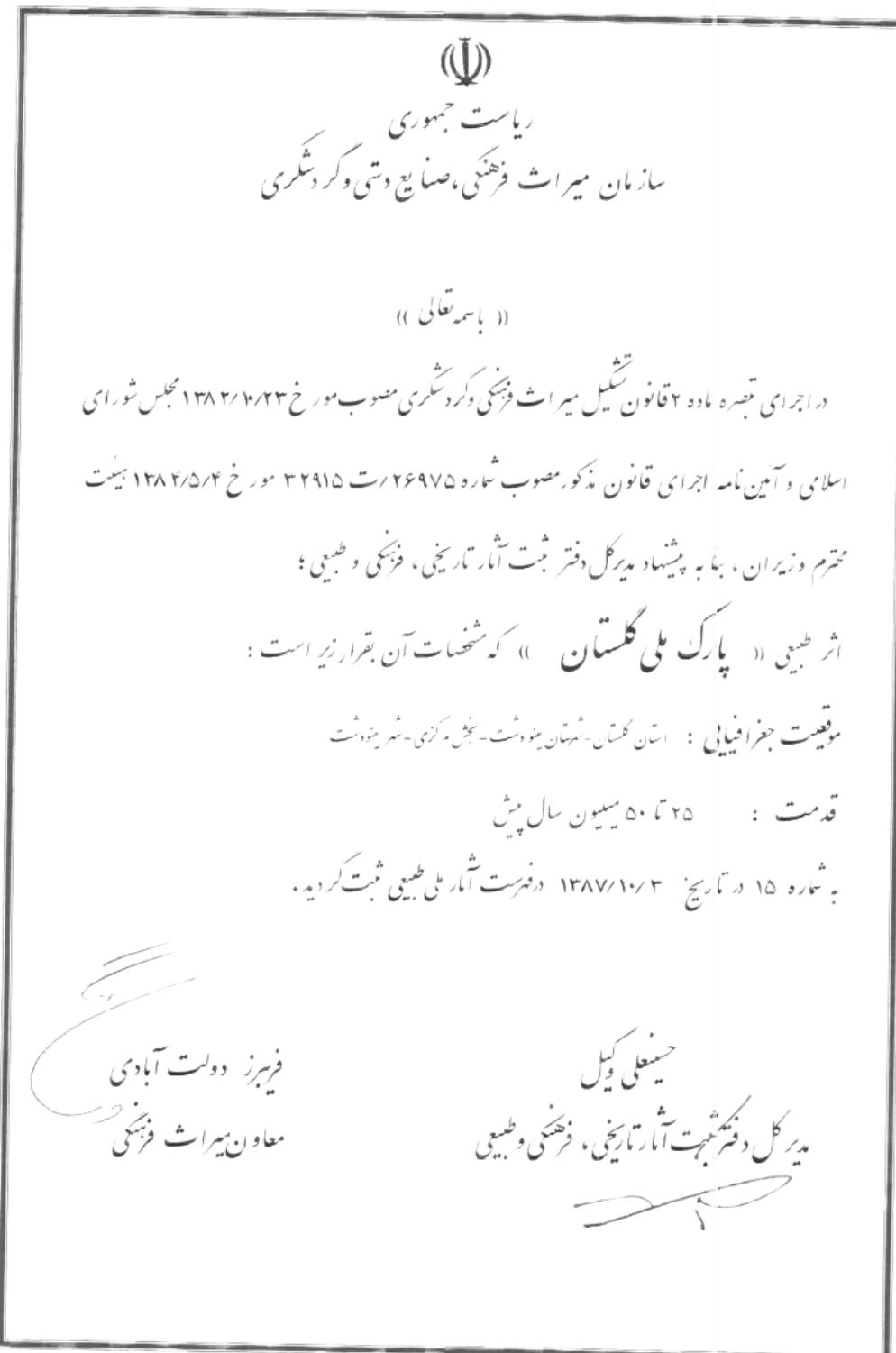


Appendices



آگهی رسمی

صوبه شماره ۹۷ مورخ ۱۳۹۷/۰۶/۲۱ شوراهايی حفاظت
محیط زیست

پاتوقه به هند الف ماده ۴ قانون حفاظت و بهساري محیط زیست پسن لغو صوبه شماره ۶۹ مورخ ۱۳۵۵/۰۶/۰۶ شوراهايی حفاظت
حفاظت محیط زیست منطقه گلستان والخ در استانهای سازمان
سازمان‌چهارساخ به دو سطه باهاوی و مشخصات و محدودهای
ذيل تمهين و اعلام میکردد:
الف: هارکه ملی گلستان.
هارکه ملی گلستان محدود است به:
بسالا

از تلالی رو دخانه زاو با جاده کمریندی بطرف شرق در استاد
دو سریشنه زاو و جاده کمریندی پس از گنشن از جنکها
مراوح کویر و تلالی جاده لهندر با این جاده در استاد جاده
کمریندی تاتلایی این جاده با جاده سولکرد، لهندر و سپس بطرف
شرق در استاد جاده سولکرد متنه پاسکه سولکرد.

فراز:

از سولکرد بطرف شرق در استاد جاده کمریندی پس از
گنشن از تقطیع جاده به کم بطرف جنوب شرقی در استاد جاده
ملکین و به کم پس از گنشن از گردنه پامته کلن تاتلایی این
پلهه با جاده اسلامه شهد در پرزا با پلو (اوپس خربلوری شدن
شرقی جاده و پاسکه پرزا با پلو جزو محدود هارکه ملی است).

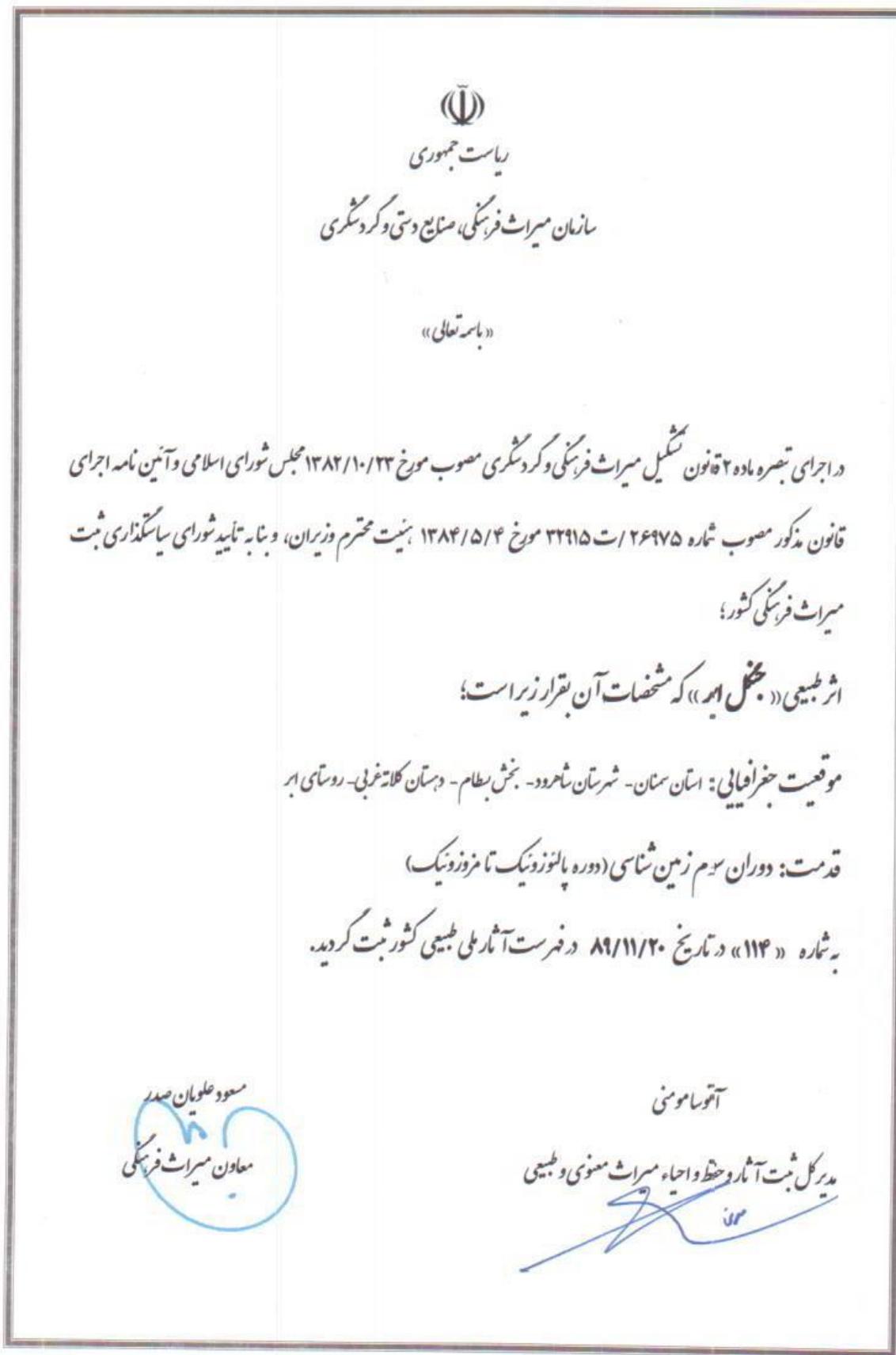
جهویا

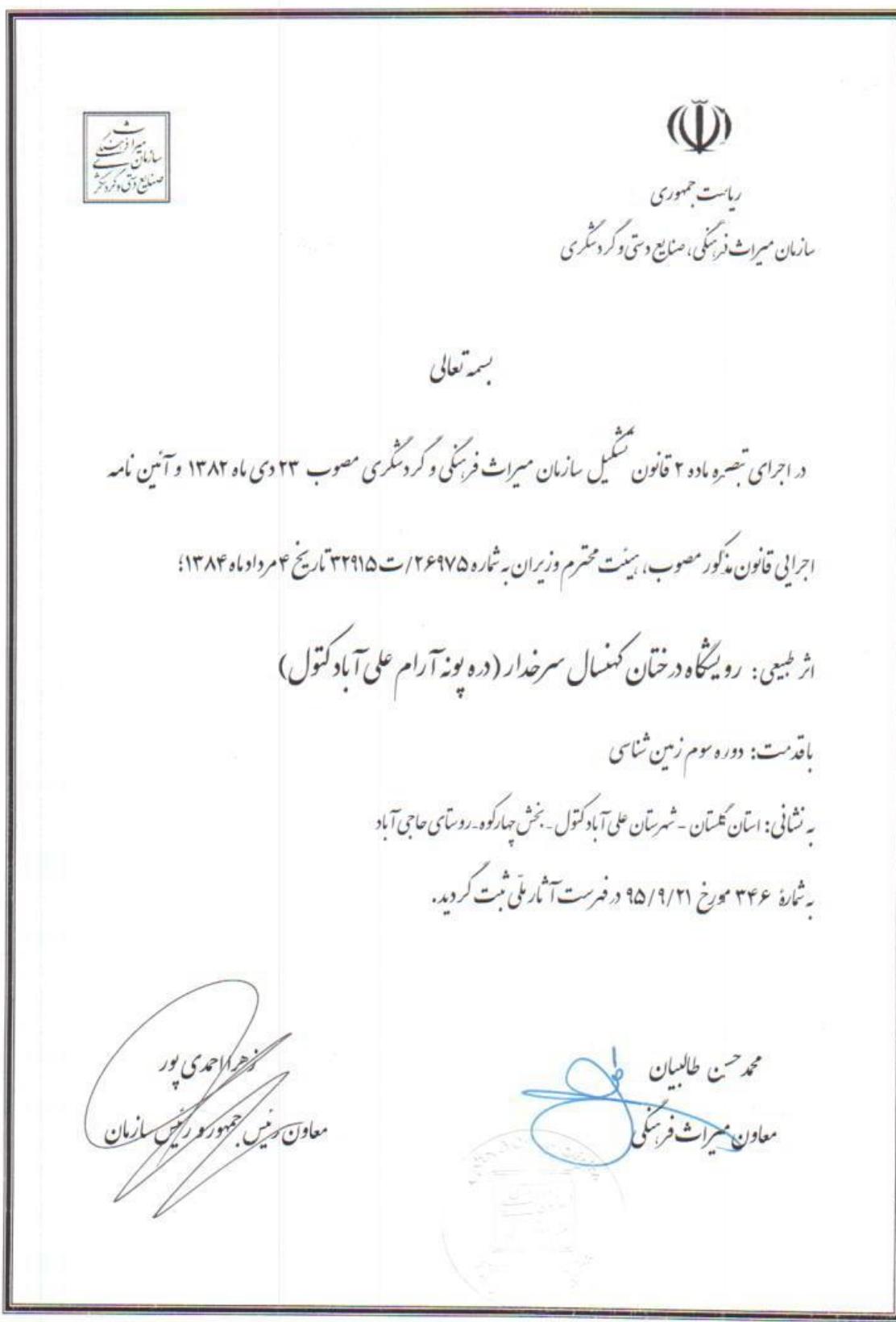
از تقطیع جاده به کم با جاده اسلامه در جنوب مرکز بازده
کنده کلن پرزا با پلو در استاد جاده اسلامه بطرف بحر تا دروازه
پشت و از این قسم بطرف جنوب در استاد جاده مائین و دشت
تا جاده کمریندی: هارکه و سپس بطرف غرب در استاد
جاده کمریندی در دره فرزلمه در استاد این دوه تا غرب در ازی
متحفه بد چشم دوازی و در استاد جاده کمریندی فردوده ازی
تاتلایی دوه لوشولی (لوش) و از این قسم در استاد خطیم
ملوپوش (که بسروت جاده کمریندی لحله میکردد) پنونی
فساله هری، تا چشم جانور از این چشم در استاد دوه فرقله ده
ملوپوش این دوه با دوه ننک و ستم در رو دخانه آبشار (آبشار نهاده
کمسکو)

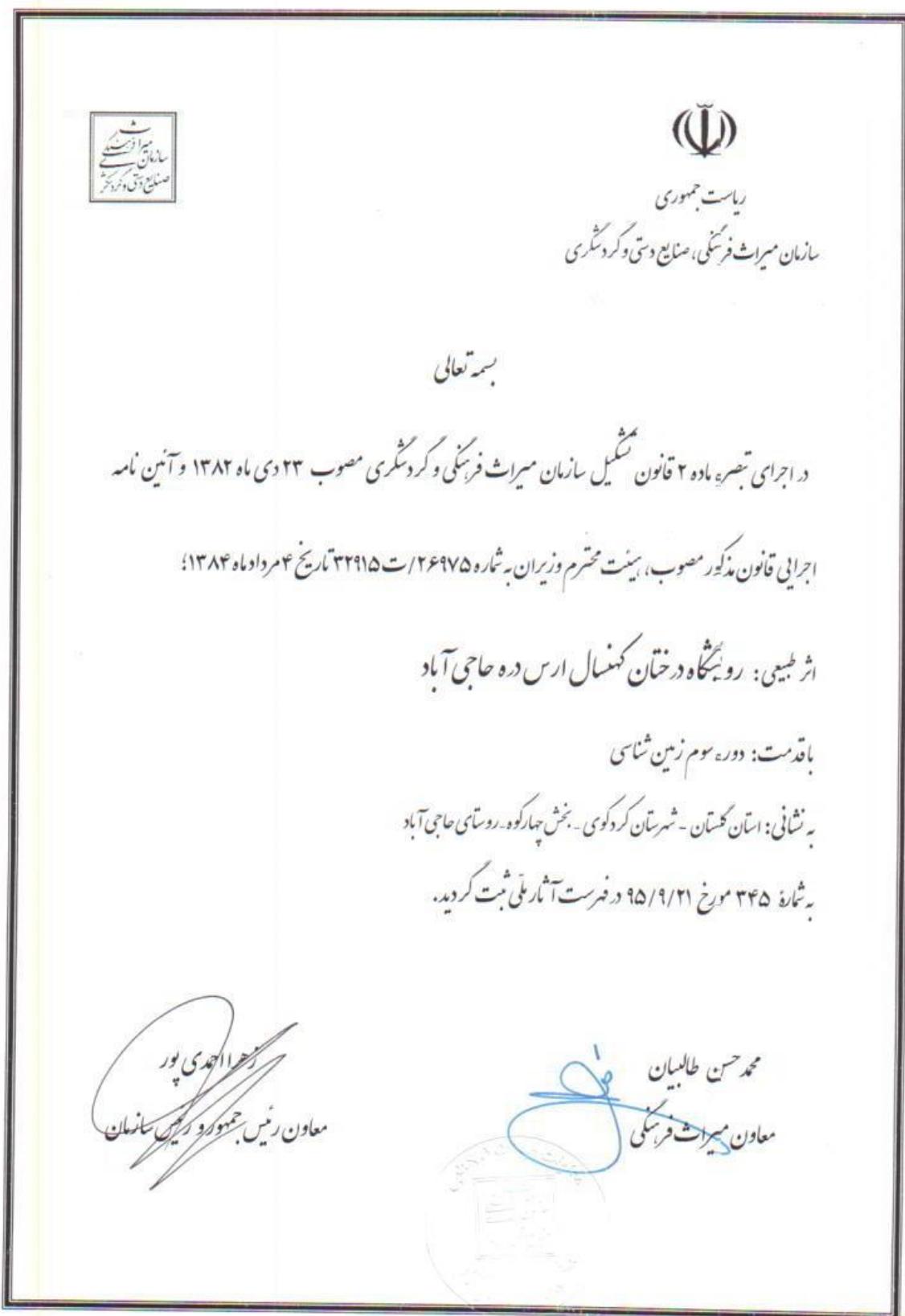
غرب

از تلالی دوده فرزلمه و ننک و ستم بطرف شمال در استاد
رو دخانه آب پریان پس از گنشن از دوه سه راه «دوه فریلیان»
دوه قبرستان تا اتصال این رو دخانه با رو دخانه دوه و سپس در
استاد رو دخانه دوه بطرف غرب پس از گنشن از حد هری
پلیسات بجمع ساخته سازیان در تکره تا دوه شمال و از
این قسم بطرف شمال در استاد دوه شمال پس از گنشن از
بللای دوه گرمهون تا اتمال این دوه با جاده کمریندی در راسته
ماکرو بوتکه و از این قسم در استاد جاده کمریندی بطرف
شمال پس از گنشن از جنوب و غرب تله پله کوه و تونل دوه
بیکه آغن دوه و جنوب تر به زاو بالا تاتلایی این جاده کمریندی
با رو دخانه زاو.

The certificates of protected area designation of Golestan







Appendix 1: The certificates of protected area designation of components at national level:

40S "321353 4065992" → 40 S "320261 4066083"
 غرباً: از نقطه‌ای به مختصات "320261 4066083" 40 S در
 امتداد خط الراس ارتفاعات در امتداد مسیری به مختصات ذیل
 40 S "318621 4066215" → 40 S "317721
 4067187" → 40 S "316889 4067763" → 40 S "316015 4068353" → 40S "316015 4068353"
 پس از گذشتن از کوه سورمه از آنجا به سمت شمال غربی در
 امتداد رودبار افرا تخته که باستی ار نقاط ذیل عبور نماید
 4071350" → 40S "316963
 4070210" → 40S "316795 40S "316239
 4072792" "319009
 تا نقطه‌ای به مختصات "321366 4073574" 40S "3321366
 سازمان حفاظت محیط زیست ۱۹۱۷۷۵۸۵

4072381" → 40 S 40 S "324180 4072333" →
 4073021" → 40 S "322820 "322237 "324324
 4072903" → 40 S "324153 4073397"

از آخرین نقطه خط فرضی فوق که به دره الوجال ختم می‌شود
 سپس در امتداد خط الراس ارتفاعات شمالی دره الوجال (پانگ آرام)
 براساس خط الراسی به مختصات زیر
 4073762" → 40 S "325375 4073789" → 40 S
 40 S "324153 4073397" → 40 S "325275 40 S
 4072307" → 40 S "328032 4072275" → 4072889"
 → 40 S "327561 "326540 4074247" "328926
 4073251" → 40 S "329402

از آخرین نقطه خط الراسی فوق که به رودخانه پون آرام ختم
 می‌شود سپس در امتداد رودخانه پون آرام به سمت شرق تا نقطه‌ای به
 مختصات

4074787" 40 S "334840

شرقاً: از نقطه‌ای بر روی رودخانه پون آرام به مختصات
 40 S "334840 4074787" در امتداد مسیل موجود به سمت
 جنوب تا محل استقرار دکل مخابراتی به مختصات "4072203"

40 S "334702 سپس در امتداد جاده خاکی به سمت جنوب تا
 نقطه‌ای به مختصات "333 163 4070455" 40 S "333 163 4070455" 40 S به
 جنوباً: از نقطه به مختصات "333 163 4070455" 40 S به
 سمت غرب در جهت اتصال خط الراس ارتفاعات موجود و براساس خط
 پیمایشی که به شرح ذیل ایجاد می‌گردد
 → 40 S "331985 4069979" → 40 S "331963 40 S

اگهی اصلاحی

شماره ۱۳۹۵/۰۵/۱۰ ۱۳۹۵۳۰۴۰۰۹۰۱۰۵۰۲۱۷
 آگهی اصلاحی شرکت تجارت پویا شیوه
 سهامی خاص به شماره ثبت ۳۹۳۱۴۵
 ۱۰۳۲۰۴۳۷۰۰۸ وشناسه ملی
 بیرو آگهی بشماره مکانیزه ۱۳۹۴۳۰۴۰۰۹۰۱۰۳۷۵۷۴ مورخ
 ۹۴/۴/۱۶ مربوط به صورت جلسه مجمع عمومی فوق العاده

The certificates of protected area designation of Abr

محفویه شماره ۱۰ سورخ . ۵۶۹۰۵ شورا بهمال

حفاظت محيط زيت

باتوجه به بند «ب» ماده ۳ قانون شکار و مسد موضع
محدود پيشا و مسعيه پيای سكانی و بند انت ماده ۳ قانون حفاظت
و بهسازی محیط زیست منطقه جنگلی جهان نما واقع در انتها
جنوبی گرگان با حدود و مشخصات دین حفاظت شده اعلام میگردد
منطقه حفاظت شده جنگلی جهان نما واقع در گرگان محدود
است بعدود زیر:

شوفا :

از شرده فرقق بطرف جنوب در استداد جاده سالرو
چهارباغ و دره وارا الى قریه چهارباغ و از قریه چهارباغ در استداد
رودخانه چهارباغ تا اتصال این رودخانه با رودخانه سوت رو دبار
جنوب:

از اتصال دو رودخانه چهارباغ و سوت رو دبار بطرف غرب
در استداد رودخانه چهارباغ پس از آذشن از تالیع رودخانه
شاه کوه (دره چمن) با این رودخانه در استداد رودخانه لتبک
متنه به رودخانه نکا، (رودخانه رادکان) و در استداد همین
رودخانه تابهه سفری

خریا :

از تالیع دره سفری با رودخانه نکا در استداد دره سفری
بطرف شمال تا اتصال دره سرتیک با شاهه سفری و آنگاه در استداد
درو سرتیک تا گدارفی که بن واژ گدارفی که بن در استداد
سالرو متنه به قریه درازنوالی قریه دراز نو و از قریه دراز نو در
استداد جاده مال رو درازنو بالا جاده کا بر سند بمحدوده جنوبی طرح
جنگلداری کرد کوی

شالا :

از تالیع جاده سالرو دراز نو بالا جاده با محدوده جنوبی طرح
جنگلداری کرد کوی بطرف شرق در استداد حد جنوبی طرحیای
کرد کوی و شموشک تا رودخانه جهان نما و پس در استداد
رودخانه جهان نما تا تالیع این رودخانه با رودخانه شصت کلا
و از این تالیع بطرف جنوب در استداد رودخانه شصت کلا تا
حد جنوبی جنگمهای واندار شده به آمویشهه عالی جنگل و مرتع
و مؤسسه تحفیمات جنگل و مرتع و پس در استداد حد جنوبی
شصت جنگلهای تا بر سند بعد جنوبی طرح بزرگ حوزه جنگلهای
شل آباد (سری شل ۷ و ۸) زیارت کا بر سند یگردن فوای
(ایندای حد شرقی)

حدود منطقه حفاظت شده جنگلی جهان نما که تنهه قن
پتصویب رسیده است توسط ستاد حفاظت محیط زیست
اعتزست هنری خواهد شد.

سازمان حفاظت محیط زیست

۵۶۹۰۵

The certificates of protected area designation of Jahan Nama

شماره ۱۲۷۴۵
۵۳۱۱۱۴
تصویب شماره ۵۲ مورخ ۰۹ مرداد ۱۳۹۲ شورای عالی حفاظت محیط زیست
باتوجه به بند ((ب)) ماده ۳ قانون شکار و صید موضوع
حدوده ها و منواعیت های مکانی و بند الف ماده ۳ قانون حفاظت
و بهسازی محیط زیست منطقه جنگلی دو دانگه و چهار دانگه
واقع در استان سازندran با حدود مشخصات ذیل حفاظت شده
اعلام میگردد .
منطقه حفاظت شد دو دانگه و چهار دانگه واقع در استان
سازندran محدود است به حدود زیر :

غرباً :
از تقاطع جاده مال رو و میرزا ابوترابی با رو دخانه سفید رود
بطرف جنوب در امتداد این جاده پس از گذشتن از جنگلهای
هلي شک - گورستان گچال کوت تا اتصال آن با حد شمالی منطقه
حفاظت شده پرور

جنوباً :
از غرب بشرق در امتداد حد شمالی منطقه حفاظت شده پرور
پس از گذشتن از خط الراس قلل تبله بن - چهارنو - واوسرا تا
قله سرم

شرقاً :
از قله سرم بطرف شمال در امتداد رو دخانه واوسرا پس از
گذشتن از قریه واوسرا تا قریه تبله بن

شمالاً :
از قریه تبله بن در امتداد رو دخانه گل خارون و ودبیار پس از
گذشتن از قراءه قلعه پائین ده - تبلک - گل خارون - رو دبیار و جنگل
خشک دره و قریه میلا دشت تا اتصال این رو دخانه به رو دخانه
سفید رود و از این قسمت بطرف غرب در امتداد رو دخانه
سفید رود پس از گذشتن از جنوب قریه سعید آباد تا محل تقاطع
جاده مال رو و میرزا ابوترابی با این رو دخانه
حدود منطقه حفاظت شده دو دانگه و چهار دانگه که نتشه
آن بصویب رسیده است، توسط سازمان محیط زیست علامت
گذاری خواهد شد .

سازمان حفاظت محیط زیست

۷۹۳۹۵

تصویب شماره ۳۶ مورخ ۱۰ مرداد ۱۳۹۲ شورای عالی حفاظت محیط زیست
با استاد بند الف ساده ۳ قانون حفاظت ویژگی محیط زیست
(صوب خرد اسلام ۵۳۳) تفسیراتی که دو عنوان پوشی از
مناطق چهارگانه تحت اختیار سازمان حفاظت محیط زیست
(پارکهای ملی - آثار طبیعی ملی - پناهگاههای حیات وحش -
مناطق حفاظت شده) با توجه به طبقه بندی جدید ملحق سورد بحث
بمل تحلیلت بشرح ذیل اعلام میگردد :

ب - پناهگاههای حیات وحش :

رسمی شماره ۸۸۰۶ مورخ ۱۶ دی ۱۳۵۴ .
۱۸ - پناهگاه حیات وحش دو دانگه واقع در استان سازندran
(منطقه حفاظت شده دو دانگه و چهار دانگه سابق ، موضوع تصویب
شماره ۵۲ مورخ ۰۹ مرداد ۱۳۵۲ شورای عالی حفاظت محیط زیست
مندرج در وزیرانه رسمی شماره ۸۷۶۴ مورخ ۱۷ دی ۱۳۵۲)

The certificates of protected area designation of Boola

اکتفی، سمه، مخصوصه شماره ۲۱۴ مورخ ۵/۷/۱۳۸۰

به استناد بهند الف ماده ۳ قانون حفاظت و بهسازی محیط زیست منطقه لی کوه، سیاه بیشه (هراز) واقع در استان فارسندran، با حدود و مشخصات زیر منطقه حفاظت شده جنگلی تعیین و اعلام می گردد.

شمال: از تقاطع یال شمالی کوه پلی با رودخانه نور رود در امتداد همین رودخانه به سمت شرق تا تلاقی آن با یال شرفی دره نمذارنویه سمت همین یال تا قله شتور و از این قله به سمت شرق در امتداد یال تا قله کوه آخری در امتداد یال شرفی تا تلاقی این یال با خط تراز ۱۷۰۰ متری و از خط تراز ۱۷۰۰ متری به سمت شمال شرق در امتداد یال تا تقاطع یال با تلاقی رودخانه نور رود و هراز و در امتداد هواز رود به سمت شمال شرق تا تقاطع رودخانه هراز با یال رود کر و از یال زرد کر به شرق تا تقاطع یال زرد کر با یال المستان به ارتفاع ۲۰۲۰ متر.

شرق: از تقاطع یال المستان با زرد کر در امتداد جنوب تا امامزاد قاسم و از امامزاده قاسم در امتداد یال اصلی در راستای جنوب شرقی بعداز عبور از قلل ۲۶۰۷ و ۲۹۱۲ متری الی قله ۳۰۱۶ متری بهراک.

جنوباً: از قله بهراک با ارتفاع ۳۰۱۶ متری در امتداد خط الراس به غرب در امتداد یال اصلی بعداز عبور از قلل ۲۴۵۴ و ۲۴۷۱ متری کوهپیر به قله ۲۱۳۱ متری در امتداد یال تا قله ۲۰۰۶ متری در امتداد یال جنوبی تا تقاطع دو رودخانه شیرکلا رود و هراز از تقاطع هراز ما یال تونل شماره ۶ در امتداد دویال به خط میزان محنی ۱۷۰۰ متری از خط تراز ۱۷۰۰ متری بعداز عبور از شمال روستای سوآ الی تلاقی آن با یال غربی دره نهر (شرق روستای امره).

غربی: از محل تلاقی منحني میزان ۱۷۰۰ متری یال غربی دره نیر به سمت شمال در امتداد یال اصلی تا قله کوه پشه و یاله بعداز عبور از قلل ۳۳۵۵ متری و ۳۳۷۵ متری در امتداد یال الی قله کوه پلی و از این قله در امتداد یال شمالی کوه پلی تا محل تلاقی آن یال با رودخانه نور رود.

سامان حفاظت محیط زیست

۵۹۴۲

The certificates of protected area designation of Alimestan

۱۳۸۰/۱۰/۲

شماره: ۱۲-۳۸۴۳۵

آگهی رسمی مسوبه شماره ۲۱۵ مورخ ۱۳۸۰/۷/۲۵

شورایعالی حفاظت محیط زیست

به استناد بند الف ماده ۳ قانون حفاظت و بهسازی محیط زیست منطقه «شاهنشهر ولاویج (واز)» واقع در استان «مازندران» با حدود و مشخصات زیر منطقه حفاظت شده جنگلی تعیین و اعلام می‌گردد.

شمالاً: از قله ۲۲۵۰ متری در شرق مشکاخانی در امتداد یال به سمت جاده و در ادامه به قله ۱۹۱۵ متری و سپس در امتداد جاده تا خلیج غربی روستای واژ یابین.

شرقاً: از روستای واژ یابین در امتداد رودخانه گزناصره تا خلیج شمالی روستای گزناصره.

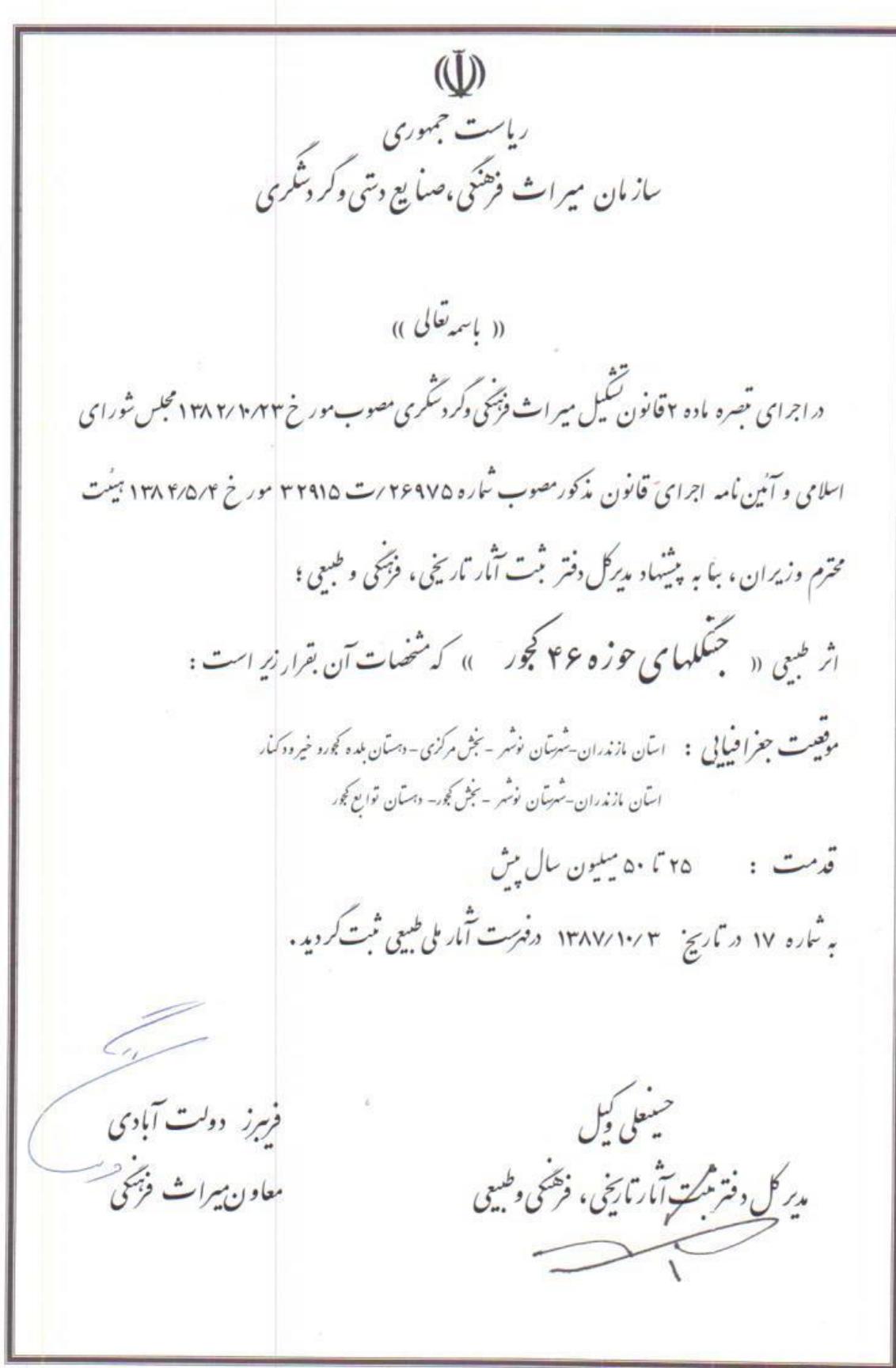
جنوباً: از خلیج شمالی گزناصره، توجمه در امتداد جاده مالرو بست قله ارتفاع ۳۰۵۲ متر و سپس قله ۳۱۲۵ متری و در امتداد یال تا رودخانه آب دوله سرا واژ، در امتداد یال از جنوب روستای رودبارگ و در ادامه در امتداد یال تا قله ۳۵۰۰ متری.

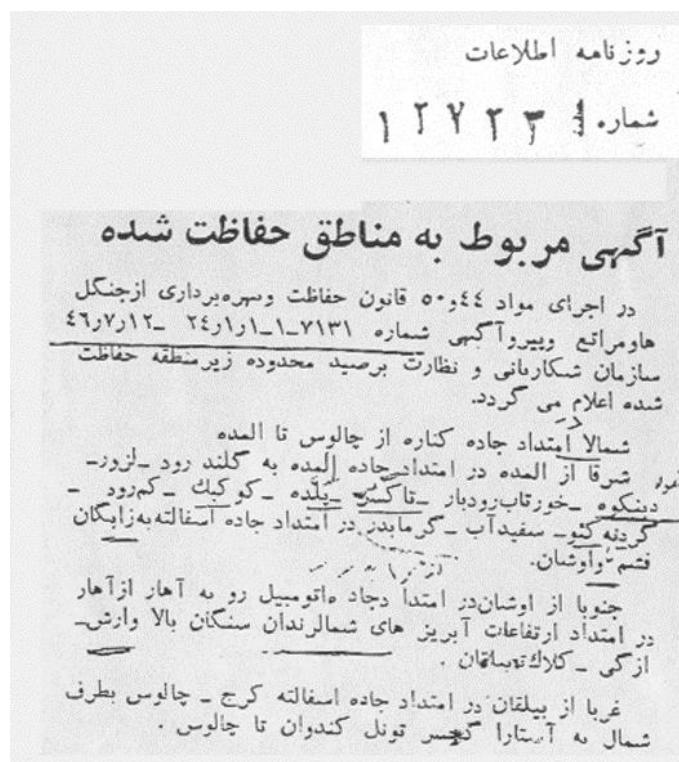
غرباً: از قله ۲۳۵۰ متری در امتداد یال باعbor از قله ۳۲۸۹.

۳۲۰۶ ۳۰۴۵ (کوه گرگ) ۲۹۰۰ متری و در ادامه از خلیج ... قی

روت را زیردا به کمک آنله ۲۲۵ متری

The certificates of protected area designation of Vaz





The certificates of protected area designation of Kojoor

۱۳۸۰/۱۰/۱۲ ۱۲-۳۸۴۳۵۰
آگهی دسمی مصوبه شماره ۲۰۹ مورخ ۲۰/۷/۲۵
شورای عالی حفاظت محیط زیست
به استناد بند الف ساده ۳ قانون حفاظت و بهسازی محیط
زیست مطیقه «جهارساغ»، واقع در استان «مارسدن»؛ با حدود و
مشخصات زیر منطقه حفاظت شده جنگلی تعیین و اعلام می‌گردد.
شمالاً: روتای دلیر در امتداد جاده مالو بست شمال
غربی: بدار عبور از دلیر رود (دلیرکوه) بست شرق در امتداد همین
جاده مالو الى روتای ناتر و از این روتای در امتداد رودخانه مکارود
(لیل رود) بست شرق بدار گشتر از روتای بیجه فتو و جنوب
فشنکو و کش دره تالاقی این رودخانه مارودخانه چالوس.
شرق: از محل تلاقی رودخانه مکارود با رودخانه چالوس در
امتداد رودخانه چالوس بست جنوب تا محل تلاقی این رودخانه با
رود آمل در محل گرم روودبار.
جنوبی از محل تلاقی رودخانه چالوس با رود آمل در امتداد
رود آمل بست جنوب غربی بهدار عبور از آمل تا سرچشمه رود
الاسفل و از این محل بست غرب الى قله کوه اندرس با ارتفاع
۳۵۰ متر و از لین قله بخط مستقیم و مفروض در همان جهت الى قله
کوه مازو با ارتفاع ۲۸۱ متر و از این قله بست شمال غرب به قله
کوه چارکوه با ارتفاع ۳۱۰ متر و از این قله بست غرب الى قله
کوه جرجخ با ارتفاع ۲۹۱۲ متر.
غرب: از قله کوه جرجخ بست شمال بخط مستقیم مفروض تا
روستای انگتوزان و از این روتای قله کوه اندرس در امتداد جاده
چهار رود الى روتای گیجان و از این روتای در امتداد جاده مالو
بست شمال غربی بهدار عبور از گردنه و آغل داده الى سرخ دره
(روه اسپرو) بین در امتداد جاده مالو متنهی به دلیر الى روتای

سازمان حفاظت محیط زیست

The certificates of protected area designation of Chahar-Bagh

آگهی رسمی مصوبه شماره ۱۱۶ مورخ ۶۶۳۲

شورایعالی حفاظت محیط زیست

با توجه به بند الف ماده ۳ قانون حفاظت و بهسازی محیط زیست اثر طبیعی ملی خشکه‌داران (موضوع مصوبه شماره ۶۳ شورایعالی حفاظت محیط‌زیست) واقع در استان مازندران شهرستان نشتارود تنکابن ضمن لغو مصوبه قبلی حد و حدود جدید منطقه بشرح ذیل تعیین و اعلام می‌گردد .

شمالا :

از ابتدای اراضی امیرفرهنگ بطرف غرب در امتداد حریم جنوبی، حد اسفالته تنکابن تا انتهای حنگلهای خشکه‌داران متصل به رودهخانه امیررود (۱۰۰ متر)

غربا :

از رودهخانه امیررود بطرف جنوب در امتداد رودهخانه فوق تا انتهای حنگلهای خشکه‌داران متصل بخط انتقال نیرو و اراضی، زراعی حسن غلامی، نشتارودی ۱ تبسیما برورش (۲۷۰۰ متر)
جنوبا :

از تلاقی رودهخانه امیررود با خط انتقال نیرو بطرف شرق در امتداد حد جنوبی حنگلهای خشکه‌داران و حد شمالی اراضی زراعی حسن غلامی نشتارودی تا تلاقی با اراضی زراعی سرهنگ ولی‌بور (۱۰۰۰ متر)

شرقا :

بطرف شمال پس از گذشت از حد غربی اراضی زراعی سرهنگ ولی‌بور - حاجی دهمت موسم پستانه - مرادی و امیر فرنگ متصل بجاده اسفالته تنکابن حالوس این محدوده توسط سازمان حفاظت محیط‌زیست شده است .

سازمان حفاظت محیط زیست

The certificates of protected area designation of Khoshk-e-Daran

۱۳۸۰/۱/۲۷

شماره ۱۲-۲۰۹۴

اگهی رسنی مصوبه شماره ۱۷۶ مورخ ۱۳۷۸/۱/۱۵

شورای عالی حفاظت محیط زیست

با توجه به بند الف ماده ۳ قانون حفاظت و بهسازی محیط زیست منطقه «سیاهroud روودبار» واقع در استان گلستان ساحدود و مشتملات زیر منطقه حفاظت شده جنگلی تعمیم و اعلام میگردد.
شمال: از سندس بسمت شرق به شیرکوه - بریدار و گرده نال
به پلنگ کول ناکوه در فک.

شرق: از کوه در فک بسمت جنوب شرقی به شهردان و از آنجا به استخر گول و از آنجا بسمت جنوب بعداز عبور از حس خانی و مرتع دورین ناگردنه چاک.

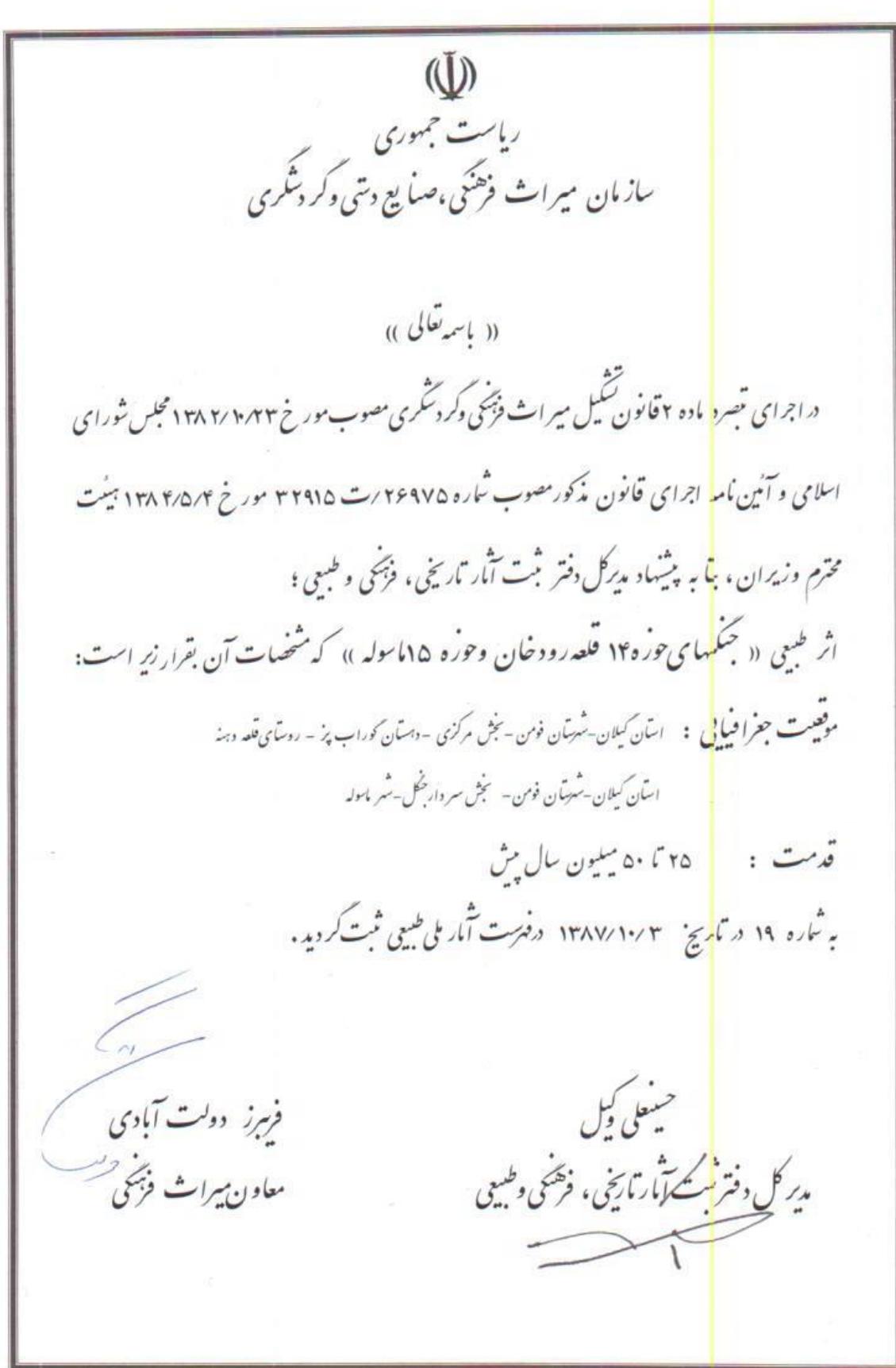
جنوب: از گردنه چاک بسمت غرب پس از عبور از جنوب دامنه و دو سالان به چاههان و از آنجا به کوه پیر خانی.

غرب: از کوه پیر خانی بسمت شمال غربی به سه کابل ناچره و از آنجا بسمت شمال نا سندس.

ساوهان حفاظت محیط زیست

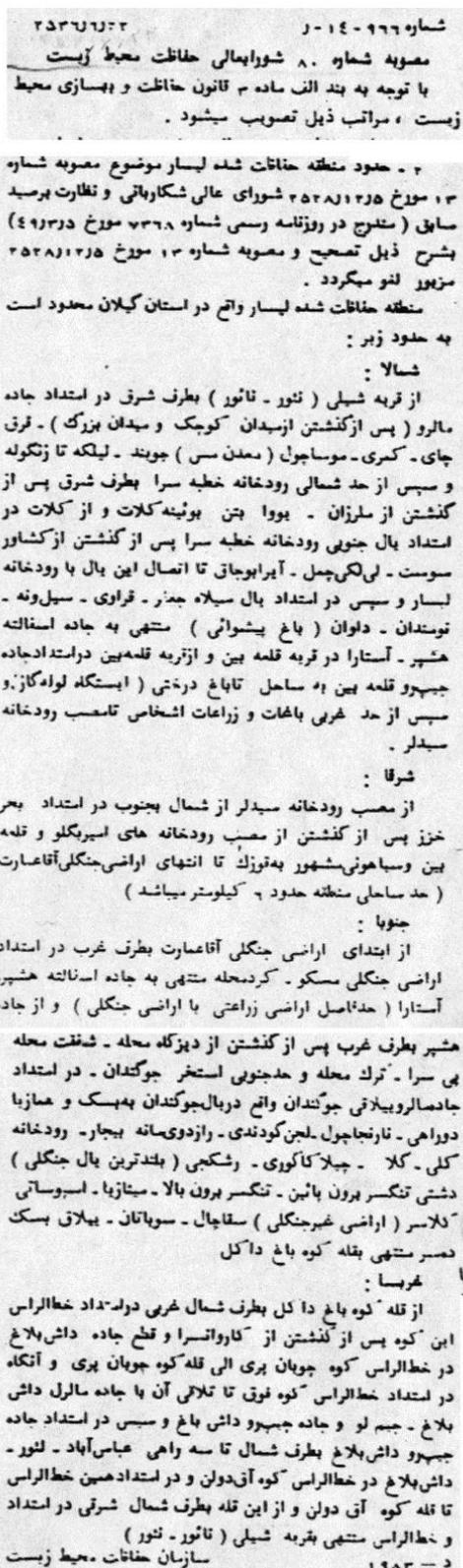
۲۶۱۵

The certificates of protected area designation of Siahroud-e-Roudbar





The certificates of protected area designation of Gasht Roudkhan



The certificates of protected area designation of Lisar

Appendix 2: Management plan and time table of the property

(Organization abbreviations: DoE: Department of Environment, FRWO: Forest, Range and Watershed Organization, MoJA: Ministry of Jahad Agriculture, MoI, Ministry of Interior, MoP: Ministry of Petroleum, NGO: None Governmental Organization, MPO: Management and Plane Organization, ICHHTO: Iranian Cultural Heritage Handicrafts and Tourism Organization).

Table 2-8: Management plan and time table of Golestan (North, South) (01, 02)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|--|---|-------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | |
| Buffer zone | Provide a precise map of the affected areas under the influence of hazards such as fire in buffer zone | * | | | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Property and Buffer zone | Monitoring the status of plant and animal species in the main zones and buffer zone | | * | * | DoE | |
| Upper and Surrounding area | Review and monitor the status of changes in the use of the outer and upstream sites | * | * | * | MoJA | DoE |
| Upper and Surrounding area | Coordination with related organizations for performing watershed operations in the upstream areas of the site | | * | * | MoJA | DoE, MoI |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE | |
| Property and Buffer zone, Surrounding area | More control of hunting and fishing | * | * | * | DoE | MoJA, MoI, NGOs, Local authorities |
| Property and Buffer zone, Surrounding area | Developing and applying more protection with the participation of local communities | * | * | * | DoE | NGOs, Local authorities |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|---|---|---|---|-----------|--------------------------------------|
| Buffer zone | Planning to exit current road to outside the site | | * | * | MRUD | MoI, MoJA, DoE |
| Property and Buffer zone | Providing of program and software rapid alarms system to control of fire | | * | * | DoE | MoI, MoJA |
| Property and Buffer zone | Development of remote control software such as cameras | | * | * | DoE | |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE | |
| Property and Buffer zone | Use of modern technologies to study the status of plant species | | | * | DoE | |
| Buffer zone | Equip and complete the Visitors Center on the site | | * | * | DoE | |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of aquatic and terrestrial species, fungi, algae and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Development of laboratory infrastructure in the region | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Study of quantitative and qualitative changes of surface water and underground resources of the region and the role of climate change in this area. | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE | Universities and research institutes |
| Buffer zone | Investigating the Role of Travelers and Tourists on the Environment of the Region | | * | * | DoE | |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-9: Management plan and time table of Abr (West, East) (03, 04):

| Area | Activity | Time table (year) | | | Responsible | Partners |
|---|--|-------------------|---------------|------------------|-------------|---------------------------------------|
| | | Short-term (0-2) | Midterm (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | protection of plant and animal species and biodiversity of the site | * | * | * | DoE, FRWO | - |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | MoJA | DoE |
| Property and Buffer zone | Monitoring the impacts of climatic change | - | * | * | DoE | MoJA, MoI, MoP |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | Monitoring of plant and animal species in the property and buffer zone | - | * | * | DOE, FRWO | - |
| Upper and Upper Territory of the Site | participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities, training program | * | * | * | DOE | MoJA, MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | - | * | * | DOE, FRWO | MoI, MPO |
| Property and Buffer zone and surrounding area | More hunting and fishing control | * | * | * | DOE | MoI, MoJA, NGOs and local authorities |
| Property and Buffer zone and surrounding area | Developing and deploying more protection with the participation of local communities | * | * | * | DOE | NGOs and local authorities |
| Property and Buffer zone | Development of remote control software such as cameras | - | * | * | DOE, FRWO | - |
| Property and Buffer zone | Use of satellite technology for observing wildlife | - | * | * | DOE, FRWO | - |
| Property and Buffer zone | Deployment of modern technologies to study the plant species status | - | | * | DOE, FRWO | - |
| Buffer zone | Establishment of environment office to control and monitor the area | - | * | * | DOE, FRWO | ICHHTO |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|--------------------------------------|
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | - | * | * | DOE, FRWO | ICHHTO |
| Property and Buffer zone | Further study and identification of wild and wildcat species, fungi, algae and ... | - | * | * | DOE, FRWO | Universities and research institutes |
| Property and Buffer zone | Research on plant species in the region | - | * | * | DOE, FRWO | Universities and research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | - | * | * | DOE, FRWO | Universities and research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | - | * | * | DOE, FRWO | Universities and research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | - | * | * | DOE, FRWO | Universities and research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | - | * | * | DOE, FRWO | Universities and research institutes |
| Buffer zone | Planning the exit of the livestock from the buffer zone | - | - | * | MoJA | DOE |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and privacy | - | * | * | DOE, FRWO | - |
| Buffer zone | Education about attr Managements (cultural-historical-natural and | * | - | - | DOE, FRWO | ICHHTO |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-10: Management plan and time table of Jahan Nama (05)

| Area | Activity | Time Table (year) | | | Responsible | Partners |
|--|---|----------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal cormorants and biodiversity of the site, especially key species | * | * | * | DoE, FRWO | - |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | MoJA | DoE |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA MoI, MoP |
| Property and Buffer zone | Monitoring and monitoring the status of plant and animal species | | * | * | DoE, FRWO | |
| Upper and Upper Territory of the Site | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE FRWO | MoI , MPO |
| Property and Buffer zone and Surrounding grounds | More hunting and fishing control | * | * | * | DoE | MoI, MoJA, NGOs, local authorities |
| Property and Buffer zone and Surrounding area | Developing and deploying more protection with the participation of local communities | * | * | * | DoE | NGOs , local authorities |
| Property and Buffer zone | Development of remote control software such as cameras | | * | * | DoE, FRWO | |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE, FRWO | |

Appendix 2: Management plan and time table of the property

| | | | | | |
|--------------------------|--|---|---|-----------|-----------------------------------|
| Property and Buffer zone | Deployment of modern technologies to study the status of plant species | | * | DoE, FRWO | |
| Buffer zone | Establishment of environment office to control and monitor the area | * | * | DoE, FRWO | ICHHT, MPO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | * | * | DoE, FRWO | ICHHTO |
| Property and Buffer zone | Further study and identification of wild and wildcat species, fungi, algae and ... | * | * | DoE, FRWO | Universities, research institutes |
| Property and Buffer zone | Research on plant species in the region | * | * | DoE, FRWO | Universities, research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | * | * | DoE, FRWO | Universities, research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | * | * | DoE, FRWO | Universities, research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | * | * | DoE, FRWO | Universities, research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | * | * | DoE, FRWO | Universities, Research institutes |
| Buffer zone | Planning the exit of the livestock from the buffer zone | | * | MoJA | DoE |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and privacy | * | * | DoE, FRWO | |
| Buffer zone | Education about attractions (cultural-historical-natural and | * | | DoE, FRWO | ICHHTO,NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | * | | DoE, FRWO | |

Table 2-11: Management plan and time table of Boola (06)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|---|---|-------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mod-term (2-5) | Long-term (5-10) | | |
| Property, Buffer zone | Provide management plan | * | | | DoE | ICHHTO |
| Property and Buffer zone | Effective protection of plant and animal and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE, FRWO | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | MoJA | DoE |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Property and Buffer zone | Monitoring the status of plant and animal species in the main zones and buffer zone | | * | * | DoE, FRWO | |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE, FRWO | MPO ,MoI, |
| Property, Buffer zone, Surrounding area | More control of hunting and fishing | * | * | * | DoE | MoI, MoJA, NGOs, Local Authorities |
| Property, Buffer zone, Surrounding area | Developing more protection with the participation of local communities | * | * | * | DoE | NGOs, Local Authoritie |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE, FRWO | |
| Property and Buffer zone | Use of modern technologies to study the status of land use changes and plant species status | | | * | DoE, FRWO | |
| Buffer zone | Establishment of place to control and monitor the area | | * | * | DoE, FRWO | ICHHTO, MPO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE, FRWO | ICHHTO |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|-----------------------------------|
| Property and Buffer zone | further study and identification of terrestrial species, fungi, algae and ... | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE, FRWO | Universities, Research institutes |
| Buffer zone | Scheduling Exit Livestock from Buffer Zone | | | * | MoJA | DoE |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and privacy | | * | * | DoE | |
| Buffer zone | Education about attractions (cultural-historical-natural and) | * | | | DoE, FRWO | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-12: Management plan and time table of Alimestan (07)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|--|---|----------------------|----------------|------------------|-------------|--------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal species and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and monitoring climate change impacts | | * | * | DoE | MoI, MoJA MoP |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE | |
| Upper and surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective and equipped infrastructure for site protection | | * | * | DoE | |
| Property and Buffer zone, surrounding are | More hunting and fishing control | * | * | * | DoE | MoI, MoJA NGOs, Local authorities |
| Property and Buffer zone, surrounding area | Developing and deploying more protection with the participation of local communities | * | * | * | DoE | NGOs, Local authorities |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE | |
| Property and Buffer zone | Use of modern technologies to study the status of plant species | | | * | DoE | |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|--------------------------------------|
| Buffer zone | Establishment of places to control and monitor the area | | * | * | DoE | ICHHTO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of terrestrial species, fungi, algae and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and border | | * | * | DoE | |
| Buffer zone | Education about attractions (cultural-historical-natural and) | * | | | DoE | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-13: Management plan and time table of Vaz (west, east) (08, 09)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|---|---|-------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal cormorants and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE | |
| Upper and surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective and equipped infrastructure for site protection | | * | * | DoE | |
| Property, Buffer zone, Surrounding area | More hunting and fishing control | * | * | * | DoE | MoJA, MoI, NGOs, Local authorities |
| Property, Buffer zone, Surrounding area | Developing more protection with the participation of local communities | * | * | * | DoE | NGOs, Local authorities |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE | |
| Property and Buffer zone | Deployment of modern technologies to study the status of land use changes and plant species status | | | * | DoE | |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|--------------------------------------|
| Buffer zone | Establishment of places to control and monitor the area | | * | * | DoE | ICHHTO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of terrestrial species, fungi, algae and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and border | | * | * | DoE | |
| Buffer zone | Education about attractions (natural and | * | | | DoE | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-14: Management plan and time table of Kojoor (10)

| Area | Activity | Time Table (year) | | | Responsible | Partner |
|---|---|-------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal cormorants and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE | |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE | |
| Property, Buffer zone Surrounding area | More hunting and fishing control | * | * | * | DoE | MoI, NGOs, MoJA, Local Authorities |
| Property and Buffer zone Surrounding area | Developing and more protection with the participation of local communities | * | * | * | DoE | NGOs, Local Authorities |
| Property and Buffer zone | Provide program and software of alarms system for rapid fire control and natural disasters | | * | * | DoE | MoI, MoJA |
| Property and Buffer zone | Development of remote control software such as cameras | | * | * | DoE | |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE | |
| Property and Buffer zone | Deployment of modern technologies to study the status of land use changes and plant species status | | | * | DoE | |
| Buffer zone | Creating a visitor center on the site in the vicinity of the environment office | | * | * | DoE | |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|-----------------------------------|
| Buffer zone | Establishment of environment office to control and monitor the area | | * | * | DoE | ICHHTO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of terrestrial species, fungi, algae and ... | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Development of laboratory infrastructure in the region | | * | * | DoE | Universities, Research institutes |
| Buffer zone | Creating fire according to the site's protection needs | | * | * | DoE | |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and privacy | | * | * | DoE | |
| Buffer zone | Education about attractions (cultural-historical-natural and) | * | | | DoE | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-15: Management plan and time table of Chahar Bagh (11)

| Area | Activity | Time Table (year) | | | Responsible | Partner |
|--|---|-------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE | |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE | |
| Property and Buffer zone, Surrounding area | More hunting and fishing control | * | * | * | DoE | MoJA, MoI, NGOs, Local Authorities |
| Property and Buffer zone, Surrounding area | Developing and deploying more protection with the participation of local communities | * | * | * | DoE | NGOs, Local Authorities |
| Property and Buffer zone | Development of remote control software such as cameras | | * | * | DoE | |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE | |
| Property and Buffer zone | Deployment of modern technologies to study the status of land use changes and plant species status | | | * | DoE | |
| Buffer zone | Establishment of place to control and monitor the area | | * | * | DoE | ICHHTO |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|-----------------------------------|
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of terrestrial species, fungi, algae and ... | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and privacy | | * | * | DoE | |
| Buffer zone | Education about attractions (cultural-historical-natural and | * | | | DoE | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-16: Management plan and time table of Khoshk-e Daran (12)

| Area | Activity | Time table (year) | | | Responsible | Partner |
|--|---|-------------------|----------------|------------------|-------------|-------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal parts and biodiversity of the site, especially threatened species | * | * | * | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoP, MoI |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE | |
| Upper and Surrounding area | Co-ordinate with stakeholders to implement sustainable organic farming in the places that have not adverse impact on the site. | | * | * | MoJA | DoE, MoI |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE | |
| Property and Buffer zone, Surrounding area | Developing more protection with the participation of local communities | * | * | * | DoE | NGOs, Local authorities |
| Upper and Surrounding area | Complete departure of facilities and fields of Aboureihan University | | | * | MoJA | MoI, MoP |
| Property and Buffer zone | Development of remote control software such as cameras | | * | * | DoE | |
| Buffer zone | Reconstruction and digging of the ditch in the vicinity of the park in order to prevent the flow of wastewater into the site | | * | | DoE | |

Appendix 2: Management plan and time table of the property

| | | | | | |
|--------------------------|---|---|---|-----------|-----------------------------------|
| Buffer zone | Reconstruction and completion of fence around the site | * | | DoE | |
| Buffer zone | Equipping and completing the visitors' site center on the site and replacing new taxis in the museum | * | * | DoE | |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of aquatic and terrestrial species, fungi, algae and ... | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research on plant species in the region | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Development of laboratory facilities in the area and establishment of a monitoring center in the vicinity of the visitor's center | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Study of quantitative and qualitative changes of surface water and underground resources of the region | * | * | DoE | Universities, Research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | DoE | MoJA |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | * | | DoE, FRWO | |

Table 2-17: Management plan and time table of Siahroud Roudbar (13)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|---|---|-------------------|----------------|------------------|-------------|------------------------------------|
| | | Short-term (0-2) | Mid-term (2-5) | Long-term (5-10) | | |
| Property and Buffer zone | Effective protection of plant and animal and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | FRWO |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | MoJA | DoE |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE, FRWO | |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective infrastructure and equipment for site protection | | * | * | DoE, FRWO | MoI, MPO |
| Property, Buffer zone, Surrounding area | More hunting control | * | * | * | DoE | MoI, MoJA, NGOs, Local Authorities |
| Property, Buffer zone, Surrounding area | Developing more protection with the participation of local communities | * | * | * | DoE | NGOs, Local Authorities |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE, FRWO | |
| Property and Buffer zone | Deployment of modern technologies to study the status of land use changes and plant species status | | | * | DoE, FRWO | ICHHTO, MPO |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|-----------------------------------|
| Buffer zone | Establishment of environmental site to control and monitor the area | | * | * | DoE, FRWO | ICHHTO, MPO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE, FRWO | ICHHTO |
| Property and Buffer zone | Further study and identification of terrestrial species, fungi, algae and ... | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE, FRWO | Universities, Research institutes |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and privacy | | * | * | DoE, FRWO | |
| Buffer zone | Education about attractions (cultural-historical-natural and | * | | | DoE, FRWO | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-18: Management plan and time table of Gasht Roudkhan (14)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|--|---|-------------------|----------|-----------|-------------|-----------------------------------|
| | | Short | Mid-term | Long-term | | |
| Property and Buffer zone | Effective protection of plant and animal cormorants and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | FRWO |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | MoJA | DoE |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Property and Buffer zone | Monitoring the status of plant and animal species | | * | * | DoE, FRWO | |
| Upper and surrounding area | Review and monitor the status of land use changes in the site's outer lands | * | * | * | FRWO | DoE |
| Upper and surrounding are | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective and equipped infrastructure for site protection | | * | * | DoE, FRWO | MoI, MPO |
| Property and Buffer zone, surrounding area | More hunting control | * | * | * | DoE | MoI, MoJA, NGOs, Local autorities |
| Property and Buffer zone, surrounding area | Developing more protection with the participation of local communities | * | * | * | DoE | NGOs, Local authorities |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE, FRWO | |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|---|---|---|---|-----------|--------------------------------------|
| Property and Buffer zone | Deployment of modern technologies to study the status of land use changes and plant species status | | | * | DoE, FRWO | ICHHTO, MPO |
| Buffer zone | Establishment of places to control and monitor the area | | * | * | DoE, FRWO | ICHHTO, MPO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE, FRWO | ICHHTO |
| Property and Buffer zone | Further study and identification of aquatic and terrestrial species, fungi, algae and ... | | * | * | DoE, FRWO | Universities and research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE, FRWO | Universities and research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE, FRWO | Universities and research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE, FRWO | Universities and research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE, FRWO | Universities and research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE, FRWO | Universities and research institutes |
| Property and Buffer zone | Investigating the impacts of land use change and economic and social Activities of local communities on the sustainability of the ecosystem of the area | | | * | DoE | MoJA |
| Buffer zone | Planning the exit of the livestock from the buffer zone | | | * | MoJA | DoE |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and border | | * | * | DoE, FRWO | |
| Buffer zone | Education about attractions (cultural-historical-natural and | * | | | DoE, FRWO | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Table 2-19: Management plan and time table of Lisar (15)

| Area | Activity | Time Table (Year) | | | Responsible | Partner |
|--|---|-------------------|----------|------------|-------------|------------------------------------|
| | | Short-term | Mid-term | Long-term(| | |
| Property and Buffer zone | Effective protection of plant and animal cormorants and biodiversity of the site, especially key species and umbrellas | * | * | * | DoE | |
| Property and Buffer zone | Study and monitoring Pest and disease | * | * | * | DoE | MoJA |
| Property and Buffer zone | Study and implementation of adaptation programs to combat climate change | | * | * | DoE | MoJA, MoI, MoP |
| Buffer zone | Control Grazing base on the grazing license in the buffer zone | | * | | DoE, FRWO | |
| Property and Buffer zone | Monitoring the status of plant and animal species in the main zones and buffer zone | | * | * | DoE | |
| Upper and Surrounding area | Establishment and implementation of participatory programs with the presence of environmental activists, Islamic councils of peripheral villages and local authorities and implementation of educational programs | * | * | * | DoE | MoJA, MoI |
| Property and Buffer zone | Development of protective and equipped infrastructure for site protection | | * | * | DoE | |
| Property and Buffer zone, Surrounding area | More hunting and fishing control | * | * | * | DoE | MoI, MoJA, NGOs, Local authorities |
| Property and Buffer zone, Surrounding area | Developing more protection with the participation of local communities | * | * | * | DoE | NGOs, Local authorities |
| Property and Buffer zone | Provide rapid fire alarms software and software | | * | * | DoE | MoI, MoJA |
| Property and Buffer zone | Use of satellite technology for observing wildlife | | * | * | DoE | |

Appendix 2: Management plan and time table of the property

| | | | | | | |
|--------------------------|--|---|---|---|-----------|--------------------------------------|
| Property and Buffer zone | development of modern technologies to study the status of land use changes and plant species status | | | * | DoE | |
| Buffer zone | Create a visitor center outside the site | | * | * | DoE | |
| Buffer zone | Establishment of places to control and monitor the area | | * | * | DoE | ICHHTO |
| Buffer zone | Formation of local tourism cooperatives and their use and participation in the development of ecotourism | | * | * | DoE | ICHHTO |
| Property and Buffer zone | Further study and identification of terrestrial and aquatic species, fungi, algae and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on plant species in the region | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research on the effects of climate change on habitats and biological trends of plant and animal species | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Research and monitoring of the identification of invasive, migratory and ... species in recent years | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Development of laboratory infrastructure in the region | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Developing and equipping the region with modern technology, including easy access to satellite resources and ... | | * | * | DoE | Universities and research institutes |
| Property and Buffer zone | Study of genetic reserves and pharmaceutical, protective and ecological values of species | | * | * | DoE | Universities and research institutes |
| Buffer zone | Planning to eliminate illegal possession, especially in sensitive areas | | | * | MoJA | DoE |
| Property and Buffer zone | Install warning signs and comment boards and specify the boundary between site and border | | * | * | DoE | |
| Buffer zone | Education about attractions (cultural-historical-natural and) | * | | | DoE | ICHHTO, NGOs |
| Property and Buffer zone | Making documentaries and films of the property on TV and Internet networks. | * | | | ICHHTO | DoE |
| Property and Buffer zone | Holding general and professional workshops for local people and managers and authorities | | * | | DoE, FRWO | |

Population information

The density of population in the surrounding area of the component are high. Then, all surrounding villages within a radius of five kilometers from buffer zone border were considered. These villages located in five provinces including Gilan, Mazandaran, Golestan, North Khorasan and Semnan. The natural and residence situation of these villages for each component part are presented separately in the table. According to the population census in 2016, there are 132 villages which have been permanent and 4 temporary villages.

Table 2-2: The natural situation (1: mountainous forest village, 2: mountainous village, 3: forest village in the valley, 4: valley village, 5: plain village) and residence situation of the villages

| NO | Name of the component part/cluster | Region(s) / District(s) | Villages | Natural situation | Residence Situation | | |
|----|------------------------------------|-------------------------|-----------------|-------------------|--------------------------|--------------------|------------------|
| | | | | | 1:Permanent /2:Temporary | Start of residence | End of residence |
| 1 | Golestan (01, 02) | Golestan province | Zav-e-Bala | 1 | 1 | - | - |
| 2 | | Golestan province | Savar- e- Pain | 1 | 1 | - | - |
| 3 | | Golestan province | Savar-e-Bala | 1 | 1 | - | - |
| 4 | | Golestan province | Dumanli | 1 | 1 | - | - |
| 5 | | Golestan province | Savar-e-Vasat | 1 | 1 | - | - |
| 6 | | Golestan province | Arjanli | 1 | 1 | - | - |
| 7 | | Golestan province | Totli Tamak | 1 | 1 | - | - |
| 8 | | Golestan province | Kurlar | 4 | 1 | - | - |
| 9 | | Golestan province | Ghodaneh Sofla | 2 | 1 | - | - |
| 10 | | Golestan province | Ghareh Sar Bala | 2 | 1 | - | - |
| 11 | | Golestan province | Kanaskuh | 1 | 1 | - | - |
| 12 | | Golestan province | Tangrah | 1 | 1 | - | - |
| 13 | | Golestan province | Terjenli | 2 | 1 | - | - |
| 14 | | Semnan province | Dasht-e-Shad | 3 | 1 | - | - |

Appendix 3: Population information

| | | | | | | | |
|----|--------------|-------------------------|------------------|---|---|-------|---------|
| 15 | Abr (03, 04) | North Khorasan province | Dasht | 3 | 1 | - | - |
| 16 | | North Khorasan province | Bidak | 2 | 2 | April | October |
| 17 | | North Khorasan province | Cheshmeh Khan | 2 | 1 | - | - |
| 18 | | Golestan province | Khojeh yapahgi | 4 | 1 | - | - |
| 19 | | Golestan province | Gorgandooz | 4 | 1 | - | - |
| 20 | | Golestan province | Chesht | * | 1 | - | - |
| 21 | | Golestan province | Ghareh Sar paeen | 2 | 1 | - | - |
| 22 | | Golestan province | Zav-e-Pain | 1 | 1 | - | - |
| 23 | Abr (03, 04) | Mazandaran province | Mâzyârân | 3 | 1 | - | - |
| 24 | | Mazandaran province | Alazman | 1 | 1 | - | - |
| 25 | | Mazandaran province | Zarringol | 3 | 1 | - | - |
| 26 | | Mazandaran province | Chinou | 1 | 1 | - | - |
| 27 | | Mazandaran province | Khâkprizan | 1 | 1 | - | - |
| 28 | | Mazandaran province | Miyânrustâq | 2 | 1 | - | - |
| 29 | | Mazandaran province | Afrâtakhteh | 1 | 1 | - | - |
| 30 | | Mazandaran province | Shirinâbâd | 1 | 1 | - | - |
| 31 | | Mazandaran province | Kordâbâd | 3 | 1 | - | - |
| 32 | | Mazandaran province | Pâqale | 1 | 1 | - | - |
| 33 | | Mazandaran province | Jouzchâl | 1 | 1 | - | - |
| 34 | | Mazandaran province | Bareftan | 3 | 1 | - | - |
| 35 | | Mazandaran province | Rig cheshmeh | 1 | 1 | - | - |
| 36 | | Mazandaran province | Tavir | * | 1 | - | - |
| 37 | | Mazandaran province | Chellisofla | * | 1 | - | - |

| | | | | | | | |
|----|-----------------|---------------------|----------------------|---|---|-------|-----------|
| 38 | Jahan Nama (05) | Mazandaran province | Chelliolia | 1 | 1 | - | - |
| 39 | | Semana province | Abr | 2 | 1 | - | - |
| 40 | | Golestan Province | Ziarat | 1 | 1 | - | - |
| 41 | | Golestan Province | Chahar-Bagh | 2 | 1 | - | - |
| 42 | | Golestan Province | Derazno | 1 | 1 | - | - |
| 43 | Boolia (06) | Golestan Province | Radakan | 1 | 1 | - | - |
| 44 | | Mazandaran Province | Senam | 2 | 1 | - | - |
| 45 | | Mazandaran Province | Band Bon | 3 | 1 | - | - |
| 46 | | Mazandaran Province | Chahar Rudbar | 3 | 1 | - | - |
| 47 | | Mazandaran Province | Zekareyya kola | 4 | 1 | - | - |
| 48 | | Mazandaran Province | Sā'īdabad | 4 | 1 | - | - |
| 49 | | Mazandaran Province | Gol Bagh | 3 | 1 | - | - |
| 50 | | Mazandaran Province | Milad Dasht | 4 | 4 | April | September |
| 51 | | Mazandaran Province | Ilal | 4 | 1 | - | - |
| 52 | | Mazandaran Province | Sava Sareh | 4 | 1 | - | - |
| 53 | | Mazandaran Province | Arvet | 4 | 1 | - | - |
| 54 | | Mazandaran Province | Narges zamin | 4 | 1 | - | - |
| 55 | | Mazandaran Province | Paji | 4 | 1 | - | - |
| 56 | | Mazandaran Province | Jur Jadeh | 4 | 1 | - | - |
| 57 | | Mazandaran Province | Sang Deh | 4 | 1 | - | - |
| 58 | | Mazandaran Province | Khoshrudbar | 3 | 1 | - | - |
| 59 | | Mazandaran Province | Berar deh | 4 | 1 | - | - |
| 60 | | Mazandaran Province | Khoramabad Bishe Sar | 4 | 1 | - | - |

Appendix 3: Population information

| | | | | | | |
|----|---------------------|---------------------|---|---|------|-----------|
| 61 | Mazandaran Province | Dine Sar | 2 | 1 | - | - |
| 62 | Mazandaran Province | Siahdasht Sofla | 2 | 1 | - | - |
| 63 | Mazandaran Province | Ange fam | 3 | 1 | - | - |
| 64 | Mazandaran Province | Part kola | 4 | 1 | - | - |
| 65 | Mazandaran Province | Já far Abad | 2 | 1 | - | - |
| 66 | Mazandaran Province | Sarkam | 4 | 1 | - | - |
| 67 | Mazandaran Province | Aliabad | 2 | 1 | - | - |
| 68 | Mazandaran Province | Mola | 2 | 1 | - | - |
| 69 | Mazandaran Province | Anarom | 4 | 1 | - | - |
| 70 | Semnan Province | Roudbarak Bala | 4 | 1 | - | - |
| 71 | Semnan Province | Sorkhehdeh | 3 | 1 | - | - |
| 72 | Semnan Province | Finesk | 3 | 1 | - | - |
| 73 | Semnan Province | Molladeh | 3 | 1 | - | - |
| 74 | Semnan Province | Hique | 1 | 4 | May | October |
| 75 | Semnan Province | Talajim | 3 | 1 | - | - |
| 76 | Semnan Province | Tom | 4 | 1 | - | - |
| 77 | Alimestan (07) | Mazandaran Province | 4 | 4 | June | September |
| 78 | | Lahash | 4 | 1 | - | - |
| 79 | | Parimeh | 3 | 1 | - | - |
| 80 | | Pasha Kola | 4 | 1 | - | - |
| 81 | | Tiar | 4 | 1 | - | - |
| 82 | Vaz (08,09) | Mazandaran Province | 3 | 1 | - | - |
| 83 | | Nojmeh | 3 | 3 | - | - |
| 84 | | Vaz tangeh | 4 | 1 | - | - |
| 85 | | Vāz-e-sofla | 4 | 1 | - | - |

Appendix 3: Population information

| | | | | | | | |
|-----|-------------|---------------------|--------------|---|---|---|---|
| 86 | Kojoor (10) | Mazandaran Province | Vāz-e-olyā | 4 | 1 | - | - |
| 87 | | Mazandaran Province | Kangalchāl | 3 | 3 | - | - |
| 88 | | Mazandaran Province | Toorānkolā | 1 | 1 | - | - |
| 89 | | Mazandaran Province | Kiakalā | 3 | 1 | - | - |
| 90 | | Mazandaran Province | Behbenag | 3 | 1 | - | - |
| 91 | | Mazandaran Province | Raeis Kola | 3 | 1 | - | - |
| 92 | | Mazandaran Province | Korchi | 3 | 1 | - | - |
| 93 | | Mazandaran Province | Dizinkalā | 3 | 1 | - | - |
| 94 | | Mazandaran province | Keliyak | 2 | 1 | - | - |
| 95 | | Mazandaran province | Kodir | 2 | 1 | - | - |
| 96 | | Mazandaran province | Barkan | 2 | 1 | - | - |
| 97 | | Mazandaran province | Bin | 2 | 1 | - | - |
| 98 | | Mazandaran province | Chilak sofla | 5 | 1 | - | - |
| 99 | | Mazandaran province | Chilak olya | 5 | 1 | - | - |
| 100 | | Mazandaran province | Chalandar | 1 | 1 | - | - |
| 101 | | Mazandaran province | Molkar | 3 | 1 | - | - |
| 102 | | Mazandaran province | Tooskatak | 5 | 1 | - | - |
| 103 | | Mazandaran province | Mollakala | 3 | 1 | - | - |
| 104 | | Mazandaran province | Band-e-Pey | 3 | 1 | - | - |
| 105 | | Mazandaran province | Mazgah | 5 | 1 | - | - |
| 106 | | Mazandaran province | Anarvar | 5 | 1 | - | - |
| 107 | Chahar | Mazandaran Province | Makarud | 4 | 1 | - | - |

| | | | | | | | |
|-----|------------------------|---------------------|------------------|---|---|---|---|
| 108 | Siahroud-e Rudbar (13) | Mazandaran Province | Valiabad | 3 | 1 | - | - |
| 109 | | Mazandaran Province | Harijan | 3 | 1 | - | - |
| 110 | | Mazandaran Province | Siah Bisheh | 3 | 1 | - | - |
| 111 | | Gilan province | Gerd Visheh | 3 | 1 | - | - |
| 112 | | Gilan province | Hajideh | 3 | 1 | - | - |
| 113 | | Gilan province | Glankash | 3 | 1 | - | - |
| 114 | | Gilan province | Diz Kuh | 4 | 1 | - | - |
| 115 | | Gilan province | Bararud | 3 | 1 | - | - |
| 116 | | Gilan province | Jalal Deh | 3 | 1 | - | - |
| 117 | | Gilan province | Liavol-e sofla | 3 | 1 | - | - |
| 118 | | Gilan province | Emamzadeh Hashem | 4 | 1 | - | - |
| 119 | | Gilan province | Cheshna Sar | 3 | 1 | - | - |
| 120 | | Gilan province | Shahr-e Bijar | 4 | 1 | - | - |
| 121 | | Gilan province | Chehesh | 3 | 1 | - | - |
| 122 | | Gilan province | Siah Dasht Bon | 2 | * | * | * |
| 123 | | Gilan province | Sondos | 4 | 1 | - | - |
| 124 | | Gilan province | Shir Kuh | 3 | 1 | - | - |
| 125 | | Gilan province | Shah-e Shahidan | 3 | 1 | - | - |
| 126 | | Gilan province | Sibon | 3 | 1 | - | - |
| 127 | | Gilan province | Gupol | 3 | 1 | - | - |
| 128 | | Gilan province | Band-e bon | 3 | 1 | - | - |
| 129 | | Gilan province | Chahar Mahal | 3 | 1 | - | - |
| 130 | Gasht Rudkhan (14) | Gilan province | Mouleskam | 3 | 1 | - | - |
| 131 | | Gilan province | Kishrodbar | 4 | 1 | - | - |
| 132 | | Gilan province | Emamzade Ebrahim | 4 | 1 | - | - |
| 133 | | Gilan province | Qaleh Rudkhan | 3 | 1 | - | - |
| 134 | Lisar (15) | Gilan province | Latan Parat | 4 | 0 | - | - |
| 135 | | Gilan province | Gol | 3 | 0 | - | - |
| 136 | | Gilan province | Mashgadi | * | * | * | * |

Appendix 3: Population information

Table 2-3: The distribution of villages in terms of population, family classes and sex ratio. For the sake of confidentiality information on villages with three or less households is shown by a *

| NO | Component part/ Cluster | Villages | 2006 | | 2011 | | 2016 | | | Sex ratio | | | |
|----|----------------------------|---------------------|------|-------|------|-------|------|-------|---------------------|------------------|--------|--------|--------|
| | | | Man | Woman | Man | Woman | Man | Woman | Number of family | Total population | 2006 | 2011 | 2016 |
| 1 | Golestan (01, 02) | Zav-e-Bala | 196 | 247 | 271 | 272 | 266 | 276 | 154 | 542 | 79.35 | 99.63 | 96.38 |
| 2 | | Savar- e- Pain | 235 | 258 | 287 | 284 | 310 | 295 | 168 | 605 | 91.09 | 101.06 | 105.08 |
| 3 | | Savar-e-Bala | 134 | 153 | 158 | 173 | 178 | 177 | 98 | 355 | 87.58 | 91.33 | 100.56 |
| 4 | | Dumanli | 161 | 176 | 187 | 198 | 206 | 186 | 109 | 392 | 91.48 | 94.44 | 110.75 |
| 5 | | Savar-e-Vasat | 70 | 85 | 83 | 80 | 92 | 88 | 45 | 180 | 82.35 | 103.75 | 104.55 |
| 6 | | Arjanli | 472 | 523 | 598 | 603 | 632 | 593 | 318 | 1,225 | 90.25 | 99.17 | 106.58 |
| 7 | | Totli Tamak | 120 | 131 | 95 | 85 | 86 | 86 | 56 | 172 | 91.60 | 111.76 | 100 |
| 8 | | Kurlar | 208 | 292 | 213 | 267 | 277 | 310 | 175 | 587 | 71.23 | 79.78 | 89.35 |
| 9 | | Ghodaneh Sofla | 408 | 370 | 420 | 400 | 389 | 389 | 184 | 778 | 110.27 | 105 | 100 |
| 10 | | Ghareh Sar Bala | 91 | 97 | 126 | 123 | 132 | 138 | 75 | 270 | 93.81 | 102.44 | 95.65 |
| 11 | | Kanaskuh | 101 | 119 | 95 | 91 | 110 | 99 | 60 | 209 | 84.87 | 104.40 | 111.11 |
| 12 | | Tangrah | 549 | 660 | 629 | 788 | 645 | 680 | 351 | 1,325 | 83.18 | 79.82 | 94.85 |
| 13 | | Terjenli | 569 | 593 | 626 | 682 | 656 | 687 | 407 | 1,343 | 95.95 | 91.79 | 95.49 |
| 14 | | Dasht-e-Shad | 603 | 621 | 610 | 635 | 609 | 592 | 400 | 1,201 | 97.10 | 96.06 | 102.87 |
| 15 | | Dasht | 562 | 570 | 645 | 633 | 705 | 688 | 433 | 1,393 | 98.60 | 101.90 | 102.47 |
| 16 | | Bidak | - | - | 219 | 220 | 194 | 182 | 121 | 376 | - | 99.55 | 106.59 |
| 17 | | Cheshmeh Khan | 231 | 243 | 291 | 274 | 302 | 276 | 186 | 578 | 95.06 | 106.20 | 109.42 |
| 18 | | Khojeh yapahgi | 258 | 308 | 300 | 307 | 307 | 330 | 181 | 637 | 83.77 | 97.72 | 93.03 |
| 19 | | Gorgandooz | 109 | 116 | 107 | 111 | 110 | 103 | 61 | 213 | 93.97 | 96.40 | 106.80 |
| 20 | | Chesht | * | * | * | * | * | * | * | * | * | * | * |
| 21 | | Ghareh Sar paeen | 188 | 205 | 265 | 265 | 244 | 245 | 140 | 489 | 91.71 | 100 | 99.59 |
| 22 | | Zav-e-Pain | 175 | 206 | 245 | 226 | 241 | 217 | 123 | 458 | 84.95 | 108.41 | 111.06 |
| 23 | Abr (03, 04) | Mâzyârân | 336 | 312 | 367 | 334 | 351 | 312 | 217 | 663 | 107.69 | 109.88 | 112.50 |
| 24 | | Alazman | 347 | 381 | 444 | 488 | 347 | 357 | 217 | 704 | 91.08 | 90.98 | 97.20 |
| 25 | | Zarringol | 321 | 304 | 304 | 300 | 307 | 305 | 194 | 612 | 105.59 | 101.33 | 100.66 |

Appendix 3: Population information

| | | | | | | | | | | | | | |
|----|-----------------|----------------|-----|-----|-----|-----|-----------|-------|-----|-------|--------|--------|--------|
| 26 | Jahan Nama (05) | Chinou | 47 | 38 | 66 | 72 | 52 | 46 | 33 | 98 | 123.68 | 91.67 | 113.04 |
| 27 | | Khâkprizan | 85 | 91 | 104 | 104 | 84 | 96 | 55 | 180 | 93.41 | 100 | 87.50 |
| 28 | | Miyânrustâq | 79 | 83 | 105 | 101 | 82 | 62 | 48 | 144 | 95.18 | 103.96 | 132.26 |
| 29 | | Afrâtakhteh | 131 | 120 | 111 | 77 | 115 | 109 | 67 | 224 | 109.17 | - | 105.50 |
| 30 | | Shirinâbâd | 245 | 208 | 248 | 205 | 222 | 221 | 162 | 443 | 117.79 | 120.98 | 100.45 |
| 31 | | Kordâbâd | 707 | 751 | 803 | 881 | 845 | 900 | 558 | 1,745 | 94.14 | 91.15 | 93.89 |
| 32 | | Pâqale | 126 | 112 | 55 | 48 | 159 | 145 | 98 | 304 | 112.50 | 114.58 | 109.66 |
| 33 | | Jouzchâl | 19 | 20 | 34 | 32 | 45 | 37 | 23 | 82 | 95 | 106.25 | 121.62 |
| 34 | | Bareftan | 898 | 939 | 946 | 948 | 839 | 820 | 554 | 1,659 | 95.63 | 99.79 | 102.32 |
| 35 | | Rig cheshmeh | * | * | * | * | * | * | * | * | * | * | * |
| 36 | | Tavir | * | * | * | * | * | * | * | * | * | * | * |
| 37 | | Chellisofla | * | * | * | * | 18 | 15 | 9 | 33 | * | * | 120 |
| 38 | | Chelliolia | | | | | 30 | 30 | 21 | 60 | - | - | 100 |
| 39 | | Abr | 669 | 714 | 597 | 663 | 750 | 730 | 504 | 1,480 | 93.70 | 90.05 | 102.74 |
| 40 | Boolâ (06) | Ziarat | 990 | 974 | 996 | 962 | 1,18 4 | 1,096 | 730 | 2,280 | 101.64 | 103.53 | 108.03 |
| 41 | | Chahar-Bagh | 103 | 102 | 30 | 33 | 57 | 52 | 42 | 109 | 100.98 | 90.91 | 109.62 |
| 42 | | Derazno | * | * | * | * | * | * | * | * | * | * | * |
| 43 | | Radakan | 164 | 159 | 53 | 47 | 125 | 110 | 66 | 235 | 103.14 | 112.77 | 113.64 |
| 44 | Boolâ (06) | Senam | 27 | 31 | 53 | 45 | 55 | 56 | 44 | 111 | 87.10 | 117.78 | 98.21 |
| 45 | | Band Bon | 56 | 58 | 45 | 43 | 47 | 40 | 32 | 87 | 96.55 | 104.65 | 117.50 |
| 46 | | Chahar Rudbar | 13 | 15 | 43 | 48 | 75 | 66 | 48 | 141 | 86.67 | 89.58 | 113.64 |
| 47 | | Zekareyya kola | 43 | 58 | 26 | 37 | 24 | 25 | 23 | 49 | 74.14 | 70.27 | 96 |
| 48 | | Sâ'îdabad | 71 | 84 | 43 | 42 | 48 | 41 | 40 | 89 | 84.52 | 102.38 | 117.07 |
| 49 | | Gol Bagh | * | * | * | * | * | * | * | * | * | * | * |
| 50 | | Milad Dasht | * | * | * | * | * | * | * | * | * | * | * |
| 51 | | Ilal | 158 | 159 | 137 | 136 | 116 | 132 | 87 | 248 | 99.37 | 100.74 | 87.88 |
| 52 | | Sava Sareh | 75 | 82 | 86 | 100 | 77 | 70 | 44 | 147 | 91.46 | 86 | 110 |
| 53 | | Arvet | 80 | 90 | 47 | 54 | 88 | 81 | 56 | 169 | 88.89 | 87.04 | 108.64 |
| 54 | | Narges zamin | 43 | 50 | 24 | 31 | 24 | 31 | 20 | 55 | 86 | 77.42 | 77.42 |
| 55 | | Paji | 204 | 228 | 201 | 194 | 176 | 166 | 127 | 342 | 89.47 | 103.61 | 106.02 |
| 56 | | Jur Jadeh | 76 | 105 | 58 | 79 | 49 | 71 | 52 | 120 | 72.38 | 73.42 | 69.01 |
| 57 | | Sang Deh | 779 | 793 | 559 | 587 | 612 | 615 | 418 | 1,227 | 98.23 | 95.23 | 99.51 |

Appendix 3: Population information

| | | | | | | | | | | | | | |
|----|----------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|--------|--------|--------|
| 58 | | Khoshrudbar | 14 | 17 | 13 | 15 | 11 | 10 | 10 | 21 | 82.35 | 86.67 | 110 |
| 59 | | Berar deh | 36 | 33 | 27 | 31 | 20 | 21 | 17 | 41 | 109.09 | 87.10 | 95.24 |
| 60 | | Khoramabad Bishe Sar | * | * | * | * | * | * | * | * | * | * | * |
| 61 | | Dine Sar | 75 | 82 | 91 | 100 | 47 | 57 | 44 | 104 | 91.46 | 91 | 82.46 |
| 62 | | Siahdasht Sofla | 26 | 40 | 52 | 67 | 47 | 54 | 45 | 101 | 65 | 77.61 | 87.04 |
| 63 | | Ange fam | 29 | 29 | 21 | 27 | 18 | 20 | 16 | 38 | 100 | 77.78 | 90 |
| 64 | | Part kola | 108 | 113 | 79 | 98 | 105 | 107 | 72 | 212 | 95.58 | 80.61 | 98.13 |
| 65 | | Ja'far Abad | 21 | 24 | 22 | 25 | 28 | 22 | 20 | 50 | 87.50 | 88 | 127.27 |
| 66 | | Sarkam | 59 | 83 | 52 | 76 | 60 | 79 | 50 | 139 | 71.08 | 68.42 | 75.95 |
| 67 | | Aliabad | 114 | 87 | 146 | 116 | 134 | 81 | 56 | 215 | 131.03 | 125.86 | - |
| 68 | | Mola | 28 | 37 | 27 | 27 | 27 | 32 | 24 | 59 | 75.68 | 100 | 84.38 |
| 69 | | Anarom | 88 | 70 | 65 | 39 | 88 | 81 | 59 | 169 | 125.71 | 166.67 | 108.64 |
| 70 | | Roudbarak Bala | * | * | 37 | 39 | 53 | 54 | 34 | 107 | 142.86 | 94.87 | 98.15 |
| 71 | | Sorkhehdeh | * | * | 48 | 42 | 12 | 14 | 12 | 26 | - | 114.29 | 85.71 |
| 72 | | Finesk | 9 | 16 | 74 | 79 | 42 | 39 | 34 | 81 | 56.25 | 93.67 | 107.69 |
| 73 | | Molladeh | 31 | 28 | 53 | 46 | 48 | 52 | 41 | 100 | 110.71 | 115.22 | 92.31 |
| 74 | | Hique | * | * | * | * | * | * | * | * | * | * | * |
| 75 | | Talajim | 8 | 8 | 75 | 82 | 67 | 54 | 41 | 121 | 100 | 91.46 | 124.07 |
| 76 | | Tom | - | - | 62 | 50 | 48 | 37 | 28 | 85 | - | 124 | 129.73 |
| 77 | Alimestan (07) | Alimestan | * | * | * | * | 37 | 33 | 23 | 70 | - | - | 112.12 |
| 78 | | Lahash | 9 | 8 | 20 | 19 | 21 | 16 | 17 | 37 | 112.50 | 105.26 | 131.25 |
| 79 | | Parimeh | * | * | 53 | 55 | 53 | 54 | 35 | 107 | - | 96.36 | 98.15 |
| 80 | | Pasha Kola | 49 | 55 | 104 | 61 | 104 | 108 | 74 | 212 | 89.09 | - | 96.30 |
| 81 | | Tiar | 41 | 47 | 26 | 28 | 45 | 52 | 35 | 97 | 87.23 | 92.86 | 86.54 |
| 82 | Vaz (08, 09) | Gaznāsarā | 9 | 10 | 17 | 16 | 42 | 40 | 33 | 82 | 90 | 106.25 | 105 |
| 83 | | Nojmeh | * | * | * | * | * | * | * | * | * | * | * |
| 84 | | Vaz tangeh | 131 | 105 | 121 | 105 | 132 | 113 | 75 | 245 | 124.76 | 115.24 | 116.81 |
| 85 | | Vāz-e-sofla | 84 | 90 | 107 | 103 | 130 | 119 | 87 | 249 | 93.33 | 103.88 | 109.24 |
| 86 | | Vāz-e-olyā | 135 | 130 | 128 | 127 | 185 | 169 | 116 | 354 | 103.85 | 100.79 | 109.47 |
| 87 | | Kangalchāl | * | * | * | * | * | * | * | * | * | * | * |
| 88 | | Toorānkolā | 207 | 196 | 214 | 200 | 211 | 195 | 124 | 406 | 105.61 | 107 | 108.21 |
| 89 | | Kiakalā | 358 | 426 | 361 | 377 | 454 | 419 | 284 | 873 | 84.04 | 95.76 | 108.35 |

Appendix 3: Population information

| | | | | | | | | | | | | | |
|-----|------------------------|------------------|-------|-------|------|------|-------|-------|-----|-------|--------|--------|--------|
| 90 | Kojoor (10) | Behbenag | 141 | 135 | 121 | 120 | 126 | 126 | 88 | 252 | 104.44 | 100.83 | 100 |
| 91 | | Raeis Kola | 263 | 276 | 273 | 267 | 233 | 223 | 141 | 456 | 95.29 | 102.25 | 104.48 |
| 92 | | Korchi | 153 | 164 | 121 | 130 | 120 | 125 | 70 | 245 | 93.29 | 93.08 | 96 |
| 93 | | Dizinkalā | 280 | 321 | 286 | 301 | 310 | 316 | 192 | 626 | 87.23 | 95.02 | 98.10 |
| 94 | Chahar-Bagh (11) | Keliyak | 77 | 72 | 24 | 34 | 34 | 33 | 27 | 67 | 106.94 | 70.59 | 103.03 |
| 95 | | Kodir | 61 | 76 | 65 | 93 | 85 | 93 | 67 | 178 | 80.26 | 69.89 | 91.40 |
| 96 | | Barkan | 10 | 9 | 33 | 31 | 29 | 27 | 20 | 56 | 111.11 | 106.45 | 107.41 |
| 97 | | Bin | * | * | 53 | 58 | 20 | 34 | 19 | 54 | - | 91.38 | 58.82 |
| 98 | | Chilak sofla | 386 | 379 | 314 | 328 | 290 | 279 | 181 | 569 | 101.85 | 95.73 | 103.94 |
| 99 | | Chilak olya | 190 | 179 | 166 | 162 | 229 | 223 | 147 | 452 | 106.15 | 102.47 | 102.69 |
| 100 | | Chalandar | 694 | 704 | 637 | 635 | 739 | 688 | 422 | 1,427 | 98.58 | 100.31 | 107.41 |
| 101 | | Molkar | 500 | 450 | 544 | 519 | 638 | 585 | 385 | 1,223 | 111.11 | 104.82 | 109.06 |
| 102 | | Tooskatak | 733 | 690 | 714 | 639 | 816 | 767 | 503 | 1,583 | 106.23 | 111.74 | 106.39 |
| 103 | | Mollakala | 230 | 206 | 218 | 215 | 267 | 245 | 165 | 512 | 111.65 | 101.40 | 108.98 |
| 104 | | Band-e-Pey | 736 | 719 | 729 | 699 | 750 | 686 | 450 | 1,436 | 102.36 | 104.29 | 109.33 |
| 105 | | Mazgah | 609 | 546 | 650 | 651 | 681 | 638 | 406 | 1,319 | 111.54 | 99.85 | 106.74 |
| 106 | | Anarvar | 834 | 807 | 928 | 848 | 820 | 791 | 512 | 1,611 | 103.35 | 109.43 | 103.67 |
| 107 | Siahroud-e Rudbar (13) | Makarud | 486 | 443 | 382 | 366 | 469 | 461 | 313 | 930 | 109.71 | 104.37 | 101.74 |
| 108 | | Valiabad | 131 | 140 | 129 | 145 | 137 | 138 | 96 | 275 | 93.57 | 88.97 | 99.28 |
| 109 | | Harijan | * | * | 165 | 142 | 104 | 94 | 65 | 198 | - | 116.20 | 110.64 |
| 110 | | Siah Bisheh | * | * | * | * | 83 | 76 | 60 | 159 | - | - | 109.21 |
| 111 | Siahroud-e Rudbar (13) | Hajideh | 63 | 74 | 40 | 48 | 51 | 54 | 46 | 105 | 85.135 | 83.33 | 94.44 |
| 112 | | Glankash | 275 | 351 | 196 | 280 | 211 | 237 | 151 | 448 | 78.34 | 70 | 89.03 |
| 113 | | Diz Kuh | 359 | 364 | 285 | 302 | 286 | 281 | 190 | 567 | 98.62 | 94.37 | 101.78 |
| 114 | | Bararud | 84 | 98 | 53 | 62 | 61 | 66 | 60 | 127 | 85.71 | 85.48 | 92.42 |
| 115 | | Jalal Deh | 36 | 51 | 24 | 52 | 49 | 63 | 38 | 112 | 70.58 | 46.15 | 77.78 |
| 116 | | Liavol-e sofla | 32 | 34 | 21 | 24 | 29 | 30 | 22 | 59 | 94.11 | 87.50 | 96.67 |
| 117 | | Emamzadeh Hashem | 1,215 | 1,180 | 1202 | 1235 | 1,153 | 1,133 | 740 | 2,286 | 102.96 | 97.33 | 101.77 |
| 118 | | Cheshna Sar | 29 | 27 | 24 | 20 | 18 | 19 | 11 | 37 | 107.40 | 120 | 94.74 |
| 119 | | Shahr-e Bijar | 442 | 457 | 405 | 430 | 425 | 452 | 285 | 877 | 96.717 | 94.19 | 94.03 |
| 120 | | Chehesh | 205 | 255 | 170 | 191 | 189 | 191 | 128 | 380 | 80.392 | 89.01 | 98.95 |
| 121 | | Siah Dasht Bon | * | * | * | * | * | * | * | * | * | * | * |

Appendix 3: Population information

| | | | | | | | | | | | | | |
|------------|--------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-------|--------|--------|--------|
| 122 | Gasht Rudkhan (14) | Sondos | 106 | 111 | 90 | 82 | 70 | 81 | 63 | 151 | 95.49 | 109.76 | 86.42 |
| 123 | | Shir Kuh | 263 | 314 | 254 | 283 | 240 | 252 | 187 | 492 | 83.75 | 89.75 | 95.24 |
| 124 | | Shah-e Shahidan | 48 | 59 | 59 | 69 | 60 | 58 | 41 | 118 | 81.35 | 85.51 | 103.45 |
| 125 | | Sibon | 253 | 227 | 277 | 266 | 271 | 266 | 190 | 537 | 111.45 | 104.14 | 101.88 |
| 126 | | Gupol | 150 | 178 | 136 | 175 | 173 | 198 | 128 | 371 | 84.269 | 77.71 | 87.37 |
| 127 | | Band-e bon | 34 | 40 | 34 | 42 | 39 | 43 | 32 | 82 | 85 | 80.95 | 90.70 |
| 128 | | Chahar Mahal | - | - | - | - | 589 | 579 | 396 | 1,168 | - | - | 101.73 |
| 129 | Gasht Rudkhan (14) | Mouleskam | 393 | 423 | 347 | 370 | 313 | 297 | 219 | 610 | 92.90 | 93.78 | 105.3 |
| 130 | | Kishrodbar | 224 | 268 | 231 | 259 | 230 | 224 | 137 | 454 | 83.58 | 89.18 | 102.6 |
| 131 | | Emamzade Ebrahim | 158 | 152 | 189 | 157 | 232 | 200 | 158 | 432 | 103.9 | 120.3 | 78.18 |
| 132 | | Qaleh Rudkhan | 355 | 352 | 321 | 289 | 278 | 260 | 195 | 538 | 100.8 | 111.07 | 93.69 |
| 133 | | Gerd Visheh | 111 | 110 | 101 | 97 | 119 | 116 | 99 | 235 | 100.90 | 104.12 | 102.59 |
| 134 | Lisar (15) | Latan Parat | 34 | 37 | * | * | * | * | * | * | * | * | * |
| 135 | | Gol | 26 | 48 | * | * | * | * | * | * | * | * | * |
| 136 | | Mashgadi | * | * | * | * | * | * | * | * | * | * | * |

Table 2-4: the major age group in the rural area of study sites

| Component part/Cluster | The major age group | 2006 | | 2011 | |
|--------------------------|---------------------|-------|-------|-------|-------|
| | | Man | Woman | Man | Woman |
| Golestan (01, 02) | 0-14 years old | 34.57 | 33.11 | 28.59 | 29.06 |
| | 15- 29 years old | 30.26 | 34.73 | 32.95 | 33.13 |
| | 30 - 64 years old | 30.82 | 29.26 | 34.41 | 34.55 |
| | 65 and more | 4.34 | 2.90 | 4.05 | 3.25 |
| | Total | 100 | 100 | 100 | 100 |
| Abr (03, 04) | 0-14 years old | 20.33 | 19.73 | 18.07 | 18.10 |
| | 15- 29 years old | 36.69 | 36.88 | 28.35 | 32.62 |
| | 30 - 64 years old | 35.49 | 37.45 | 46.04 | 42.76 |
| | 65 and more | 7.50 | 5.94 | 8.49 | 6.53 |
| | Total | 100 | 100 | 100 | 100 |
| Jahan Nama (05) | 0-14 years old | 12.86 | 14.37 | 12.68 | 14.12 |
| | 15- 29 years old | 34.40 | 28.28 | 33.34 | 31.79 |
| | 30 - 64 years old | 43.38 | 51.37 | 44.72 | 49.71 |
| | 65 and more | 10.09 | 6.11 | 9.26 | 4.38 |
| | Total | 100 | 100 | 100 | 100 |
| Boola (06) | 0-14 years old | 15 | 12 | 12.80 | 10.80 |
| | 15- 29 years old | 29 | 29 | 26.45 | 22.36 |
| | 30 - 64 years old | 35 | 46 | 41.34 | 52.07 |
| | 65 and more | 20 | 13 | 19.40 | 15.29 |
| | Total | 100 | 100 | 100 | 100 |
| Alimestan (07) | 0-14 years old | 24 | 13 | 27.34 | 19.23 |
| | 15- 29 years old | 17 | 20 | 15.62 | 18.92 |
| | 30 - 64 years old | 36 | 37 | 43.66 | 47.16 |
| | 65 and more | 23 | 30 | 17.84 | 19.58 |
| | Total | 100 | 100 | 100 | 100 |
| Vaz (08, 09) | 0-14 years old | 20 | 21 | 19 | 19 |
| | 15- 29 years old | 34 | 34 | 28 | 25 |
| | 30 - 64 years old | 36 | 37 | 39 | 47 |
| | 65 and more | 10 | 7 | 13 | 9 |
| | Total | 100 | 100 | 100 | 100 |
| Kojoor (10) | 0-14 years old | 21.29 | 22.03 | 20 | 19.46 |
| | 15- 29 years old | 36.13 | 32.69 | 29.46 | 29.60 |
| | 30 - 64 years old | 36.04 | 38.31 | 41.90 | 42.23 |
| | 65 and more | 6.69 | 7.22 | 8.74 | 8.71 |
| | Total | 100 | 100 | 100 | 100 |
| Chahar Bagh (11) | 0-14 years old | 15 | 15 | 15 | 19 |
| | 15- 29 years old | 39 | 40 | 38 | 32 |
| | 30 - 64 years old | 39 | 37 | 41 | 41 |

| | | | | | |
|--------------------------------|-------------------|-------|-------|-------|-------|
| | 65 and more | 7 | 8 | 6 | 8 |
| | Total | 100 | 100 | 100 | 100 |
| Siahroud-e Roudbar (13) | 0-14 years old | 22.48 | 21.83 | 18.99 | 18.43 |
| | 15- 29 years old | 31.50 | 30.61 | 28.95 | 26.98 |
| | 30 - 64 years old | 33.23 | 37.68 | 40.34 | 43.38 |
| | 65 and more | 11.44 | 9.87 | 11.72 | 11.21 |
| | Total | 100 | 100 | 100 | 100 |
| Gasht Roudkhan (14) | 0-14 years old | 22.30 | 16.82 | 19.17 | 15.77 |
| | 15- 29 years old | 30 | 33.80 | 29.27 | 26.29 |
| | 30 - 64 years old | 38.23 | 40.25 | 45.64 | 52.66 |
| | 65 and more | 9.46 | 9.12 | 11.94 | 11.32 |
| | Total | 100 | 100 | 100 | 100 |
| Lisar (15) | 0-14 years old | * | * | * | * |
| | 15- 29 years old | * | * | * | * |
| | 30 - 64 years old | * | * | * | * |
| | 65 and more | * | * | * | * |
| | Total | * | * | * | * |

Table 2-5: Literacy in the rural area of study sites by sex

| Component part/ Cluster | 2006 | | | | 2011 | | | |
|--------------------------------|----------|-------|------------|-------|----------|-------|------------|-------|
| | Literate | | Illiterate | | Literate | | Illiterate | |
| | Man | Woman | Man | Woman | Man | Woman | Man | Woman |
| Golestan (01, 02) | 82.22 | 69.49 | 17.78 | 30.51 | 83.58 | 71.19 | 15.84 | 28.40 |
| Abr (03, 04) | 76.16 | 64.28 | 23.84 | 35.72 | 78.98 | 69.91 | 22.07 | 29.78 |
| Jahan Nama (05) | 74.64 | 67.96 | 25.36 | 32.04 | 80.39 | 68.61 | 18.27 | 28.79 |
| Boola (06) | 65.02 | 52.38 | 34.98 | 47.62 | 70.16 | 56.77 | 29.23 | 42.81 |
| Alimestan (07) | 57.18 | 36.29 | 42.82 | 63.71 | 68.41 | 60.28 | 31.59 | 39.72 |
| Vaz (08, 09) | 75.45 | 67.06 | 24.55 | 32.94 | 74.15 | 66.44 | 25.29 | 33.24 |
| Kojoor (10) | 84.06 | 71.46 | 15.94 | 28.54 | 84.48 | 74.95 | 15.05 | 24.79 |
| Chahar Bagh (11) | 82.79 | 74.21 | 17.21 | 25.79 | 87.73 | 76.17 | 11.84 | 23.68 |
| Siahroud-e Roudbar (13) | 77.20 | 61.32 | 22.80 | 38.68 | 73.82 | 58.56 | 25.89 | 41.05 |
| Gasht Roudkhan (14) | 80.30 | 67.89 | 19.70 | 32.11 | 71.23 | 59.91 | 22.89 | 34.23 |
| Lisar (15) | * | * | * | * | * | * | * | * |

Table 2-6: Employment and unemployment percentage in rural area. For the sake of confidentiality information on villages with three or less households is shown by a *

| NO | Component part/Cluster | Villages | 2006 | | 2011 | | | | | |
|----|------------------------|------------------|------------|--------------|------------|--------------|-------------|------------|---------|-----------|
| | | | Employment | unemployment | Employment | unemployment | Agriculture | Industrial | Service | The other |
| 1 | Golestan (01, 02) | Zav-e-Bala | 97.79 | 2.21 | 93.87 | 6.13 | 46.41 | 49.67 | 1.31 | 2.61 |
| 2 | | Savar- e- Pain | 94 | 6 | 91.25 | 8.75 | 39.73 | 37.67 | 12.33 | 10.27 |
| 3 | | Savar-e-Bala | 98.06 | 1.94 | 93.48 | 6.52 | 50 | 37.21 | 12.79 | 0 |
| 4 | | Dumanli | 92.47 | 7.53 | 89.08 | 10.92 | 44.34 | 41.51 | 8.49 | 5.66 |
| 5 | | Savar-e-Vasat | 98.28 | 1.72 | 90.48 | 9.52 | 52.63 | 34.21 | 5.26 | 7.89 |
| 6 | | Arjanli | 82.80 | 17.20 | 91.55 | 8.45 | 43.31 | 37.58 | 4.78 | 14.33 |
| 7 | | Totli Tamak | 67.11 | 32.89 | 85.96 | 14.04 | 51.02 | 34.69 | 12.24 | 2.04 |
| 8 | | Kurlar | 96.88 | 3.13 | 99.34 | 0.66 | 52.67 | 38.67 | 5.33 | 3.33 |
| 9 | | Ghodaneh Sofla | 98.26 | 1.74 | 73.33 | 26.67 | 56.82 | 40.91 | 2.27 | 0 |
| 10 | | Ghareh Sar Bala | 100 | 0 | 65.38 | 34.62 | 68.63 | 23.53 | 3.92 | 3.92 |
| 11 | | Kanaskuh | 98.65 | 1.35 | 81.43 | 18.57 | 84.21 | 10.53 | 5.26 | 0 |
| 12 | | Tangrah | 83.93 | 16.07 | 90.72 | 9.28 | 34.94 | 23.58 | 40.91 | 0.57 |
| 13 | | Terjenli | 74.87 | 25.13 | 95.07 | 4.93 | 36.72 | 47.72 | 14.52 | 1.04 |
| 14 | | Dasht-e-Shad | 98.62 | 1.38 | 80.88 | 19.12 | 66.06 | 12.73 | 11.52 | 9.70 |
| 15 | | Dasht | 97.41 | 2.59 | 90.63 | 9.37 | 28.68 | 27.39 | 22.22 | 21.71 |
| 16 | | Bidak | - | - | 81.34 | 18.66 | 54.13 | 34.86 | 8.26 | 2.75 |
| 17 | | Cheshmeh Khan | 99.43 | 0.57 | 96.32 | 3.68 | 42.62 | 29.51 | 21.31 | 6.56 |
| 18 | | Khojeh yapahgi | 97.39 | 2.61 | 73.33 | 26.67 | 50.76 | 13.64 | 6.82 | 28.79 |
| 19 | | Gorgandooz | 86.15 | 13.85 | 85.29 | 14.71 | 50 | 12.07 | 5.17 | 32.76 |
| 20 | | Ghareh Sar paeen | 82.19 | 17.81 | 94.19 | 5.81 | 23.97 | 68.49 | 2.74 | 4.79 |
| 21 | | Zav-e-Pain | 94.59 | 5.41 | 97.04 | 2.96 | 38.93 | 23.66 | 10.69 | 26.72 |
| 22 | | Mâzyârân | 81.40 | 18.60 | 88.55 | 11.45 | 41.38 | 35.34 | 21.55 | 1.72 |
| 23 | Abr (03, 04) | Alazman | 97.75 | 2.25 | 74.22 | 25.78 | 38.97 | 38.97 | 19.72 | 2.35 |
| 24 | | Zarringol | 76.37 | 23.63 | 90 | 10 | 48.54 | 27.49 | 21.64 | 2.34 |
| 25 | | Chinou | 75.76 | 24.24 | 95.12 | 4.88 | 69.23 | 7.69 | 20.51 | 2.56 |
| 26 | | Khâkprizan | 81.48 | 18.52 | 93.85 | 6.15 | 77.05 | 9.84 | 13.11 | 0 |
| 27 | | Miyânrustâq | 81.36 | 18.64 | 89.61 | 10.39 | 56.52 | 31.88 | 11.59 | 0 |
| 28 | | Afrâtakhteh | 74.70 | 25.30 | 82.35 | 17.65 | 48.21 | 28.57 | 23.21 | 0 |
| 29 | | Shirinâbâd | 86.75 | 13.25 | 85.29 | 14.71 | 53.10 | 37.93 | 6.90 | 2.07 |
| 30 | | Kordâbâd | 95.59 | 4.41 | 94.61 | 5.39 | 29.53 | 35.03 | 33.40 | 2.04 |

Appendix 3: Population information

| | | | | | | | | | | |
|----|--------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 31 | Jahan Nama (05) | Pâqale | 97.87 | 2.13 | 97.44 | 2.56 | 65.79 | 31.58 | 2.63 | 0 |
| 32 | | Jouzchâl | 100 | 0 | 92 | 8 | 52.17 | 26.09 | 17.39 | 4.35 |
| 33 | | Bareftan | 86.41 | 13.59 | 75.90 | 24.10 | 67.88 | 15.79 | 14.88 | 1.45 |
| 34 | | Rig cheshmeh | 86.67 | 13.33 | 50 | 50 | - | - | - | - |
| 35 | | Tavir | * | * | * | * | * | * | * | * |
| 36 | | Chellisofla | * | * | * | * | * | * | * | * |
| 37 | | Chelliolia | 100 | 0 | * | * | * | * | * | * |
| 38 | | Abr | 81.82 | 18.18 | 96.55 | 3.45 | 50.42 | 33.61 | 11.76 | 4.20 |
| 39 | | Ziarat | 100 | 0 | 89.20 | 10.80 | 27.68 | 38.06 | 30.10 | 4.15 |
| 40 | | Chahar-Bagh | 100 | 0 | 92 | 8 | 78.26 | 17.39 | 4.35 | 0 |
| 41 | Boolia (06) | Derazno | 84.62 | 15.38 | * | * | * | * | * | * |
| 42 | | Radakan | 89.86 | 10.14 | 88.10 | 11.90 | 67.57 | 29.73 | - | - |
| 43 | | Keliyak | 84.85 | 15.15 | 96.55 | 3.45 | 78.57 | 10.71 | 7.14 | 3.57 |
| 44 | | Kodir | 63.83 | 36.17 | 98.08 | 1.92 | 45.10 | 27.45 | 23.53 | 3.92 |
| 45 | | Senam | 100 | 0 | 80.43 | 19.57 | 86.49 | 5.41 | 5.41 | 2.70 |
| 46 | | Band Bon | 96.08 | 3.92 | 97.87 | 2.13 | 76.09 | 8.70 | 15.22 | 0 |
| 47 | | Chahar Rudbar | 100 | 0 | 100 | 0 | 67.44 | 4.65 | 27.91 | 0 |
| 48 | | Zekareyya kola | 100 | 0 | 100 | 0 | 88.46 | 7.69 | 3.85 | 0 |
| 49 | | Sâ'idabad | 93.88 | 6.12 | 86.49 | 13.51 | 90.63 | 3.13 | 6.25 | 0 |
| 50 | | Gol Bagh | * | * | * | * | * | * | * | * |
| 51 | | Milad Dasht | * | * | * | * | * | * | * | * |
| 52 | | Ilal | 75.45 | 24.55 | 94.50 | 5.50 | 67.96 | 17.48 | 9.71 | 4.85 |
| 53 | | Sava Sareh | 63.49 | 36.51 | 95 | 5 | 67.11 | 10.53 | 10.53 | 11.84 |
| 54 | | Arvet | 100 | 0 | 95 | 5 | 97.37 | 2.63 | 0 | 0 |
| 55 | | Narges zamin | 100 | 0 | 96.55 | 3.45 | - | - | - | - |
| 56 | | Paji | 82.35 | 17.65 | 86.42 | 13.58 | 70.71 | 10.71 | 17.14 | 1.43 |
| 57 | | Jur Jadeh | 79.63 | 20.37 | 95.16 | 4.84 | 74.58 | 10.17 | 11.86 | 3.39 |
| 58 | | Sang Deh | 93.21 | 6.79 | 94.15 | 5.85 | 41.45 | 22.02 | 32.64 | 3.89 |
| 59 | | Khoshrudbar | 80 | 20 | 100 | 0 | 0 | - | - | - |
| 60 | | Berar deh | 60 | 40 | 100 | 0 | 96.30 | 0 | 3.70 | 0 |
| 61 | | Khoramabad Bishe Sar | 81.82 | 18.18 | 100 | 0 | 0 | - | - | - |
| 62 | | Dine Sar | 62.26 | 37.74 | 98.70 | 1.30 | 71.05 | 19.74 | 9.21 | 0 |
| 63 | | Siahdasht Sofla | 66.67 | 33.33 | 84.91 | 15.09 | 82.22 | 8.89 | 6.67 | 2.22 |
| 64 | | Ange fam | 100 | 0 | 88 | 12 | 77.27 | 18.18 | 4.55 | 0 |
| 65 | | Part kola | 97.94 | 2.06 | 97.67 | 2.33 | 73.81 | 13.10 | 10.71 | 2.38 |
| 66 | | Ja'far Abad | 100 | 0 | - | - | - | - | - | - |
| 67 | | Sarkam | 100 | 0 | 91.67 | 8.33 | 86.36 | 4.55 | 9.09 | 0 |
| 68 | | Aliabad | 97.73 | 2.27 | 96.61 | 3.39 | 71.93 | 17.54 | 10.53 | 0 |
| 69 | | Mola | 88.24 | 11.76 | 95.65 | 4.35 | 86.36 | 13.64 | 0 | 0 |
| 70 | | Anarom | 77.27 | 22.73 | 88 | 12 | 31.82 | 15.91 | 45.45 | 6.82 |
| 71 | | Roudbarak Bala | 100 | 0 | 100 | 0 | 67.86 | 10.71 | 17.86 | 3.57 |
| 72 | | Sorkhehdeh | - | 100 | 0 | 77.27 | 0 | 9.09 | 13.64 | - |

Appendix 3: Population information

| | | | | | | | | | | |
|-----|-----------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 73 | Alimestan (07) | Finesk | 100 | 0 | 97.62 | 2.38 | 75.61 | 4.88 | 14.63 | 4.88 |
| 74 | | Molladeh | 100 | 0 | 100 | 0 | 95.12 | 2.44 | 2.44 | 0 |
| 75 | | Hique | * | * | * | * | * | * | * | * |
| 76 | | Talajim | 100 | 0 | 100 | 0 | 76 | 2 | 14 | 8 |
| 77 | | Tom | - | - | 100 | 0 | 94.12 | 0 | 2.94 | 2.94 |
| 78 | Vaz (08, 09) | Alimestan | 100 | 0 | * | * | * | * | * | * |
| 79 | | Lahash | 100 | 0 | * | * | * | * | * | * |
| 80 | | Parimeh | 95.45 | 4.55 | 90.70 | 9.30 | 38.46 | 48.72 | 12.82 | 0 |
| 81 | | Pasha Kola | 100 | 0 | 96.97 | 3.03 | 37.50 | 40.63 | 15.63 | 6.25 |
| 82 | | Tiar | 100 | 0 | 100 | 0 | 64 | 8 | 24 | 4 |
| 83 | Vaz (08, 09) | Gaznāsarā | * | * | * | * | * | * | * | * |
| 84 | | Nojmeh | * | * | * | * | * | * | * | * |
| 85 | | Vaz tangeh | 72.09 | 27.91 | 94.52 | 5.48 | 21.74 | 72.46 | 2.90 | 2.90 |
| 86 | | Vāz-e-sofla | 55.26 | 44.74 | 96.10 | 3.90 | 14.86 | 64.86 | 20.27 | 0 |
| 87 | | Vāz-e-olyā | 68.63 | 31.37 | 94.38 | 5.62 | 9.52 | 66.67 | 22.62 | 1.19 |
| 88 | | Kangalchāl | | | | | | | | |
| 89 | | Toorānkolā | 99.24 | 0.76 | 95.27 | 4.73 | 53.90 | 24.82 | 16.31 | 4.96 |
| 90 | | Kiakalā | 59.83 | 40.17 | 67.66 | 32.34 | 38.46 | 27.47 | 28.02 | 6.04 |
| 91 | | Behbenag | 100 | 0 | 70.10 | 29.90 | 48.53 | 33.82 | 14.71 | 2.94 |
| 92 | | Raeis Kola | 100 | 0 | 36.48 | 63.52 | 10.34 | 31.03 | 27.59 | 31.03 |
| 93 | | Korchi | 100 | 0 | 85.06 | 14.94 | 24.32 | 36.49 | 22.97 | 16.22 |
| 94 | | Dizinkalā | 55.20 | 44.80 | 71.84 | 28.16 | 23.20 | 34.40 | 31.20 | 11.20 |
| 95 | Kojoor (10) | Barkan | 85.71 | 14.29 | - | - | 37.50 | 50 | 4.17 | 8.33 |
| 96 | | Bin | 94.12 | 5.88 | 97.50 | 2.50 | 74.36 | 15.38 | 2.56 | 7.69 |
| 97 | | Chilak sofla | 91.14 | 8.86 | 81.73 | 18.27 | 30 | 21.76 | 36.47 | 11.76 |
| 98 | | Chilak olya | 91.87 | 8.13 | 86.24 | 13.76 | 21.28 | 32.98 | 34.04 | 11.70 |
| 99 | | Chalandar | 79.25 | 20.75 | 93.81 | 6.19 | 20.58 | 36.41 | 25.59 | 17.41 |
| 100 | | Molkar | 91.52 | 8.48 | 94.83 | 5.17 | 15.76 | 34.24 | 36.97 | 13.03 |
| 101 | | Tooskatak | 90.87 | 9.13 | 91.78 | 8.22 | 10.17 | 38.74 | 39.47 | 11.62 |
| 102 | | Mollakala | 85.45 | 14.55 | 94.24 | 5.76 | 15.27 | 39.69 | 32.82 | 12.21 |
| 103 | | Band-e-Pey | 84.73 | 15.27 | 83.15 | 16.85 | 25.77 | 18.94 | 42.51 | 12.78 |
| 104 | | Mazgah | 91.81 | 8.19 | 88.89 | 11.11 | 7.88 | 34.78 | 54.08 | 3.26 |
| 105 | | Anarvar | 87.71 | 12.29 | 93.26 | 6.74 | 14.12 | 38.32 | 32.44 | 15.13 |
| 106 | Chahar Bagh (11) | Makarud | 90.03 | 9.97 | 89.11 | 10.89 | 19.21 | 19.65 | 43.23 | 17.90 |
| 107 | | Valiabad | 93.33 | 6.67 | 81.05 | 18.95 | 27.27 | 42.86 | 20.78 | 9.09 |
| 108 | | Harijan | 100 | 0 | 90.35 | 9.65 | 22.33 | 24.27 | 49.51 | 3.88 |
| 109 | | Siah Bisheh | 100 | 0 | | | | 80 | 17.27 | 2.73 |
| 110 | Siahroud Rondbar (13) | Gerd Visheh | 82.35 | 17.65 | 54.55 | 45.45 | 46.67 | 30 | 16.67 | 6.67 |
| 111 | | Hajideh | 52.17 | 47.83 | 93.55 | 6.45 | 86.21 | 10.34 | 3.45 | 0 |
| 112 | | Glankash | 96.39 | 3.61 | 77.12 | 22.88 | 85.59 | 2.54 | 11.86 | 0 |
| 113 | | Diz Kuh | 67.12 | 32.88 | 90.83 | 9.17 | 26.26 | 33.84 | 27.27 | 12.63 |
| 114 | | Bararud | 84.85 | 15.15 | - | - | 87.27 | 1.82 | 7.27 | 3.64 |

Appendix 3: Population information

| | | | | | | | | | | |
|--------------|---------------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| 115 | | Jalal Deh | 93.33 | 6.67 | - | - | 53.33 | 40 | 6.67 | 0 |
| 116 | | Liavol-e sofla | 68.75 | 31.25 | - | - | - | - | - | - |
| 117 | | Emamzadeh Hashem | 91.81 | 8.19 | 80.75 | 19.25 | 12.46 | 30.15 | 54.62 | 2.77 |
| 118 | | Cheshna Sar | 100 | 0 | 92 | 8 | | | | |
| 119 | | Shahr-e Bijar | 73.20 | 26.80 | 96.13 | 3.87 | 43.96 | 28.57 | 25.27 | 2.20 |
| 120 | | Chehesh | 100 | 0 | 85.83 | 14.17 | 64.08 | 11.65 | 22.33 | 1.94 |
| 121 | | Siah Dasht Bon | * | * | | | | | | |
| 122 | | Sondos | 85.48 | 14.52 | 80.77 | 19.23 | 42.86 | 19.05 | 38.10 | 0 |
| 123 | | Shir Kuh | 95.48 | 4.52 | 98.45 | 1.55 | 49.47 | 4.74 | 30 | 15.79 |
| 124 | | Shah-e Shahidan | 79.17 | 20.83 | 95.24 | 4.76 | 80 | 5 | 15 | 0 |
| 125 | | Sibon | 77.39 | 22.61 | 50.62 | 49.38 | 43.90 | 29.27 | 20.73 | 6.10 |
| 126 | | Gupol | 100 | 0 | 92.71 | 7.29 | 41.57 | 43.82 | 10.11 | 4.49 |
| 127 | | Band-e bon | 100 | 0 | 96.97 | 3.03 | 87.50 | | 12.50 | |
| 128 | | Chahar Mahal | - | - | 54.55 | 45.45 | 46.67 | 30 | 16.67 | 6.67 |
| 129 | Gasht Roudkhan (14) | Mouleskam | 93.01 | 6.99 | 95.54 | 4.46 | 37.33 | 32 | 22 | 8.67 |
| 130 | | Kishrodbar | 56.95 | 43.05 | 90.35 | 9.65 | 66.24 | 15.81 | 15.81 | 2.14 |
| 131 | | Emamzade Ebrahim | 96.63 | 3.37 | 89.18 | 10.82 | 89.54 | 2.09 | 7.53 | 0.84 |
| 132 | | Qaleh Rudkhan | 68.52 | 31.48 | 45.97 | 54.03 | 71.93 | 5.26 | 19.30 | 3.51 |
| 133 | Lisar (15) | Latan Parat | * | * | * | * | * | * | * | * |
| 134 | | Gol | * | * | * | * | * | * | * | * |
| 135 | | Mashgadi | * | * | * | * | * | * | * | * |
| Total | | | 88.13 | 12.60 | 87.57 | 12.22 | 51.47 | 25.23 | 17.13 | 5.53 |



Table 2-7: Rural facilities in the study sites. For the sake of confidentiality information on villages with three or less households are shown by a *. (+: Has, -: Doesn't have) (1: Asphalt pavement, 2: Gravel road, 3: Unpaved road, 4: Walking road)

| NO | Name of the component part/cluster | Villages | 2006 | | | | | 2011 | | | | |
|----|------------------------------------|------------------|------|-------------|--------------|----------------|--------------------|------|-------------|--------------|----------------|---------------------------|
| | | | Road | Electricity | Plumbing gas | Plumbing water | Water purification | road | Electricity | Plumbing gas | Plumbing water | Water purification system |
| 1 | Golestan (01, 02) | Zav-e-Bala | 2 | + | - | + | + | 1 | + | - | + | + |
| 2 | | Savar- e- Pain | 1 | + | - | + | - | 1 | + | - | + | + |
| 3 | | Savar-e-Bala | 2 | + | - | + | - | 1 | + | - | + | - |
| 4 | | Dumanli | 2 | + | - | - | - | 1 | + | - | + | + |
| 5 | | Savar-e-Vasat | 2 | + | - | + | - | 1 | + | - | + | + |
| 6 | | Arjanli | 2 | + | - | - | - | 1 | + | - | + | - |
| 7 | | Totli Tamak | 2 | + | - | + | - | 1 | + | - | + | - |
| 8 | | Kurlar | 1 | + | - | + | - | 1 | + | - | + | - |
| 9 | | Ghodaneh Sofla | 1 | + | - | - | - | 1 | + | - | + | - |
| 10 | | Ghareh Sar Bala | 2 | + | - | + | - | 1 | + | - | + | - |
| 11 | | Kanaskuh | 2 | + | - | + | + | 2 | + | - | + | + |
| 12 | | Tangrah | 1 | + | - | + | + | 1 | + | + | + | + |
| 13 | | Terjenli | 1 | + | - | + | - | 1 | + | + | + | - |
| 14 | | Dasht-e-Shad | 1 | + | + | + | - | 1 | + | + | + | - |
| 15 | | Dasht | 1 | + | + | + | - | 1 | + | + | + | - |
| 16 | | Bidak | 4 | - | - | - | - | 3 | + | + | + | - |
| 17 | | Cheshmeh Khan | 1 | + | - | + | - | 1 | + | + | + | - |
| 18 | | Khojeh yapahgi | 1 | + | - | + | - | 1 | + | - | + | - |
| 19 | | Gorgandooz | 1 | + | - | + | - | 1 | + | - | + | - |
| 20 | | Ghareh Sar paeen | 1 | + | - | + | + | 1 | + | - | + | + |
| 21 | | Zav-e-Pain | 2 | + | - | + | + | 1 | + | - | + | + |
| 22 | | Mâzyârân | 1 | + | - | + | - | 1 | + | + | + | - |
| 23 | Abr (03, 04) | Alazman | 1 | + | + | - | - | 1 | + | + | + | - |
| 24 | | Zarringol | 1 | + | - | + | + | 1 | + | + | + | + |
| 25 | | Chinou | 2 | + | - | + | - | 1 | + | - | + | - |
| 26 | | Khâkprizan | 2 | + | - | + | - | 1 | + | - | + | - |
| 27 | | Miyânrustâq | 2 | + | - | + | - | 2 | + | - | + | + |
| 28 | | Afrâtakhteh | 2 | + | - | + | + | 1 | + | - | + | + |
| 29 | | Shirinâbâd | 2 | + | - | + | - | 1 | + | - | + | - |
| 30 | | Kordâbâd | 1 | + | + | + | + | 1 | + | + | + | + |
| 31 | | Pâqale | 2 | + | - | + | - | 1 | + | - | + | - |

| | | | | | | | | | | | | |
|----|--------------------|----------------------|---|---|---|---|---|---|---|---|---|---|
| 32 | Jahan Nama (05) | Jouzchâl | 3 | + | - | + | - | 2 | + | - | + | - |
| 33 | | Bareftan | 1 | + | + | + | - | 1 | + | + | + | - |
| 34 | | Rig cheshmeh | 3 | + | - | - | - | 2 | + | - | + | - |
| 35 | | Tavir | * | * | * | * | * | 3 | + | - | + | - |
| 36 | | Chellisofla | * | * | * | * | * | 3 | + | - | + | - |
| 37 | | Chelliolia | 3 | + | - | - | - | 3 | + | - | + | - |
| 38 | | Abr | 3 | + | - | + | + | 1 | + | + | + | + |
| 39 | | Ziarat | 1 | + | - | + | - | 1 | + | - | + | + |
| 40 | | Chahar-Bagh | 1 | + | - | + | - | 1 | + | - | + | - |
| 41 | | Derazno | 3 | + | - | - | - | 2 | + | - | + | - |
| 42 | Boolia (06) | Radakan | 2 | + | - | + | - | 2 | + | - | + | - |
| 43 | | Keliyak | 1 | + | - | + | - | 1 | + | - | + | + |
| 44 | | Kodir | 1 | + | - | + | - | 1 | + | - | + | - |
| 45 | | Senam | 3 | + | - | + | - | 3 | + | - | + | - |
| 46 | | Band Bon | 3 | + | - | + | - | 3 | + | - | + | - |
| 47 | | Chahar Rudbar | 3 | + | - | + | - | 3 | + | - | + | - |
| 48 | | Zekareyya kola | 3 | + | - | + | - | 3 | + | - | + | - |
| 49 | | Sa'îdabad | 3 | + | - | + | - | 3 | + | - | + | - |
| 50 | | Gol Bagh | 3 | + | - | + | - | 3 | + | - | + | - |
| 51 | | Milad Dasht | * | * | * | * | * | 3 | - | - | - | - |
| 52 | | Ilal | 2 | + | - | + | - | 2 | + | - | + | - |
| 53 | | Sava Sareh | 2 | + | - | + | - | 2 | + | - | + | - |
| 54 | | Arvet | 2 | + | - | + | - | 2 | + | - | + | - |
| 55 | | Narges zamin | 2 | + | - | - | - | 2 | + | - | + | - |
| 56 | | Paji | 2 | + | - | + | - | 1 | + | - | + | - |
| 57 | | Jur Jadeh | 2 | + | - | + | - | 1 | + | - | + | - |
| 58 | | Sang Deh | 1 | + | - | + | + | 1 | + | - | + | + |
| 59 | Boolia (06) | Khoshrudbar | 1 | + | - | + | + | 1 | + | - | + | + |
| 60 | | Berar deh | 2 | + | - | + | - | 2 | + | - | + | + |
| 61 | | Khoramabad Bishe Sar | 3 | + | - | + | - | 1 | + | - | + | + |
| 62 | | Dine Sar | 2 | + | - | + | - | 1 | + | - | + | + |
| 63 | | Siahdasht Sofla | 2 | + | - | + | + | 1 | + | - | + | + |
| 64 | | Ange fam | 1 | + | - | + | - | 1 | + | - | + | + |
| 65 | | Part kola | 2 | + | - | + | + | 1 | + | - | + | + |
| 66 | | Ja'far Abad | 2 | + | - | + | - | 1 | + | - | + | - |
| 67 | | Sarkam | 1 | + | - | + | + | 1 | + | - | + | + |
| 68 | | Aliabad | 1 | + | - | + | + | 1 | + | - | + | + |
| 69 | | Mola | 2 | + | - | + | - | 1 | + | - | + | - |
| 70 | | Anarom | 3 | + | - | + | - | 2 | + | - | + | + |
| 71 | | Roudbarak Bala | 3 | - | - | + | - | 3 | + | - | + | + |
| 72 | | Sorkhehdeh | 3 | - | - | - | - | 3 | - | - | + | - |
| 73 | | Finesk | 3 | + | - | + | - | 1 | + | - | + | + |
| 74 | | Molladeh | 3 | + | - | + | + | 1 | + | - | + | + |

Appendix 3: Population information

| | | | | | | | | | | | | |
|-----|-------------------------|------------------|---|---|---|---|---|---|---|---|---|---|
| 75 | Alimestan (07) | Hique | 3 | - | - | - | - | 3 | - | - | - | - |
| 76 | | Talajim | 2 | + | - | + | - | 2 | + | - | + | + |
| 77 | | Tom | 3 | - | - | - | - | 1 | + | - | + | + |
| 78 | | Alimestan | 2 | - | - | - | - | 1 | - | - | - | - |
| 79 | | Lahash | 2 | + | - | + | - | 1 | + | - | + | - |
| 80 | Vaz (08,09) | Parimeh | 3 | + | - | + | - | 3 | + | - | + | - |
| 81 | | Pasha Kola | 3 | + | - | + | - | 1 | + | - | + | - |
| 82 | | Tiar | 3 | + | - | + | - | 1 | + | - | + | - |
| 83 | | Gaznāsarā | 3 | + | - | + | - | 2 | + | - | + | - |
| 84 | | Nojmeh | 2 | - | - | - | - | 2 | - | - | - | - |
| 85 | Kojoor (10) | Vaz tangeh | 3 | + | - | + | - | 1 | + | - | + | - |
| 86 | | Vāz-e-sofla | 3 | + | - | + | - | 1 | + | - | + | - |
| 87 | | Vāz-e-olyā | 3 | + | - | + | - | 1 | + | - | + | - |
| 88 | | Kangalchāl | 3 | - | - | - | - | 2 | - | - | - | - |
| 89 | | Toorānkolā | 1 | + | - | - | - | 1 | + | - | + | - |
| 90 | Chahar Bagh (11) | Kiakalā | 3 | + | - | + | - | 1 | + | - | + | - |
| 91 | | Behbenag | 3 | + | - | + | - | 1 | + | - | + | - |
| 92 | | Raeis Kola | 1 | + | - | + | - | 1 | + | - | + | - |
| 93 | | Korchi | 1 | + | - | + | - | 1 | + | - | + | - |
| 94 | | Dizinkalā | 2 | + | - | + | - | 1 | + | - | + | - |
| 95 | Siahroud-e Roudbar (13) | Barkan | 1 | + | - | + | - | 1 | + | - | + | + |
| 96 | | Bin | 1 | + | - | + | - | 1 | + | - | + | - |
| 97 | | Chilak sofla | 1 | + | + | + | - | 1 | + | + | + | - |
| 98 | | Chilak olya | 1 | + | + | + | - | 1 | + | + | + | - |
| 99 | | Chalandar | 1 | + | - | + | - | 1 | + | + | + | - |
| 100 | Chahar Bagh (11) | Molkar | 1 | + | - | + | - | 1 | + | + | + | - |
| 101 | | Tooskatak | 1 | + | + | + | - | 1 | + | + | + | - |
| 102 | | Mollakala | 1 | + | - | + | - | 1 | + | + | + | - |
| 103 | | Band-e-Pey | 1 | + | + | + | - | 1 | + | + | + | - |
| 104 | | Mazgah | 1 | + | + | + | - | 1 | + | + | + | - |
| 105 | Siahroud-e Roudbar (13) | Anarvar | 1 | - | + | - | - | 1 | - | + | - | - |
| 106 | | Makarud | 3 | + | - | + | - | 1 | + | - | + | - |
| 107 | | Valiabad | 3 | + | - | + | - | 2 | + | - | + | - |
| 108 | | Harijan | 3 | + | - | - | - | 3 | + | - | - | - |
| 109 | | Siah Bisheh | 3 | + | - | + | - | 3 | + | - | + | - |
| 110 | Siahroud-e Roudbar (13) | Gerd Visheh | 1 | + | - | + | - | 1 | + | - | + | - |
| 111 | | Hajideh | 2 | + | - | + | - | 1 | + | - | + | - |
| 112 | | Glankash | 2 | + | - | + | - | 1 | + | - | + | - |
| 113 | | Diz Kuh | 1 | + | - | + | - | 1 | + | - | + | - |
| 114 | | Bararud | 1 | + | - | + | - | 1 | + | - | + | - |
| 115 | Siahroud-e Roudbar (13) | Jalal Deh | 3 | + | - | + | - | 3 | + | - | + | - |
| 116 | | Liavol-e sofla | 1 | + | - | + | - | 1 | + | - | + | - |
| 117 | | Emamzadeh Hashem | 3 | + | - | + | - | 1 | + | + | + | - |

| | | | | | | | | | | | | |
|------------|----------------------|------------------|---|---|---|---|---|---|---|---|---|---|
| 118 | | Cheshna Sar | 3 | + | - | + | - | 2 | + | - | + | - |
| 119 | | Shahr-e Bijar | 1 | + | - | + | - | 1 | + | - | + | - |
| 120 | | Chehesh | 1 | + | - | + | - | 1 | + | - | + | - |
| 121 | | Siah Dasht Bon | * | * | * | * | * | 3 | + | - | - | - |
| 122 | | Sondos | 1 | + | + | + | - | 1 | + | + | + | + |
| 123 | | Shir Kuh | 1 | + | + | + | - | 1 | + | + | + | - |
| 124 | | Shah-e Shahidan | 3 | + | - | + | + | 2 | + | - | + | + |
| 125 | | Sibon | 1 | + | - | + | - | 1 | + | - | + | - |
| 126 | | Gupol | 2 | + | - | + | - | 2 | + | - | + | - |
| 127 | | Band-e bon | 3 | + | - | + | + | 2 | + | - | + | + |
| 128 | | Chahar Mahal | * | * | * | * | * | * | * | * | * | * |
| 129 | GashRoudkhan (14) | Kishrodbar | 1 | + | - | - | - | 1 | + | - | - | - |
| 130 | | Mouleskam | 1 | + | - | + | + | 1 | + | - | + | + |
| 131 | | Qaleh Rudkhan | 1 | + | - | + | - | 1 | + | - | + | - |
| 132 | | Emamzade Ebrahim | 1 | + | - | + | - | 1 | + | - | + | - |
| 133 | Lisar (15) | Latan Parat | 4 | - | - | - | - | 4 | - | - | - | - |
| 134 | | Gol | 4 | - | - | - | - | 4 | - | - | - | - |
| 135 | | Mashgadi | * | * | * | * | * | * | * | * | * | * |

Table 2-1: Endemic plant species of Iran which exist in the Hyrcanian Region

| NO | Specific name | Family | Life form | IUCN Category | Habitat |
|----|--|------------------------|-----------|---------------|-------------------------------------|
| 1 | <i>Acantholimon bodeanum</i> | <i>Plumbaginaceae</i> | Ch | DD | Euxino-Hyrcanian and Irano-Turanian |
| 2 | <i>Acantholimon demawendicum</i> | <i>Plumbaginaceae</i> | Ch | DD | Euxino-Hyrcanian and Irano-Turanian |
| 3 | <i>Acantholimon dianthifolium</i> | <i>Plumbaginaceae</i> | | DD | Euxino-Hyrcanian |
| 4 | <i>Acantholimon faustii</i> | <i>Plumbaginaceae</i> | | DD | Euxino-Hyrcanian |
| 5 | <i>Acantholimon Festucaceum</i> | <i>Plumbaginaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 6 | <i>Acantholimon gilliati</i> | <i>Plumbaginaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 7 | <i>Acantholimon ophiocladum</i> | <i>Plumbaginaceae</i> | Ch | DD | Euxino-Hyrcanian |
| 8 | <i>Acantholimon scirpinum</i> | <i>Plumbaginaceae</i> | Ch | DD | Euxino-Hyrcanian and Irano-Turanian |
| 9 | <i>Acantholimon scorpius</i> | <i>Plumbaginaceae</i> | Ch | LR | Euxino-Hyrcanian |
| 10 | <i>Acantholimon sorchense</i> | <i>Plumbaginaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 11 | <i>Acantholimon talagonicum</i> | <i>Plumbaginaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 12 | <i>Acantholimon wilhelminae</i> | <i>Plumbaginaceae</i> | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 13 | <i>Acantholimon yamense</i> | <i>Plumbaginaceae</i> | Ch | DD | Euxino-Hyrcanian and Irano-Turanian |
| 14 | <i>Acanthophyllum crassifolium</i> | <i>Caryophyllaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 15 | <i>Achillea aucheri subsp. aucheri</i> | <i>Asteraceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 16 | <i>Achillea millefolium subsp. elburzensis</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 17 | <i>Aconitum iranshahrii</i> | <i>Ranunculaceae</i> | Cry | LR | Euxino-Hyrcanian |
| 18 | <i>Agropyron bulbosum</i> | <i>Poaceae</i> | | DD | Euxino-Hyrcanian |
| 19 | <i>Ajuga chamaecistus</i> | <i>Lamiaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 20 | <i>Alcea gorganica</i> | <i>Malvaceae</i> | Th | DD | Euxino-Hyrcanian and Irano-Turanian |
| 21 | <i>Alcea lineariloba</i> | <i>Malvaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 22 | <i>Alchemilla amardica</i> | <i>Rosaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 23 | <i>Alchemilla citrina</i> | <i>Rosaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 24 | <i>Alchemilla condensa</i> | <i>Rosaceae</i> | | LR | Euxino-Hyrcanian |
| 25 | <i>Alchemilla gigantodus</i> | <i>Rosaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 26 | <i>Alchemilla hessii</i> | <i>Rosaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 27 | <i>Alchemilla melancholica</i> | <i>Rosaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 28 | <i>Alchemilla microscopica</i> | <i>Rosaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 29 | <i>Alchemilla pectiniloba</i> | <i>Rosaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 30 | <i>Alchemilla surculosa</i> | <i>Rosaceae</i> | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 31 | <i>Allium capitellatum</i> | <i>Alliaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 32 | <i>Allium chelotum</i> | <i>Alliaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 33 | <i>Allium derderianum</i> | <i>Alliaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 34 | <i>Allium elburzense</i> | <i>Alliaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 35 | <i>Alyssum polycladum</i> | <i>Brassicaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |

Appendix 4 Endemic plant species of Iran which exist in the Hyrcanina Region

| | | | | | |
|-----------|---|------------------|----|----|-------------------------------------|
| 36 | <i>Amygdalus lycioides</i> <i>var.horrida</i> | Rosaceae | Ph | LR | Euxino-Hyrcanian and Irano-Turanian |
| 37 | <i>Anthemis altissima</i> var. <i>discoidea</i> | Asteraceae | Th | DD | Euxino-Hyrcanian |
| 38 | <i>Anthemis brachystephana</i> | Asteraceae | Th | LR | Euxino-Hyrcanian and Irano-Turanian |
| 39 | <i>Anthemis gilanica</i> | Asteraceae | Th | LR | Euxino-Hyrcanian and Irano-Turanian |
| 40 | <i>Anthemis mazanderanica</i> | Asteraceae | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 41 | <i>Arabis ottanis-schulzii</i> | Brassicaceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 42 | <i>Arenaria polycnemifolia</i> | Caryophyllaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 43 | <i>Arenaria zargariana</i> | Caryophyllaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 44 | <i>Aristolochia hyrcana</i> | Aristolochiaceae | | | Euxino-Hyrcanian |
| 45 | <i>Artemisia melanolepis</i> | Asteraceae | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 46 | <i>Artemisia spicigera</i> | Asteraceae | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 47 | <i>Astragalus alamouticus</i> | Fabaceae | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 48 | <i>Astragalus angustatus</i> subsp. <i>Angustiflorus</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 49 | <i>Astragalus atricapillus</i> | Fabaceae | He | EN | Euxino-Hyrcanian |
| 50 | <i>Astragalus beckii</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 51 | <i>Astragalus belgheisicus</i> | Fabaceae | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 52 | <i>Astragalus bounophilus</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 53 | <i>Astragalus coelicolor</i> | Fabaceae | | | Euxino-Hyrcanian |
| 54 | <i>Astragalus demavendicus</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 55 | <i>Astragalus glochidiatus</i> | Fabaceae | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 56 | <i>Astragalus haematinus</i> | Fabaceae | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 57 | <i>Astragalus indomitus</i> | Fabaceae | | VU | Euxino-Hyrcanian |
| 58 | <i>Astragalus kendewanensis</i> | Fabaceae | | | Euxino-Hyrcanian |
| 59 | <i>Astragalus khoshjailensis</i> | Fabaceae | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 60 | <i>Astragalus kohrudicus</i> | Fabaceae | Ph | | Euxino-Hyrcanian and Irano-Turanian |
| 61 | <i>Astragalus lilacinus</i> | Fabaceae | He | | Euxino-Hyrcanian and Irano-Turanian |
| 62 | <i>Astragalus manuceherii</i> | Fabaceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 63 | <i>Astragalus masanderanus</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 64 | <i>Astragalus modestus</i> | Fabaceae | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 65 | <i>Astragalus monanthemus</i> | Fabaceae | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 66 | <i>Astragalus ochreatus</i> | Fabaceae | He | | Euxino-Hyrcanian and Irano-Turanian |
| 67 | <i>Astragalus paralurges</i> | Fabaceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 68 | <i>Astragalus pinetorum</i> | Fabaceae | He | VU | Euxino-Hyrcanian and Irano-Turanian |
| 69 | <i>Astragalus pishchakensis</i> | Fabaceae | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 70 | <i>Astragalus raswendicus</i> | Fabaceae | | | Euxino-Hyrcanian and Irano-Turanian |
| 71 | <i>Astragalus rimarium</i> | Fabaceae | | DD | Euxino-Hyrcanian |
| 72 | <i>Astragalus rubriflorus</i> | Fabaceae | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 73 | <i>Astragalus rudbaricus</i> | Fabaceae | | | Euxino-Hyrcanian |
| 74 | <i>Astragalus seidabadensis</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 75 | <i>Astragalus speciosus</i> | Fabaceae | He | LR | Euxino-Hyrcanian |
| 76 | <i>Astragalus subalpinus</i> | Fabaceae | | | Euxino-Hyrcanian |
| 77 | <i>Astragalus submitis</i> subsp. <i>Maassoumi</i> | Fabaceae | He | LR | Euxino-Hyrcanian |

| | | | | | |
|------------|---|------------------------|-----|----|-------------------------------------|
| 78 | <i>Astragalus submitis</i> subsp. <i>Submitis</i> | <i>Fabaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 79 | <i>Astragalus vulcanicus</i> | <i>Fabaceae</i> | He | VU | Euxino-Hyrcanian and Irano-Turanian |
| 80 | <i>Asyneuma mazanderanicum</i> | <i>Campanulaceae</i> | He | LR | Euxino-Hyrcanian |
| 81 | <i>Ballota platyloma</i> | <i>Lamiaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 82 | <i>Betonica nivea</i> stev. Subsp. <i>Mazandaranica</i> | <i>Lamiaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 83 | <i>Buffonia capsularis</i> | <i>Caryophyllaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 84 | <i>Bunium wolffii</i> | <i>Apiaceae</i> | Cry | DD | Euxino-Hyrcanian and Irano-Turanian |
| 85 | <i>Bupleurum flexile</i> | <i>Apiaceae</i> | Ch | DD | Euxino-Hyrcanian |
| 86 | <i>Bupleurum ghahremanii</i> | <i>Apiaceae</i> | He | VU | Euxino-Hyrcanian |
| 87 | <i>Buxus hyrcana</i> | <i>Buxaceae</i> | Ph | EN | Euxino-Hyrcanian |
| 88 | <i>Caccinia strigosa</i> | <i>Boraginaceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 89 | <i>Calligonum persicum</i> | <i>Polygonaceae</i> | Ph | LR | Euxino-Hyrcanian and Irano-Turanian |
| 90 | <i>Carduus transcaspicus</i> subsp. <i>Macrocephalus</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 91 | <i>Centaurea aucheri</i> subsp. <i>Elbursensis</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 92 | <i>Centaurea aziziana</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian |
| 93 | <i>Centaurea kandavanensis</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 94 | <i>Cephalorrhynchus brassicifolius</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 95 | <i>Cerasus microcarpa</i> subsp. <i>Diffusa</i> | <i>Rosaceae</i> | Ph | | Euxino-Hyrcanian and Irano-Turanian |
| 96 | <i>cirsium strigosum</i> var. <i>khorassanicum</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 97 | <i>Clastopus vestitus</i> | <i>Brassicaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 98 | <i>Colutea porphyrogramma</i> | <i>Fabaceae</i> | He | LR | Euxino-Hyrcanian |
| 99 | <i>Colutea uniflora</i> | <i>Fabaceae</i> | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 100 | <i>Consolida teheranica</i> forma <i>ecalcarata</i> | <i>Ranunculaceae</i> | Th | NE | Euxino-Hyrcanian |
| 101 | <i>Consolida teheranica</i> forma <i>teheranica</i> | <i>Ranunculaceae</i> | Th | EN | Euxino-Hyrcanian and Irano-Turanian |
| 102 | <i>Corydalis verticillaris</i> subsp. <i>Grandiflora</i> | <i>Papaveraceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 103 | <i>Cotoneaster assadii</i> | <i>Rosaceae</i> | Ph | VU | Euxino-Hyrcanian |
| 104 | <i>Cousinia alfredii</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 105 | <i>Cousinia behboudiana</i> | <i>Asteraceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 106 | <i>Cousinia calocephala</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 107 | <i>Cousinia commutata</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 108 | <i>Cousinia crispa</i> | <i>Asteraceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 109 | <i>Cousinia elata</i> | <i>Asteraceae</i> | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 110 | <i>Cousinia erinacea</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian |
| 111 | <i>Cousinia esfandiarii</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 112 | <i>Cousinia gmelini</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian |
| 113 | <i>Cousinia harazensis</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian |
| 114 | <i>Cousinia hypochiona</i> | <i>Asteraceae</i> | | DD | Euxino-Hyrcanian |
| 115 | <i>Cousinia hypoleuca</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 116 | <i>Cousinia rechingerae</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian |

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|------------|---|-----------------|-----|----|-------------------------------------|
| 117 | <i>Cousinia renominata</i> | Asteraceae | | DD | Euxino-Hyrcanian |
| 118 | <i>Cousinia shahvarica</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 119 | <i>Cousinia sphaerocephala</i> | Asteraceae | He | LR | Euxino-Hyrcanian |
| 120 | <i>Crataegus babakhanloui</i> | Rosaceae | Ph | VU | Euxino-Hyrcanian |
| 121 | <i>Crataegus melanocarpa subsp. elbursensis</i> | Rosaceae | Ph | | Euxino-Hyrcanian and Irano-Turanian |
| 122 | <i>Crepis asadbarensis</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 123 | <i>Crepis demavendi</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 124 | <i>Crepis gaubae</i> | Asteraceae | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 125 | <i>Crepis papposissima</i> | Asteraceae | Th | DD | Euxino-Hyrcanian |
| 126 | <i>Cynoglossum teheranicum</i> | Boraginaceae | | | Euxino-Hyrcanian and Irano-Turanian |
| 127 | <i>Daphne rechingeri</i> | Thymelaeaceae | | | Euxino-Hyrcanian |
| 128 | <i>Delphinium aquilegifolium</i> | Ranunculaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 129 | <i>Delphinium elbursense var. elbursens</i> | Ranunculaceae | He | LR | Euxino-Hyrcanian |
| 130 | <i>Delphinium elbursense var. gymnobotrys</i> | Ranunculaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 131 | <i>Delphinium lanigerum</i> | Ranunculaceae | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 132 | <i>Delphinium syncarpum</i> | Ranunculaceae | | DD | Euxino-Hyrcanian |
| 133 | <i>Delphinium ursinum</i> | Ranunculaceae | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 134 | <i>Deyeuxia parsana</i> | Poaceae | He | DD | Euxino-Hyrcanian |
| 135 | <i>Dianthus agrostolepis</i> | Caryophyllaceae | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 136 | <i>Dianthus hyrcanicus</i> | Caryophyllaceae | | LR | Euxino-Hyrcanian |
| 137 | <i>Dianthus mazanderanicus</i> | Caryophyllaceae | | | Euxino-Hyrcanian |
| 138 | <i>Dianthus orientalis subsp. Gilanicus</i> | Caryophyllaceae | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 139 | <i>Dianthus orientalis subsp. Gorganicus</i> | Caryophyllaceae | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 140 | <i>Dianthus orientalis subsp. Obtusisquamatus</i> | Caryophyllaceae | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 141 | <i>Dianthus orientalis subsp. Stenocalyx</i> | Caryophyllaceae | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 142 | <i>Dianthus polylepis</i> | Caryophyllaceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 143 | <i>Diaphanoptera stenocalycina</i> | Caryophyllaceae | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 144 | <i>Dionysia aretioides</i> | Primulaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 145 | <i>Diplotaenia damavandica</i> | Apiaceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 146 | <i>Doronicum wendelboi</i> | Asteraceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 147 | <i>Dracocephalum kotschy</i> | Lamiaceae | Ch | EN | Euxino-Hyrcanian and Irano-Turanian |
| 148 | <i>Echinophora platyloba</i> | Apiaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 149 | <i>Echinops cephalotes</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 150 | <i>Echinops chorassanicus</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 151 | <i>Echinops elbursensis</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 152 | <i>Echinops koelzii</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 153 | <i>Epipactis rechingeri</i> | Orchidaceae | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 154 | <i>Eremostachys lanata</i> | Lamiaceae | | VU | Euxino-Hyrcanian |
| 155 | <i>Eremurus stenophyllus</i> | Asphodelaceae | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 156 | <i>Erigeron hyrcanicus</i> | Asteraceae | He | LR | Euxino-Hyrcanian |
| 157 | <i>Eriocycla olivieri</i> | Apiaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |

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|------------|---|------------------------|-----|----|-------------------------------------|
| 158 | <i>Eritrichium gracillimum</i> | <i>Boraginaceae</i> | | LR | Euxino-Hyrcanian |
| 159 | <i>Erodium dimorphum</i> | <i>Geraniaceae</i> | | VU | Euxino-Hyrcanian |
| 160 | <i>Euphorbia decipiens</i> | <i>Euphorbiaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 161 | <i>Ferula persica var. latisecta</i> | <i>Apiaceae</i> | He | EN | Euxino-Hyrcanian and Irano-Turanian |
| 162 | <i>Fritillaria kotschyana</i> | <i>Liliaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 163 | <i>Gagea wendelboi</i> | <i>Liliaceae</i> | | DD | Euxino-Hyrcanian |
| 164 | <i>Glaucium contortuplicatum</i> | <i>Papaveraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 165 | <i>Graellsia stylosa</i> | <i>Brassicaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 166 | <i>Gypsophila xanthochlora</i> | <i>Caryophyllaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 167 | <i>Gypsophila persica</i> | <i>Caryophyllaceae</i> | Th | LR | Euxino-Hyrcanian and Irano-Turanian |
| 168 | <i>Hedysarum hyrcanum var. incanescens</i> | <i>Fabaceae</i> | | DD | Euxino-Hyrcanian |
| 169 | <i>Helichrysum globiferum</i> | <i>Asteraceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 170 | <i>Helichrysum oligocephalum</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 171 | <i>Heracleum anisactis</i> | <i>Apiaceae</i> | He | VU | Euxino-Hyrcanian |
| 172 | <i>Heracleum gorganicum</i> | <i>Apiaceae</i> | He | LR | Euxino-Hyrcanian |
| 173 | <i>Hieracium hoppeanum</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 174 | <i>Ilex spinigera</i> | <i>Aquifoliaceae</i> | ph | | Euxino-Hyrcanian |
| 175 | <i>Iranecio elbursensis</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 176 | <i>Iranecio oligolepis</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian |
| 177 | <i>Isatis gaubae</i> | <i>Brassicaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 178 | <i>Johrenia golestanica</i> | <i>Apiaceae</i> | He | VU | Euxino-Hyrcanian |
| 179 | <i>Lagochilus aucheri</i> | <i>Lamiaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 180 | <i>Lagochilus kotschyanus</i> | <i>Lamiaceae</i> | Ch | | Euxino-Hyrcanian and Irano-Turanian |
| 181 | <i>Lagochilus quadridentatus</i> | <i>Lamiaceae</i> | | VU | Euxino-Hyrcanian |
| 182 | <i>Leontodon hispidus var. mazanderanicus</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 183 | <i>Leontodon kotschi</i> | <i>Asteraceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 184 | <i>Leonurus cardiaca subsp. Persicus</i> | <i>Lamiaceae</i> | He | VU | Euxino-Hyrcanian and Irano-Turanian |
| 185 | <i>Leutea nematoloba</i> | <i>Apiaceae</i> | He | DD | Euxino-Hyrcanian |
| 186 | <i>Leutea polyscias</i> | <i>Apiaceae</i> | | LR | Euxino-Hyrcanian |
| 187 | <i>Ligularia persica</i> | <i>Asteraceae</i> | He | | Euxino-Hyrcanian and Irano-Turanian |
| 188 | <i>Linum bungei</i> | <i>Linaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 189 | <i>Malvalhaea heterophylla</i> | <i>Malvaceae</i> | | | Euxino-Hyrcanian |
| 190 | <i>Muscaris pseudomuscari</i> | <i>Hyacinthaceae</i> | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 191 | <i>Myosotis anomalla</i> | <i>Boraginaceae</i> | He | LR | Euxino-Hyrcanian |
| 192 | <i>Nepeta allotria</i> | <i>Lamiaceae</i> | He | DD | Euxino-Hyrcanian |
| 193 | <i>Nepeta crassifolia</i> | <i>Lamiaceae</i> | He | | Euxino-Hyrcanian and Irano-Turanian |
| 194 | <i>Nepeta crispa</i> | <i>Lamiaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 195 | <i>Nepeta glomerulosa</i> | <i>Lamiaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 196 | <i>Nepeta pogonosperma</i> | <i>Lamiaceae</i> | Ch | LR | Euxino-Hyrcanian |
| 197 | <i>Nonnea longiflora</i> | <i>Lamiaceae</i> | | LR | Euxino-Hyrcanian |
| 198 | <i>Nonnea minutiflora</i> | <i>Lamiaceae</i> | | DD | Euxino-Hyrcanian |
| 199 | <i>Onobrychis gaubae</i> | <i>Fabaceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 200 | <i>Onobrychis masanderanica</i> | <i>Fabaceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |

Appendix 4 Endemic plant species of Iran which exist in the Hyrcanina Region

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| 201 | <i>Onobrychis scrobiculata</i> | <i>Fabaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 202 | <i>Onobrychis subnitens</i> | <i>Fabaceae</i> | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 203 | <i>onosma chrysochaeta</i> | <i>Boraginaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 204 | <i>Ophrys turcomanica</i> | <i>Orchidaceae</i> | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 205 | <i>Orobanche eriophora</i> | <i>Scrophulariaceae</i> | | DD | Euxino-Hyrcanian |
| 206 | <i>Orobanche pogonanthera</i> | <i>Scrophulariaceae</i> | Cry | | Euxino-Hyrcanian |
| 207 | <i>Oxytropis aellenii</i> | <i>Fabaceae</i> | | DD | Euxino-Hyrcanian |
| 208 | <i>Oxytropis bicornis</i> | <i>Fabaceae</i> | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 209 | <i>Oxytropis chrysocarpa</i> | <i>Fabaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 210 | <i>Oxytropis iranica</i> | <i>Fabaceae</i> | He | DD | Euxino-Hyrcanian |
| 211 | <i>Oxytropis kotschyana</i> | <i>Fabaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 212 | <i>Oxytropis masanderanensis</i> | <i>Fabaceae</i> | | | Euxino-Hyrcanian and Irano-Turanian |
| 213 | <i>Oxytropis szovitsii</i> | <i>Fabaceae</i> | He | | Euxino-Hyrcanian and Irano-Turanian |
| 214 | <i>Oxytropis thaumasiomorpha</i> | <i>Fabaceae</i> | | | Euxino-Hyrcanian |
| 215 | <i>papaver gaubae</i> | <i>Papaveraceae</i> | Th | DD | Euxino-Hyrcanian and Irano-Turanian |
| 216 | <i>Paraquilegia caespitosa</i> | <i>Ranunculaceae</i> | He | LR | Euxino-Hyrcanian |
| 217 | <i>Parlatoria rostrata</i> | <i>Brassicaceae</i> | Th | LR | Euxino-Hyrcanian and Irano-Turanian |
| 218 | <i>Pentanema pulicariiforme</i> | <i>Asteraceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 219 | <i>Phlomis ghilanensis</i> | <i>Lamiaceae</i> | | DD | Euxino-Hyrcanian |
| 220 | <i>Polygala platyptera</i> | <i>Polygalaceae</i> | He | LR | Euxino-Hyrcanian |
| 221 | <i>Polygonum hyrcanicum</i> | <i>Polygonaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 222 | <i>polylophium involucratum</i> | <i>Apiaceae</i> | He | DD | Euxino-Hyrcanian |
| 223 | <i>Potentilla flaccida</i> | <i>Rosaceae</i> | He | LR | Euxino-Hyrcanian |
| 224 | <i>Potentilla gaubeana</i> | <i>Rosaceae</i> | | | Euxino-Hyrcanian |
| 225 | <i>Potentilla gilanica</i> | <i>Rosaceae</i> | | | Euxino-Hyrcanian |
| 226 | <i>Potentilla iranica</i> | <i>Rosaceae</i> | | | Euxino-Hyrcanian and Irano-Turanian |
| 227 | <i>Potentilla kandavanensis</i> | <i>Rosaceae</i> | | | Euxino-Hyrcanian |
| 228 | <i>Potentilla mallota</i> | <i>Rosaceae</i> | He | | Euxino-Hyrcanian and Irano-Turanian |
| 229 | <i>Potentilla nuda</i> | <i>Rosaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 230 | <i>Potentilla petraea</i> | <i>Rosaceae</i> | | | Euxino-Hyrcanian |
| 231 | <i>Pseudocamelina glaucophylla</i> | <i>Brassicaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 232 | <i>pyrus kandavanica</i> | <i>Rosaceae</i> | ph | VU | Euxino-Hyrcanian and Irano-Turanian |
| 233 | <i>pyrus mazanderanica</i> | <i>Rosaceae</i> | ph | VU | Euxino-Hyrcanian |
| 234 | <i>Ranunculus amblyolobus</i> | <i>Ranunculaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 235 | <i>Ranunculus elbursensis</i> | <i>Ranunculaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 236 | <i>Ranunculus kotschy</i> | <i>Ranunculaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 237 | <i>Ranunculus sojakii</i> | <i>Ranunculaceae</i> | He | DD | Euxino-Hyrcanian |
| 238 | <i>Reseda bungei var. bungei</i> | <i>Resedaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 239 | <i>Ribes melananthum</i> | <i>Grossulariaceae</i> | | | Euxino-Hyrcanian |
| 240 | <i>Rindera albida</i> | <i>Boraginaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 241 | <i>Rindera regia</i> | <i>Boraginaceae</i> | | VU | Euxino-Hyrcanian |
| 242 | <i>Rumex elbursensis</i> | <i>Polygonaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 243 | <i>Rumex kandavanicus</i> | <i>Polygonaceae</i> | He | DD | Euxino-Hyrcanian |
| 244 | <i>Salvia hypoleuca</i> | <i>Lamiaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |

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| 245 | <i>Salvia oligophylla</i> | Lamiaceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 246 | <i>Sameraria nummularia</i> | Brassicaceae | Th | LR | Euxino-Hyrcanian and Irano-Turanian |
| 247 | <i>saponaria bodeana</i> | Caryophyllaceae | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 248 | <i>Saxifraga iranica</i> | Saxifragaceae | He | VU | Euxino-Hyrcanian |
| 249 | <i>Saxifraga mazanderanica</i> | Saxifragaceae | Ch | | Euxino-Hyrcanian |
| 250 | <i>Saxifraga ramsarica</i> | Saxifragaceae | | VU | Euxino-Hyrcanian |
| 251 | <i>Saxifraga wendelboi</i> | Saxifragaceae | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 252 | <i>Scilla gorganica</i> | Hyacinthaceae | Cry | LR | Euxino-Hyrcanian and Irano-Turanian |
| 253 | <i>Scilla greihuberi</i> | Hyacinthaceae | Cry | DD | Euxino-Hyrcanian and Irano-Turanian |
| 254 | <i>Scorzonera kandavanica</i> | Asteraceae | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 255 | <i>Scorzonera mucida</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 256 | <i>Scorzonera persica</i> | Asteraceae | He | LR | Euxino-Hyrcanian |
| 257 | <i>Scorzonera stenocephala</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 258 | <i>Scrophularia crassicaulis</i> | Scrophulariaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 259 | <i>Scrophularia elbursensis</i> | Scrophulariaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 260 | <i>Scrophularia frigida</i> subsp. <i>Frigida</i> | Scrophulariaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 261 | <i>Scrophularia gaubae</i> | Scrophulariaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 262 | <i>Scrophularia gorganica</i> | Scrophulariaceae | | LR | Province and Irano-Turanian |
| 263 | <i>Scrophularia megalantha</i> | Scrophulariaceae | Cry | | Euxino-Hyrcanian |
| 264 | <i>Scrophularia oxysepala</i> | Scrophulariaceae | | LR | Province and Irano-Turanian |
| 265 | <i>Scrophularia rostrata</i> | Scrophulariaceae | | DD | Province and Irano-Turanian |
| 266 | <i>Semenovia subscaposa</i> | Apiaceae | | | Euxino-Hyrcanian and Irano-Turanian |
| 267 | <i>Sempervivum iranicum</i> | Crassulaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 268 | <i>Senecio iranicus</i> | Asteraceae | He | VU | Euxino-Hyrcanian and Irano-Turanian |
| 269 | <i>Senecio vulcanicus</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 270 | <i>Serratula gracillima</i> | Asteraceae | | DD | Euxino-Hyrcanian |
| 271 | <i>Silene gynodioica</i> subsp. <i>Gynodioica</i> | Caryophyllaceae | He | DD | Euxino-Hyrcanian |
| 272 | <i>Silene lineata</i> | Caryophyllaceae | Th | DD | Euxino-Hyrcanian |
| 273 | <i>Silene palinotricha</i> | Caryophyllaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 274 | <i>Silene sojakii</i> | Caryophyllaceae | Cry | DD | Euxino-Hyrcanian |
| 275 | <i>Stachys laxa</i> | Lamiaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 276 | <i>Stenotaenia nudicaulis</i> | Apiaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 277 | <i>Tanacetum archibaldii</i> | Asteraceae | | VU | Euxino-Hyrcanian |
| 278 | <i>Tanacetum hololeucum</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 279 | <i>Tanacetum tenuisectum</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 280 | <i>Trachydium eriocarpum</i> | Apiaceae | | DD | Euxino-Hyrcanian |
| 281 | <i>Trachydium pauciradiatum</i> | Apiaceae | | DD | Euxino-Hyrcanian and Irano-Turanian |
| 282 | <i>Tragopogon acanthocarpus</i> | Asteraceae | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 283 | <i>Tragopogon caricifolius</i> | Asteraceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 284 | <i>Tragopogon gongylorrhizus</i> | Asteraceae | He | DD | Euxino-Hyrcanian |
| 285 | <i>Tragopogon kotschyi</i> | Asteraceae | He | DD | Euxino-Hyrcanian and Irano-Turanian |
| 286 | <i>Trifolium mazanderanicum</i> | Fabaceae | | DD | Euxino-Hyrcanian |
| 287 | <i>Trifolium radicosum</i> var. <i>radicosum</i> | Fabaceae | He | LR | Euxino-Hyrcanian and Irano-Turanian |

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|------------|---|-------------------------|-----|----|-------------------------------------|
| 288 | <i>Trigonella persica</i> | <i>Fabaceae</i> | Th | LR | Euxino-Hyrcanian and Irano-Turanian |
| 289 | <i>Trigonella teheranica</i> | <i>Fabaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 290 | <i>Tulipa harazensis</i> | <i>Liliaceae</i> | | VU | Euxino-Hyrcanian |
| 291 | <i>Tulipa montana var. montana</i> | <i>Liliaceae</i> | Cry | | Euxino-Hyrcanian and Irano-Turanian |
| 292 | <i>Tulipa ulophylla</i> | <i>Liliaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 293 | <i>Verbascum aucheri</i> | <i>Scrophulariaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 294 | <i>Verbascum sublobatum</i> | <i>Scrophulariaceae</i> | He | LR | Euxino-Hyrcanian |
| 295 | <i>Veronica bungei</i> | <i>Scrophulariaceae</i> | | DD | Euxino-Hyrcanian |
| 296 | <i>Veronica chionantha</i> | <i>Scrophulariaceae</i> | Ch | LR | Euxino-Hyrcanian and Irano-Turanian |
| 297 | <i>Veronica euphrasiifolia</i> | <i>Scrophulariaceae</i> | | DD | Province and Irano-Turanian |
| 298 | <i>Veronica francispitae</i> | <i>Scrophulariaceae</i> | | LR | Euxino-Hyrcanian |
| 299 | <i>Veronica mazanderanae</i> | <i>Scrophulariaceae</i> | He | LR | Euxino-Hyrcanian |
| 300 | <i>Veronica mirabilis</i> | <i>Scrophulariaceae</i> | | DD | Euxino-Hyrcanian |
| 301 | <i>Veronica paederotae</i> | <i>Scrophulariaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 302 | <i>Veronica rechingeri</i> | <i>Scrophulariaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 303 | <i>Vicia aucheri</i> | <i>Fabaceae</i> | | LR | Euxino-Hyrcanian |
| 304 | <i>Viola spathulata</i> | <i>Violaceae</i> | | LR | Euxino-Hyrcanian and Irano-Turanian |
| 305 | <i>Viola spathulata var. delirensis</i> | <i>Violaceae</i> | | VU | Euxino-Hyrcanian and Irano-Turanian |
| 306 | <i>Zeravschania aucheri</i> | <i>Apiaceae</i> | He | LR | Euxino-Hyrcanian and Irano-Turanian |
| 307 | <i>Zoegea leptaurea subsp. <i>mianensis</i></i> | <i>Asteraceae</i> | Th | LR | Euxino-Hyrcanian and Irano-Turanian |