

**SUSTAINABILITY OF VULTURE SAFE FEEDING SITES (VSFS) FOR
THE CONSERVATION OF VULTURE IN DANG DISTRICT, NEPAL**



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**A thesis submitted in partial fulfillment of the requirements for the award of
the degree of Master of Science in Zoology with special paper
“Ecology and Environment”**

Submitted to
Central Department of Zoology
Institute of Science and Technology
Tribhuvan University
Kirtipur, Kathmandu
Nepal
April 27, 2017

RECOMMENDATION

This is to recommend that the thesis entitled “**Sustainability of Vulture Safe Feeding Sites (VSFS) for the conservation of vulture in Dang district, Nepal**” has been carried out by **Ms. Pushpa Bhandari** for the partial fulfillment of Master’s Degree of Science in Zoology with special paper ‘Ecology’. This is her original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

Date: April 27, 2017 (14th Baishakh, 2074 B.S)

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RECOMMENDATION

This is to recommend that the thesis entitled “**Sustainability of Vulture Safe Feeding Sites (VSFS) for the conservation of vulture in Dang district, Nepal**” has been carried out by **Ms. Pushpa Bhandari** for the partial fulfillment of Master’s Degree of Science in Zoology with special paper Ecology and Environment. This is her original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

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LETTER OF APPROVAL

On the recommendation of supervisor **Professor Dr. Nanda Bahadur Singh**, this thesis submitted by **Ms. Pushpa Bhandari** entitled “**Sustainability of Vulture Safe feeding sites (VSFS) for the conservation of vulture in Dang district, Nepal**” is approved for the examination and submitted to the Tribhuvan University in partial fulfillment of the requirements for Master’s Degree of Science in Zoology with special paper Ecology and Environment.

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CERTIFICATE OF ACCEPTANCE

This thesis work submitted by **Ms. Pushpa Bhandari** entitled “**SUSTAINABILITY OF VULTURE SAFE FEEDING SITES (VSFS) FOR THE CONSERVATION OF VULTURE IN DANG DISTRICT, NEPAL**” has been accepted as a partial fulfillment for the requirements of Master’s Degree of Science in Zoology with special paper Ecology and Environment.

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DECLARATION

I hereby declare that the work presented in this thesis entitled “**Sustainability of Vulture Safe feeding sites (VSFS) for the conservation of vulture in Dang district, Nepal**” has been done by myself, and has not been submitted elsewhere for the award of any degree. All the sources of the information have been specifically acknowledged by reference to the author(s) or institution(s).

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ABSTRACT

Vultures are the natural scavenger of the order falconiformes. They play a vital ecological role through the rapid consumption of animal carcasses. Nepal supports six resident vulture species and two migratory among nine species found in south Asia out of 23 species found in the world. The study entitled “**Sustainability of Vulture Safe Feeding Sites (VSFS) for the conservation of vulture in Dang district, Nepal**” was carried out to understand the possibilities of sustainable management of Vulture safe feeding sites for the conservation of vultures, breeding success of White-Rumped Vulture (*Gyps bengalensis*), the perception of people towards vulture conservation and jatayu restaurant, livestock condition, advantage and disadvantage of the vulture restaurant and potential threats to the vulture.

The nesting habitat assessment of White-Rumped Vulture suggested that (Saaj tree) *Terminalia tomentosa* was preferred tree species for building nest. Since all 19 nests were found to be built in *Terminalia tomentosa*. The nesting height was found to be highly dependent on the height of the tree. The breeding success based on active nest was found to be 74%. Primary data was collected through group discussion, questionnaire survey, Key informant survey, direct observation etc. Samples were selected by using simple random sampling method. People were found to be positive towards Vulture safe feeding sites and they were willing to help VSFS for the sustainable management of Jatayu restaurant. Questionnaire survey was also conducted with veterinary professional to know the current practice on NSAIDs and their use in the veterinary pharmacies. During the survey diclofenac was not found in any vet shop.

Competition with other scavengers, carcass insufficiency, high electric tension lines , theft of meat by local people, low level of awareness among the local people about vulture conservation, habitat loss are the major threats in vulture conservation and the sustainable management of Vulture safe feeding sites.

Keywords: White-rumped Vulture, breeding success, Vulture safe feeding site.

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ABBREVIATIONS

BBC	: British Broadcasting Corporation
BCN	: Bird Conservation Nepal
CBS	: Central Bureau of Statistics
CFUG	: Community Forest User's Group
DNPWC	: Department of National Parks and Wildlife Conservation
INGO	: International Non-Governmental Organization
IUCN	: International Union for Conservation of Nature
MoEF	: Ministry of Environment and forest
NGO	: Non-Governmental Organization
NSAID	: Non-Steroidal Anti-Inflammatory Drugs
UNCF	: Uchanimbu community forest
VDC	: Village Development Committee
VSFS	: Vulture Safe Feeding Site

VSZ : vulture safe zone
cal. : calculated
d.f. : degree of freedom
Max. : Maximum
Min. : Minimum
Pers. : Personal
Spss : Statistical package for social science
tab. : tabulated
WRV : White rumped vulture