SAVE Meeting Report 2025

Phnom Penh, Cambodia **17th-18th February**
Siem Pang Wildlife Reserve **19th-21st February**

Contents

1. Summary of Actions/ Next Steps 1-2
2. Meeting minutes 3-33
3. Results of SAVE Blueprint Prioritisation 34-37
4. Feedback Questionnaire Results 38-42

ASAP

CAMBODIA VULTURE WORKING GROUP

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1. Summary of Actions/Next Steps

Session (page)	Action	
1. (p3)	Introductory Session	Lead
	Host welcome from Cambodia, introductions & meeting overview. No action	-
2. (p5)	SAVE Blueprint prioritisation	
2.1	**Further prioritisation and involvement with each country to develop additional details on delivery of action.**	**MD**
3. (p6)	Country updates	
3.1	**Advocacy Committee to follow up on this point (veterinary awareness, origins of drugs) with specifically Myanmar in order to advance country progress of the banning of toxic NSAIDs.**	**SA/CB**
3.2	**TAP form a meeting to discuss release protocols looking at energy infrastructure avoidance.**	**JM**
3.3	**CVWG to follow up with WWF Laos re next steps of transboundary collaboration.**	**CVWG**
4. (p10)	The Future Role of Captive Populations	
4.1	**All range countries invited to be involved in a planning workshop to begin going through five stage review process. JPJ to develop next steps in contact with Jamie Copsey of Conservation Planning Specialist Group.**	**JPJ**
5. (p11)	Safety Testing Priorities and Next Steps	
5.1	**IVRI/BNHS/TAP to ensure testing progress links up with planned initiatives in Spain. Also to factor in possible variations between buffalo and cows in terms of dosage levels.**	**KM**
6. (p12)	Cambodia Vulture Action Plan and role of CVWG	
6.1	**CVWG ensure linking Blueprint actions with National Vulture Action Planning and ensuring these fully align.**	**NN**
7. (p14)	Fundraising and Communications Committee (FCC)	
7.1	**Partners all develop priority funding packages to present to TAP for review and on to FCC to develop funding opportunities/identify donors.**	**VD**
7.2	**Both FCC and AC committees to address development of a communications strategy and subgroup and report back to SAVE board.**	**VD/SA**
8. (p16)	Red-headed vulture work in Thailand	
8.1	**Consider integrating RHV planning together with wider discussions on safety-net planning (see point 4 above).**	**JPJ**

8.2	**Initiate follow up meeting as required to consider next steps of SAVE involvement. To involve relevant TAP representatives.**	**CB**
9. (p18)	NSAIDs regulations: CMS obligations	
9.1	**RSPB to draft guidance to help increase basic understanding of the CMS and potential approaches to engaging or supporting government to make greater progress on commitments**	**JZ**
9.2	**SAVE partners based in signatory countries to consider how best to engage relevant government entities on matters relevant to delivery of CMS commitments**	**Relevant partners**
9.3	**SAVE partners facilitate non-CMS countries by providing links and support to Govt.**	**Partners**
9.4	**Relevant parties request agenda item for RSC to report on progress of CMS Resolution for each SAVE country.**	**Advocacy Committee**
10. (p19)	VSZs: Progress/ challenges	
10.1	**TAP arrange a follow up meeting to discuss VSZ criteria, inclusion of other threats.**	**JM/MD**
10.2	**FCC to gather data on funding gaps of VSZ – could tell a bigger story about VSZ concept/ approach/network successes across the region.**	**VD**
11. (p21)	Pharmacy surveys	
	No action.	
12. (p21)	'How to' Guides	
12.1	**All to contact JM/MD with ideas of how to guides/positions to add to website.**	**All**
12.2	**TAP to work on next steps of those in development.**	**JM/MD**
13. (p23)	Additional work in Nepal	
	No action.	
14. (p24)	Impact of poisoning and lessons learned	
	No action	
15. (p27)	Transboundary Vulture Conservation	
15.1	**Relevant parties request RSC to add 'Transboundary cooperations' to agenda and progress this. Discuss issues with CITES for sample analysis - highlight the need for Govt assistance with permissions. Likewise for tagging permissions.**	CB
16. (p28)	Advocacy Committee	
	Provide update at SAVE Open Day (Sept 2025).	
17. (p31)	Summary of the meeting and closing remarks	

2. Meeting minutes

Day 1: Monday 17th February 2025

Session 1. Introductory session

Welcome addresses were provided by three delegates to open the AGM. First, Bou Vorsak, CEO of NatureLife Cambodia and on behalf of the CVWG, provided welcome remarks. Following this, welcome remarks were received from Jemima Parry-Jones MBE, the current Chair of SAVE, before opening remarks by H.E Chea Sam Ang, Secretary of State, Ministry of Environment, Cambodia.

Overview of the SAVE structure - Vinayagan Dharmarajah of BirdLife International
An overview of the structure of SAVE was presented. The types of membership categories were explained (Core Partners, Government Partners, Research Partners, Associate Partners, Affiliate Partners, and Supporting partners). The structure, members, and process of the SAVE Board were presented.

The SAVE committees were then presented. The Fundraising and Communications Committee (FCC) is currently chaired by Vinayagan Dharmarajah. Aims include identifying cross cutting fundraising and communication themes, proactively seeking funding agencies to support concept notes for priority Blueprint actions that need funding, and providing guidance and support to these. Also planning messaging and social media targets for SAVE platforms.

The Advocacy Committee (AC), currently co-Chaired by A B M Sarowar Alam and Bharathidasan S, have key aims of: identifying cross cutting advocacy and policy related initiatives, supporting and encouraging the development of activities by partners, fostering links with external fora and agencies, adopting and utilising the findings of the Technical Advisory Panel in the advocacy plan, and developing positions, plans and protocols as required.

The Technical Advisory Panel (TAP), currently Chaired by John Mallord, was presented. The key aims of the TAP were given as including: identifying and updating cross cutting technical themes, challenges and opportunities emerging from SAVE Blueprint reporting, developing position statements, plans and best practice protocols as identified in the annual workplan, reviewing and providing technical inputs on materials proposed by AC to raise SAVE's profile as champions of vulture conservation, and reviewing the merits of priority proposals put forward through the FCC channel.

SAVE: Origin and highlights since last meeting - Chris Bowden of the RSPB
The presentation provided the historical background for the formation of SAVE. Vultures are a highly endangered set of species with 23 species worldwide, with nine listed as Critically Endangered by the IUCN Red List, three as Endangered, and four as Near Threatened. In South and Southeast Asia, five species have been Red-listed, including four Critically Endangered species.

The catalyst for forming SAVE was the South Asian vulture population collapse, leading to SAVE being formed in 2011 as a scientific and authoritative framework to coordinate vulture conservation efforts in South Asia, and to provide a transparent and accessible communication platform while facilitating funding for conservation priorities.

Key recent highlights by Country were provided.

In **Cambodia**, vulture tagging has been conducted, including efforts focused on Red-headed Vultures (RHV), which have led to new insights. Vulture Restaurant Guidelines had been developed, and the population had remained relatively stable. Conservationists have been exploring transboundary conservation efforts with Laos.

In **Myanmar**, the Hai Hpak Biodiversity Conservation Association, a community-based initiative founded in 2022 in Shan State, has been monitoring vulture populations, establishing safe feeding sites, and raising awareness in 14 villages. It was confirmed through pharmacy surveys that diclofenac is now in veterinary use in the country. The first confirmed sighting of a Red-headed Vulture (RHV) in Shan State has been recorded. Additionally, research titled 'Nesting Records of White-rumped Vulture' had been published in Birding ASIA 40 (2023).

In **Pakistan**, vulture conservation efforts have been expanded beyond Nagar Parkar into AJ&K and Balochistan. Researchers had conducted pharmacy surveys in 10 districts of AJ&K and the coastal districts of Balochistan. A study on NSAIDs (toxic veterinary drugs) by Hira Fatima from Cambridge University, UK, is scheduled for March-April 2025.

In **Bangladesh**, the ban on ketoprofen has been successfully implemented, and there has been an increase in the use of tolfenamic acid, but the use of toxic flunixin has also increased, underlining the urgent and wider need for banning drugs already on the market and licensing only (tested) safe drugs. Tagged vultures have been observed crossing into India, highlighting the urgent need for transboundary conservation efforts.

In **Nepal**, populations of White-rumped and Slender-billed Vultures have been increasing at their maximum biological rate. In 2023, captive vultures were released into the wild. 10 Slender-billed Vultures were tagged, but with one dying near the India-Nepal border, suspected to have been poisoned by NSAIDs. More transboundary efforts to enforce the ban on toxic veterinary drugs is needed.

In **India**, progress has been made in the legislation of vulture-toxic/safe drugs, with ketoprofen and aceclofenac banned in 2023 and nimesulide in Dec 2024. A new study published in June 2024 by Eyal Frank and Anant Sudarshan analyses the social costs of a keystone species collapse, using evidence from the decline of vultures in India to illustrate the functional extinction of vultures appear to have increased human mortality by over 4 percent due to sanitation.

Beyond the SAVE Region, Resolution 11.15 of COP14 encourages some additional instruments for Parties, Signatories and non-Parties of the CMS range states of vultures and scavenging raptors to ensure safety testing of NSAIDS, withdraw licensing of vulture-toxic NSAIDs, and contribute to the identification and promotion of safe drug alternatives.

Session 2. SAVE Blueprint Prioritisation

The SAVE Blueprint revision - Presentation of priorities - Mary Davies of the RSPB
The SAVE Blueprint, first published in February 2014, outlines action timelines for each strand of vulture conservation activity, extending up to 2025. It serves as a strategic framework to guide conservation efforts and ensure coordinated action across key areas.

The Blueprint's primary purpose is to help prioritise vulture conservation initiatives, assess the progress of implemented activities, and identify challenges that may hinder success. By highlighting these blockages, the Blueprint directs SAVE's focus toward overcoming obstacles and advancing conservation efforts effectively.

The Objectives of the SAVE Blueprint have been reviewed and restructured for 2025, and fall into four categories.

A. Minimising the threat to vultures from toxic non-steroidal anti-inflammatory drugs (NSAIDs) throughout the range, whilst monitoring the exposure to, and mortality from, this threat (there are 11 actions in this category).
B. Assessing the magnitude of other threats to vultures including poison baits, electrocution and collision, and food and habitat availability, and address these threats where appropriate (there are 11 actions in this category).
C. Supporting vulture conservation through actions that contribute to addressing knowledge gaps and population recovery (there are 10 actions in this category).
D. Advancing vulture conservation through effective promotion and implementation of the SAVE Blueprint activities by sharing and disseminating best practice, knowledge and expertise across the partnership and more widely (there are 7 actions in this category).

The current consultation period for the Blueprint is underway (Dec 2024 - Mar 2025). For each country and for each action, input is requested on: Priority for action; Status; Resources available; Activity details; Lead partner/ group; and expected completion date. The format for each input was provided.

To collect further member input to prioritise actions, an activity was then an exercise conducted with poster containing the priority actions for vulture conservation across the SAVE region with participants given 20 voting markers to prioritise actions on the posters. Results of exercise available in Appendix 2. Whilst a useful exercise and good way to engage people with the new Blueprint, there are flaws in this method of prioritisation. Some countries were more represented than others and voting isn't done blind and will be influenced by others. However, results will be used to help inform priorities.

Next steps: Further prioritisation of Blueprint actions with involvement from each country to develop additional details on delivery of action.

Session 3. Country updates:

1. **Vulture Conservation Update in Myanmar** - Dr. Zaw Tun Aye and Thiri Sandar Zaw of the Myanmar Vulture Working Group

The presentation on vulture conservation in Myanmar covered key activities, challenges, and priorities for the coming years. In 2024, the team conducted two vulture restaurant activities in southern Shan State, with a maximum of 65 individual vultures (WRV 29, SBV 20, and HG 16) observed at the grassland community lodge at Indawgyi Wildlife Sanctuary in Kachin State. The Hai Hpak team, formed by BANCA, played a key role in community-led vulture conservation efforts. Additionally, WWF Myanmar carried out nest monitoring of White-rumped Vultures in Kyethi Township. Long-term vulture observation data, dating from 2001 to 2024, was compiled from restaurant surveys, local sources, and social media. The frequency of three critical vulture species—White-rumped Vulture, Slender-billed Vulture, and Red-headed Vulture—was recorded, along with data on migratory vultures such as the Himalayan Griffon and Cinereous Vulture.

CEPA (Communication, Education, and Public Awareness) coaching training to CBO to be as a conservation Champion was provided by BANCA to Hai Hpak team in southern Shan State, which included group discussions, communication games, and public speaking practice. Education and awareness activities were conducted in 14 villages, reaching 346 men and 432 women from six ethnic groups.

Veterinary pharmacy practices in southern Shan State and Indawgyi Wildlife Sanctuary in Kachin State confirmed the continued use of diclofenac. Efforts to ban diclofenac nationally faced significant challenges, requiring stepwise advocacy with the Livestock Breeding and Veterinary Department. Localised bans have been considered as more achievable route to removing the threat to vultures. For meloxicam, few veterinary people are aware of the drug, and this requires more work with the Community Health Animal Workers (CHAWs) to promote it as a safe alternative.

A separate awareness initiative targeted wetland site managers, integrating vulture conservation into the management plans for Indawgyi Wetland Areas.

Challenges include vulture conservation programs lacking in Kachin State and northern Shan State, and travel restriction and safety issues due to regional political situation.

Looking ahead, conservation priorities for 2025–2027 included expanding diclofenac monitoring in Shan State, tracking vulture threats and populations in Kachin and Shan States with CBO support, exploring vulture nesting sites and food supply programs, strengthening community engagement, and establishing at least one Vulture Safe Zone in Myanmar.

Notes by the Chair: It is testament to the good work of the conservationists that this current understanding has been achieved, and that we learn that for meloxicam and Tolfenamic acid,

there is little usage or supply, mostly coming from India, Bangladesh. They were recommended to learn more about the brands, formulas and origins to find out more about the supply side.

Next steps: Advocacy Committee to follow up on this point (veterinary awareness, origins of drugs, One Health approach) specifically with Myanmar in order to advance country progress of the banning of toxic NSAIDs.

2. **Vulture Conservation Update in Pakistan** - Jamshed Chaudary of WWF Pakistan

The presentation discussed vulture conservation in Pakistan, detailing the Pakistan Vulture Restoration Project (PVRP). Ex-situ conservation efforts focused on the Changa Manga Vulture Captive Breeding Centre, established in 2005 to maintain and breed White-rumped Vultures. The center aimed to release vultures back into the wild and raise awareness. Vultures have been successfully breeding at the center since the 2015-16 season. As of the presentation, the center housed 34 adult/subadult White-rumped Vultures and 3 chicks.

In-situ conservation objectives included establishing Vulture Safe Zones (VSZs) free from NSAIDs, monitoring vulture populations and NSAID usage, advocating for bans on harmful NSAIDs, and increasing awareness. A Vulture Safe Zone was established in Nagar Parkar Town, Sindh Province, in 2012, and another was proposed in AJ&K.

Undercover pharmacy surveys were conducted in AJK in 2024 to assess NSAID availability and pharmacist knowledge. No veterinary diclofenac was found, but human diclofenac was present in some pharmacies. Meloxicam was present in 41% of pharmacies, while other harmful NSAIDs were also found. Population monitoring surveys in AJK from 2015 to 2024 showed a decrease in White-rumped Vulture numbers.

Activities in the proposed Vulture Safe Zone in AJ&K in 2024 included celebrating International Vulture Awareness Day and establishing nature clubs in schools. Undercover pharmacy surveys in Sindh in 2024 found no veterinary or human diclofenac. Meloxicam was present in 94% of pharmacies. Population monitoring surveys in Nagar Parkar in 2024 observed active nests of Long-billed Vultures, but few White-rumped Vultures. Surveys in Balochistan also indicated the presence of harmful NSAIDs.

Challenges to vulture conservation in Pakistan included the availability of vulture-toxic NSAIDs and disturbance to vultures. Priorities for 2025-27 included banning harmful NSAIDs, developing a regulatory framework for veterinary drugs, risk mapping for vulture electrocution, engaging energy project donors, population and NSAID monitoring, maintaining the captive population, promoting VSZs, developing a National Vulture Conservation Plan, and developing a fundraising strategy.

3. **Vulture Conservation Update in Bangladesh** - A B M Sarowar Alam of IUCN Bangladesh

The presentation provided a 2024 update on the vulture situation in Bangladesh. A population survey in 2023 used direct observation, grid-transect surveys, questionnaire surveys, eBird data, vulture nest monitoring, and feeding station monitoring. Vultures were found in 35.45% of the

surveyed grids. The estimated population of White-rumped Vultures in Bangladesh was between 227 and 269 individuals.

The vulture population survey divided the country into 1,065 grids of 10 km by 10 km. 107 grids were selected by random sampling. A Poisson GLM model for vulture count showed significant predictors as direct observation, road transect, and interview survey. The model diagnostics suggested a well-fitted Poisson GLM. Vulture count data was analysed separately for Sylhet and Khulna divisions. Higher vulture presence was recorded near waterbodies compared to homesteads in Sylhet. In Khulna, a strong association with riverine habitat was observed. The 6th undercover pharmacy survey was completed in September 2024. Diclofenac was not found. Meloxicam availability increased. Flunixin increased dramatically. Three White-rumped Vultures were tagged in 2024. One vulture released from Khulna travelled 4950 km over 6 months, moving between West Bengal, Jharkhand in India, and Khulna (Bangladesh). Three Himalayan Griffon Vultures were tagged and released. Using movement data from tagged vultures, important roosting sites were identified for poison bait surveys. A questionnaire survey regarding poison bait use was conducted.

Vulture Conservation Teams (VCTs) rescue sick or injured vultures. Rescued vultures are transferred to rescue centres. Community-based Vulture Feeding Stations were constructed. In the 2023-2024 breeding season, 17 nests were found, with 9 successful. In the 2024-2025 breeding season, 16 nests were identified.

Challenges in vulture conservation include increased Flunixin use, poison baits, funding shortages, and transboundary issues. Vulture Conservation Team (VCT) meetings were conducted, and awareness campaigns were organized. The plan for 2025-2027 includes satellite tagging, pharmacy surveys, advocating for banning harmful drugs, and awareness campaigns.

4. **Vulture Conservation Update in India** - Sachin Ranade & Kishor Rithe of the BNHS

The presentation focused on vulture conservation and breeding programs in India. Four breeding centers were established by BNHS, with additional state zoos also involved in vulture breeding. Vultures are K-type breeders, characterized by large bodies, long lifespans, and slow breeding.

India has successfully bred three Gyps species. A total of 84 Gyps vultures have been released, all with satellite tags, in different regions. Diclofenac was banned for animal use in 2008, with further restrictions on human formulations in 2015. Aceclofenac and Ketoprofen were banned in 2023, and Nimesulide was banned in 2024.

Vulture Safe Zone programs are active in several states, involving advocacy, awareness, and surveys. Surveys were conducted in Assam and Meghalaya in 2023-24. Studies of vultures in the wild include population surveys, food availability assessments, nest surveys, and liver sampling from livestock carcasses.

Notes from the Chair: There is a need for effective collaboration between civil society and the government to achieve the banning of harmful drugs. Captive breeding also requires long-term cooperation between the government and specialized organizations.

5. **Vulture Conservation Update in Nepal** - Purushottam Sharma of the DNPWC, and Ankit Bilash Joshi of BCN

The presentation included highlights, challenges, and priorities for vulture conservation in Nepal. Vulture nest monitoring data from 2007 to 2023 was presented, showing the total number of nests monitored, successful nests, and the proportion of successful nests for various vulture species.

In 2024, eighteen captive vultures were seen exhibiting breeding behavior, and 14 captive vultures successfully fledged their young in the wild.

Annual vulture road transect surveys provided data on White-rumped Vulture population indices. The survival of wild Gyps vultures, including adults and subadults, was analyzed. Satellite tagging was used to track vulture movements, and the expansion of Vulture Safe Zones (VSZ) in Western Nepal was discussed. Pharmacy surveys and efforts to ban toxic NSAIDs were ongoing.

Notes from the Chair (VD): While NSAIDs remain the largest threat, at small numbers other threats may also have big impact.

Next steps: TAP to convene a meeting to review/discuss release protocols looking at energy infrastructure avoidance.

6. **Vulture Conservation Update in Cambodia -** Ny Naiky of the CVWG

The presentation provided an update on vulture conservation efforts in Cambodia. It detailed the structure of the Cambodia Vulture Working Group (CVWG), which includes members from government agencies and NGOs. The Cambodia Vulture Action Plan for 2016-2025 guides these efforts.

Key achievements in 2024 included the provision of supplementary feeding sites, where approximately 100 carcasses are provided annually across four sites. Two sites provide more frequent feedings. National Vulture Census events were conducted five times in 2024, and the highest count was taken as the minimum population estimate. Vulture population monitoring data was presented, showing trends over the years. Priority sites for vulture conservation were identified.

Mobile Vulture Restaurants have been implemented, with WCS starting monthly mobile restaurants in December 2022 at three different sites. NatureLife Cambodia and Lomphat rangers have also been conducting monthly mobile vulture restaurants since April 2024 to monitor Red-headed Vultures.

Vultures were also monitored using GSM-GPS tags. In 2024, 13 vultures were monitored, including White-rumped, Red-headed, and Slender-billed Vultures. Nest searching and protection activities are conducted during the nesting season, which is from November to May. Rewards are provided to local people for locating nests. Vulture nests recorded from 2011 to 2024 were also presented.

A Vulture Restaurant Guideline was developed by WCS in 2024. Artificial nest platforms have also been used, with one platform being used by a breeding pair of Slender-billed Vultures in successive years. International Vulture Awareness Day was celebrated on September 7, 2024. Challenges in 2024 included the need for funds to support CVWG quarterly meetings and limited collaboration with Laos. The 10-year action plan is also close to expiration. Priorities for 2025-2027 include community awareness, continued population monitoring, vulture nest searching and protection, securing funding for the Working Group, collaboration with WWF Laos, and developing a new 10-Year Action Plan for 2026-2036.

Notes from the Chair: The optimistic interpretation of the national population trend data was encouraging, with the ten year stable period and note for rebuilding the population over next 10 year period very appealing for finding support. The strong history of team work was also evident.

Laotian Vulture Population Discovery - Dr. Akchousanh Rasphone of WWF Laos
This workshop has been informational and interesting from the perspective of conservation of the vultures in Laos. Given the recency of this knowledge, the next steps are to consider carefully the options, as well as review whether the vulture populations overlap with focal conservation sites. This meeting has provided the introductions necessary to begin discussions and share data, and we look forward to cooperating more with the relevant partners, particularly Rising Phoenix and the CVWG to identify the next steps. The workshop is also very useful to learn more about the vulture-specific issues.

Next steps: CVWG to follow up with WWF Laos re next steps of transboundary collaboration and future initiatives in Laos.

Session 4. The Future Role of Captive Populations

Chair: Jamshed Chaudhry

The future role of Safety-net Populations of Critically Endangered South Asian Vultures – Rhys Green of Cambridge University
The presentation discussed the relevant factors and importance of captive populations in vulture conservation, focusing on the SAVE Blueprint discussion regarding Action C4. Action C4 emphasises ensuring the maintenance of a genetically viable, long-term conservation breeding program for White-rumped, Indian, and Slender-billed Vultures as a safeguard against extinction.

The roles of ex-situ safety net populations of globally threatened wild species were provided with examples such as the Californian Condor. The talk also highlighted how ex-situ populations are highly valuable to prevent or minimise irrevocable losses of genetic diversity from fragmented populations. The necessary resources, expertise, feasibility, and risks associated with such a program were outlined. Additionally, with regards to how the current captive vulture population sizes compare with the likely minimum requirements for long-term viability, some recent scientific studies were reviewed for calculating how many individuals are needed/recommended to establish a founding captive population.

A key question explored the future role of safety-net populations of critically endangered South Asian vultures and the purpose of ex-situ safety-net populations for globally threatened wild species. It also questioned whether viable safety-net populations of South Asian Gyps Vultures are still needed.

The presentation referenced the IUCN SSC five-step procedure for decision-making about ex-situ safety-net populations. These steps include:

1. Compiling a status review of wild and captive populations.
2. Updating the specifications of the role(s) that ex-situ management should play. This involves considering whether the main objective should be maintaining a viable population of all three species and, if so, for how long. It also raises the question of whether producing surplus captive birds for release is a priority.
3. Updating the specifications of the precise nature of the ex-situ population required to meet the identified role(s).
4. Determining the resources and expertise required, feasibility and risks.
5. Making an informed decision of the future of the ex-situ programme in time to prevent or minimise irrevocable losses of genetic diversity and avoid extinction

Next steps: All range countries invited to be involved in a planning workshop to begin going through five stage review process. JPJ to develop next steps in contact with Jamie Copsey of Conservation Planning Specialist Group.

Session 5. Safety Testing Priorities and Next Steps

Safety testing priorities and next steps - Karikalan Mathesh of Centre for Wildlife Conservation, Management & Disease Surveillance

The presentation focused on the results of recent research projects including "Assessing the Safety to Vultures (Gyps Spp.) of Non-Steroidal Anti-Inflammatory Drugs in Veterinary Use in India" project, sponsored by the MoEF & CC, which is being conducted by the ICAR-Indian Veterinary Research Institute and the Bombay Natural History Society. The project's objectives include conducting safety studies of four NSAIDs in Gyps species and studying the metabolism of aceclofenac in buffalo calves, and developing a cell line from renal tubular epithelium of vulture origin for screening in vitro toxicity of NSAIDs.

Salient achievements from 2023-25 include the ban on the use of ketoprofen, aceclofenac, and nimesulide in veterinary use. These were gazetted by the Ministry of Health and Family Welfare, and were backed up by the papers, especially 'Experimental safety testing confirms that the NSAID nimesulide is toxic to Gyps vultures in India', published in Environmental Toxicology and Pharmacology in the Elsevier Journal.

Funds were recently released to complete paracetamol and flunixin meglumine safety testing. Paracetamol safety testing work is to be continued, with plans for further testing on G. himalayensis and Gyps bengalensis vultures, involving both oral gavage and tissue feeding experiments. Permission has been obtained from the Haryana Forest Department to capture birds for these tests.

Flunixin safety testing has also been conducted, with plasma half-life determined. In an example experiment, buffalo calves were given flunixin, and tissues were collected for metabolite estimation.

Next steps involve identifying safer drugs, safety testing other drugs in the oxicam class, and exploring in silico or in vitro toxicity testing. Research collaboration and funding are being pursued. There is also a plan for the formulation of Standard Operating Procedures (SoP) on Non-Steroidal Anti-Inflammatory Drugs for veterinary use, as requested by the Ministry.

Next steps: IVRI/BNHS/TAP to ensure testing progress links up with planned initiatives in Spain. Also to factor in possible variations between buffalo and cows in terms of dosage levels.

Section 6. Cambodia Vulture Action Plan and role of CVWG

Chair: Dr. Srey Sunleang

Contribution of National Action Plans toward vulture conservation, and the benefits and links to National Working Groups – Oliver Gray-Read of NatureLife Cambodia

The presentation discussed the contribution of National Action Plans toward vulture conservation, focusing on the benefits and links to National Working Groups, using the Cambodia Vulture Working Group (CVWG) as a case study.

The CVWG's development was highlighted, noting the establishment of the Cambodia Vulture Conservation Project (CVCP) and the CVWG's endorsement by a Government Decree in 2013. The CVCP, primarily driven by NGOs, operated under a Memorandum of Understanding between four NGOs and conducted activities such as identifying vulture restaurants for monitoring, wing-tagging, satellite tracking, nest monitoring, and publishing scientific studies. The formation of the CVWG in 2016 involved a national workshop to inaugurate the group and gather stakeholder input for the 10-year Action Plan. The CVWG was officially incorporated by the Ministry of Environment through an Endorsement Sub-Decree. Its structure includes government agencies, conservation NGOs, and academic and tourism organizations.

The 2016-2025 Cambodia Vulture Action Plan was developed using input from field monitoring, questionnaires, and stakeholder workshops. It follows the government's recommended structure, with monitoring and evaluation measured against short-term and long-term indicators. The plan outlines actions to mitigate threats to vultures, including poisoning.

The functions of the CVWG include coordination of national population monitoring, joint NSAID surveys and advocacy, capacity-building and information exchange, reporting and compliance with national policies, storage of national-level data, facilitation of vulture rescue and release, awareness, engagement, anti-poisoning response, fund-raising, and connection with SAVE and international networks.

Major achievements of the CVWG include positive signs in vulture census data, advocacy to remove diclofenac from the veterinary drug market, long-term national data records, and targeted interventions following the Action Plan, such as anti-poisoning campaigns, published research, and implemented protocols and training.

Challenges include the need for funding and resources for coordination and participation, varying conservation priorities across sites, and the wide historical range of vultures, including areas outside the conservation network. Opportunities include building on increased cooperation between Ministries and NGOs, evaluating and renewing the Action Plan, and strengthening trans-boundary and regional partnerships.

The Contribution of the Bangladesh Vulture Conservation Action Plan (VCAP) in Guiding Vulture Conservation in Bangladesh - A. B. M. Sarowar Alam of IUCN Bangladesh

The presentation focused on the Bangladesh Vulture Conservation Action Plan (BVCAP) and its role in guiding vulture conservation efforts in the country.

The BVCAP's vision is a vulture-safe Bangladesh, free from harmful threats, ensuring stable vulture populations. Its mission involves implementing conservation strategies to protect vultures through habitat protection, harmful drug bans, and community engagement.
The Government of Bangladesh has formally declared vulture conservation as a national priority. This commitment includes enforcing conservation policies and legal frameworks. Key actions include the ban on diclofenac (2010), the ban on ketoprofen nationwide (2021), and advocacy for alternative, vulture-safe veterinary drugs.

The BVCAP outlines several key thematic areas:

1. Vulture Safe Zones (VSZs): The government allocated 3 crore BDT for the declaration and management of Vulture Safe Zones, with two VSZs declared.
2. Removal of NSAIDs harmful to vultures and promoting safe alternatives. Two harmful NSAIDs—Diclofenac (2010) and Ketoprofen (2021)—officially banned nationwide, supported by Strict market surveillance and ongoing advocacy and training.

3. Conservation breeding. Future plans include securing additional funding and partnerships to establish controlled breeding centres.
4. Research and monitoring. RSPB-funded satellite tagging is tracking vulture movements and habitat use. In the past two years, 4 White-rumped Vultures and 7 Himalayan Griffons have been tagged.

Government initiatives and project implementation include the implementation of the Vulture Conservation Action Plan, funded by the government. There's ongoing community-based vulture feeding station maintenance, providing safe food in Vulture Safe Zones, and support for alternative vulture-safe drug promotion, such as meloxicam and tolfenamic acid.

The Bangladesh National Vulture Recovery Committee (BNVRC) is actively involved in policy-making and implementation and regularly participates in SAVE meetings to align with regional conservation efforts.

The Ministry of Environment, Forest and Climate Change (MoEFCC) has been supporting awareness campaigns. Nationwide vulture conservation programs are engaging communities, veterinarians, and policymakers, demonstrating a commitment to the long-term conservation of vultures in Bangladesh.

The way forward involves supporting vulture-safe zones and feeding stations, expanding community engagement and awareness efforts, enhancing research and monitoring to track vulture population trends, and policy enforcement on harmful drug bans and habitat protection

Next steps: CVWG ensure linking Blueprint actions with National Vulture Action Planning and ensuring these fully align.

Session 7. Fundraising and Communications Committee

Chair: Vinayagan Dharmarajah

The presentation focused on the purpose and activities of the Fundraising and Communications Committee (FCC) within the context of the SAVE (Saving Asia's Vultures from Extinction) program.

The purpose of the group was clarified as to support and advance the activities outlined in the SAVE Blueprint by proactively sharing expertise and experience in fundraising and communications.

To achieve this, the FCC aims to identify cross-cutting fundraising and communication themes, challenges, and opportunities emerging from SAVE Blueprint reporting, and use these to develop an annual workplan. The committee also solicits and encourages partners to provide concept notes for priority Blueprint actions that require funding, proactively seeking funding

agencies to support these initiatives and providing guidance and support letters where necessary.

Furthermore, the FCC identifies transboundary opportunities and supports partners in collaborating to develop these. It maintains and fosters links with external forums and agencies, including donors. The committee also proactively plans messaging and social media targets for SAVE platforms and delegates members to help prepare and respond to events and news items. The presentation mentioned that the first meeting of the FCC involved defining the Terms of Reference and discussing ideas for a workplan. The ways of working include partners developing proposals to be supported/endorsed by the FCC, partners sharing information on potential donors and funding opportunities, and encouraging transboundary collaborations.

An update was provided, indicating that the BirdLife Asia communications team is now supporting SAVE communications, including the website and newsletter, and a template for proposals has been developed.

Discussion points included fundraising, specifically addressing the priority projects or key funding needs of each partner/country, the potential for a mega-project, and funding opportunities such as grants, foundations, and corporates. Communications were also discussed, focusing on what more could be done in communications and whether a communications plan is needed.

Fundraising: Scenario: USD25K – demonstrate that this is the most impactful way to use the money (most bang for buck)

Jemima	**Get rid of NSAIDS** - Electrocution/poisoning wasn't as big an issue when the population was high, so must get to the root cause. - Advocacy targeted at governments and local communities.
KR (India)	**Support Existing conservation breeding program** - Within this, support advocacy to target NSAIDS (like Jemima)
VB/AM (Cambodia)	**Support development of new CVWG Action Plan** - Consultation with governments and local communities - It will guide implementation, and fundraising for implementation
TDA (Myanmar)	**Advocacy to ban diclofenac and secure a VSZ** - Train local communities - Advocacy targeted at government **Review and develop new Myanmar Vulture Conservation Action Plan**
SA (Bangladesh)	**Meetings with governments, companies and other stakeholders to raise funds** - Publicising the cause and raising more funds
IT (Nepal)	**Sustaining VSZ** - **Investigating poison baits and other emerging threats**

	- Working with local communities to target emerging threats e.g. adapting to new emerging harmful drugs - RSPB already supporting certain research elements (but not all)
JC (Pakistan)	**Banning NSAIDS in Pakistan** - Advocacy, lobbying, supporting staff time to work on this.

Next steps: Partners all develop priority funding packages to present to TAP for review and on to FCC to develop funding opportunities/identify donors.

Communication: needs further discussion and planning. Newsletter/ website/ social media all could be used to better effect.

Next steps: Both FCC and AC committees to address development of a communications strategy and subgroup and report back to SAVE board.

Session 8. Red-headed vulture work in Thailand

Chair: Chris Bowden

Thailand Red-Headed Vulture Project - Chaianan Poksawat and Saowaphang Sanannu
The presentation focused on the Thailand Red-Headed Vulture Project, outlining its background, captive management and veterinary care, and rehabilitation efforts. The project is initiated by The Zoological Park Organization of Thailand.

The presentation provided an overview of vultures in Thailand, noting the presence of 5 species historically present in the Country: the White-rumped Vulture, Slender-billed Vulture, Himalayan Vulture, Cinereous Vulture, and the Red-Headed Vulture. Of these, Himalayan Griffons and Cinereous Vultures still occur as visitors in the country, and the Red-headed Vulture was the last resident species.

The Red-Headed Vulture is a focal species in the project, particularly concerning its tragic decline in Thailand. The last group of these vultures was found at Huai Kha Khaeng Wildlife Sanctuary. Their cause of death was attributed to scavenging on poisoned deer carcasses, which were baited for hunting tigers. The last sighting of these vultures was on February 14, 1992. The Thailand Red-Headed Vulture Project involves collaboration with various organizations, including focal Government Departments and the Seub Nakhasathien Foundation.

The project's objective is to restore the red-headed vulture population in its habitat in Thailand, including via captive management, biological and ecological studies and vulture population surveillance. One challenge is the low number of founding individuals: there are 6 red-headed vulture in captivity (3 males, 3 females).

In terms of captive management and veterinary care, the birds are kept in a dome aviary with 12m height and 10m diameter at the Nakhon Ratchasima Zoo. Veterinary Care involves health checks, disease screening, and pre-shipment procedures.

Rehabilitation is a key component of the project. A Rehabilitation cage measuring W 20 m x L 40 m x H 20 m has been constructed at the Sub Fa Pa Forest Protection Unit, at Huai Kha Khaeng Wildlife Sanctuary in Uthai Thani Province. Two birds, Pok and Ming were selected based on health screening and decided to be moved from the zoo to a rehabilitation cage at the wildlife sanctuary. The first shipment to HKK occurred in early 2020, but they were later returned for further treatment. The second successful relocation occurred in February 2022. Monitoring is conducted, including health monitoring at 3-month, 6-month, and 1-year intervals. This monitoring assesses physical condition, haematology, blood chemistry, blood parasites, respiratory fungal infections, and screens for diseases. Behavior monitoring is also conducted using CCTV at the wildlife sanctuary.

Notably, the project has observed successful breeding in the wildlife sanctuary. In Dec 2021, an egg in uterus was recorded, however this later turned out to be infertile. In 2023 the first baby Red-headed Vulture was successfully hatched and fledged.

The project engages in a wide range of public awareness and education activities, including public engagement, social media engagement, and production of media such as videos and podcasts.

The main future plan is to continue the captive breeding to increase the population, with the target of reintroduction in next 5 years.

Next steps:

- **Consider integrating RHV planning together with wider discussions on safety-net planning (see point 4 above).**
- **Initiate follow up meeting as required to consider next steps of SAVE involvement. To involve relevant TAP representatives.**

Day 2: Tuesday 18th February 2025

Session 9. NSAIDs regulations: CMS obligations

Chair: Jake Zarins

NSAIDs regulation: Opportunities Presented by the Convention on the Conservation of Migratory Species of Wild Animals (CMS) - Jake Zarins of the RSPB
The presentation discussed Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) regulation and the opportunities presented by the Convention on the Conservation of Migratory Species of Wild Animals (CMS) to address the threat of NSAIDs to vultures.

CMS, a United Nations environmental treaty, provides a global platform for the conservation and sustainable use of migratory animals and their habitats. CMS includes legal instruments such as the Raptors MOU and the Central Asian Flyway. Several South Asian countries are parties to the CMS, including Bangladesh, India, and Pakistan. Other countries in the region, such as Nepal, Myanmar, Cambodia, Laos, Thailand, and Bhutan, are non-parties but may be "Range States" for the Central Asian Flyway.

Key resolutions (Resolution 11.15 (Rev.COP14) & Resolution 12.10 (Rev.COP14)), adopted at the 14th Meeting of the Conference of the Parties, calls for urgent action to address the poisoning of vultures, particularly by poison baits, and the veterinary use of diclofenac and other NSAIDs toxic to vultures. This resolution aligns with the CMS Preventing Poisoning Working Group and the Guidelines to Prevent Poisoning of Migratory Birds.

The resolution urges parties to ensure safety testing of existing veterinary NSAIDs on live, captive Old World vultures, eagles, and other scavenger birds. It also calls for the withdrawal of licensing of vulture-toxic NSAIDs, such as diclofenac, for veterinary use, or the implementation of comprehensive risk assessments. Furthermore, it advocates for mandatory safety testing of new veterinary NSAIDs, financed by the pharmaceutical industry, as part of the drug licensing procedure. The resolution also encourages contributing to the identification and promotion of safe alternative drugs.

The SAVE Blueprint also addresses the issue of toxic NSAIDs, with objectives to minimize the threat to vultures from these drugs and to monitor exposure and mortality. The Blueprint includes actions such as establishing systems to withhold or withdraw approval for veterinary drugs with unknown effects on vultures until safety testing is conducted, and to prohibit or withdraw the veterinary use of known toxic NSAIDs like diclofenac, ketoprofen, and others. It also calls for enforcing the removal from the market of vials of NSAIDs intended for human medicine in excess of 3 ml capacity, and working with the pharmaceutical industry and governments to ensure robust safety testing of drugs to identify safe NSAIDs.

A paper published in 2024, supported by individuals and organizations within SAVE, has been influential in informing the CMS resolution text. This paper highlighted that current policies in Europe and South Asia do not prevent the veterinary use of drugs toxic to vultures and that

despite regulatory action to ban veterinary diclofenac in South Asia, enforcement has been incomplete. The paper also noted that mandatory safety testing is not part of drug licensing procedures in any vulture range state.

The presentation highlighted that the SAVE Blueprint informed the CMS commitments and as such is a powerful tool as pushing or supporting governments to align with international obligations might be less complex than direct lobbying upon individual issues. If countries deliver upon CMS commitments, the NSAID threat could theoretically be almost entirely removed, allowing focus to shift to other issues. The presentation concludes by discussing how SAVE partners can support governments to meet CMS commitments, such as reporting progress at the next COP meeting, seeking out national focal points of CMS/Raptor MOU, building relationships, and collaborating with other ENGOs.

Discussion points:

- Many of the aspects of the CMS are designated about NSAIDs and mirror the blueprint. SAVE can provide a list of steps and obligations to then be presented in local language and lobbied for. Raptors MoU, Flyway could achieve the same result, Cambodia has signed up to CMS for turtles. To seek out CMS representatives on the website, SAVE have a draft letter available. Umberto Gallo Orsi was mentioned as the Raptors MoU Chair.
- In India, several gov members understand the process and are able to do it, but inter-department factors influence it. The BNHS endeavor to find out when committees are meeting and then join. India has a petition system – research papers play a role as the committees need to consider them.
- In Nepal there are several departments involved, and it is needed to find a key person and take to present to Government focal points so that they can properly understand and represent the issues. In Nepal, gazetted documents from India were able to be used as supports.
- Some advocacy issues with advocating with vets – some older practitioners are unreceptive. Question whether the toxicity or impact is real, also the cost and the efficacy of safe alternatives. An issue is that it is perceived as if bans are successful for all NSAIDs veterinarians struggle to find alternative treatments
- It was reminded that the progress may be hampered by political situations and instability during which nothing moves.

Next steps:

- **RSPB to draft guidance to help increase basic understanding of the CMS and potential approaches to engaging or supporting government to make greater progress on commitments**
- **SAVE partners based in signatory countries to consider how best to engage relevant government entities on matters relevant to delivery of CMS commitments**
- **SAVE partners facilitate non-CMS countries by providing links and support to Govt.**

- **Relevant parties request agenda item for RSC to report on progress of CMS Resolution for each SAVE country.**

Session 10. VSZs: Progress/ challenges

Vulture Safe Zones: Progress, Challenges and Adaptability - Mary Davies of RSPB
The presentation centred on the concept and implementation of Vulture Safe Zones (VSZs) as a conservation strategy. VSZs are defined as areas with a 100 km radius, typically centred around important vulture nesting colonies or sites where captive vultures could be safely released. The primary conservation activities within VSZs include advocacy, awareness-raising, and monitoring the effects of conservation actions.

A key aspect of VSZ designation is their progression from provisional to full status. Initially, all VSZs are considered provisional. They are only upgraded to full VSZ status when it is confirmed that threats to vultures have been reduced.

The presentation outlined the original criteria used to determine if VSZs were safe. These criteria included that, within the defined VSZ area and after two years of searching, no diclofenac was found in pharmacies for veterinary use, and no diclofenac was found in a minimum of 800 cattle carcass liver samples. Furthermore, after five years of regular intensive monitoring, no diclofenac or visceral gout was to be found in dead vultures within the area, and vulture populations within the VSZ were either stable or increasing.

The presentation also detailed newer criteria for determining VSZ safety. These criteria state that within the defined VSZ area, after two years of searching, the threat from toxic NSAIDs is sufficiently reduced, with undercover pharmacy surveys indicating less than 10% of pharmacies offer any toxic NSAID. Additionally, there must be 25 constantly tracked birds for two years (or equivalent bird-years) within the VSZ, and confirmation that no mortality occurs due to NSAID poisoning.

The presentation discussed the lessons learned and challenges faced in establishing and maintaining VSZs in various countries, including Nepal, Bangladesh, Pakistan, India, and Myanmar. Specific challenges in Myanmar include monitoring and advocacy regarding toxic drugs, tree cutting, traditional beliefs of local people, limited collaboration among stakeholders, poor awareness of vulture conservation, the impact of ongoing civil conflict, security concerns and travel restrictions, and challenges in regulating veterinary drug use.

Finally, the presentation raised discussion points about including poison baits within the Vulture Safe Zone criteria and the similarities or differences between this and the established approach.

Discussion points:

- The Legality of a VSZ was mentioned, and that this is not always clear, but that the best case scenario is that the Government should be the official body responsible.

- In Cambodia with regards to the NSAID requirements, discussions have been held with the MoE, who are keen to continue testing but limited by resources. Acknowledgement at government level should go hand in hand with promoting Meloxicam.
- Challenges with adapting to wildlife/domestic animal poisoning are that this is already illegal so the additional actions to prevent it are unclear, as well as issues of how to measure success, although monitoring through tagging of birds seems appropriate.

Next steps:

- **TAP arrange a follow up meeting to discuss VSZ criteria, inclusion of other threats.**
- **FCC to gather data on funding gaps of VSZ – could tell a bigger story about VSZ concept/ approach/network successes across the region.**

Session 11. Pharmacy surveys

Recent results of undercover pharmacy surveys in availability of Vulture toxic and safe drugs – Rhys Green of Cambridge University

The presentation focuses on recent changes in the proportion of pharmacies offering NSAIDs for sale for veterinary use in Vulture Safe Zones in India, Nepal, and Bangladesh. It also draws conclusions based on the data.

In India, the proportion of pharmacies offering diclofenac, a vulture-toxic NSAID, has decreased substantially from 2011 to 2023. At the same time, the proportion of pharmacies offering meloxicam, a vulture-safe NSAID, has remained fairly constant, however the proportion offering nimesulide, another vulture-toxic NSAID, has also increased from 2011 to 2023. Diclofenac was also noted appearing in new areas, such as Rajasthan.

In Nepal, a similar decreasing trend was seen for diclofenac and meloxicam, however nimesulide sale was increasing, before was seen to start increasing before being curtailed from 2019 onwards.

In Bangladesh, the proportion of pharmacies offering flunixin sharply increased in 2024, while the proportion of pharmacies offering ketoprofen has significantly decreased in the same period. The proportion of pharmacies offering meloxicam has remained fairly static, whereas tolfenamic acid has been increased since 2021.

The presentation concludes that a combination of bans and targeted conservation advocacy works, as seen in the case of diclofenac in Vulture Safe Zones in India and Nepal, and ketoprofen in Bangladesh.

However, it also highlights discovery of illegal newly-manufactured large vials of diclofenac in Madhya Pradesh (India) is a big worry, highlighting the need for government support in vulture conservation.

Consequently, void left by toxic drugs is not being filled by known vulture-safe drugs. Instead, there has been a rise in the use of other toxic drugs like nimesulide in India and flunixin in

Bangladesh. This highlights the importance of government bans on known vulture-toxic drugs and pre-approval safety testing of new-to-market NSAIDs. The discovery of illegal, newly-manufactured large vials of diclofenac in Madhya Pradesh, India, is also a concern, emphasizing the need for government support in vulture conservation.

Session 12. 'How to' Guides

SAVE technical guidance series: recommendations for practical vulture conservation – Rhys Green of Cambridge University

The session provided information on the the 'How to...' Guides, a series of technical guidance documents aimed at practical vulture conservation that are hosted on save-vultures.org. These guides, developed under the Saving Asia's Vultures from Extinction (SAVE) program, offer recommendations on various aspects of vulture conservation.

The existing guides cover topics such as harnessing vultures, tagging vultures for survival monitoring, carcass sampling, conducting undercover pharmacy surveys, determining appropriate ring sizes, inserting an Identichip, and marking vultures with rings, tags, and harnesses.

1. Harnessing vultures - Duncan Orr-Ewing
2. Tagging for survival monitoring - Rhys E. Green
3. Carcass sampling - Rhys E. Green
4. Undercover Pharmacy Surveys - John Mallord
5. Suggested ring sizes -- Rhys E. Green
6. Inserting an Identichip - Neil A Forbes
7. Marking Vultures – Rings, Tags & Harnesses - SAVE Technical Advisory Panel

The presentation also outlines proposals for new guides, including instructions on how to monitor vulture population size and trends, how to record vulture mortality cases, and information on ex-situ safety-net populations of South Asian Gyps vulture.
Others: How to train vultures not to perch on powerlines; How to make power infrastructure less dangerous; VSZ criteria; Awareness raising comms materials.

Discussion Points:

- Harness choice is important and various methods have been described. Leg loop harnesses not included as not studied yet although may work. Bangladesh have both thoracic and leg loop, but find younger birds parents remove leg loops. There is some lack of information on bird survival are not as well studied and shared
- Wing tags have been seen to be often taken off by the bird and no longer recommended, There are one type of recommend alloy rings, there is a riveted ring developed for White-tailed eagle trial in Sweden which was 100% successful. South African ringing scheme have also been successful for similar sized vultures

- Identichips – captive vultures are marked this way. PIT tags on wild vultures could be used in conjunction with a PIT tag reader to study. Need to attach to a ring, and study in captivity first.

Next steps:

- **All to contact JM/MD with ideas of how to guides/positions to add to website.**
- **TAP to work on next steps of those in development.**

Session 13. Additional work in Nepal

Chair: Ishana Thapa

Power infrastructure: An emerging threat - Ankit Bilash Joshi of BCN.
This presentation provided recent results of surveys and research into vulture deaths due to electrocution in Nepal. It includes data and analysis of incidents and deaths in Nepal from 2010 to 2023.

During the period from February 2010 to March 2023, there were 122 individual vulture deaths in Nepal due to electrocution. These deaths spanned across 17 districts and involved seven different species of vultures. Different types of power infrastructure were outlined, with relevant aspects highlighted.

While vulture deaths from electrocution have occurred across different districts from the east to west of Nepal, the highest number were in the central area in and around the VSZ. Vulture deaths, ranging from 1-5 to more than 20.

Tracking and monitoring of Egyptian Vultures in Nepal - Krishna Prasad Bhusal of BCN

The presentation provided the results of tracking and monitoring Egyptian Vultures in Nepal. In particular the study aimed to fill the knowledge gap in the Indian subspecies population of the Egyptian Vulture subspecies. Whereas as the European subspecies is known to migrate each year to Africa, the Indian subspecies wider movements are less well known.

The study used a number of methodologies, including tracking and monitoring via satellite tagging, Population count at foraging, roosting and nesting sites, nest monitoring, and threat analysis.

Five Egyptian Vultures were tracked using Leg loop harness trackers. Of these five, four did not move large distances, whereas one travelled up to 250km southwest to the Rapti River, before returning to the approximate capture site. Movement were largely dependent on carcass dumping sites.

Population counts at foraging, roosting, and nesting sites, provided a number of 316 Egyptian Vultures, and IVAD counts over 2019 to 2024 have shown that the monitored population has been stable within a range of 341 to 511. There were 37 active nests with a nesting success

rate of 64.86%. Nests were only located in the central and western areas of Nepal. In terms of mortality records, 5 died due to electrocution and collisions, one due to carcass poisoning, and one fell from a nest.

Session 14. Impact of poisoning and lessons learned

Chair: Alistair Mould

Vulture poisoning in Assam State, India - Sachin Ranade of the BNHS
Focusing on vulture poisoning in Assam State, India, the presentation first provided a background of the vulture declines due to NSAIDS, and the actions taken to mitigate the threat. Actions taken included a ban on the veterinary drug diclofenac, and meloxicam was confirmed as a safe alternative drug for Gyps vultures. Successful breeding programs and the initiation of vulture reintroduction were also part of the conservation efforts.

However, an emerging threat is poisoning. There has been rampant poisoning of vultures in the last few years, with poisoned baits used to kill dogs and other carnivores. Vultures die after consuming a poisoned carcass.

A major factor is the loss of cattle due to feral dog attacks, which lead to heavy losses for cattle owners. Consequently, cattle owners poison the carcass, which vultures may then feed on, often then resulting in mass mortality events.

The use of chemicals and pesticides is a large contributing factor. Pesticides are easily available over the counter. Tea gardens and other large-scale agriculture are major demand-side driver of pesticides, with around 150 chemicals are used in each tea garden.

Details of two vulture mass mortality poisonings were detailed in Kamrup and Shivasgur in 2015, samples were collected and analyzed in a governmental forensic laboratory. For some events, it is possible to recover sick but not dead vultures, and the team has found Atropine is effective for treating poisoned vultures. Further information was provided on subsequent poisonings, with the data of vulture poisoning in Assam provided from 2003 to 2016.

To combat the threat, a range of awareness messages and materials have been created and disseminated to stakeholders.

Wildlife Health Surveillance and Poisoning Cases in Cambodia – Sours Srey Em of WCS Cambodia

Wildlife surveillance in Cambodia has evolved since 2005, with projects focusing on various health-related issues affecting wildlife. From 2014 to 2018, a program called LACANET piloted a wildlife health surveillance system, and then the Wild Health Net project, funded by DTRA, operated from 2019-2021. The LACANET One-Health Project was funded by the European Union, and involved the development of a Lao PDR-Cambodia One Health Surveillance and Laboratory Network.

The presentation details how wildlife surveillance is conducted in Cambodia, including: Event detection through forest rangers, forestry inspection, wildlife monitoring team, rescue centres, and conservation NGOs; reporting mechanisms of wildlife disease, mortality and confiscations; necropsy/Sampling by WCS team+ National Animal Health Lab, Rescue centres + other NGOs, and the Livestock Health Division.

Laboratory analysis is handled by institutions such as NAHPRI, IPC, NAHL, LOMWRU, and data is communicated through One Health government and non-government partners.

The presentation includes case studies of poisoning incidents affecting various animal species. These cases involve intentional poisoning using poisoned bait and unintentional poisoning through pesticide use. Affected species include domestic animals, birds, and other wildlife. The presentation concludes by emphasizing the importance of the Wildlife Health Surveillance Network (WHSN) in incident detection and response, information sharing, and collaboration among NGOs, government agencies, and communities.

Since 2019, training programs have strengthened poisoning reporting and response capacities, with 740 government and community rangers, researchers, and biodiversity teams trained. Several poisoning incidents were reviewed, including cases from Preah Vihear, Stung Treng, and Takeo provinces. These incidents, spanning from 2014 to 2025, involved a wide range of species including raptors, Critically Endangered Giant Ibis, various waterbirds, and domestic cattle. Poisoning methods ranged from contaminated water sources to pesticide-laced rice stalks placed in bird feeding areas. Investigations confirmed substances like carbofuran as the primary toxin. Response actions included carcass collection, necropsy analysis, waterhole decontamination, and awareness campaigns

The Wildlife Health Surveillance Network (WHSN), established in 2020, plays a crucial role in coordinating outbreak investigations, prevention measures, and information sharing. Members include the Forestry Administration, General Directorate of Animal Health and Production, conservation NGOs, and sub-national veterinary epidemiologists. Quarterly meetings facilitate collaboration between these stakeholders to enhance wildlife health responses.

The seminar concluded by stressing the need for WHSN's expansion, continued inter-agency coordination, and stronger legal frameworks to prosecute wildlife poisoning cases. The ongoing challenge of enforcing legislation was highlighted, along with the necessity of maintaining robust reporting mechanisms. Moving forward, maintaining partnerships between government agencies, NGOs, and local communities will be vital in mitigating wildlife health threats and ensuring conservation success.

Wildlife Mortality/Morbidity Poisoning Event Reporting and Response Training - Tan Sophan of WCS Cambodia

The presentation focused on enhancing wildlife health surveillance and strengthening response mechanisms. Key objectives included understanding zoonotic diseases and their transmission, identifying causes of wildlife mortality, recognizing the importance of surveillance, and learning proper reporting protocols. The seminar also addressed the significance of wearing personal protective equipment (PPE) when handling animal samples, as well as procedures for sample collection, storage, and transport to laboratories.

The causes of wildlife mortality discussed included hunting, trapping, road collisions, and poisoning, particularly from pesticides such as carbofuran. Case studies were presented, including incidents from 2014 to 2015 where carbofuran poisoning led to the deaths of Giant Ibis, vultures, and local villagers after drinking contaminated water. The presentation stressed the importance of surveillance as defined by the OIE Terrestrial Animal Health Code, emphasizing that early detection leads to early response, benefiting both wildlife conservation and public health.

The session introduced the One Health Network approach, which integrates wildlife, livestock, and human health responses. It underscored the role of rangers as frontline responders in detecting wildlife health events, ensuring sample collection, and preventing further outbreaks. Detailed protocols for handling mortality events were provided, covering steps such as assessing and securing affected areas, collecting observational data, and documenting incidents with photos and videos.

Practical demonstrations focused on safe sample collection techniques, including oral and rectal swabs, carcass handling, and proper storage using cold chain methods. Participants were trained on disinfection and disposal procedures to minimize contamination risks. A simulation exercise reinforced the learning outcomes, providing hands-on experience in responding to wildlife mortality events.

The seminar concluded with discussions on the importance of collaboration between government agencies, conservation organizations, and local communities. Strengthening reporting systems and expanding surveillance networks were identified as key priorities to improve wildlife health management in Cambodia.

Discussion Points:

- Noted that the poisoning Issue is India-wide, but receives more attention when conducted around Tiger Reserves. The Indian Government intervenes at 2 levels: engagement and punishment.
- Compiling quality evidence is needed to tie people to a poisoning case. It would be good to request info from India about how to file cases for prosecutions.
- The avian influenza pandemic – Openbill storks were tested for H5N1, with the FAO getting involved in shipping and genome sequencing testing. The viruses were found to be similar to samples from domestic ducks and poultry, showing some adaptations to humans. The vulture-rabies link is a compelling story, but it is difficult to connect it to

Cambodia. Scavenging birds seem more exposed to H5N1, although vultures appear to be resistant, based on research from Karikalan in India.

Session 15. Transboundary Vulture Conservation

Chair: Sarowar Alam

Vulture Conservation & Transboundary Initiative - A. B. M. Sarowar Alam of IUCN Bangladesh
The presentation emphasizes the importance of satellite tagging for tracking vulture movement patterns, monitoring survival and threats, and supporting conservation strategies
Tagging vultures was identified as essential to: track movement patterns & habitat use, monitor survival & threats, and support conservation strategies. To do this, important practices include safe capture & expert handling, fitting of lightweight satellite tags, and ability to release & conduct real-time monitoring.

Satellite tagging in Bangladesh has made significant progress, with 11 vultures tagged across the country from 2022 to 2024. This includes four White-rumped Vultures (WRV) and seven Himalayan Griffon Vultures (HGV). The tracking data provides valuable insights through real-time monitoring of vulture movements, helping to map key habitats and migration routes. This initiative enhances conservation efforts by identifying critical areas for protection and understanding vulture behavior across different landscapes.

The presentation highlights the transboundary movements of vultures between Bangladesh, India, Myanmar, and Nepal, emphasizing the need for regional collaboration in conservation efforts. Examples of vultures traveling long distances across borders are provided, illustrating the importance of transboundary initiatives for vulture conservation.

The presentation also details collaborative conservation actions between Bangladesh and India, including conducting undercover pharmacy and poison bait surveys, working closely with authorities to address conservation challenges, and raising awareness in local communities to reduce threats to vultures.

Transboundary Vulture Conservation - Ankit Bilash Joshi of BCN.
The seminar on Transboundary Vulture Conservation, presented by Ankit Bilash Joshi from Bird Conservation Nepal (BCN), highlighted the crucial role of vulture conservation and breeding centers in safeguarding vulture populations across borders.

The presentation provided in-depth results of tracked vulture movement between Nepal, India, and Bhutan, demonstrating the need for coordinated conservation efforts. The results included movement of satellite-tagged White-rumped Vultures (WRV) Several cases of tagged vultures were presented, including WRVs that were rescued, rehabilitated, and released, with some successfully fledging chicks, while others faced threats such as electrocution.

Recommendations for increasing best practice given included:
- Strengthening efforts for better coordination and cooperation in trans boundary issues.

- Joint research and monitoring carried out in both the sides to identify the population, habitats, rescue, and eliminate threats to validate the vulture safe zone.
- Better management and sharing information of the movement pattern and habitats to help the management authorities of both sides to make quick decisions based on scientific information.
- Exchange visits to learn the best practices in vulture conservation.
- To address some of the most urgent tasks of vulture conservation both the government should have jointly agreed conservation action plans at local and regional level.
- Prevent the use of Vulture Toxic Drugs (ban Aceclofenac, Ketoprofen, Nimesulide and Flunixin) in veterinary practices and promote the safe drugs (Meloxicam and Tolfenamic acid)
- Establishing and enforcing stronger legal protections for vultures, both nationally and transboundary.
- Collaboration with regional and International media of both the countries to raise awareness among the general pubic about vulture conservation
- Ensure adequate funding for long-term conservation efforts.

Discussion Points:

- At Siem Pang in Cambodia it is known from tagging that vultures both move in and out from Cambodia to Laos, and also nest in Laos. For WWF Laos, most of their focus species are terrestrial, during this meeting they cross-checked locations and found that the focal site in Xe Pian NP overlaps with vultures. The field monitoring team there do report that they have seen some vultures there. WWF has recently drafted the 5 year plan, however not including vultures, but after updating Country Director they think they can update to include vultures.

Next steps: Relevant parties request RSC to add 'Transboundary cooperations' to agenda and progress this. Discuss issues with CITES for sample analysis - highlight the need for Govt assistance with permissions. Likewise for tagging permissions.

Session 16. Advocacy Committee

Chair: Thiri Da Wei Aung

Vulture Safe Zone in South India - Bharathidasan S of Arulagam
The presentation provided details of the progress of the establishment of the provisional Vulture Safe Zone, situated in 3 states (Kerala, Karnataka and Tamil Nadu).

Collaborative efforts have been undertaken between various state governments, vulture teams, and the forest department to protect vulture populations. The work has aimed to bring changes through public awareness or influencing policies through public awareness and policy influence, targeting stakeholders such as the forest department, animal husbandry personnel, veterinary colleges, and cattle owners. Approaches to convey the messages have included a wide variety of events; signature campaigns, slogan writing competitions, bike rallies, volleyball tournaments and other day-to-day events with vultures for sensitising the stakeholders.

The presentation also highlights the achievements made in the region, including engaging elected representatives to provide a voice for vulture conservation in parliament, the prioritization of vulture conservation plans, the voluntary display of harmful drug posters in front of medical stores, the formation of state-level vulture conservation committees, and the implementation of synchronized vulture surveys. Furthermore, it mentions the release of a site-specific blueprint for Tamil Nadu State and the enforcement actions taken to check diclofenac availability.

At state level, both ketoprofen and flunixin withdrawn from state veterinary drug purchases. Monitoring compliance and enforcement has included periodical raids to check diclofenac availability for veterinary use 104 drug store owners prosecuted for illegal diclofenac sale.

The presentation also discusses the challenges encountered, including the ban on certain drugs not extending to multi-dose vials, the emergence of other harmful drugs, the illegal purchase of banned drugs from other states, the unavailability of safe carcasses due to hygienic practices, and threats from electrocution and poison baits.

SAVE Advocacy Committee 2025 Workplan - A. B. M. Sarowar Alam of IUCN Bangladesh
This presentation outlined the 2025 workplan of the SAVE Advocacy Committee, focusing on strengthening policy and advocacy for vulture conservation.

The committee's mission is to support and advance activities in the SAVE Blueprint through policy and advocacy initiatives. It is led by at least one chairperson and two coordinators, nominated biannually. Membership includes at least one representative from each vulture range country. The committee's role is to create a safe environment for vulture recovery and release by identifying advocacy challenges, coordinating with national and international stakeholders, and strengthening policy and public awareness efforts. Meetings are held twice a year virtually, with additional in-person sessions during SAVE meetings.

The Advocacy Committee aims to identify challenges and opportunities from the SAVE Blueprint and develop an annual workplan. It supports and engages partners in implementing activities, incorporates findings from the Technical Advisory Panel into advocacy strategies, and works with policymakers, influencers, and stakeholders while maintaining links with external organizations. The committee also develops advocacy positions, plans, and protocols for SAVE Board approval. Strengthening communications and outreach through media, publications, and events is a key priority to raise awareness of vultures and their conservation. Additionally, the committee reports annually to the SAVE Board on progress in key workplan areas.

In the AC 2025 workplan, key components were provided, including priorities, key actions, and responsible parties. Priority country-specific actions include transboundary operations in Bangladesh, NSAID bans and policy advocacy in India, strengthening national-level advocacy in Nepal, and policy implementation and awareness in Pakistan and Bhutan. The presentation also discusses the committee's composition, planned activities, and next steps, including refining the workplan, finalizing membership, and scheduling follow-up meetings.

Advocacy: Vultures Mascots for ONE HEALTH – Dr Percy Avari of Bombay Veterinary College, Mumbai
Examining advocacy options, the presentation looked at public Support for or recommendation of a particular cause or policy for vulture conservation. Primarily the focus was NSAIDs preference, specifically to gain an understanding about what veterinarians prefer.

The survey was conducted through a Google Forms questionnaire, with 124 responses. The majority of respondents were from Maharashtra (75%), with 70% having a Master's Degree, and 81.5% working in the veterinary government sector. One area of questioning was the use of flunixin versus meloxicam for treatment of animal ailments, and for Vulture Safe vs. Vulture Toxic drugs. Vulture Toxic drugs appeared more frequently used for six categories of ailments, particularly musculoskeletal afflictions, whereas vulture-safe drugs were more commonly used for general pain & inflammation, joint pain and post-operative pain.

The conclusions highlight that vulture-toxic drugs are preferred over vulture-safe alternatives, underscoring the need to promote the use of safer drugs. Research should focus on improving the effectiveness of vulture-safe medications, while outreach efforts should target young veterinarians to raise awareness. Broader surveys with more data are necessary to better understand drug use trends. Additionally, safety testing of NSAIDs for vultures should be conducted before licensing to prevent harmful impacts on vulture populations.

Regarding awareness and messaging, various lines of research were outlined including by ISVPT Mathura in Nov 2024 using the Google searches: "Diclofenac vulture" and "Against" Diclofenac and other NSAIDs. Additional efforts engaging and sensitising the veterinary community are clearly needed.

The Van Ki Baat program featured materials and engagement with Vet students, such as for IVAD and other talks at Hyderabad Zoo, Sep 2024, for Kokan Marathi Parishad in January 2025, and talks at Bombay Cambridge School, Mumbai, 12 Aug 2024

For using the 'Vultures as One Health Mascots' theme for messaging there were several key points raised that are relevant in the South Asian context. It is estimated that 40 million vultures (99%) were lost, which would have removed 10.4 billion kg of meat/year. Water quality seriously affected by the loss of vultures, with an estimated 10% reduced dissolved oxygen, more than double faecal coliforms in rivers. Sales of Rabies shots can be seen to increase from the baseline trend at the same time as the reports in vulture declines began, indicating correlation between decreased vultures and increased rabies, a trend also seen human all-cause death rates. This trend of 4.7% increase (1,04,386 deaths a year), this estimated cost $69.4 Billion/year.

Additional costs include incinerator costs: ($1,39,000/year) for 5,480 carcasses, with the annual burden of about 30 million cow carcasses - $768 million. Not included, cost of transport of carcasses or other environmental cost due to increase in dog populations, tanning industry and

Zoroastrian community. GHG mitigation by vultures is also significant, with prevention of 3.03 and 60.70 Tg CO2 eq. per year globally. Potential threats and potential solutions were given, with cattle shelters and training of vultures to mitigate the threats mentioned.

Discussion Points:

- One beneficial output could be a manifesto, or list of advocacy points, that provides the 10 key positions or requests, so that external stakeholders can clearly communicated to. There was some motivation to follow up with an accessible and usable agreed document to be translated into local languages.

Session 17. Summary of the meeting and closing remarks

Chair: Chris Bowden

Summary of the meeting – Jemima Parry-Jones, SAVE Chair
Thanks to the CVWG and everyone working behind the scenes.
Comment that face-to-face meetings are more effective for SAVE and its partners. Also thank Cambodia for funding and hosting, which allowed SAVE to return to in-person meetings. ASAP were the main funders of this meeting and Natural Encounters donated $10,000. Also grateful to David Hadrill, who attended and had the opportunity to see the presentations and has made a funding offer to SAVE.

The Indian drug control ban on Nimuleside was discussed, and Cambodia has accepted the RSC chair for IUCN. Presentations were commended, with valuable involvement and input from participants. Also discussed NSAID regulation, with the CMS resolution requiring legal implementation in Cambodia by March 2026, which provides a clear instrument for action.
On funding, we heard about techniques for designing pitches, as well as practical ideas. Noted that storytelling is needed to motivate further action.

Closing Remarks – Purushottam Sharma, representing the Nepalese Government
'It has been a pleasure to represent the Government of Nepal. As a partner of SAVE, Nepal has been closely monitoring the decline of vulture populations and, guided by the action plan, declared the first vulture safe zone and removed diclofenac. Nepal remains fully committed to restoring wild vulture populations. This meeting has been productive, and I sincerely hope to implement the ideas discussed. I would like to express heartfelt gratitude to the CVWG, NLC, and all SAVE partners for their continued support.'

Closing Remarks – Mihir Kumar Doe, representing the Bangladesh Government
'*Distinguished conservationists, academics, researchers, and practitioners from all countries, I'm delighted to join the 14th SAVE meeting, and this is my first opportunity to participate, which is particularly important for vulture conservation. Every year, there are many meetings focused on species such as tigers and crocodiles, but vultures also require our attention, especially considering the significant decline in their populations. While tigers receive much attention, other species, like vultures, are equally in need of support. The Government of Bangladesh is now actively monitoring vulture populations and taking steps to take responsibility for their*

conservation. This meeting has been a great opportunity to learn about the various situations and approaches, and I will be sure to share this valuable information with high officials. Thank you.'

Closing remarks - Mr Hong Chamnan, Department of Freshwater Conservation of the Cambodian Government
'The meeting is coming to an end—thank you to everyone for participating. A special thanks to Jemima Parry-Jones, the CVWG members individually, and NatureLife Cambodia, the Department of Freshwater Conservation and the GDNCPA. I also extend my gratitude to the countries and donors: CEPF, RSPB, Mandai, and BLI.

During the opening ceremony we heard welcome introductions from HE Chea Sam Ang of MoE, and the SAVE Chair Jemima Parry-Jones MBE, with both expressing their feelings that this SAVE Annual General Meeting is an excellent step in connecting vulture conservationists in Cambodia with the wider area.

During day one we heard in-depth talks informing and updating participants about the SAVE structure, Origins and SAVE Blueprint revisions. The SAVE Consortium covers 6 countries across the region, including Pakistan, India, Nepal, Bangladesh, Myanmar and Cambodia, and representatives of each countries provided detailed country updates for 2024.

In addition to SAVE Country partner updates, for the first time the team from the Red-headed Vulture Project in Thailand joined the meeting to present about the work to breed and re-introduce the species in Thailand.

Throughout the workshop, several presentations and group discussions were held covering a range of focal topics, such as: NSAID regulation, surveillance, and strategy, the establishment and design of Vulture Safe Zones, and information on SAVE resources and support through funding, communications, and guides and protocols.

Technical sessions focusing on three themes were held: on the contribution of National Working Groups and Action Plans to vulture conservation, on the prevention and mitigation of vulture mortality from the mis-use of pesticide poison baits, and Transboundary Collaboration. Several notable outcomes resulted from the meeting.

On National Action Plans, discussions provided tangible options and advice to facilitate the creation or renewal action plans. In terms of aligning with wider strategies, the methods and ways to align national strategies with the SAVE Blueprint and CMS Vulture Multi-species Action Plan were also clarified.

Connecting and enriching the connections within the SAVE Network, a preliminary agreement of future collaboration was outlined between Cambodia and Laos to conserve the vulture population around the mutual border, and the possibilities to connect the Red-headed Vulture breeding program in Thailand with neighbouring countries were explored.

The workshop concluded with a welcome dinner, and now participants look forward to joining the second part – a field trip to Cambodia's Premier Vulture Site at Siem Pang Wildlife Sanctuary.

Again, thanks to all and wishing everyone safe onward journeys, and now officially close the workshop.'

3. Results of SAVE Blueprint Prioritisation

Number of votes highlighted in yellow. High scoring actions highlighted in red (25+)

Objective A	To minimise the threat to vultures from toxic non-steroidal anti-inflammatory drugs (NSAIDs) throughout the range, whilst monitoring the exposure to, and mortality from, this threat.	
A1	Establish system and procedures by which veterinary drugs with unknown effects on vultures, including new to market drugs, have their approval for veterinary use withheld or withdrawn until scientific testing on Gyps vultures establishes their safety at maximum likely exposure levels.	**Policy and Legislation 35**
A2	Prohibit or withdraw the veterinary use of known toxic NSAIDs (diclofenac, ketoprofen, aceclofenac, nimesulide, carprofen, and flunixin).	**Policy and Legislation 27**
A3	Enforce the removal from the market of vials of NSAIDs supposedly intended for human medicine in excess of 3 ml capacity.	**Policy and Legislation 9**
A4	Work with both the pharmaceutical industry and governments to ensure, by a robust safety testing and approval process, the testing of drugs of unknown toxicity to vultures to identify NSAIDs that are safe for vultures and as evidence for those that are not. Currently meloxicam and tolfenamic acid are the only such drugs.	**Policy and Legislation 22**
A5	Contribute, with government agencies and pharmaceutical companies, to maintaining pharmacovigilance and regulation of veterinary drugs, to prevent their negative effects on wild vultures (RSC).	**Policy and Legislation 17**
A6	Establish a SAVE web-based information system on veterinary drugs which combines information of levels of use from pharmacy surveys and analyses of cattle carcasses, with results from safety testing to draw attention of govts to potentially hazardous drugs.	**Direct Conservation Action 6**
A7	Develop awareness-raising initiatives across the partnership to highlight NSAIDs issue and promote vulture-safe drugs, specifically to veterinarians and potential consumers.	**Education and Awareness 27**
A8	Monitor availability of NSAIDs for veterinary use in Vulture Safe Zones (VSZs) and more widely through undercover pharmacy surveys.	**Research and Monitoring 25**
A9	Monitor NSAID contamination of ungulate carcasses in VSZs and more widely.	**Research and Monitoring 11**
A10	Investigate factors affecting use of vulture-safe NSAIDs by veterinarians, paravets and livestock owners.	**Research and Monitoring 14**
A11	Seek to improve regulations to facilitate the easier movement of samples between countries where capacity is lacking, to facilities than can do the relevant analysis.	**Direct Conservation Action 17**

Objective B	To assess the magnitude of other threats to vultures including poison baits, electrocution and collision, and food and habitat availability, and address these threats where appropriate.	
B1	Undertake an assessment of threats to vultures using monitoring and tracking data.	**Research and monitoring 23**
B2	Collect, collate (e.g. via database) and share basic standardised information about poison bait incidents at national, and regional levels.	**Research and monitoring 12**
B3	Establish protocols and train and support relevant agency staff to rapidly respond to poisoning incidents including sharing best practice.	**Education and Awareness 21**
B4	Implement awareness campaigns, specifically covering negative impacts on vultures and other non-target species and legal alternatives to mitigate human-wildlife conflict.	**Education and Awareness 22**
B5	Investigate and promote vulture-safe protocols and guidelines for vertebrate control and the disposal of carcasses at dumpsites e.g. sterilisation and vaccination programmes for feral dog control, and improving management practices at dumpsites for vultures.	**Education and Awareness 14**
B6	Undertake risk-mapping, identifying areas where energy infrastructure poses greatest electrocution risks to vultures; combine tracking data, site prioritisation, vulture counts and other sources.	**Research and monitoring 24**
B7	Engage with donors of large energy infrastructure developments to ensure responsible energy developments and allocation of project resources to enable long-term monitoring.	**Policy and Legislation 19**
B8	Investigate changes in food availability (and water availability and quality - where applicable), quality and distribution for vultures at a range of spatial scales (foraging patterns of fledglings and breeding adults), and any resulting impacts on vulture populations.	**Research and monitoring 21**
B9	Develop clear goals and science-based guidance and methods to support any supplementary feeding strategies (e.g. vulture restaurants), including ensuring resources to cover operational costs for sites for 5–12 years.	**Direct Conservation Action 20**
B10	Investigate and identify key nesting and roosting areas and assess availability in relation to habitat destruction – working with local communities to show importance and impact on vulture populations.	**Research and monitoring 35**
B11	Safeguard nesting areas from logging and human predation at relevant sites.	**Direct Conservation Action 33**

Objective C	To support vulture conservation through actions that contribute to addressing knowledge gaps and population recovery.	
C1	Undertake population monitoring locally and nationally (e.g. Road transect surveys, or other methods)	**Research and monitoring 34**
C2	Undertake GPS/satellite tracking studies of vultures to determine spatial movements and to identify mortality caused by full range of threats. Create a repository for tracking data across the range	**Research and monitoring 37**
C3	Improve capacity to conduct autopsies, toxicological and other forensic analyses to determine causes of mortalities throughout the range.	**Direct Conservation Action 20**
C4	Ensure the maintenance of genetically viable, long term conservation breeding programme for White-rumped Vulture, Indian Vulture and Slender-billed Vulture as relevant and for as long as is necessary as an insurance against extinction.	**Direct Conservation Action 16**
C5	Undertake the release of captive-reared/captive-bred vultures using the IUCN guidelines and criteria for translocation of species.	**Direct Conservation Action 15**
C6	Undertake research into the estimation of the former and potential future value of the ecosystem services provided by wild vultures.	**Research and monitoring 11**
C7	Encourage and assist all range states to develop National Vulture Conservation Plans.	**Policy & Legislation 23**
C8	Implement, maintain and review network of VSZs (with emphasis on NSAIDs issue) in India, Nepal, Pakistan and Bangladesh and develop VSZ criteria to promote as an approach in addressing other critical threats.	**Direct Conservation Action 22**
C9	Undertake capacity-building and local advocacy to promote VSZs.	**Education and Awareness 15**
C10	Integrate community-led vulture-based tourism in VSZs.	**Direct Conservation Action 25**

Objective D	To advance vulture conservation through effective promotion and implementation of the SAVE Blueprint activities by sharing and disseminating best practice, knowledge and expertise across the partnership and more widely.	
D1	Disseminate and update the Blueprint and engage partner to report annually on progress and challenges.	**Direct Conservation Action 14**
D2	Develop SAVE positions on key issues as highlighted by reporting from partners.	**Education and Awareness 10**
D3	Develop and implement a fundraising strategy to secure the finances and other resources required to effectively implement the Blueprint.	**Direct Conservation Action 25**
D4	Develop and implement a communications strategy, comprising tools to promote the conservation of vultures.	**Education and Awareness 23**
D5	Utilise and support existing events at national level, such as International Vulture Awareness Day, to promote the conservation of vultures in the SAVE region.	**Education and Awareness 16**
D6	Establish a repository for SAVE products e.g. relevant guidance, protocols, awareness raising materials, and other publications that promote vulture conservation.	**Education and Awareness 15**
D7	Seek to build in country capacity to enhance sustainability and legacy of vulture conservation initiatives.	**Direct Conservation Action 20**

4. Feedback Questionnaire Results

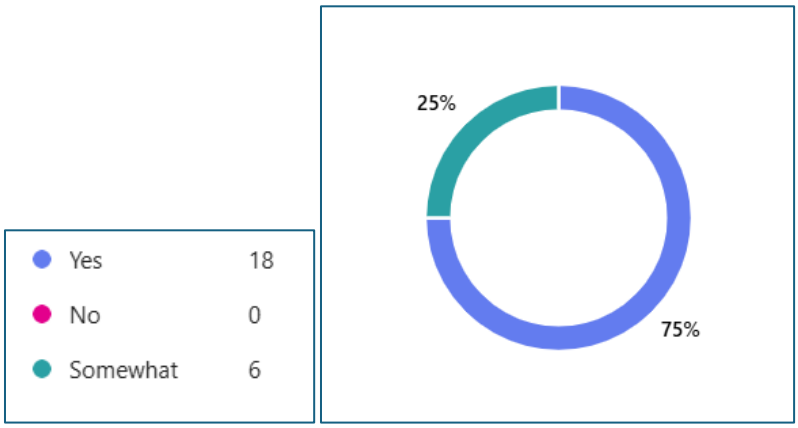
All participants were sent the following questionnaire, and 24 attendees responded anonymously. Results are shown below.

1. What were your main goals in attending this meeting?

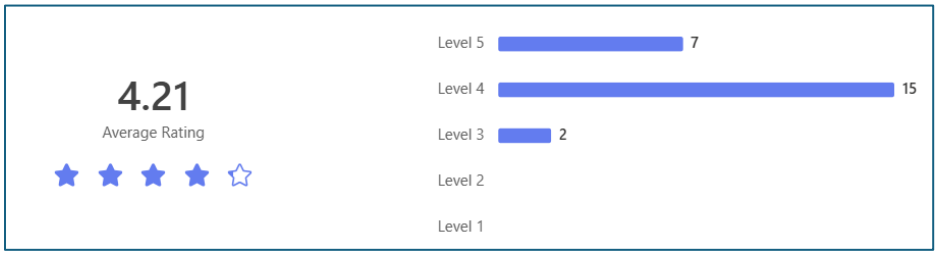
- Understand the progress by SAVE partners
- To move everyone forward in vulture conservation
- To update my knowledge and to interact with the vulture experts
- Learning, sharing, networking and cooperation for better conservation outcomes
- Meet with SAVE partners, learn about the work of partners, next steps for SAVE
- Understand how the SAVE work and international vulture conservation
- Updating the country update and priorities in vulture conservation
- A chance to get to know more about the SAVE and activities of the conservation projects.
- To understand the SAVE working. To know partner organisations well and find out opportunities to work together.
- Networking with involved agencies. Learning about updates with work and progress.
- To understand about vulture conservation activities undertaken in South Asia. To connect with key people working on vulture conservation.
- To share our activities and experiences of vulture conservation and learning from Asian countries. To get more participation of veterinary community in vulture conservation in Myanmar.
- Supporting the Vulture Conservation work in India primarily and the Globe as well
- Sharing and learning of the latest advancement of vulture research and conservation in Asia
- I want to know what SAVE is doing, as it could be relevant to my current work and the activities we are doing for our wildlife case reporting network
- Learn new research and updates from all SAVE consortiums and consider the priority of applying to Cambodia.
- Know about the update of vulture conservation from six countries
- Discuss, including threats to vultures, national action plans, and transboundary cooperation.
- To strengthen vulture conservation efforts and unite together to save the vulture in this region. learning about the vulture conservation
- Update on the conservation status of vultures in Asia.
- To get more experience in vulture conservation especially best practices from members of SAVE.
- Get new experience from other countries
- Ensuring clear outcomes and objectives for next steps
- I want to get knowledge on Vulture conservation from other countries like good experience, challenges, lessons learnt and solutions for efficiency on Vulture conservation in Cambodia in future.

- Lear more about vulture conservation in other countries and threats.
- Learn more about vulture tagging
- Make connection with other vulture experts
- Seeking to learn more and understand how we can support

2. **Did you accomplish these goals?**

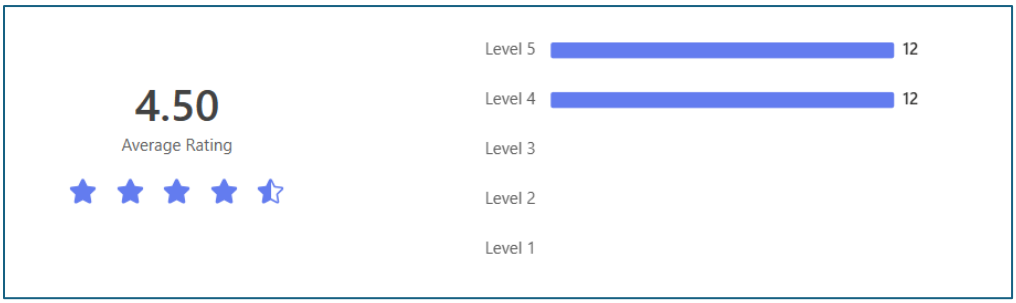


3. **How would you rate the SAVE meeting agenda, and the discussions included in the sessions?**



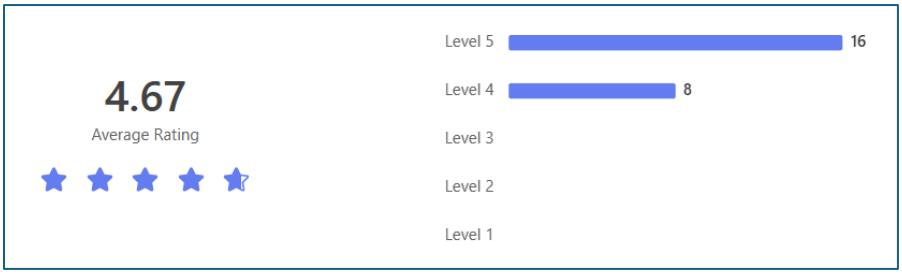
4. **Was there anything that wasn't covered that should have been? If so, what?**
   - Requested to bring more experts from Europe and Africa working on safety testing
   - Species specific conservation factsheet of each threatened vultures of Asia
   - The next research for vulture conservation proposal should be discussed.
   - Government participation
   - Clear outcomes from each section - there were some but not consistent
   - Conservation technologies (drone) and more information on GPS/GSM transmitters.
   - More information on fund raising as this was not develop as much as I expected.

5. **How would you rate how the meeting was structured?**



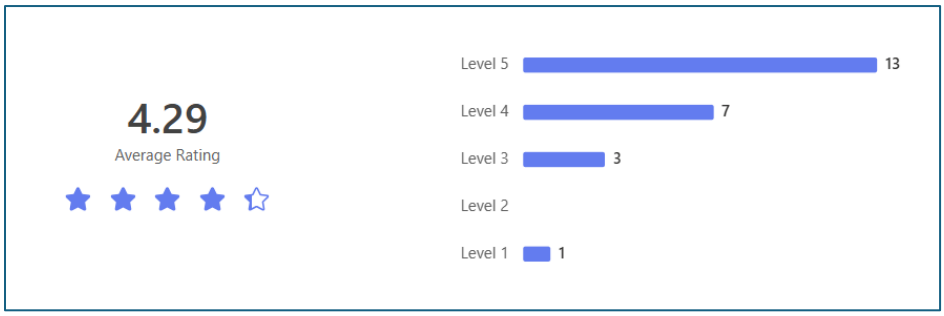
6. **What could be done to improve the structure of the meeting, if anything?**
   - Invitation should be sent to all those working in the area of vulture conservation
   - Some more group discussions.
   - Very PowerPoint heavy. You could give some thought to including group work/discussion and feedback sessions. To sustain attention and interest, there needs to be a mix of styles, not just PPT.
   - Would be good to have more discussion sessions, where participants are encouraged to brainstorm or pitch ideas. Much of this meeting was very presentation focussed which was informative, but did not incite much discussion.
   - The meeting is well-structured meeting and ensured clear agenda and time allocation also.
   - More interactive content - involve participants
   - More activities where participants interact together in small groups

7. **How would you rate the meeting venue and other logistical arrangements?**



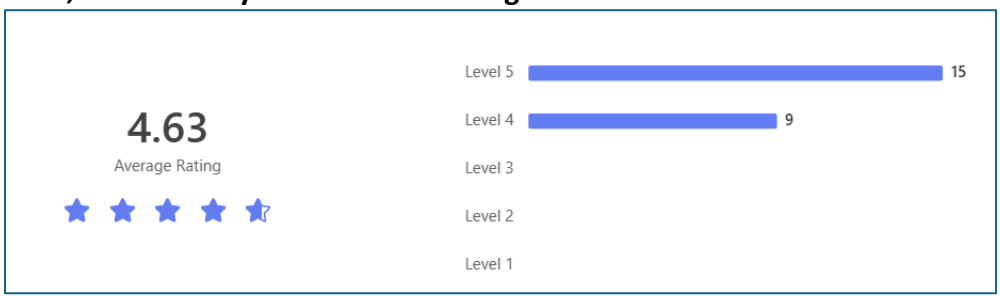
8. **Is there anything that could have improved the logistical arrangements? If so, what?**
   - If we host the next meeting, better to use best hotel and services, once the budget allowed.
   - The venue could have been in a more interesting part of town.
   - Should arrange the meeting not so far from the field trip location.

9. **How would you rate the field trip?**



10. **Is there anything that would have improved the field trip experience for you? If so, what?**
    - Much too far away, two days of travel in a car after two days sitting in the meeting and hours of air travel was not ideal.
    - Meetings should be held near execution sites whenever possible to save time, reduce logistics costs, and minimize travel time.
    - Should have time to visit the vulture nest platform.
    - The field trip should include the local authority and community to join and show how they involve this conservation action.
    - I got more knowledge and experience from the potential protection areas and active conservation activities in the Siem pang sanctuary for Vulture conservation.
    - A bit too far as only really 1 day of field but 2 days of travel.

11. **Overall, how would you rate this meeting?**



12. **Please share any other suggestions about ways to improve future SAVE meetings or any other comments you have about your meeting experience.**
    - Invite the expected bureaucrats from each country with formal letter.
    - All good apart from the excessive travel
    - Nothing specific
    - Provide some role for government attendees and seek their commitments.
    - More time to discuss
    - More knowledge sharing experience from the Technical Advisory Panel
    - I am a social enterprise company that runs the bird watching tour to support local community livelihood and at the same time is helping the conservation project

through out the country. Would be great if we are invited to join the field trip with delegates and guests to promote Cambodia Wildlife Viewing Tours and so on.

- Excellent.
- There were a few people in the room who did almost all the talking. Facilitated group work could increase participation and help draw out ideas from everyone. You have to think of ways to get everyone more involved!
- I liked the way prioritisation was done for the SAVE Blueprint. For future SAVE meetings, it might be good to let participants know in advance that this will be done so everyone could have more time to review, and be ready to vote when they arrive. This would be especially useful for non-English speakers.
- In the future, I expected to see the discussion of TAP, AC and FCC in SAVE meeting.
- It was a good meeting as usual.
- I think having other stakeholders like WVI would be good.
- Consistency of participants is must I believe. I understand completely that it is an expensive affair to invite people and organizations as well.
- There were less discussion about TAP progress, plan and priorities in this meeting e.g. publication in this year, manuscript submission, research priorities etc. It will be truly grateful if covered these topic as well in future meetings.
- Distribution of meeting summaries.
- Physical meeting is very important and we can arrange the meeting regularly.
- The meeting was smooth and fruitful. The member from each country actively participated.
- Save meeting should be host in Siem Reap province.
- Excellent hosting and glad Cambodia team used to leverage government so well
- I suggestion on future SAVE meeting, should be used English and Khmer languages.
- Great meeting, I learnt a lot on vulture conservation and programs in place in other countries.