

CEPF Final Completion and Impact Report

Organization's Legal Name:	Wildlife Conservation Society HQ
Project Title:	Spreading Cambodian models to save Asia's bustards on farmed lands
Grant Number:	CEPF-109901
Hotspot:	Multiple
Strategic Direction:	1 Multiple
Grant Amount:	\$100,000.00
Project Dates:	October 01, 2019 - March 31, 2022
Date of Report:	February 03, 2022

IMPLEMENTATION PARTNERS

WCS Cambodia Program: provided technical support to project implementation in India and coordinating the exchange visit

WCS-India: responsible for the implementation of activities regarding Great Indian Bustard and Lesser Florican conservation

Aarnayak: responsible for the implementation of activities regarding Bengal Florican conservation in Assam

Bombay Natural History Society (BNHS): Provided guidance and training sessions on monitoring for identified lekking sites to Florican Village Watcher.

Samvedana (Akola Maharashtra): Provided training on innovative practices that helped in active participation of local tribal communities in conservation programs of Lesser Florican and its habitats in the respective region.

Wildlife Institute of India: Provided information on Lesser Florican locations from their satellite telemetry study

CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
The project will put in place bustard conservation measures that are compatible with suitable existing human uses of the places where the birds are found. It will promote agricultural systems that are profitable to farmers and create suitable habitat conditions for floricans, and in doing so ensure that these	Great Indian Bustard at Jaisalmer: Threats have been documented and a plan made for reducing and mitigating impact. WCS leveraged significant funding based on the CEPF grant to enable conservation to continue at a greater scale outside of the CEPF project. Lesser Floricans at Pratapggarh:

Impact Description	Impact Summary
species populations do not undergo further declines.	<p>Land cover change has been one of the major drivers leading to an alteration of critical florican habitats. The land cover analysis for the landscape is ongoing. The exercise will help in understanding the temporal changes in grassland and cropland-covered areas.</p> <p>Intense commercial agriculture is practised throughout this landscape. At the current time, it does not appear likely that an agriculture-based project will be beneficial to Lesser Florican, but we plan to undertake research during the 2022 monsoon season before making this decision. One potential avenue to promote grass cultivation is through better management of fodder sources for cattle. Discussions are ongoing with local community members and the Animal Husbandry Department to better understand existing practices in growth and harvest of fodder and look for alternative sources for fodder. This will be continued in 2022.</p>

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
The project will stabilize populations of three bustard species at three key sites.	<p>The citizen science-based -monitoring protocol for the Lesser Florican has been shared with communities throughout the landscape. Over the coming years this will help to track the bird movement during breeding and non-breeding seasons, and better understand habitat use. Strategic management of grazing grassland has been proposed to the Gram Panchayat by maintaining some patches of grasslands intact for fodder generation. This will help to provide food resources and a favourable nesting ground for the Lesser Florican.</p> <p>The team encouraged Gram panchayats and farmers to reduce agricultural activities during the breeding season and to restore perennial vegetation covers to restore the communal grassland patches.</p> <p>In Koklabari Seed Farm, displaying male Bengal Florican territories have been mapped in relation to crop types and other land uses, and the needs of farmers using the site are now better understood.</p>
The project will increase incomes of farmers participating on bustard-friendly agricultural pilots, benefiting 300 families and a total of 750 women and 750 men.	The agriculture system in the Pratapgarh region is complex. They have 2 different cropping seasons. We would require at least 2 breeding seasons to understand the effects of farming practices on the bird. We would be putting this on hold till we understand more about the bird and its association with the croplands from this region.

Impact Description	Impact Summary
	In Koklabari Seed Farm, 130 families have volunteered to take part in a florican-friendly farming trial, which will increase incomes while protecting florican habitat. Discussions are ongoing between Aaranyak, SMP, and WCS Cambodia on the design of this trial.

Unexpected impacts (positive or negative)?

The positive Impacts are:

As mentioned above, the project provided us with an opportunity to interact with other organizations that work on the conservation of Lesser Florican, and through networking increase the potential for successful conservation of the species across its distribution. These organizations include the State Forest Departments of Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, and Andhra Pradesh, and organizations such as the Bombay Natural History Society (BNHS) working in Rajasthan and Karnataka, Wildlife Institute of India (WII) working in Rajasthan, Samvedana working in Akola, Maharashtra. These practitioners have been working in their respective areas for over three years. The interactions with these experienced practitioners allowed us to gather crucial information on the species' preferred habitats and innovative conservation and management measures practiced in the respective regions. The inputs and experiences shared by the practitioners will assist us in designing an effective Lesser Florican conservation and management program at the local level.

The project team also reached out to Dr. Sutirtho Dutta (WII), Dr. Sujit Naravde (BNHS), Dr. Aparna Watve (IUCN SSC Red List Authority Coordinator), and Mr. Kaustubh Pandharipande (Samvedana, Pune) for developing a sampling protocol for the species, understanding detection methods for the species, experience of effective community engagement, grassland management, and policies. Although to date, flight and entry restrictions caused by the COVID-19 pandemic measure that we were unable to take a field visit to Cambodia and the Cambodia team were unable to visit India, this also meant that Mr. Ashish John (Community Liaison Technical Advisor for WCS Cambodia) was on home leave in India, and so he was able to visit the Pratapgarh area to evaluate farming practices and implications for Lesser Florican Conservation.

The negative Impacts:

The project area was proposed to be in Pratapgarh in Rajasthan and also in Madhya Pradesh. However, we were unable to cover the proposed areas in Madhya Pradesh during the duration of the project due to the restrictions imposed as a result of the Covid-19 pandemic.

PROJECT RESULTS/DELIVERABLES

Overall results of the project:

This project aimed to apply Bengal Florican conservation models developed by WCS in Cambodia to populations of bustards in India. Initially, the project focussed on Great Indian Bustard, because it is the bustard species of highest conservation concern. Funding from CEPF enabled WCS-India to initiate a program for the conservation of Great Indian Bustards in Jaisalmer, Rajasthan. Relationships were established with farmers, and the project began to evaluate ways to address threats to the grassland habitat of the species and its use of agricultural areas. This meant that a much larger grant was leveraged from the Rural India

Support Trust focussed only on the Great Indian Bustard, and it was decided to re-focus the CEPF-funded project on Lesser Florican.

There was originally an intention to conduct a number of exchange visits of farming and bustard conservation staff between the WCS Cambodia program and WCS India. However, owing to COVID-19 induced travel restrictions this was not possible during the reporting period. It is still hoped that the visit of WCS India staff to Cambodia can take place during March 2022, before the project is completed.

The CEPF-funded project has enabled WCS to begin to evaluate the efficacy of developing a long-term Lesser Florican conservation program. When planning the project, WCS had little information on the conservation landscape of Lesser Florican, which NGOs and government agencies were working on the species, where, and with what methods. The project has answered those questions and helped WCS to begin to identify a potential niche in Lesser Florican conservation.

The project also evaluated the potential for spreading Cambodian models of bustard conservation to Lesser Florican in India, focussing on the breeding sites in the Pratapgarh region of Rajasthan. Lesser Floricans are rare and elusive birds that are consequently difficult to study. During the project, our efforts to answer questions about the best locations and methods for Lesser Florican conservation were further hampered by the COVID-19 pandemic. We are grateful to CEPF for extending the project by one year to maximize our opportunities for conducting fieldwork. However, we believe that we will need to conduct one additional field season of investigation and evaluation after the CEPF-funded project is finished before we can make a decision on whether to start a long-term program of Lesser Florican conservation.

Based on the results of the project, it is evident that, like in Cambodia, the first priority in Lesser Florican conservation is protecting as much grassland as possible, and that the details of grassland management matter to both floricans and people. In contrast, it does not appear likely that Lesser Floricans preferentially use farmland to any great extent, and so an agricultural commodity-based bustard conservation program would have little impact. Moreover, it would be socially and politically difficult to implement, because decisions over crop choice, chemical use, and timing of planting and harvest are outside of the control of individual farmers.

The project took significant steps towards establishing a Lesser Florican conservation program, focused on Pratapgarh, Rajasthan. We developed a citizen science-based monitoring protocol to enable communities to collect data on the Lesser Florican. Thirteen Florican Village Watchers (FVW) were appointed and trained to assist the project team to use this protocol to help identify the breeding and non-breeding areas used by the species in the Pratapgarh region. The FVW were appointed for a period of four months, from August to November during the monsoon (breeding) season. Each FVW was provided with a binocular, a mobile handset (for recording data), and a camera to document records (on sharing basis). The FVWs were also provided with literature on Lesser Florican. FVW obtained two confirmed sightings of Lesser Florican from private grassland areas during the breeding season. The FVW observed one female Lesser Florican in August and recorded calls of a male Lesser Florican in September. Both the recordings are from private grasslands. There is therefore a possibility that nesting sites exist in the Pratapgarh area, and this is a research priority in the 2022 breeding season. Secondary information regarding the non-breeding sites was collected through informal discussions with frequent forest visitors from the communities such as hunters and forest dwellers.

Apart from species occurrence, the FVW also helped in mapping the grassland areas in the Pratapgarh region. Each FVW conducted awareness sessions in their respective areas among the community to increase collective knowledge and consciousness about the bird and its breeding habitat. They also informed the local community members about the importance of the Lesser Florican for the grassland ecology and explained how conservation of the Lesser Florican can benefit grassland management. The project also developed guidelines for ethical photography practices through discussion with the thirteen FVW.

The project team developed a good relationship with the Wildlife Institute of India (WII), who is also conducting research and conservation on Lesser Florican. The WHI provided the project team with locations of migratory stopover sites of Lesser Florican, obtained from their satellite telemetry project. The FVW team visited the stopover sites to understand better about the preferred habitats of the species.

To develop a Lesser Florican population and habitat monitoring program, regular discussions were held with the authorities, including the Forest Department, District Collector office, and major landowners in the Pratapgarh area. Meetings with 13 Gram Panchayats (Village council, a basic village-governing institute in Indian villages) from the Pratapgarh area were also regularly held. We have submitted a letter explaining the current scenario of the Lesser Florican from the landscape to every Gram Panchayat. The project team also began a dialogue with the large landholders in the Pratapgarh areas (Thakur and King families) to inform them about our concerns regarding grassland degradation and land-use changes in the landscape and begin to develop an effective grassland management plan.

The project team also visited grassland areas in other states of India (Maharashtra, Madhya Pradesh, Karnataka, Andhra Pradesh, and Telangana) to gain an understanding of the habitat of Lesser Florican and its management. Through these visits, the project team have developed a network of organizations and communities working to prevent the extinction of the Lesser Florican, as well as bird enthusiasts and other stakeholders, which can share information across the distribution of the species.

In Assam, the WCS Cambodia program provided remote support to Aaranyak to investigate the potential for Bengal Florican sensitive agriculture in Koklabari Seed Farm, adjacent to Manus National Park. Fieldwork was significantly impacted by the COVID-19 restrictions, but farming systems are now better understood. Currently, farming methods are chemical-intensive, and whilst a switch to organic might increase the amount of safe insect food available to floricans, without appropriate attention paid to the timing of planting and cropping there may be unintended adverse negative impacts on floricans. These issues are being resolved and a manual for farming at Koklabari is under development.

Results for each deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1.0	Conduct learning-exchange visit to Cambodia	1.1	Report on exchange visit, including preliminary plan for Lesser Florican pilot	It is still hoped that the exchange visit to Cambodia can be conducted in March 2022
2.0	Pilot bustard conservation in India following Cambodian principles	2.1	Manual for farming for Bengal Florican in Koklabari Seed Farm	An analysis of the farming methods, current and future, and the distribution of breeding floricans has been conducted. Based on this a manual for farming for Bengal Florican is under development.
2.0	Pilot bustard conservation in India following Cambodian principles	2.2	Improved protection and conservation status of Lesser Floricans and grasslands in Pratapgarh, Rajasthan	<p>The identification of florican breeding areas followed by regular monitoring during the breeding season was planned for the Pratapgarh landscape. For this purpose, we appointed 13 Florican Village Watchers (FVW). The FVW were selected based on confirmed sightings in the past, accurate descriptions of courtship displays and curiosity to learn more about the Lesser Florican. The FVW were trained to identify and monitor the areas for breeding and non-breeding sites of the Lesser Florican.</p> <p>FVW were equipped with tools and relevant literature for conducting awareness at the local level on the importance of grasslands for the conservation of the species.</p> <p>Guidelines for ethical practices were designed and discussed with 13 FVW regarding observations and documentation of floricans and other birds.</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				We have prepared a small documentary featuring the history of association of the species with the landscape perspective of local people towards species, the need for conservation of the species and its habitat. In order to generate awareness to a broader audience, we intend to share the documentary on regional television, with schools, forest departments, and Gram Panchayats.
2.0	Pilot bustard conservation in India following Cambodian principles	2.3	Garnering stakeholder support and stewardship for conservation of Lesser Floricans	Interactions with the Gram Panchayat and Landowners were initiated to formulate an action plan for grassland improvement and fodder management to ensure optimal breeding habitats for Lesser Florican and other grassland associated species A Series of meetings with the District Collector, Forest officials, medical officers from the Animal Husbandry Department, major landholders from the Pratapgarh region were conducted to discuss the potential action plan for habitat conservation for the breeding ground of the Lesser Florican.
3.0	Disseminate and promote results of pilots	3.1	Workshop proceedings	The workshop could not be implemented due to COVID-19 restrictions. Instead, the project focused on developing relationships with a range of organizations involved in Lesser Florican conservation.
4.0	Sub-grant management and oversight	4.1	Signed sub-grant agreements.	Sub-grants to WCS-India and Aaranyak were signed and implemented.
4.0	Sub-grant management and oversight	4.2	Workplan for the training of local farmers in Manas NP.	Farmer training was not able to take place due to the COVID-19 pandemic. However, the

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				manual will include a workplan for farmer training in line with the agricultural plans.
4.0	Sub-grant management and oversight	4.3	Workplan for the Great Indian Bustard and Lesser Florican components of the project.	<p>Collaboration with different agencies working on Lesser florican and its habitats is in progress at the regional level.</p> <p>In addition to the site-specific approach, the team also focused on a wider area including different grassland regions across the country where the breeding of the species has been reported.</p> <p>The team monitored the bird movement during both breeding and non-breeding seasons by referring to the telemetry data provided by other agencies working on satellite tracking of the bird.</p> <p>A dialogue between Florican Village watchers and local people from different Florican sites already engaged in the conservation of Lesser Florican has been encouraged to sensitize villagers about the importance of conserving the Lesser Florican and its habitat across its range.</p>

Tools, products or methodologies that resulted from the project or contributed to the results:

The team prepared a citizen science-based monitoring protocol to enable communities to collect data during the breeding season of the Lesser florican in Pratapgarh, Rajasthan. An android based app named My-Track was used to identify and regularly monitor potential breeding areas during the monsoon season. The app has helped to geo-track the trails and map the grasslands. App-based grassland and cropland mapping in the Pratapgarh region was completed and the data was further used as a base map for land cover analysis.

PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
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GLOBAL INDICATORS

Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

Name of Protected Area	WDPA ID*	Latitude	Longitude	Country	Original Total Size (Hectares) **	New Protected Hectares ***	Year of Legal Declaration or Expansion
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*World Database of Protected Areas

**If this is a new protected area, 0 should appear in this column

*** This column excludes the original total size of the protected area.

Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management

Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention
Pratapgarh District, Rajasthan, India	23.963323	74.722932	208,550	With the help of the villagers, a protocol was developed for mapping and monitoring the grasslands of the Pratapgarh landscape during the breeding season of the bird.

Benefits to Individuals

- **Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
95	100	Different training sessions were conducted for Florican Village Watchers including: Demonstration of using field equipment (Binocular, mobile for tracking, and camera) Basic birdwatching techniques, the identification of focal species display calls, and visual observations using Binoculars. Hands-on training on mapping the trails and landscapes with the help of an Android-based tracking system- the MyTrack app.

Number of Men Trained	Number of Women Trained	Topics of Training
		<p>Training on ethical wildlife photography. A workshop on Safeguard training including ethics for sampling and data collection. Using google maps for scanning the grasslands and navigation. Keeping and updating data on Google team drive using the Mobile handset.</p> <p>Bengal Florican: training on habitat needs of the Bengal Florican, information on reducing pesticide use.</p>

- **Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits
0	0	

Benefits to Communities

View the characteristics column below with the following corresponding codes:	View the benefits column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	Community Characteristics							Type of Benefit									Country	Number of Males Benefitting	Number of Females Benefitting	
	1	2	3	4	5	6	7	a	b	c	d	e	f	g	h	i				
Meena, Wagari, Bhil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	India	100	80

Characteristics of "Other" Communities:

- Meena, Wagari, Bhil: Hunters and forest dwellers

Policies, Laws and Regulations

View the topics column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	Name of Law	Scope	Topics															
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

“Other” Topics Addressed by the Policy, Law or Regulation:

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment

Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted

Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose
Practitioners working towards conservation of Bustards found in India	2021	India	Yes	Lesser Floricans are migratory, and their migration occurs over a relatively large space

Name of Network/Partnership	Year Established	Country/Countries	Established by Project?	Purpose
				<p>which requires suitable habitat that provides food and shelter along the migration route. It is therefore crucial to map breeding, stopover, and nonbreeding sites in order to ensure favorable habitats providing food and shelter to the species are protected or otherwise managed sustainably. Various government and non-government organizations like the State forest departments, WII, BNHS, and now WCS India, are working on many different fronts to support the efforts towards Lesser Florican conservation. Some agencies already work in partnership and have developed a conservation plan involving Indigenous People and local communities. WCS India have strengthened this network through the project. The network supports the development of community and conservation reserves for preserving existing habitats and expanding grassland area to create potential breeding grounds for the species. The network facilitates collective efforts and development and sharing of innovative practices across a broad community of conservation practitioners.</p>

Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/Countries	Project Intervention	Delivery of Funds?
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Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Sypheotides	indicus	Likh	EN	The development of a citizen science-based -monitoring protocol for the Lesser Florican during the breeding season for Pratapgarh, Rajasthan has been completed. To design effective species conservation and management programs at the local level, a collaboration has been initiated between different institutes in India that are working towards the conservation of breeding and non-breeding sites of Lesser Florican.	Decreasing
Houbaropsis	bengalensis	Bengal Bustard	CR	Preparation of a manual to conduct farming in a way that is compatible with conservation of the species.	Stable

LESSONS LEARNED

Models developed in one country are not always directly transferable to a different context. The project aimed to transfer Cambodian bustard conservation models to an Indian context. We found that some elements of the model transferred well, whilst others were less relevant. Nonetheless, the process of working through the model, and seeking to understand farming and land-use practices of communities and how the bustards use human modified habitats, has helped us to begin to develop a conservation program for the Lesser Florican. We found that farming practices are suboptimal for Lesser Florican, and that the birds tend to avoid croplands. This highlighted the importance of protecting remaining grassland habitat, which is similar to the situation in Cambodia. The project also highlighted the potential importance of grass grown as a cattle fodder as a habitat for Lesser Florican, and this is something that we will investigate further in the next monsoon season (after the CEPF funded project is completed).

The Cambodia bustard conservation model highlights the importance of community-based conservation initiatives, which require effort at the grass-root level. This is the method that we followed in the project. The Cambodian bustard conservation model has also provided a facilitation framework reflecting the participatory approach as one of the strategies for effective community engagement. The design included encouraging stakeholders and community members to understand and focus on the issues of common interest and promoting people's involvement in decision-making. We supported communities with resources (e.g. equipment) and supported the capacity building of participants to achieve desired conservation goals. The use of local knowledge, skills, and resources can benefit a better understanding of the dynamics of the environment and its problems. We also enlisted the help of experts to provide the guidelines for the conservation measures, but so that our work is accepted locally the execution and management remain with the community group. We hope that this will provide stability and long-term sustainability to the conservation work.

SUSTAINABILITY/REPLICATION

One major success of the project was leveraging significant long term financing for WCS India's new Great Indian Bustard conservation program. The CEPF-funded project enabled WCS India to develop a conservation program on Great Indian Bustard and begin consultation with communities in the project area. This directly led to WCS India securing nearly USD 2 million in additional funding for the project. We are grateful that CEPF were nimble enough to allow us to modify our CEPF project and pivot away from Great Indian Bustard towards Lesser Florican. Without securing additional funding for Great Indian Bustard we would not have had the opportunity to begin to design a Lesser Florican conservation program, and without CEPF's flexibility and eagerness for dialogue with grantees we would not have had the funding to do that.

Another success that we wish to highlight is that the citizen science-based approach has proven to be an effective tool for understanding bird migration. We trained Florican Village Watchers (FVWs), and they in turn trained a network of villagers, shepherds, and farmers, who now report Lesser Florican sightings and auditory records. Quality of data can be an issue with citizen science, and it is typically addressed either through collecting a huge quantity of data (so that erroneous records are drowned out), or, as in our situation where the species being studied is rare and records are few, by trained FVWs following up on

reports to authenticate and document the records so that they can be further verified by experts. Through this method we received two verified records of Lesser Florican, and therefore learned a little bit more about its distribution and habitat preferences in the Pratapgarh area.

The major challenge during the project was the COVID-19 pandemic, which impacted many aspects of project implementation and required a one year no-cost extension. In some parts of India, particularly Assam where Aaranyak are working, fieldwork was understandably highly restricted by government regulations, particularly where it involved communities. As a result of travel restrictions, the exchange visits between India and Cambodia were not able to take place. These visits should have been conducted at the beginning of the project, so that all staff had a common understanding of the conservation and agricultural situation in the respective countries. As a result of not being able to travel, the project teams from WCS Cambodia program and WCS India have not been able to meet in person. We addressed this challenge through twice-monthly calls between WCS Cambodia and WCS India, and between WCS Cambodia and SMP and Aaranyak, although this is a poor substitute for gaining a first-hand experience and understanding through exchange visits. Although there are only two months remaining in the project, we still anticipate hosting the WCS India team in Cambodia in mid-March 2022, because this experience will be useful for Lesser Florican conservation going forwards.

ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

The project originally intended to pilot novel or modified farming methods with the communities during the lifetime of the project. However, this was not possible owing to COVID-19 related delays, and instead the project team conducted voluntary participatory consultations with communities to better understand land-use, observed communities use of the land, and surveyed to better understand florican distribution. Following the Stakeholder Engagement Plan (dated July 2019), the project team summarized the project in local language to communities, sub-national government officers, and other NGOs involved in the project, prior to beginning work with them. At Pratapgarh where we did not already have a relationship with the community, we produced a local language poster about the project and the Lesser Florican, which was explained to the communities at village meetings.

ADDITIONAL COMMENTS/RECOMMENDATIONS

Based on Cambodian models, the project successfully seeded a Great Indian Bustard Conservation Program, developed methods for farming at Koklabari Seed Farm that are more sensitive to Bengal Floricans, and enabled WCS India to begin to evaluate the design of a Lesser Florican conservation program in the Pratapgarh area.

One constraint to the latter is that we still have a limited understanding of the use of the Pratapgarh area by Lesser Floricans. There is still a need to better understand the reasons and modes of migration of the species. Due to challenges with detecting birds during the non-breeding season, there is little information about the non-breeding habitat of this species and it is therefore difficult to target conservation work for Lesser Florican to specific locations within the Pratapgarh area. We have approached bustard experts for guidance, and also exploring the effectiveness of other detection modes including acoustic methods and camera traps. We will also need to extend the network of FVWs and other people

working in the landscape, and developing a communication platform for sharing a standard protocol for reporting and monitoring purposes. We also need to understand more about how Lesser Florican have been impacted by habitat change in the Pratapgarh area. Although we know that land cover change has likely caused much of the decline in Lesser Florican, and at least has reduced the area of suitable florican habitat, there is a need to understand the causes and effects of such changes to grassland habitats. We have initiated a land cover analysis to understand the changes in the grasslands from the Pratapgarh area over the past 20 years, so that we can better understand past trends in florican populations and so that we can target our future conservation efforts.

ADDITIONAL FUNDING

Total Amount of Additional Funding Actually Secured (USD)	\$1,907,660.00
Breakdown of Additional Funding	1,907,658 was generated for the Conservation of the Great Indian Bustard and its habitat in the Thar Desert of Rajasthan.

INFORMATION SHARING AND CEPF POLICY

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

WCS, contact Colin Poole, South Asia Regional Director (cpoole@wcs.org). WCS-India, contact Vidya Athreya, Director (avidya@wcsindia.org)