

## Project Update: July 2021

### Conservation of Threatened Vulture Species Through Research and Awareness Raising Programs in Chitral Pakistan

#### NSAID Drugs Report:

NSAIDs have caused a catastrophic decline in vulture populations worldwide. Although in most countries of the world NSAID drugs are legally banned, they are still manufactured and continue to be in use in many countries thus posing a threat to the survival of the species. To investigate the availability and use of NSAID drugs a survey was conducted in the veterinary hospitals and shops in the project sites in Chitral.

A total of 16 veterinary facilities, including government hospitals and private shops, were surveyed during the study, which included five public veterinary hospitals and 11 privately owned shops in different areas of Chitral (Table. 1). The study found that NSAID drugs are sold in different veterinary hospitals and veterinary medical stores. Although Meloxicam was also available at different stores and being prescribe by the veterinarians seven NSAID drugs were found to be in use and available in all the veterinary hospitals and veterinary medical stores in lower Chitral.

*Table 1 Names and Addresses of the Veterinary Hospitals and Shops Surveyed for the Project*

<b>S #</b>	<b>Medical Veterinary Name</b>	<b>Area/Address Location</b>	<b>Shopkeeper/ Doctor Name</b>	<b>Toxic Drugs vulture and birds</b>
1	Chitral Veterinary medicine Store	Shahi Bazar Chitral	Dr. Sardar Ahmad Khan	Butadin
2	Miftah Veterinary Medical Store	Ataleq Bazar Chitral	Miftah Uddin	Flunixin, Butadin, Phenybutazone
3	Meadow Dairy Enterprises	Danin, Mustuj Road, Chitral	Imdad Ullah	Diclofenac Sodium Lornoxicam
4	Wahid Veterinary Medicine Store	Danin Qutiba Road	Wahid	Nil
5	Ayun Veterinary Medicose	Main Bazar Ayun	Yaheya	Nil
6	Veterinary Hospital Danin	Mustuj Road Danin	Sheikh	Nil
7	Veterinary Hospital Broze	Near Main Bazar Broze Gol	Khalid	Nil
8	Veterinary Hospital Ayun	Near GHS Ayun	Yaheya	Nil
9	Veterinary medical store Booni	Hospital Road Booni	Zabar Khan	Nil
10	Altaf Veterinary Store	Booni Chowk Near National Bank	Altaf	Nil
11	Govt, Veterinary Hospital	Booni Lasht, Booni	Dr. Shuja	Nil
12	Muhammad Veterinary	Zero Point Drosh	Dr, Mehtab	Diclofenac

	Clinical Store			sodium, Lorhaxicam
13	Drosh Veterinary Medicine Store	Chawni Road New Bazar Drosh	Muhammad Husian shah	Nil
14	Millat Veterinary Medicine Shop	Arandu Ada Zia Market, Drosh	Rahmat khasraw uddin	Nil
15	Sool Veterinary Hospital Drosh	Zero Point Drosh	Asad Bangash	Diclofenac
16	Muhammad veterinary clinical store	Zero Point Drosh	Dr, Mehtab	Diclofenac Sodium, Lorhaxicam

The following drugs were found in different veterinary shops/ hospitals during the survey: Flunixin meglumine, Diclofenac Sodium, Butadin, Phenylbutazone, Mefenamic Acid, and Analgen. Details of the drugs, manufacturer can be found in Table 2. Along with the drugs of veterinary use it was reported by the shopkeepers and veterinarians that other drugs of human use such as Analgin, Mefenamic acid, Vorin, etc. are also prescribed for livestock with high doses in the absence of specific veterinary drugs.

*Table 2 NSAID Drugs available and used in Chitral, Name of Manufacturer and Addresses*

S#	Name of Drug	Address of Pharma/Industry where Manufactured
1	Flunixin meglumine	Star Laboratories (PVT, Ltd) 23-KM Multan Road Lahore Pakistan
2	Flunimit	VIMITS Pharmaceuticals, (Pvt Ltd) 129, Sunder Industrial Estate, Lahore
3	BUTADIN (Phenylbutazone)	Star Laboratories (PVT, Ltd) 23-KM Multan Road Lahore Pakistan
4	F-MEGLU (Flunixin meglumine)	Epoch Pharmaceuticals, PLOT NO.83-85 SECTOR 15 KORANGI INDUSTRIAL AREA KARACHI- PAKISTAN
5	PAIN GO (Phenylbutazone)	Leads Pharma, Plot# 81-A, St# 6-I, 10/3 Industrial Area Islamabad, Pakistan
6	Flutic	Attabk Pharmaceutical Industries, 5-C, I-10/3, Industrial Area Islamabad, Pakistan
7	DICLOCIN Forte (Diclofenac Sodium) Tablet	COMBITIC Global Caplet Pvt Ltd M-15, D-2 & D-3, Old Rohtak Rd, near fly over, Krishna Nagar, Industrial Area, Sonipat, Haryana 131001, India

The veterinarians and shopkeepers had no knowledge regarding NSAIDs and their effect on vultures and whether selling of NSAID is legally banned or not. Most of the shopkeepers had no relevant qualification and were not aware about the uses of the drugs. All the veterinarians said that diclofenac drugs are used as painkiller, nine of them also prescribed diclofenac Sodium to reduce temperature, while five also prescribed the drug for inflammation. One of the veterinarians reported that the drug is

used as a de-wormer and as antibiotic whereas two of them prescribed the drug for muscle relaxation and infection.

The results of the survey showed that NSAID drugs such as Diclofenac Sodium, Phenylbutazone and others are available in different veterinary hospitals and veterinary medical stores and are used to treat livestock in the study area. Veterinarians in hospitals and veterinary medical stores have no knowledge about the side effects of NSAID drugs. All the veterinarians did not know what vultures are and what caused their population declines. They considered Diclofenac drug as a safe drug. They usually prescribe any type of Diclofenac drugs to treat animals. The veterinarians had no information about ban on some of the NSAID drugs. It is important to note that all the NSAID drugs available in local markets are manufactured in big cities of Pakistan such as Lahore, Islamabad, Karachi, Peshawar, etc., reflecting that the same are also supplied to other parts of Pakistan and thus continue to be a threat for vultures. Interestingly, one of the NSAID drugs (Diclofenac Forte, tablet) is manufactured in India and the study area is far away from the Pakistan-India border. One possible route may be via Afghanistan. It shows that production/ manufacturing NSAID drugs have consequences beyond international borders.

The project has now reached to the veterinarians with awareness raising materials to educate them about the consequences of NSAID drugs for vultures and telling them what the safe alternatives of diclofenac sodium are available. It is suggested to reach out to the manufacturer pharma's of the drugs and strict implementation of the ban.





# Flutic

Injection

(USF Specification)



Manufactured by:

**Attabk Pharmaceutical Industries**  
*Animal Health Division*

5-C, I-10/3, Industrial Area, Islamabad-Pakistan.  
Ph: 051-4434124-5 Web: [www.atabak.com.pk](http://www.atabak.com.pk)