IUCN Conservation Outlook Assessment 2017 **(archived)**
Finalised on 09 November 2017

Please note: this is an archived Conservation Outlook Assessment for Keoladeo National Park. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Keoladeo National Park

SITE INFORMATION

Country:
India
Inscribed in: 1985
Criteria:
(x)

Site description:

This former duck-hunting reserve of the Maharajas is one of the major wintering areas for large numbers of aquatic birds from Afghanistan, Turkmenistan, China and Siberia. Some 364 species of birds, including the rare Siberian crane, have been recorded in the park. © UNESCO

SUMMARY

2017 Conservation Outlook

Good with some concerns

Keoladeo is an artificially created and maintained wetland site and it is recognized that the existence of Keoladeo is due to human modification. The area floods in the rainy season (July-September), from October to January the water level gradually lowers and from February the land begins to dry out. By June only some water depressions remain. The site relies on the addition of water to support the numbers of waterfowl present. The State Party reports that it has taken significant steps to replenish the water regime in the property's wetland systems by the decision to release water and by completing all water related projects, with a commitment from The Government of Rajasthan to provide water to the park to maintain the OUV of the property. These commitments are now being implemented and the park's water requirements are being met from several different sources of water. Nevertheless there is a need for further comprehensive data to demonstrate the sustained supply of the minimum required 550 mcft p.a. of water to the property. Similarly, ecological monitoring programmes, despite indicating some growth, remain inconclusive on the overall trends for bird populations following dramatic crashes in population sizes in 2008/09, and hence there is a need to standardize ecological monitoring methodologies. Related is the uncertainty of guaranteeing ongoing environmental water flows in the face of other human pressures (eg. the demand for water for irrigation), flows which are essential for the health of the wetland system.

Current state and trend of VALUES

Low Concern
Trend: Stable

Progress has been made by the State Party to replenish the water regime within the property's wetland systems by releasing water from reservoirs and completed water-related projects. Ecological monitoring programmes are in place

which are designed to assess long-term ecosystem changes and in particular, the recovery of bird populations. The sustainability of water supply has been ensured by ensuring securing water availability from three different sources of water so that all three of them cannot fail in any single year. The bird data is showing a progressive trend for the last 5 years with no zero year in between. However, comparison of the current bird numbers cannot be made with data of 1990s. Changes in survey methodology and changes in global populations of various species would makes such comparison difficult. However, recent observations show that the nesting birds in the heronry in 2016 amounted to 20760, maximum in the last 30 years. This could be a result of the removal of the invasive African catfish that ensured the proliferation of local fish species has also positively influenced the recovery of the nesting colonies.

Overall THREATS

Low Threat

There has been progress made by the State Party to replenish the water supplies within the property’s wetland systems through the decisions to release environmental water flows from reservoirs and completed water related projects. This needs to be ongoing and demonstrably sustainable through the provision of long-term comprehensive data on annual water replenishment. More accurate and long-term ecological monitoring programmes are needed to understand the status of bird populations and the impact of ecosystem changes and so guide the recovery of bird populations.
An increase in the involvement of local communities in the management of the property should play a key role in contributing to the ongoing success in the control of invasive species.

Overall PROTECTION and MANAGEMENT

Mostly Effective

There is a Management Plan in place for Keoladeo National Park 2010 – 2014, which identifies the ongoing need to restore the water supply to the property’s wetland systems. Commendable efforts on the part of the State Party have been made to restore the water regime of the wetland. Other management interventions have emphasized working closely with local communities to address significant invasive species concerns and manage external pressures. Nevertheless inconsistencies and deficiencies in water flow monitoring and

ecological census contribute to an unclear picture on the outlook for the sites' wetland ecosystems and associated bird populations.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- **An area which provides unique and globally significant natural habitats for abundant populations of both resident and migratory waterbirds**
  Criterion:(x)

  The Keoladeo National Park is a 2,873 ha wetland of international importance for migratory waterfowl. The site is one of the major wintering areas for large numbers of aquatic birds from Afghanistan, Turkmenistan, China and Siberia. Some 375 species of birds, including the rare Siberian crane, have been recorded in the park. At the time of inscription it was the wintering ground for the Critically Endangered Siberian Crane and continues to be a habitat for large numbers of resident nesting birds, including five Critically Endangered, two Endangered, and six Vulnerable species as well as being a breeding ground for approximately 115 species. The habitat mosaic of the property supports a large number of species in a small area, with 42 species of raptors recorded (IUCN Evaluation, 1985; SoOUV, 2012).

Other important biodiversity values

- **Wetland / waterbird values**

  The fish fauna is both diverse and abundant in this park. Various species of fish that live in various strata of water, having varying sizes and shapes and capabilities of escaping the predators constitute the diverse and complex

prey base for supporting various feeding guilds of aquatic birds. The availability of areas with water depths varying from few centimetres to a few meters all the time, is another reason for the presence of a diverse array of wading, diving, dabbling and stalking water birds in this park. (Management Plan for Keoladeo NP-2010-14). In recent years reappearance of certain species that were thought to be locally extinct from Keoladeo NP has been observed. For example, the Fishing Cat (Prionailurus viverrinus) was caught on a camera trap recently. The spotted pond terrapin (Geoclemys hamiltonii) also was recorded recently. Other than these, a leopard (Panthera pardus) has arrived in the park and has made his territory there. Another small cat, the Caracal (Caracal caracal) has been photographed by one of the camera traps this year. (Director, Keoladeo NP –Pers. comm.)

Assessment information

Threats

Current Threats

Low Threat

Previous SOC reports have noted the dramatic decline in bird populations attributed to fluctuations in natural and artificial water flows. Good quality water allocations estimated at 550 mcft p.a. are deemed necessary to ensure the recovery of the bird populations which are central to the OUV of the property. (IUCN SOC, 2012; IUCN SOC 2014). The State Party reports that it has taken significant steps to replenish the water supply in the property by releasing water from several sources (SP Report, 2014), hence the threat from recently insufficient water levels in the park is likely to have been much reduced; however, further data demonstrating the sustained supply of the minimum required 550 mcft p.a. of water to the park are needed to confirm this assessment. (IUCN SOC, 2014)
Accurate time series data on migratory and resident water bird populations is also urgently needed to confirm the conservation status and outlook for these populations (IUCN SOC, 2014).

Ecodevelopment Committees (EDCs), which have been formed with villagers from 16 villages adjacent to the park, will be critical to establishing good relations, mitigating the impacts of neighbouring communities and to controlling invasive species.

► Invasive Non-Native/ Alien Species

Low Threat
Inside site, extent of threat not known

The State Party reports that during 2007, local communities have been involved in the removal of the invasive species, Prosopis juliflora. (SP Report, 2012)
However, Prosopis juliflora remains a threat to the site. Some eradication was done in 2007-2008 but not enough to prevent further spread. It has been reported by the State Party that by 2014, 1030 ha of forest had been completely cleared of the invasive plant. (SP Report, 2014).
Water Hyacinth (Eichhornia sp.) also poses a threat to the aquatic ecosystem of Keoladeo National Park as dense mats of the hyacinth increases siltation in the wetland. The removal of water hyacinth has been carried out successfully using labour from the Ecodevelopment Committees (EDCs), which have been formed with villagers from 16 villages adjacent to the park. (SP report, 2014)
Whilst Lantana camara is a slower moving threat to the local vegetation its eradication is also required. (IUCN SOC Consultation, 2011).

A recent invasive species to the park has been the African cat fish (Clarias gariepinus). Both the diversity and abundance of the fish fauna was found to be declining and the predatory African cat fish was spreading everywhere. From 2009 onwards the park management has been continuously removing the African catfish in the peak summer season when the water in the wetland reduces to a few puddles here and there. This operation was carried out by involving EDCs, local fishermen and NGOs. Presently the Africal cat fish population has been brought to very low levels and the increase in the population of local varieties of fish could be observed.

► Tourism/ visitors/ recreation

Very Low Threat

Inside site, scattered(5-15%)

Whilst the property is known for bird photography, there do not appear to be guidelines and restrictions set down to ensure little or no disruption is made to bird populations by the huge numbers of photographers, both private and professional, who visit the site for this purpose (IUCN Stakeholder Consultation, 2011). The tourists are not allowed to leave the designated tracks/roads and enter the water. Birds get habituated to tourists and come closer to the roads by the month of February. The Range Officer (Tourism) and his staff keep patrolling the area to ensure the tourist discipline.

► Utility / Service Lines

Low Threat
Outside site

An increase has been reported in numbers of mobile phone towers around the site which may be harmful to the breeding cycle of some species especially storks and passerines (IUCN Stakeholder Consultation, 2011). The State Party notes that a 500 metre eco-sensitive area is defined around the property; however this cannot be widened due to the proximity of Bharatpur town (IUCN SOC, 2012). However, there has been no scientific evidence so far to prove that the mobile phone towers are harming the birds. The numbers of nesting birds reached an all time peak in the year 2016.

► Dams/ Water Management or Use

Low Threat
Inside site, throughout(>50%)

The key determinant in sustaining the property’s OUV is the maintenance of adequate environmental water flows.

Time series data on bird populations has been previously provided by the State Party; however, data deficiencies and the use of different methodologies make interpreting this data, and thus interpreting the conservation status of key species, challenging. Bird populations fluctuate significantly and declined dramatically between 2008 and 2009. This steep decline followed a period up until the 1990s when reported numbers of birds flocking to the site may have exceeded 100,000 (IUCN SOC, 2011).

The State Party reports that it has “taken significant steps to replenish the water regime in the property’s wetland systems through decisions to release the required environmental water flows and has completed all water related projects to meet the water requirements on a sustainable basis” This includes the completion of the Govardhan Drain Project on the 29th September 2013 (SP Report, 2014). Additional data on water flows from other projects such as the Dholpur – Bharatpur Drinking Water Project and other water sources is not available making it difficult to assess the long-term sustainability of water flows to the property (IUCN SOC, 2014). The significant effort undertaken by the State Party to ensure adequate water flow to the property will have much reduced the threat emanating from recently insufficient water levels in the park. However, more complete data demonstrating the sustained supply of the minimum required 550 mcft p.a. of water to the park are needed to confirm this assessment.
After commissioning of the Dholpur – Bharatpur Drinking Water Project in 2011 and the Govardhan drain project in 2013, no drought years have been recorded in the park.
Overall, the steps undertaken by the State Party to ensure water supply to the park are commendable. However, the entire wetland cannot be filled if the rains do not occur in the region.

► Logging/ Wood Harvesting

Very Low Threat
Inside site, localised(<5%)

At the time of the evaluation of the site in 1985 it was reported that illegal felling of trees and harvesting of grasses at the site had been phased out (IUCN Evaluation,1985). However there remain concerns of the loss to its green cover and feed for wild species due to illegal felling and harvesting (IUCN Stakeholder Consultation, 2011). However the State Party notes that no illegal conversion of agricultural land to other uses has so far taken place. There has been local community involvement in grassland management and this participatory approach to management of the property should be continued and further intensified to ensure ongoing success (IUCN SOC, 2012).

With the changing times, majority of the communities around the park have switched over to LPG fuel and there has been a significant reduction in the

fuel wood collection from the park. A 6 foot tall boundary wall that was reconstructed and completed between 2007 and 2015 ensures the near complete protection of the park from wood collectors.

Potential Threats

Low Threat

Different invasive species (such as the drought-tolerant Prosopis juliflora and the Water Hyacinth Eichhornia sp.) will react differently to an increase in water supply (IUCN SOC, 2014), which will require an adequate management response. Further development along the periphery of the site may bring an increase in road traffic which may compromise the OUV of the property if the disturbance impacts on the bird populations within the Park. (IUCN/UNESCO Mission Report, 2008).

► Roads/ Railroads

Very Low Threat
Inside site

The National Highway (NH 11) passes in front of the Park with the probability of an increase in heavy traffic. (IUCN Stakeholder Consultation, 2011).

► Invasive Non-Native/ Alien Species

High Threat
Inside site

Invasive water plant species such as Eichhornia and Paspalum may occur and spread if not controlled, with the restoration of water supplies. (IUCN/UNESCO Mission Report, 2008)

Protection and management

Assessing Protection and Management

► Relationships with local people

Mostly Effective

Local communities have been involved in the removal of the invasive

species, Prosopis juliflora; in some prevention of offences; education; and grassland management. Eco Development Committees have been constituted in 16 villages adjacent to the park boundary. This initiative is a result of establishing committees based on the proximity of the villages to the park and also on their apparent dependence on the park. The objective of these committees is to promote sustainable use of land and other resources, as well as on-farm and off-farm income generating activities which are not deleterious to the property (IUCN SOC, 2012; SP Report, 2014).
Local communities and indigenous peoples resident, or close, to the property have had some input into discussions relating to management but no direct role in management (UNESCO, Periodic Report, 2011).
Recently the EDCs have been given a bigger role in management of the park. The Cycle Rickshaw EDC has been actively involved in removal of African Cat Fish, Water Hyacinth and Prosopis juliflora. Most of the other EDCs have been involved in the removal of Prosopis juliflora from the areas falling within their village premises.

► Legal framework

Highly Effective

The legal status of the property has remained the same since its inscription on the World Heritage list. The property is managed by the Forest Department of the State of Rajasthan. According to the State Party, (SP Report, 2012) “there is excellent capacity and resources to enforce and regulate legislation at the site”. The property is protected under The Wildlife Protection Act, 1972. The avifauna of satellite wetlands are also protected by the same legislation but this Act does not offer protection to the habitat of non-protected satellite wetlands (UNESCO, Periodic Report, 2011). Since the property is enjoying the status of a National Park, the maximum protection status that any Protected Area can get in India.

► Enforcement

Mostly Effective

Law enforcement system is effective. There are three Range Officers; one for tourism management, one for the flying squad that attends to emergencies issues related to tourism activities and protection and the Range Officer for Keoladeo NP looks after the development works as well as the overall

management of the protection activities. There is a road that encircles the park along the boundary wall on all sides. Protection chowkis are located at every 2 to 3 km along this road.

► Integration into regional and national planning systems

Some Concern

The property is a protected wetland located in the central Asian migratory flyway. 27 satellite wetlands have been identified around the property that support a large number of avifauna and act as buffer wetlands (UNESCO, Periodic Report, 2011).
In the landscape surrounding Keoladeo National Park, there are many wetlands both big and small; seasonal and perennial. The migratory waterfowl arriving in this region get distributed in these wetlands as they move in between these wetlands for feeding and roosting. There are no barriers to the free movement in the flight corridors of the birds.

► Management system

Some Concern

The Management Plan of 2002-2006 has been updated (2010-2014) placing special emphasis on solving the water crisis, eco-development, protecting and improving the habitat for waterfowl and enhancing interpretation facilities to improve visitor satisfaction. Research and monitoring has been given adequate importance as in previous plans. There has also been more emphasis placed on ecologically sound tourism management. Whilst there is some coordination between the range of administrative bodies / levels involved in the management of the property it could be improved. The Management Plan has addressed all the issues related to maintaining the OUV of the property and the recommendations have been made with respect to each of the issues related to the park. The implementation of the recommendations is under progress and it is periodically reviewed by the office of the Chief Wildlife Warden, Rajasthan.

► Management effectiveness

Mostly Effective

The updated management plan (2010-14) has been developed identifying the need to engage local people in management. In order to increase the role

of local communities in the management of the property, eco-development programmes have been initiated in the surrounding villages. Habitat improvement operations are now being executed through the eco-development committees and an annual work/action plan exists and most or all activities are being implemented and monitored. As a result, local communities have some input into discussions relating to management but no direct role in management; indigenous peoples directly contribute to some decisions relating to management but their involvement could be improved and there is contact but little or no cooperation with industry regarding the management of the property and/or area surrounding the property (UNESCO, Periodic Report, 2011). Chapter 10 of the Management Plan for Keoladeo NP lays out the parameters for evaluating the effectiveness of the management of the park.

► Implementation of Committee decisions and recommendations

Mostly Effective

The recommendation to ensure adequate supply of water to the site is being addressed by the State Party via a range of existing water sources and new sources linked to water supply projects. The State Party has committed to meeting the environmental water flow requirements of the wetland (SP Report, 2014). However, it is not clear what the overall strategy is for sustaining the necessary 550 mcft p.a. to sustain wetland values (IUCN SOC, 2014). Clearer time series data is needed on the annual water flow into the property to assess the long-term adequacy of the water regime.

However, overall a flexible and effective water management regime is currently in place. There are four sources of water.

Water from Gambhiri river that reaches the national park through through Ajan Bandh, Water from the Chambal Dholpur drinking water project, water from Govardhan drain and the water from rainfall.
The State Party is also working to address the recommendation regarding control of invasive alien species and involvement of local communities in management.
No information has been provided on development in the immediate vicinity of the property, as requested by the Committee in Decision 36 COM 7B.11

(IUCN SOC, 2014).

► Boundaries

Mostly Effective

The property had no buffer zone at the time of its inscription on the World Heritage List. This is partly due to the property being enclosed within a 2.6m high boundary wall which provides significant protection from surrounding activities (IUCN/UNESCO Mission, 2008). The State Party also notes that a 500m eco-sensitive area is defined around the property, which cannot be widened due to the proximity of Bharatpur town (SP Report, 2012).

► Sustainable finance

Mostly Effective

75% of the property's overall funding is provided by the National/Federal Government and 20% by the Regional/Provincial Government. The State Party reports that the available budget is sufficient but further funding would enable more effective management to international best practice standard. The existing sources of funding are secure in the medium-term and planning is underway to secure funding in the long-term (UNESCO, Periodic Report, 2011)
The property has received an estimated total of USD 80,000 in international funding (Enhancing Our Heritage project on management effectiveness assessment). The property has also benefited from the UNF funded World Heritage India programme from 2008 (enhance management effectiveness and build staff capacity; increase the involvement of local communities in the management of the property and promote their sustainable development; and raise awareness through communications and advocacy). (IUCN SOC, 2012).

► Staff training and development

Mostly Effective

At the time of inscription the property was managed by a Deputy Chief Wildlife Warden with a staff comprising a research officer, forester, three rangers, 20 wildlife guards, clerks and an accountant with all staff being employed on a permanent, full-time basis. (IUCN Evaluation, 1985)
A capacity development programme is in place at the property and is

partially implemented.

The staff is getting sufficient periodical trainings in law enforcement and skills in natural history and wildlife management. The Ranger Officers and field staff were sent on exposure visits to various PAs in India upgraded as part of a capacity building project. There had been new recruitment of forest guards in 2011, 2013 and 2016 and the fresh recruits have been trained adequately before being sent on field duty.

► Sustainable use

Mostly Effective

One of the main uses of the property is ecotourism. Only manually driven cycle rickshaws and battery operated golf cars are allowed inside the park Bicycles are also provided to the tourists for visiting the park.

► Education and interpretation programs

Some Concern

Whilst the tourism industry and local authorities have a good understanding of the importance of the property as a World Heritage Site there is a lack of understanding amongst the local farming and indigenous communities. There is a planned education and awareness programme however the State Party reports that it only partly meets their needs and could be improved (UNESCO, Periodic Report, 2011).

► Tourism and visitation management

Mostly Effective

There is an excellent visitor centre, information booths, guided tours and a very good system of walking trails. The education, information and awareness building activities are very good with a variety of information brochures and signage available to visitors along the trails (UNESCO, Periodic Report, 2011). This view is countered by the 2008 Mission which found some features in need of restoration and noted that more resources were required for the infrastructure in the park (IUCN/UNESCO Mission, 2008).

► Monitoring

Mostly Effective

The State Party reports that a comprehensive, integrated programme of monitoring, which has been identified as necessary for improving understanding of the OUV of the property, is in place. This programme is noted as monitoring the status of bird populations with particular reference to the amount of water available. The monitoring programme is linked to the Management Plan and much of the monitoring activity is carried out by the managers and staff with involvement of the local communities.
The park authorities carry out a regular annual waterfowl count in the property. (SP Report, 2012), (SP report, 2014)
There has been aquatic habitat monitoring also carried out recently. Water samples collected from different blocks of the property have been analyzed for heavy metals, pesticides, toxic metals and salt content. Monitoring avifaunal diversity in the 27 satellite wetlands around Keoladeo National Park which falls within 100 km radius of KNP has also taken place. (SP Report, 2014)
Monitoring in Keoladeo is mostly effective; however, different datasets present contradictory information on bird numbers and different methodologies contribute to an unclear overall picture on bird population trends (IUCN SOC, 2014).

► Research

Some Concern

Whilst there are scientific studies being carried out there is little that is directly related towards management needs at the site (UNESCO, Periodic Report, 2011).

Overall assessment of protection and management

Mostly Effective

There is a Management Plan in place for Keoladeo National Park 2010 – 2014, which identifies the ongoing need to restore the water supply to the property’s wetland systems. Commendable efforts on the part of the State Party have been made to restore the water regime of the wetland. Other management interventions have emphasized working closely with local communities to address significant invasive species concerns and manage external pressures. Nevertheless inconsistencies and deficiencies in water flow monitoring and

ecological census contribute to an unclear picture on the outlook for the sites' wetland ecosystems and associated bird populations.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**

Some Concern

At the time of the evaluation mission it was noted that there is a lack of a buffer zone to the site due to physical constraints. Keoladeo National Park sits within a populated human-dominated landscape. It is surrounded by 17 villages and the industrial city of Bharatpur. The high stone wall that surrounds the park prevents, to an extent, human and domestic stock trespass. The wetlands of the park are dependent on a regulated water supply from outside the park boundary. (IUCN Evaluation, 1985). However, an ecological buffer zone surrounds the property even though legally it is a part of the National Park, the wetland which supports the biggest heronry of the region and the wetland blocks that support thousands of migratory waterfowl are situated outside the boundary of the park. Eco-sensitive zone of 500m all around the National Park has been proposed and it is due for approval by the Government of India.

▶ **Best practice examples**

Removal of Invasive Alien Species has been carried out by the PA management by involving the local communities. Since there are legal restraints on commercial removal of any produce from the Protected Areas in India, it could only be distributed for the bona fide livelihood use of the communities living around the park. Successful control of Prosopis juliflora, Eichornia crassipes and Clarias gariepinus have been achieved in this manner.
The most eco friendly tourism is practiced in this park where tourists visit the park on bicycle rickshaws, bicycles and on foot only.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► An area which provides unique and globally significant natural habitats for abundant populations of both resident and migratory waterbirds

Good
Trend:Improving

Many of the threats to the OUV of the property have been brought to harmless levels by the management interventions. Since water is available from three different sources now, the park will not remain completely dry in any given year. The rainfall in the region has always been erratic and a single source of water cannot be relied upon for ensuring water for the PA every year. Presently water is received from Chambal which is a perennial river and will ensure sustenance of ecological processes in all situations of rainfall. With the intensive management inputs and the completion of projects which assured water input into the area, the Keoladeo National Park has been revitalized and in 2016 a record number of 20760 birds nested in the heronry. The Siberian Crane, previously the flagship species of the park, has not been observed at the property since 2002 (UNESCO/IUCN Mission Report, 2008); however, this is due to threats that the population of the Siberian Crane faced outside the property along its distribution and migration range. p Programmes such as the collaborative control of invasive plants in cooperation with local people and the creation of village based Ecodevelopment Committees appear to be having a positive impact on the park’s conservation.

Summary of the Values

► Assessment of the current state and trend of World Heritage values

Low Concern

Trend: Stable

Progress has been made by the State Party to replenish the water regime within the property’s wetland systems by releasing water from reservoirs and completed water-related projects. Ecological monitoring programmes are in place which are designed to assess long-term ecosystem changes and in

particular, the recovery of bird populations. The sustainability of water supply has been ensured by ensuring securing water availability from three different sources of water so that all three of them cannot fail in any single year. The bird data is showing a progressive trend for the last 5 years with no zero year in between. However, comparison of the current bird numbers cannot be made with data of 1990s. Changes in survey methodology and changes in global populations of various species would makes such comparison difficult. However, recent observations show that the nesting birds in the heronry in 2016 amounted to 20760, maximum in the last 30 years. This could be a result of the removal of the invasive African catfish that ensured the proliferation of local fish species has also positively influenced the recovery of the nesting colonies.

► **Assessment of the current state and trend of other important biodiversity values**

Data Deficient

Trend: Data Deficient

.

Additional information

Benefits

Understanding Benefits

► **Outdoor recreation and tourism**

There is a steady influx of tourists to the park and in particular of bird-watchers. There is a visitor centre and lecture hall and interpretative material along the system of trails.

► **Collection of timber, e.g. fuelwood**

Members of the EDCs are allowed to remove and carry home the Prosopis juliflora trees for their bonafide livelihood use (SP Report, 2014).

Opportunities exist for local people to utilize other invasives such as Water Hyacinth for fertilizer, Asolla for cattle feed.

Summary of benefits

The involvement of local communities and stakeholders in the management of Keoladeo National Park has been facilitated through the establishment of Ecodevelopment Committees (EDC's). These have been formed based on the proximity of villages to the park and also on their apparent dependence on the park. Their aim is to engage local participation in projects promoting sustainable use of land and other resources, as well as income generating activities which are not deleterious to the property. Thus local communities become involved in the protection and preservation of the OUV of the property. Another benefit from the site is the large number of tourists and bird watchers who visit. The recently opened Memento shop and Parking area for tourist vehicles are managed by the ecodevelopment committees. This has provided additional income for the local stakeholders. Opportunities exist for local people to be employed by the park and/or via tourism guiding activities (rickshaw bird watching). The visitor centre and interpretative signage along the trails within the park contribute to the education of those who visit.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	National Rural Employment Guarantee Scheme		Labourers from adjoining villages make their living by clearing Prosopis juliflora from the park. (This initiative is a follow-on from a project where villagers removed invasive species Prosopis juliflora and in return were able to keep the wood from the harvested weed trees.)
2	Govardhan Drain Project		Govardhan Drain is an interstate flood control drain constructed jointly by the U.P and Rajasthan Government. The project was completed in September, 2012.

№	Organization/ individuals	Project duration	Brief description of Active Projects
3	A Study on the ecological monitoring of the satellite wetlands around KNP.		This study was initiated by the Wildlife Institute of India in 2005 under the UNESCO-IUCN project „Enhancing Our Heritage: Managing and Monitoring for Success in Natural World Heritage Sites‟ and which has been continued under the UNESCO-UNF project „Building partnerships to support UNESCO’s World Heritage Programme: India‟ (2008-2012). As part of these studies, satellite wetlands of high significance value to both migratory and resident water birds have been identified and these are being regularly monitored for the presence and abundance of avifaunal populations. (SP Report, 2012)
4	Nature Based Tourism-Rajputana Society of Natural History (RSNH) (a registered non-profit NGO)		The Rajputana Society of Natural History’s model is to develop income sources for poor village communities with nature based tourism, using one of the neighbouring villages as model. (IUCN Stakeholder Consultation, 2011)

REFERENCES

№	References
1	Discovered India (2014). Keoladeo National Park. http://www.discoveredindia.com/list-of-world-heritage-sites…. Accessed 23 April 2014
2	IUCN (1985). Evaluation Report. Keoladeo National Park. IUCN Gland, Switzerland
3	IUCN (2011). Stakeholder SOC Consultation. IUCN Gland, Switzerland
4	IUCN (2011). State of Conservation Report Keoladeo National Park. IUCN Gland, Switzerland.
5	IUCN (2014). State of Conservation Report Keoladeo National Park. IUCN Gland, Switzerland.
6	IUCN/UNESCO (2008). Report of a joint reactive monitoring mission to Keoladeo National Park, India IUCN Gland, Switzerland. UNESCO Paris, France
7	Ramsar Convention (1981). Keoladeo Bird Sanctuary, Bharatpur Ramsar Information Sheet - http://ramsar.wetlands.org/Database/SearchforRamsarsites/ta…. Accessed 23 April 2014
8	Ramsar Convention (2014). Keoladeo National Park Summary Description http://ramsar.wetlands.org/Database/SearchforRamsarsites/ta…. Accessed 23 April 2014
9	State Party of India (2012). State Party Report Keoladeo National Park Submitted to 36COM
10	State Party of India (2014). State Party Report Keoladeo National Park
11	UNESCO (2011). Periodic Reporting Section II. Keoladeo National Park UNESCO Paris, France
12	UNESCO (2012). Statement of Outstanding Universal Value 36COM. On line http://whc.unesco.org/en/list/340 accessed 26 February 2014
13	World Heritage Committee (2012). Decision 36 COM 7B.11 Keoladeo, India On line (IUCN SOC, 2012) accessed 26 February 2014