 196 ha from other sources (Source : Birdlife international).

Map 1 – Location of KFSR (Source : MNR).



Map 3 – Physical map of KFSR (Source: MNR).

The nominated area is a lowdisturbed mountainous chain, oriented NW-SE and established to preserve both cultural and natural heritage of Armenia (**Map 3**).

In absence of opened roads and other facilities, the access to the nominated area is rather uneasy and keeps it protected from most anthropogenic pressure ; it gives the nominated area an effective high level of preservation.

Two main rivers, Azat and Vedi rivers, flow down from the core of the area to the West ; they provide excellent water resources to the local population. The largest one, Vedi river, springs at 2 720 m ; its watershed covers around the quarter of the surface of the nominated area. The Atak river on the North serves as border of the nominated area, to the village of Garni.

KFSR is also one of the eldest protected areas in the world, founded in the 4th century by Khosrov Kotak, King of Armenia who gave it his name. KFSR then served, as ground game for the royal family over the years . The area was designated “State Reserve” in September 1958³.

Since then, KFSR was continuously managed as a strict reserve, where only few limited and sustainable uses and activities are allowed. Two sanctuaries were set up within the reserve, in 2002 :

- the **Goravan sand State sanctuary**⁴, located in the South Eastern part of KFSR, at the foothill of Ararat valley. This area covers 95,99 ha and was established to protect the unique desert ecosystem in the Trans-Caucasus region ; very specific fauna and flora are present in this area, typical from sandy habitats. All activities that would affect the natural ecological processes negatively, including its hydrological regime, are strictly forbidden, as well as the construction of buildings, socioeconomic activities which are not compatible with the maintenance of the ecological and landscape features of the area. A 100 m width buffer zone was set up around the sanctuary, in order to strengthen its protection ; the horned viper (*Pseudocerastes persicum*) and the vulnerable Greek turtle (*Testudo graeca*) are amongst the key species that can be met in this sanctuary ;
- the **Khor Virap sanctuary**⁵, located on the left bank of Araks river, nearby Artashat, the ancient capital of Armenia, and close to the church of Khor Virap. It is a wetland of international importance designated under criteria 2⁶ and 4⁷ of the the Ramsar Convention⁸ that covers 50 ha. The main objective of this sanctuary is to protect the wetland ecosystem, in

³ Governmental Decree n°P-341, dated 13 September 1958.

⁴ Created by Governmental Decree n°925 U, date 30 May 2002, annex 6.

⁵ Created by Governmental Decree n°925 U date 30 May 2002, annex 5.

⁶ Presence of vulnerable, endangered, or critically endangered species or threatened ecological communities.

⁷ Wetland that supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions

⁸ Date of designation : 25/01/07.

particular the waterfowl and its natural habitats, as well as the flora specific to this ecosystem. All activities that could degrade the ecosystem are strictly forbidden, as well as construction of buildings, exploitation of mineral resources, use of pesticides, any utilization of soils and resources that could affect the hydrological regime of the area, etc. Wise use of the natural resources are allowed when compatible with the ecological characteristics of the site (eg. : reed harvest, ...) but fish and game are forbidden. A 100 m width buffer zone was set up also around this sanctuary in order to strengthen its protection.; amongst the 30 species of birds nesting in the site regularly, the presence of the endangered White-headed Duck (*Oxyura leucocephala*), as well as the vulnerable Marbled Duck (*Marmaronetta angustirostris*) must be quoted. An allochthonous species, the Coypu (*Myocastor coypus*) is however present in this wetland and could necessitate appropriate measures of management.

For more detailed, please refer to the application document (TPVS/DE (2012) 5).

I APPRAISAL

The information hereafter follows **Res. (98)29** of the regulation of the European diploma of protected areas, **appendix 3**.

I-1 EUROPEAN INTEREST

KFSR comprises many elements that are representative of biological and landscape heritage, in accordance with the European diploma regulation and criteria for the award of the diploma.

I-1-1 Biological heritage

KFSR hosts :

- 1 849 species of vascular plants of Armenia⁹ ; 80 of them are listed in the Red Data Book (RDB) of Armenia and 24 are endemic from this area¹⁰ ;
- 280 species of vertebrates¹¹ ; 96 of them are registered in the RDB of Armenia¹² and 11 are listed in the IUCN RDB ; it is an outstanding area for the great raptors in particular¹³ ;
- 6 500 species of invertebrates¹⁴ ; 58 species are listed in the RDB of Armenia¹⁵.

The nominated area contents :

- typical examples of diverse and highly representative ecological **communities** in Europe ; several communities are furthermore poorly or even not represented to date in the network of the diplomated areas ; they do constitute typical examples of the two floristic provinces of Armenia, **Anatolian** and **Alpine** provinces (**Map 4**) (eg.: semi-deserts, arid forests, “tragathan” vegetation, wetlands,... ;

⁹ more than 50% of the 3 600 species of vascular plants listed in the RDB of Armenia.

¹⁰ 120 endemic species are listed in Armenia, amongst them, 7 mammals, 21 birds and 8 reptiles.

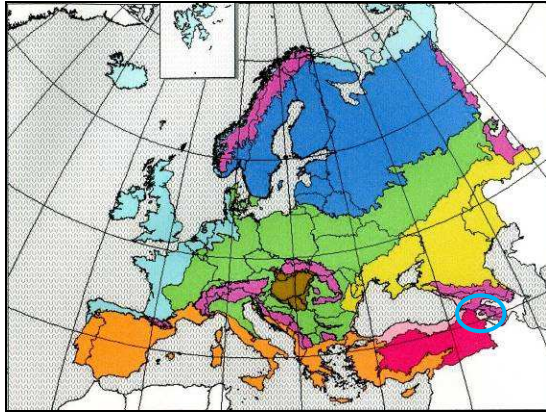
¹¹ 41 mammals, more than 190 birds (156 species and 76 breeding, recorded by Birdlife International), 33 reptiles, 5 amphibians and 9 fish.

¹² 329 endemic species of vertebrates are listed in Armenia.

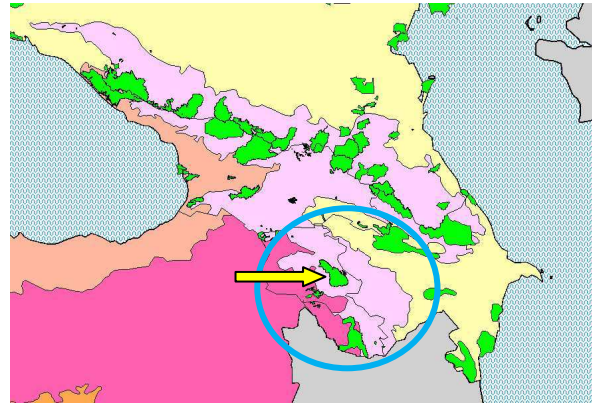
¹³ IBA AM003.

¹⁴ 70 molluscs, 15 crustaceans, 300 arachnids and 6 000 insects,

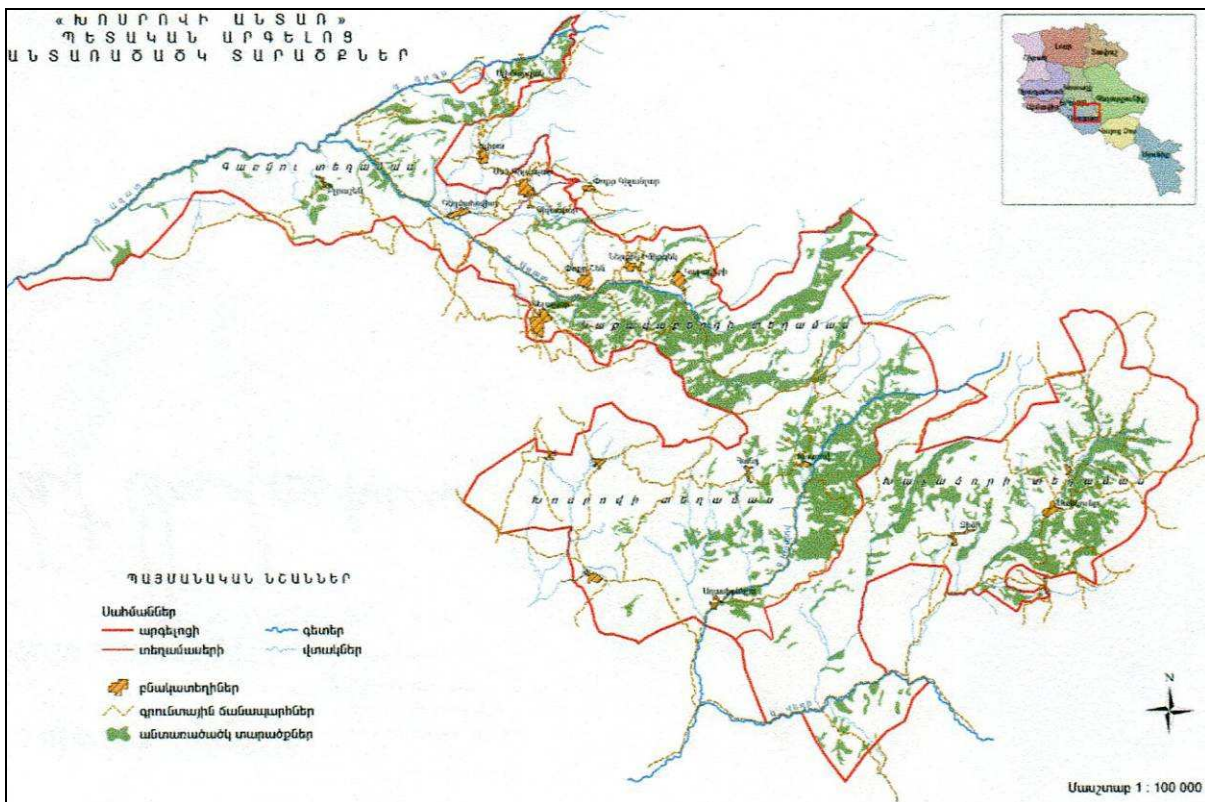
¹⁵ 29 insects, 1 dragonfly, 7 beetles, 15 butterflies, 6 hymenopterans (mMore than 60% of the 155 species of invertebrates listed in the RDB of Armenia.



Map 4 – Biogeographical regions of the Pan-European countries (Source : EU)



Map 5 – Biogeographical regions of the Pan-European countries, localisation of Armenia/KFSR



Map 6 – Forest distribution in KFSR (Source : MNP).

- a large number of flora and fauna **species** which are rare, threatened or endemic and have a high European interest. *Panthera pardus*, *Felis chaus*, *Felis libyca*, *Capra aegagrus* and *Ovis orientalis Gmelini* are some key species of mammals of high European interest present in the nominated area ; *Macrovipera lebetina* is also one of the most spectacular species of reptiles that can be met in KFSR, as well as the small rare fish *Aburnoïdes pipunctatus*. At least 21 species of raptors are breeding in the protected area¹⁶, amongst them all European species of great vultures¹⁷ and many other species of animals listed in **Annex 3** of the Bern Convention. Forest covers 16% of the area (**Map 6**) ; *Juniperus polycarpus* together with *Quercus macranthera* are the dominant tree species ; there are accompanied by many species of bush that cover 20% of the whole area (eg.: *Rhamnus pallasii*, *Lonicera iberica*, *Viburnum*

¹⁶ Possibly 23 species.

¹⁷ Ex.: *Gyps fulvus*, *Gypaetus barbatus*, *Aegypius monachus* and *Nephron percnopterus*.

lantana), wild pear trees as well, and plants, some rather common but specific from the local relief (eg.: *Thymus kotschyanus*, *Gypsophila aretioïdes*), and sometimes very rare and specific to the geological local features (eg.: eg.: *Inula aucherana*, *Adiantum capillus veneris*) ; mountain steppes, as well dry and locally wet meadows cover the two-thirds of the area ; in the driest parts of the area, semi-desert and steppic species of flora grow (eg.: *Stipa* ssp, *Astragalus* ssp), some rare and endemic from higher altitudes (eg.: *Phleum pratense*, *Hordeum bulbosum*), most listed in **Annex 2** of the Bern Convention.

- **habitats of rare species** which are in an unfavourable state of conservation at European level ; the most emblematic example is probably *Panthera pardus* which is a very endangered species ; the presence of 2-3 individuals in the highest parts of KFSR is reported and other specimens are visiting the nominated area occasionally. KFSR is ecologically and topographically linked to the whole Caucasus mountain where a viable population of leopards is still living. A “*Strategy for the Conservation of the Leopard in the Caucasus Ecoregion* » was adopted in 2007¹⁸ where KFSR is considered as an important area for the recovery of this species. The Armenian moufflon (*Ovis gmelini*) is another flagship and spectacular species present in the nominated area. KFSR hosts also the Bezoar goat (*Capra aegagrus*), the Trans-Caucasian grey bear (*Ursus arctos*), the Marbled polecat (*Vormela peregusna*), the Common otter (*Lutra Lutra*), and the Pallas' Cat (*Felis manul*) which are amongst the most endangered species of mammals of Armenia ;
- **breeding grounds** for species protected under the Bern Convention, (eg.: raptors and other birds, invertebrates like *Rosalia alpina*, ...), as well as resting and feeding areas for migratory species, waterfowl in particular, (some are considered as being of international importance, *Oxyura leucocephala* amongst others, and most as being of European interest and special conservation interest¹⁹ .

To conclude, the nominated area meets the general criteria for the award of the European diploma and comprises representative elements of biological heritage which are of exceptional European importance.

I-1-2 Landscape interest

The landscape features of the nominated area are also outstanding, for at least four main reasons :

- its **diversity** : as mentioned here above, the biological and ecological features of the site is reflected in its landscape that is composed of very various types of landscape units, from dry to wet conditions and from high to low altitudes ; the convergence between the Alpine and Anatolian bioregions is also one very important characteristic of KFSR and give the site a unique interest from this point of view ;
- its **aesthetic** : the variety of KFSR, associating so diverse types of natural features, spreading from the sea level to 2 500 m of elevation, build landscapes of exceptional beauty at any time of the year whose character is the result of the action and interaction of natural as well as human factors as well ;
- its **integrity** : thanks to its strict protected regime, the nominated area has conserved to date a high integrity, although in some specific and local parts of the reserve, some degradation may be observed. The overall landscape of the nominated area has still a high degree of integrity ; it has not been degraded significantly, except again in some local and rather small locations ;

¹⁸ A project of reintroduction of the Persian leopard is also planned in the Western part of the Caucasus (WWF – 2008. Programm for reintroduction of the Central Asian leopard in the Caucasus region, 65 p).

¹⁹ Emerald network (cf.: T-PVS/Emerald (2008)11).

- its **high mix natural and cultural values** as well : the nominated area is finally well-known for its cultural heritage ; this area has been inhabited for centuries and many ancient signs of this occupation can still be seen in the backcountry, such as vestiges and remnants of villages²⁰, monuments²¹ and other signs of ancient occupations²². Those traces give this area a very high anthropological value and a great European interest deriving from its natural and cultural features.

To conclude, the nominated area comprises also many diverse representative elements of the natural and cultural landscape heritage which are of European importance and offers magnificent wild and anthropogenic types of natural and cultural landscapes which are typical from this part of Europe (Pictures 1 to 6).

²⁰ Ex.: Khosrov, Mankuk, Vanstan, Avanik, Spitakavank villages.

²¹ Ex.: Chamber of Mirzik, Tap fort-castle, Geghmahovit church, Aghjots Monastery, Havut Tar monastic complex.

²² Ex.: Jghin, Gilan residences.



Picture 1 – Semi desertic lowland areas.



Picture 2 – Mountain and dry mountain steppes areas.



Picture 3 – Rocky and cliffs areas.



Picture 4 – *Juniperus* forest area.



Picture 5 – River ecosystem.



Picture 6 – Mountain meadows.

I-2 PROTECTION MEASURES

KFSR is a strictly protected area (IUCN category I a)²³.

Most uses and activities are forbidden within the nominated area, and only those compatible with the maintenance of its ecological and landscape characteristics can be allowed.

The site has been preselected for designation as one of the nine (9) areas of Armenia of “**special conservation interest**” under the Emerald network²⁴.

I-2-1 Merits and protection system

a. Administration and management of KFSR

a.1 Organisation

KFSR is placed under the authority the Ministry of Nature Protection (MNP) of the Republic of Armenia and managed by The Bioresources Management Agency founded in 2002²⁵.

At the time of the mission, the nominated area was managed by the KFSR administration which comprised 77 staff members placed under the heading of a (1) director and a (1) deputy director and shared in 4 main units, administration (24), research (8), protection (38) and 2 visitor centres (6) (**Table 1**).

The visitor centres are located at each of the two main entrances of the reserve and they were built recently with external support²⁶.

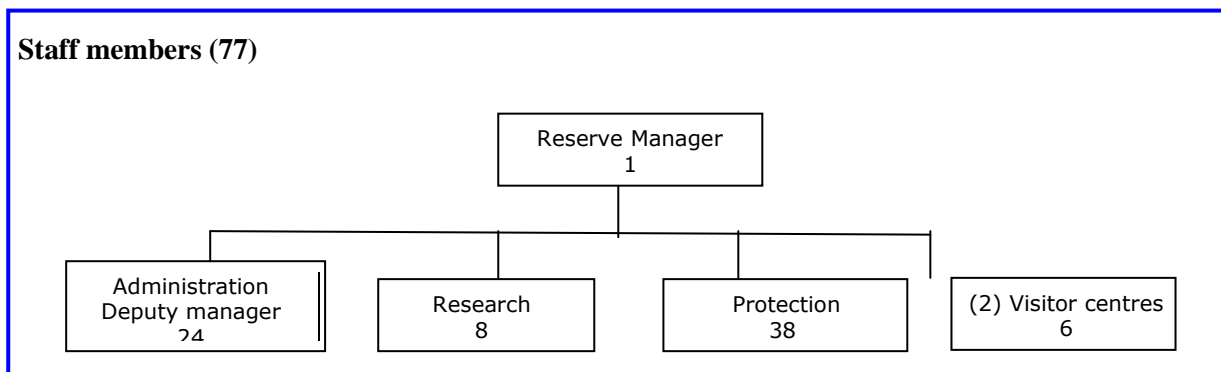


Table 1 –KFSR Organisation (Source : KFSR).

a.2 Budget

According to the figures provided by the MNP, the budget of the nominated area is situated around 140 000 Euros/year and it remained rather stable during the last five years (**Table 2**).

Year	2007	2008	2009	2010	2011
Armenian Drachme	71 845,5	79 247,5	77 535	77 535	77 535

²³ MD n°P-341, 13 September 1958.

²⁴ See note above (Emerald Network Pilot Project in Armenia, report, 2008 (T-PVS/Emerald (2008)11).

²⁵ Resolution N1236 of August 8, 2002, of the Government of Armenia.

²⁶ Danish government and WWF.

Table 2 – Budget of the nominated area (period 2007-2011) (Source : MNP).

Most funds come from State contribution ; in 2010 and 2011, two thirds of this budget came however from the “*Caucasus Protected Areas Fund*”, a trust fund supported by Germany ; 252 100 Euros were provided for the management of the nominated area over three years.

This budget is rather low and certainly not sufficient to cover all tasks of the site administration properly ; **the State Party should be encouraged to increase it, so that the site be managed according to the international standards required from a protected area of European interest awarded with the diploma.**

a.3 Technical aspects

A management plan was adopted for the nominated area for the period 2009-2014. **Unfortunately, this plan was not made available to the expert in a working language of the Council of Europe and it was therefore not possible to assess its contents in detail.** However, the main chapters were translated into English upon request of the expert and thanks to MNR so that after discussions and exchange with the officials of the State Party and based on additional information provided by the MNP after the field mission, the expert was able to check this plan that seems to build a satisfactory baseline for managing the nominated area in accordance with the European diploma regulation and standards.

Table 3 gives an overview of the main activities planned for the period 2009-2014.

N	Activity	Timeframe
1.	Development of draft legislation	
1.	Elaboration of legal framework for ecotourism arrangement on the territory of KFSR.	2010-2013
2.	Signing of cooperation agreements between KFSR SNCO and communities for transit movement of livestock through KFSR to summer pastures	2010-2011
3.	Definition of allowed forms of economic activities in buffer zones of KFSR and development of indicators.	2010-2011
4.	Development of proposals on setting entry fees to KFSR, establishment of entry fees.	2010
5.	Development of proposals and definition of the staff positions and number of protection service staff, responsibilities of staff and requirements for staff in KFSR SNCO.	2010
6.	Development of a program on development of an incentive system for the staff of KFSR SNCO, dealing with guarding/protection functions, on introduction and financing of round-the-clock guarding system.	2010-2011
7.	Development of proposals on thematic planning, development and approval of themes for scientific-research activities in KFSR SNCO.	2010-2014
8.	Clarification of the borders of state owned lands located within administrative borders of the communities adjacent to KFSR and change of their category.	2009-2013
2.	Institutional reforms in KFSR	
1.	Development of proposals on a new structure for “KFSR SNCO, including establishment of departments on biodiversity monitoring and tourism management, as well as stemming from them the number of new staff and working procedures.	2010
2.	Approval of the structure and staff list of KFSR SNCO.	2010

3.	Establishment of visitor centre for ecotourism organization purposes.	2010-2011
3.	Capacity building, improvement of staff skills	
1.	Training on development and maintenance of data base in GIS system.	2010-2011
2.	Development of educational programs for the staff of KFSR SNCO, staff training. Development of draft short and long-term staff training programs.	2010-2011
3.	Approval and implementation of short and long-term staff training programs.	2010 -2014
4.	Training of staff aimed at implementation of biodiversity monitoring.	2010-2011
5.	Organization of study tours for the staff of “KFSR SNCO.	2010-2014
6.	Establishment and maintenance of the cadastre of KFSR.	2009
7.	Technical strengthening of KFSR SNCO.	2010-2014
8.	Establishment of satellite internet connection and internal computer network in KFSR SNCO.	2010
9.	Implementation of practical trainings on the territory of KFSR.	2010-2014
4.	Improvement of KFSR management	
1.	Implementation of nature protection measures aimed at promotion of natural regeneration of ecosystems.	2010-2014
2.	Implementation of joint scientific-research activities on the territory of KFSR – inventory and stock-taking of flora and fauna, research of ecological features and others.	2010-2014
3.	Improvement of cooperation between state bodies, local self-governing bodies, scientific and environmental entities and State reserve.	2010-2014
5.	Development of tourism and recreation	
1.	Development of designs for establishment of touristic infrastructures in KFSR and its buffer zone.	2010-2011
2.	Implementation of the ecotourism development program on the territory of KFSR and its buffer zone.	2010-2014
3.	Development of a monitoring system for assessment of environmental and social impact of tourism.	2010 – 2011
4.	Approval and implementation of the monitoring program on environmental and social impact assessment of the tourism.	2011 – 2014
5.	Publication of a scientific-popular manual and informational booklets on KFSR in Armenian and English.	2010-2014
6.	For memory	
7.	Setting up of a biodiversity monitoring (BDM) system	
1.	Development and implementation of a monitoring system in KFSR (identification of indicators, observation points and sample plots and others).	2010-2014
2.	Implementation of monitoring with some pilot indicators (data collection – analysis – forecasts).	2010

Table 3 – Program of activities (period 2009-2014) (Source : MNP).

b. Regulations and effects of socio-economic activities

Most uses and activities that are not be compatible with the long-term preservation of the biological and landscape features of the nominated area are forbidden (**Annex 2**).

However, several specific matters need to be addressed :

b.1 Construction and exploitation of water systems and facilities

Those facilities are not allowed within the nominated area ; a water supply station does exist however inside the reserve, on the river Azat, near the village of Garni, on the North Western part of KFSR (**Pictures 7 and 8**). The ecological characteristics of the area do not look to have been affected significantly by this facility to date although those facilities affect the immediate landscape. It is crucial that this facility will not degrade and compromise the nominated area in the future, especially in Summer time when the water level of the river is low.

The State Party should be urged and commit not to develop further water pumping in the river Azat in the future and keep those facilities at their existing level that seem compatible with the long-term maintenance of the biological and landscape features of the nominated area ; would the expansion of the existing water supply facilities be needed, the State Party should be urged to build new needed facilities outside the nominated area.



Picture 7 – water supply facilities (Garni area).

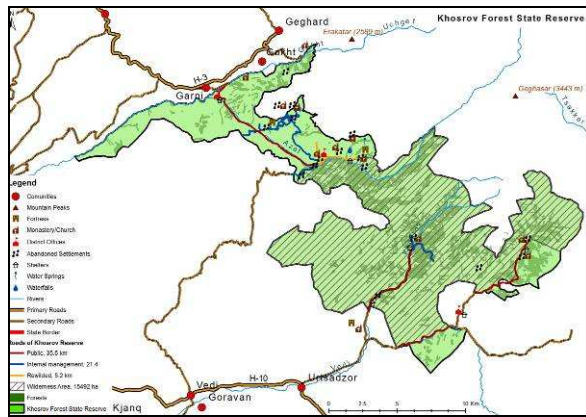


Picture 8 - water supply facilities/sluces (Garni area).

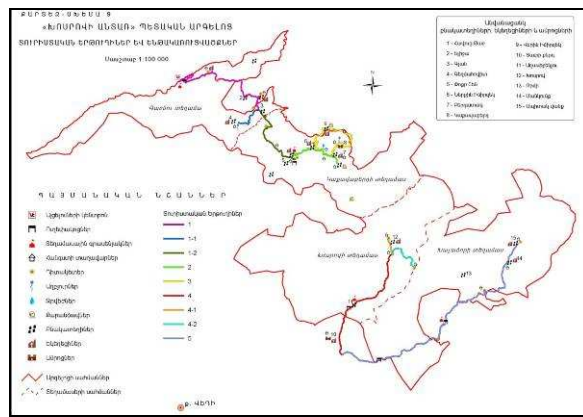
b.2 Construction and exploitation of buildings and facilities (roads, pipes, electric power lines, trails, ...)

They are also forbidden, except those required for the management of the reserve (forest cabins, barriers, border signs, ...) ; there are several gravel roads in the reserve (**Map 7**), closed to public traffic and use, as well as a series of 5 eco-cultural trails (**Map 8**)²⁷ that are opened to visitors.

²⁷ (1) Garni and Kakavaberd districts, Havuts Tar, (2) Kakavaberd district, Vanstan, (3) Kakavaberd district, Kakavaberd, (4) Khosrov district, Trchnaberd and (5) Khachadzor district, Mankuk (Source : MNP).



Map 7 – Road facilities (Source : MNP).
(Source: MNP).



Map 8 – Touristic trails and facilities

The expert was informed that touristic operator the road facilities to transport tourists by van to the core of the reserve, in contradiction to the regulation of the reserve. **The access to the nominated area should be strictly forbidden by motor vehicles from the existing official entrances, except for the reserve management and in case of emergency (eg. : fire, accident, research, ...).**

b.3 Grazing and agriculture

In the light of the information available at the time of the mission, it is not clear whether or not grazing is allowed within the nominated site. This question was not addressed specifically during the field visit. Several activities planned in the program for the period 2009-2014, refer to “*economic activities*”, especially grazing, performed at least in the “*buffer zone*” of the nominated area, as well as on “*trials*” used by livestock along their “*transit*” throughout the area to the summer pasture areas (**Action Plan - A1.1 and A9.4**).

Legal and Illegal grazing is several quoted in the literature as a concern in KFSR and a clear response should be given by the State Party on the full compatibility of this activity with the preservation of the natural and landscape characteristics of the nominated area, on the basis of which the diploma could be attributed to KFSR.

Based on further information sent to the expert by the MNR, grazing is forbidden in the nominated area and the case recorded must be considered as illegal. The State Party should be invited to provide the group of specialists with further information on this activity and its legal regime in the buffer zone of the nominated area, as well as, if needed on any other activity like agriculture, collect of medicinal plants, that may degrade the integrity of the nominated area and its surroundings and have significant indirect effects on its European biological and landscape interest.

b.4 Tourism

The State Party wishes to develop ecotourism in then nominated area ; the nominated area has many assets for developing such socio-economic activities, with a rich natural heritage and an outstanding cultural heritage that can be valued, monuments, ruins of abandoned villages, churches, old bridges, etc. It offers facilities (2 visitor centres, a museum at the headquarters, 5 existing trails, ...) (**Pictures 9 and 10**), that can carry ecotourism activities. The construction of an eco-training centre on communal land of the village of Urtsadzor, nearby the nominated site, is also on going with financial support from the GEF small grant fund ; this centre will develop awareness and training activities for the local people and visitors of KFSR.



Picture 9 – Garni visitor centre (NW).



Picture 10 – Vedi visitor centre (SE).

Moreover, the KFSR administration signed an agreement with the “PAN parks” organization and WWF in March 2012, in view to certify KFSR as PAN park protected site. The evaluation report mentions the existence of gravel roads at the North and South entrances of the nominated area and suggests to “re-wild” the 5 km road located on the North Western part of the reserve territory and not use it by car any more, and especially not to carry tourist by van to the core of the reserve; this matter was raised previously in the report.

Would the diploma be awarded to KFSR, the State Party should be urged to enforce the existing legislation of the nominated area and to stop motor vehicles traffic on the territory of the reserve, except for management purposes and for the access of public services charged of the management of the water supply station. This gravel road from the village of Garni should also be re-wilded, in accordance with the PAN parks expert recommendation.

Tourism activities should be furthermore developed only in a way to uphold the European interest and sensitivity of the nominated site, and to preserve its integrity. The public access should be regulated in a way to channel the visitors and avoid damage on the biological and landscape features of the area. The State Party should be invited to develop tourism in the nominated area as a model of local development for Armenia in line with the European diploma regulation that requires a management of the diplomed areas “in an exemplary way”²⁸.

b.5 Illegal uses and activities

Two main issues will be raised :

- Litter and waste

Litter and waste deposits are not allowed within the nominated area.

During the field visit, the expert observed however amounts of litter (plastic bottles, cans, ...) within the nominated area, nearby some facilities (ex: the “White House”) and in its vicinity, at its Northern border, in the village of Garni in particular. Presence of litter and waste in and nearby a protected area of European interest awarded with the European diploma cannot be admitted.

The reserve administration as well as all persons including rangers and scientists that use the existing reserve facilities, should be requested to make significant efforts, not to throw their litter in the territory of the reserve.

²⁸ Art. 1.

The State Party should be strongly recommended also to address this issue with the local communities, Garni in priority, and to develop a specific program of awareness activities and cleaning of the surroundings of the nominated area, through the on-going Action plan (chap 8. - Public awareness).

- *Poaching*

Hunting and fishing are forbidden within the nominated area ; poaching is however mentioned in various sources in the literature and the expert found clear and recent signs of poaching in the nominated area, during his field visit.

The State Party should be urged to develop further efforts on reducing and stopping as far as possible, the illegal activities in the area, especially hunting of large mammals.

c. Zoning

The nominated area is a strict nature reserve on its whole territory ; there is no specific zoning.

However, two important issues will be addressed that require further information from the State Party ; on relies on (1) the exact borders of the nominated area and the other (2) on the existence of a buffer zone that would include Azat and Vedi rivers watersheds according to the information available.

- *KFSR borders* : there are still pending discussions between the MNR and the local communities on the exact location of the buffer zone borders of the KFSR , regarding the limits of State owned lands in particular that are not clear (**Action plan, A1.8, A3.6**).

The State Party should be invited to clarify this matter as soon as possible and to provide the secretariat with clear maps with appropriate borders of the nominated area and its buffer zone before the nomination of the area be reviewed by the group of experts;

- *Buffer zone* : the Action plan on the period 2009-2014 refers to the existence of a buffer zone (**Action Plan – A1.3, A5.1 and 2, A9.5**) and several maps provided by the State Party, seem also to confirm that a buffer zone may exist around KFSR. Unfortunately, the English translation of the captions of those maps is not absolutely clear on that matter which was not clarified definitely during the field mission

Further information should be required also to the State party, by the next meeting of the group of experts, on (1) the location, (2) borders and (3) legal regime, as well as on the uses and activities that are allowed in this buffer zone that must not degrade the KFSR ecosystem according to the nominated area regulation and be fully compatible with the maintenance of its European interest according to the European diploma regulation.

d. Ownership title

The nominated area is a State owned land.

e. Land-use plans

The expert was told that there is no specific other uses and activities in the nominated area, in addition to those assessed here above and/or linked to the KFSR management.

f. Development work.

No specific comments

g. Management plan for the area.

As mentioned before²⁹, a management plan was approved by the government of the State Party for the period 2010-2014³⁰.

This plan was however not accessible in a working language and the expert was unable to assess it fully, except the table of contents and parts of the text, including the Action plan, which were provided to him in English, after the mission.

The format of this plan meets the European diploma regulation requirements, although several issues raised here above need further information and/or actions from the State Party.

h. Public access and reception facilities and infrastructures.

Public access is regulated and the nominated offers various accommodations for tourists and visitors.

No further comments in addition to the here above developments.

i. Scientific studies needed and activities of research bodies.

Much of the research works were conducted during the Soviet era, when financial support for science was high. For long, Armenia supported excellent scientists working in the field of biodiversity research.

However, the economic difficulties met by the State Party, have resulted over the years in a lack of money for research and scientists. Therefore, limited funds are currently devoted to research on biodiversity in Armenia in general, in KFSR in particular.

Despite these difficulties, the intellectual and technical capacities for research within the nominated area KFSR remain satisfactory and the expert appreciated the high standards of the presentations that were made by the local experts, during the mission.

One challenge is certainly to apply this resource to an exemplary management of the nominated area in accordance with the European diploma regulation requirements.

The State Party should be encouraged to maintain knowledge on the features of the nominated area at a level and in a way that allow to monitor the state of conservation of species and communities that give KFSR its European interest, as well as the effects of tourism on it.

j. Possible membership of other international networks.

KFSR is member of the PAN parks network.

k. Relationship.

The MNR of Armenia and the KFSR administration are familiar of international organisations, public (GEF, UNDP, UE, WB, Ramsar Convention, ...) and private (WWF). They also cooperate with the other countries from the Caucasus region on several programs of activities (eg: Persian Leopard conservation).

²⁹§ I.2.1 a.3.

³⁰ Decree n°500-N 23 April 2009.

CONCLUSION

Referring to the art. 9, § 5.a of Res. (98) 29 of the Committee of the Ministers, it is suggested to the Group of specialists, that the award of the European diploma to the Khosrov Forest Strict Reserve (KFSR) be recommended to the Committee of Ministers, with the following conditions and recommendations :

1) prior the award decision and by the next meeting of the Group of specialists :

Condition 1 : clear maps with appropriate borders of the nominated area and its buffer zone (location, borders and legal regime, as well as allowed uses and activities), should be provided by the State Party ;

Condition 2 : confirmation and appropriate information should be given by the State Party that all socioeconomic activities, like agriculture, grazing, logging, collect of medicine plants amongst others, in the buffer zone of the nominated area are managed in accordance with the maintenance of its European interest and that they do not affect the integrity of the ecosystem ;

Condition 3 : commitments should be taken by the State Party that the existing water resources facilities will not be expanded within the nominated area and will stay fully compatible with the preservation of the European interest of the area ;

Condition 4 : motor vehicles public traffic will be strictly forbidden on the existing gravel roads within the nominated area, including for transportation of tourists, except for management purposes and in case of emergency.

2) attached to the award decision :

Condition 2 :

Recommendation 1 : the State Party should be urged to develop appropriate efforts for preventing and minimizing illegal activities, including poaching of large mammals within the nominated site ;

Recommendation 2 : the State Party and the KFSR administration should be invited to develop and implement awareness and training activities for local people and visitors on management of litter and wastes as well as for their own staff members ;

Recommendation 3 : to fully implement the sustainable tourism strategy and to monitor those activities.

Recommendation 4 : to pursue inventories and mapping of species and habitats, not only in the Emerald network but, as much as possible, in the whole territory of the reserve ;

Recommendation 5 : to guarantee the Park budget, from internal sources preferably, especially the operating part.

Annex 1

APPRAISAL MISSION “Khosrov Forest State Reserve” for the award of the European diploma of Protected Areas

Programme of the visit

2nd- 6th of April 2012

2nd April

Departure from Geneva
Arrival in Erevan

3rd April - Visit

Morning

Meeting with the directorate of the reserve, provision of general information on administration and management
Visit of KFSR facilities (museum etc...
Visit of the “Khor Virap” sanctuary
Visit of the “Goravan sands” sanctuary

Afternoon

Visit of the ecotourism trail (Vedi)

4th April – Seminar

Morning

Welcome speeches

H. Ghalachyan - pHD, Head of Plant Resources Management Division, Biological resources Management Agency, Ministry of Nature protection (Bern Convention National focal- point)
V. Barseghyan – Head of the “KFRST”
A. Ziroyan – Head of the Bio-resources Management Agency, Ministry of Nature Protection
S.Baloyan- EPIU SA, the Ministry of Nature Protection
N. Nikolyan – Ministry of Foreign Affairs of RA; Head of the Council of Europe’s department

Council of Europe presentations

I. Obretova – Project Manager Biological Diversity Unit Directorate of Democratic Governance, Culture and Diversity, Council of Europe
H. Lethier – Expert, Biological Diversity Unit Directorate of Democratic Governance, Culture and Diversity, Council of Europe

Overview of the KFSR

A. Aghasyan – Head of the department of special protected areas, Bio-resources Management Agency, MNP
G. Fayvush - Institute of Botany of National Academy of Science

Questions and discussion

Local expert presentations

- A. Sargsyan – Scientific department, KFSR
- A. Maksudyan – Head of the “ Goravan sands” sanctuary, KFSR
- L. Sahakyan – Head of the zoological laboratory, Prevention of Special Dangerous Infection Diseases Centre, Health Ministry
- N. Margaryan - Institute of Zoology
- A. Ghulijanyan - “Zikatar” environmental Centre, SNCO
- F. Safaryan - senior specialist, Forest control department, State environmental inspectorate, MNP
- A. Alaverdyan - State Forest Monitoring Centre, SNCO, Ministry of Agriculture

Questions and discussion

Afternoon

Local expert presentations

- K. Manvelyan - World Wildlife Fund (WWF), Office of Armenia
- A. Mkrtchyan – senior specialist, of “Environmental department” of the Ararat region
- A. Gevorgyan - National coordinator, Transboundary Joint Secretariat Nature Conservation in the Caucasus
- A. Martirosyan and G. Arzumanyan, UNDP, Office of Yerevan
- H. Sargsyan – Head, Ararat “Aarhus” Centre, Environmental NGOs
- H. Babayan – senior specialist, Ministry of Territorial Administration
- A. Davtyan – “ Dilijan” national park”, SNCO

Questions and discussion

5rd April – field visit and further discussions with the KFSR staff

Morning

- Field visit (Geghamahovit abandoned village, Garni district)
- Discussion with the KFSR staff

Afternoon

- Field visit (White House, turtle farm, ...)
- Transfer IO to Erevan

6th April

- Departure IO/CoE to Strasburg

NB : from 7th to 9th, continuing visit of HL/CoE expert on his own, 9th evening/transfer to Erevan, 10th/departure

ANNEXE 2**Decree of the Republic of Armenia**

30 May 2002 N 925-Ն

On ratification of the regulations on Reorganization of the State Institution “Khosrov State Reserve” into “Khosrov Forest” State Reserve and the State Non-Commercial Organization “Khosrov forest” State Reserve”

The subject and goal of the activities of “Khosrov forest” state reserve” state non-commercial organization are to ensure scientific research, maintenance, conservation, registration, inventory, monitoring and management of history of nature of natural ecosystems, landscape and biological diversity and natural heritage in «Khosrov forest» state reserve, «Khor Virap» and «Goravan sands» state sanctuaries.

Annex N**1****of RA Government Decree****2002 May 30 N 925-Ն****R E G U L A T I O N O F «KHOSROV FOREST» STATE RESERVE**

1. "Khosrov Forest" State Reserve (henceforth referred to as Reserve) was established by the decree N 341 on the application of the law on "Nature Protection of The Armenian SSR" of the Council of Ministers of the Armenian SSR made on September 13, 1958.
2. The objectives for the establishment of the reserve are the following:
 - a) Ensure the natural process of development of water and land natural ecosystems of Azat and Vedi river basins; maintain / conserve landscape and biological diversity, nature and historical monuments.
 - b) Maintain/conservе rare and endangered species of wild plants and animals typical to central Armenia, their gene fund and habitats.
 - c) Scientific research of natural landscapes, and their individual elements, natural processes and phenomena to foresee and assess the processes going on in the natural ecosystem of the reserve, conserve flora and fauna gene fund, develop scientific basis for environment protection, ensure a basis for the development of effective ways to conserve and use nature in the adjacent areas of the reserve.
 - d) Ensure a basis to arrange ecological monitoring, manage chronology of nature and establish a regional museum of nature.
 - e) Ensure preconditions for scientific recognition tourism development
 - f) Ensure appropriate prerequisites/preconditions for public ecological education
3. Armenian-owned lands including waters, mining, flora and fauna are involved in the territory of the reserve.
Full name in English : Khosrov Forest State Reserve,
4. Access to the territory of the reserve is permitted only after having special passes issued by the executive body of «Khosrov forest» state reserve» state non-commercial organization or authorized state body.

III. Reserve protection

5. «Khosrov forest» state reserve» state non-commercial organization carries out the protection of the reserve.

IV. Protection / Safety zone of the reserve

6. The protection / safety zone of the reserve covers the area limited by watershed lines of the Azat and Vedi

rivers flowing in the area allocated to the reserve. Lands owned by different owners, including administrative community areas, can be involved in the protection / safety zone. Their use is regulated by the regulation determined by the legislation of the Republic of Armenia.

7. Any economic activity agreed with the authorised state body that doesn't harm the ecosystem of the reserve and its natural development is permitted in the territory of protection / safety zone of the reserve.

Annex N
of RA Government Decree
2002 May 30 N 925-Ն

R E G U L A T I O N OF «KHOSROV FOREST» STATE RESERVE» STATE NON-COMMERCIAL ORGANIZATION

1. The founder of the organization is the Republic of Armenia, on behalf of the Government of the Republic of Armenia (hereinafter referred to as founder).

2. The organization ensures the implementation of the requirements in the territories of "Khosrov" State Reserve (hereinafter - reserve), "Khor Virap" and "Goravan sands" state sanctuaries (hereinafter – sanctuaries) that are fixed in their regulations.

Full name in English : «Khosrov Forest» State Reserve» State Non-Commercial Organization

II. THE SUBJECT, PURPOSE AND TYPES OF THE ACTIVITIES BEING IMPLEMENTED BY THE ORGANIZATION

3. The subject and objective of the activities being implemented by the organization are to ensure scientific research, conservation, protection, registration, stocktaking / inventory, monitoring and management of chronology of natural history of the natural ecosystems, landscape and biological diversity, natural heritage of the reserve and sanctuaries.

- a) Prevent the anthropogenic activities that disrupt / affect the balance of natural ecosystem of the reserve and sanctuaries and implement restoration activities for damaged ecosystems according to the cases determined by RA law “on Specially protected nature areas”.
- b) Organize scientific recognition tourism (including ecotourism).
- c) Fire safety measures are implemented according to the determined regulation
- d) Implement measures on public ecological education within the jurisdictions
- e) Plan and organize scientific research activities
- f) Join the international environmental organizations; participate in the international environmental projects
- g) Prepare and publish scientific and scientific recognition literature and informative materials

4. The organization carries out the following types of entrepreneurial activities

- a) Arrange scientific recognition tourism, including the ecotourism
- b) Prepare and publish scientific and scientific recognition literature and informative materials
- c) Ensure preconditions for public ecological education
- d) Provide services related to ecological and scientific recognition tourism
- e) Arrange advertising related to the reserve and sanctuaries
- f) Provide information and advice
- g) Arrange reproduction of valuable, rare and endangered flora and fauna species specific to the region in the safety zone of the reserve.

III. MANAGEMENT OF THE ORGANIZATION

5. The founder, its authorized state body, collegial management body (henceforth the board) and the executive body (director) implement the management of the organization.

6. The founder of the organization has the right to finally solve any issue related to its activity and management, except the cases envisaged by law.
7. The authorizations of the founder are determined by RA law "on State Non-Commercial Organizations".
8. The Board consists of five members; one of them should be selected by the General Assembly of the Organization. The composition of the Board is approved by the authorized state body.
9. The Board carries out its activities through sessions that are invited / organized at least once every two months by the head of the Board upon his own initiative, as well as upon the request expressed by the authorized state body, executive body or one-third of the members of the board.
10. The director has the right to attend the meetings of the board with the right to an advisory vote.
11. The director manages the current activities of the organization. The director is appointed and dismissed by the authorized state body.
12. The Director has to reject the decisions, orders, and commands, instructions made by the founder, authorized state body and board that contradict the RA legislation, and wouldn't be liable for their failure.

V. SCIENTIFIC RESEARCH ACTIVITIES BEING IMPLEMENTED BY THE ORGANIZATION

13. The scientific researches carried out by the organization address the study of ecosystems of the reserve and sanctuaries, monitoring of the processes and phenomena, their assessment and prediction, maintenance of the gene fund of flora and fauna species, assessment and prediction of the ecological situation.
14. Scientific research activities are arranged by the scientific department of the organization. The head of the department is also the deputy director.
15. The scientific department of the organization:
 - a) Organize and implement the study of the ecosystem and their components of the reserve and sanctuaries
 - b) Organize and implement environmental monitoring in the territories of the reserve and sanctuaries
 - c) Prepare and publish scientific research, scientific recognition materials.
 - d) Arrange experimental and other scientific activities for the reproduction of rare and endangered species of wild animals / Flora and plants / Fauna.

Annex N of RA Government Decree 2002 May 30 N 925-Ն

R E G U L A T I O N O F «K H O R V I R A P» S T A T E S A N C T U A R Y

1. "Khor Virap" State Sanctuary (henceforth referred to as Sanctuary) was created on the wetland of 50.28 hectares that is located within the administrative boundaries of Poqr Vedi rural community of Ararat region / marz of the Republic of Armenia, near Khor Virap church complex on the left bank of the Araks river and on the right side of the ancient capital of Armenia - Artashat.
2. The main objective of the creation of the sanctuary is to conserve the ecosystem of the wetland of international importance, flora and fauna, especially waterfowl species and their habitats, rare plants and their growing areas, as well as to ensure their natural development, reproduction and sustainable use.
3. Special protection objects of the sanctuary are the unique fauna and water-wetland flora of wetland

ecosystem near the Araks river.

4. The 100 metre wide peripheral area is determined as a protection/safety zone to limit or prohibit the economic activities that have negative impacts on the sanctuary.

II. THE MAIN ISSUES OF THE SANCTUARY

5. The main issues of the sanctuary are the following:

- a) Ensure and maintain / conserve the natural development of landscape and biological diversity of “Khor Virap” sanctuary.
- b) Conserve the ecological balance of wetland ecosystem, including the water regime
- c) Conserve the habitats of wild species of plants and animals
- d) Conserve and reproduce the flora and fauna species that are threatened, endangered, vulnerable, listed under critical category and registered in the Red Data Books of Armenia
- e) 5) Create preconditions for scientific recognition and ecological tourism

III. THE REGIME OF THE SANCTUARY

6. The following is banned in the sanctuary:

- a) Any activity that violates the natural development of wetland, as well as threatens the habitat security.
- b) Any activity, including the exploitation of sediments of underground water and water pool, that violates the hydrological regime of the territory
- c) Economic and residential construction and exploitation, construction of roads, pipelines, electrical transmission lines and other communications (Except the ones that are needed for the operation of the sanctuary).
- d) Exploitation of mineral mining, distribution of the facilities that process the minerals and violation of the land and plant cover.
- e) Use of pesticides
- f) Produce, use and store radioactive materials and wastes, as well as dangerous or other poisonous/toxic materials that threaten human health and environment
- g) Use of the technologies that the sewage and emissions of which exceed the limits permitted by the legislation of the Republic of Armenia and are environmentally harmful.
- h) Soil tillage of the territory

7. The following is allowed to implement in the territory of the sanctuary according to the regulation determined by RA law

- a) Measures to prevent the processes and phenomena that violate the water-biological balance of wetland because of anthropogenic impacts
- b) Activities to eliminate communicable diseases, pests and infection centers that threaten human, animals and plants
- c) Ecological, scientific recognition trips and tourism
- d) Measures targeted to reproduce wild animals and plants typical to the area, including rare and endangered species
- e) Scientific research studies

8. Any activity that does not violate the hydrological regime of the sanctuary pool (decrease in pool water level, drying) is permitted in the protection/safety zone of the sanctuary

9. The authorized state body implements state supervision targeted to protect environmental and natural resources use regimes in the territory of the sanctuary according to the regulation determined by RA law «on environmental supervision».

10. The organizations and citizens that violate the environmental regimes and permissible ways to use natural resources are liable according to the regulation determined by the law.

**Annex N
of RA Government Decree
2002 May 30 N 925-Ն**

REGULATION OF «GORAVAN SANDS» STATE SANCTUARY

1. «Goravan sands" sanctuary (henceforth referred to as Sanctuary) occupies an area of 95.99 hectares, is located in the south-eastern part of Goravan rural community of Ararat marz/region of the Republic of Armenia, in the foothill of the Ararat valley, at 920-980 meters above sea level.
2. The main objective of the creation of the sanctuary is to conserve the unique desert ecosystem in the Trans-Caucasus, the integrity of flora and fauna, and ensure their reproduction and sustainable use.
3. Fauna typical to sandy desert and sand-loving/psamophil vegetation are specially protected objects in the sanctuary
4. The 100 metre wide peripheral area is determined as a protection/safety zone to limit or prohibit the economic activities that have negative impacts on the sanctuary.

II. THE MAIN ISSUES OF THE SANCTUARY

5. The main issues of the sanctuary are the following:
 - a) Ensure and maintain / conserve the natural development of landscape and biological diversity of the sanctuary
 - b) Conserve the habitats of wild species of plants and animals
 - c) Conserve and reproduce the flora and fauna species that are threatened, endangered, vulnerable, listed under critical category and registered in the Red Data Books of Armenia.
 - d) Create preconditions for scientific recognition and ecological tourism

III. THE REGIME OF THE SANCTUARY

6. The following is banned in the sanctuary:
 - a) Any activity that violates the process of natural development of natural complexes of the sanctuary, as well as threatens the habitat security
 - b) Any activity that violates the hydrological regime of the territory
 - c) Economic and residential construction and exploitation, construction of roads, pipelines, electrical transmission lines and other communications (Except the ones that are needed for the operation of the sanctuary).
 - d) Exploitation of mineral mining, distribution of the facilities that process the minerals and violation of the land and plant cover.
 - e) Use of pesticides and chemical fertilizers
 - f) Exploitation of mineral mining, violation of soil and vegetative cover
 - g) Produce, use and store radioactive materials and wastes, as well as dangerous or other poisonous/toxic materials that threaten human health and environment
 - h) Use of the technologies that the sewage and emissions of which exceed the limits permitted by the legislation of the Republic of Armenia and are environmentally harmful.
 - i) Soil tillage of the territory
7. The following is allowed to implement in the territory of the sanctuary according to the regulation determined by RA law
 - a) Measures to prevent the processes and phenomena that violate the natural balance of ecosystem because of anthropogenic impacts
 - b) Activities to eliminate communicable diseases, pests and infection centers that threaten human, animals and plants

- c) Ecological, scientific recognition trips and tourism
- d) Measures targeted to reproduce rare and endangered animal and plant species typical to the ecosystem
- e) Scientific research studies

8. Any activity that doesn't have negative impact directly or indirectly on fauna typical to sandy desert and sand-loving/psamophil vegetation, particularly dust emissions and toxic substances that exceed the permissible norms determined by the legislation of the Republic of Armenia, as well as activity that violates arid microclimate conditions (reservoir construction) is permissible in the protection/safety zone of the sanctuary.