

Report on Gid Control Awareness, Watch Dog Sterilization, and Pet Registration Program at Yaksa–Nubri Chiwog, Tsento Gewog, Paro Dzongkhag

1. Introduction

The Livestock Sector of Tsento Gewog, in collaboration with the Dzongkhag Veterinary Hospital (DVH), Paro, conducted a Gid Control Awareness, Watch Dog Sterilization, and Pet Registration Program at Yaksa–Nubri Chiwog from 11th May till 21st May, 2026. The program was implemented as part of integrated livestock disease prevention and dog population management activities in yak-rearing communities.

Gid is one of the major parasitic diseases affecting yaks in Bhutan and is caused by the larval stage of *Taenia multiceps*. Dogs act as the definitive host and shed infective eggs through faeces, contaminating grazing pasture and water sources. Young yaks become infected while grazing on contaminated pasture, resulting in neurological signs, poor productivity, and death in severe cases. The increasing number of uncontrolled watch dogs and feral dogs in highland settlements contributes significantly to the persistence of the disease transmission cycle.

Considering the socio-economic importance of yak farming in Yaksa-Nubri Chiwog, the program focused on creating public awareness, sterilization of watch dogs, registration and vaccination of dogs, strategic deworming, and humane feral dog management to strengthen Gid control measures in the community.

2. Objectives and Purpose of Program Implementation

The objectives and purpose of the program were:

- To create awareness among yak herders regarding the transmission cycle, prevention, and control of Gid disease.
- To reduce uncontrolled breeding of watch dogs through sterilization programs.
- To register and microchip watch dogs and pet dogs for proper identification and monitoring.
- To vaccinate dogs against rabies to improve animal and public health safety.
- To manage feral dog populations through humane darting and capture methods.
- To distribute Albendazole tablets to young yaks for control of internal parasites.
- To distribute Praziquantel tablets to watch dogs to interrupt the transmission cycle of *Taenia multiceps*.

- To promote responsible dog ownership and strengthen collaboration between livestock officials and yak-herding communities.

3. Staff Mobilization and Responsibilities

Technical staff were mobilized from the Dzongkhag Veterinary Hospital and Gewog Livestock Centre for successful implementation of the program.

Sl. No	Name	Designation	Responsibility
1	Dr. Phuntsho Wangdi	Veterinary Officer	Surgical sterilization & awareness campaign
2	Mr. Galey Jamtsho	Sr. Livestock Supervisor	Surgical sterilization
3	Mr. Ngawang Phuntsho	Sr. Livestock Supervisor	Nurse & awareness campaign
4	Mr. Leki Wangchuk	Sr. Livestock Supervisor	Pet Registration & Overall Coordination, awareness activities, reporting, and program monitoring
5	Mr. Sangay Tenzin	Livestock Supervisor	Dog registration, micro chipping, medicine distribution, animal restraint, and data recording
6	Mr. Sherab Thinley	Sr. Livestock Supervisor	Anaesthesia & Post-operative care
7	Mr. Arjun Ghishing	Driver	Feral dog management, Decontamination & Post-operative care

The team coordinated closely with local leaders, Chiwog representatives, and yak herders to ensure smooth implementation of all field activities.

3. Program Achievement

Watch Dog Sterilization, Micro-chipping, Registration, anti-rabies vaccination (ARV) and horse castration figures are follow table no.1. Dog registration and micro chipping were conducted to establish proper identification and facilitate future monitoring, vaccination, and disease control interventions.

Anti-rabies vaccination was administered to watch dogs and pet dogs to minimize the risk of rabies transmission to both humans and animals in the community.

Village	Sterilization of Watch Dog		Micro chipping and Registration		ARV Vaccination		Horse Castration
	Male	Female	Male	Female	Male	Female	
Nubri	9	12	19	12	19	12	1
Yaksa	11	7	14	7	14	7	7
RBA, Chekha	0	0	0	0	3	3	0

IMTRAT,Chekha	2	2	0	0	3	3	0
Total	22	21	33	19	39	25	8

4. Methodology of Sterilization

Sterilization of watch dogs was carried out under aseptic surgical conditions by the veterinary team. Male dogs underwent castration, while female dogs underwent ovariohysterectomy



(spaying). Pre-operative examination was conducted to assess the health status of animals before surgery.

Animals were restrained appropriately and administered general anaesthesia under veterinary supervision. Surgical procedures were performed using sterile surgical instruments and standard veterinary protocols. Post-operative antibiotics, pain management, and wound care instructions were provided to dog owners. Owners were also briefed regarding post-operative care and feeding management following surgery.

4. Feral Dog Management through Darting

Humane darting techniques were used for the capture and management of aggressive and free-roaming feral dogs that could not be restrained manually. Captured dogs were subsequently sterilized and vaccinated as part of dog population management measures as given details below table no. 2.

Village/Location	Darting for ARV and neutering		Remarks
	Male	Female	
Nubri	2	0	Both ARV & neutering
RBA,Chekha	5	5	All for ARV
IMTRAT,Chekha	3	1	3 for ARV & 1 for neuter
Total	10	6	



5. Distribution of Albendazole to Young Yaks & Praziquantel Tablets to Watch Dogs

Albendazole tablets were distributed to yak herders for strategic deworming of young yaks to reduce internal parasitic infections and improve overall health status.

Briefing on Route and Method of Administration

Yak herders were briefed on the proper administration of Albendazole tablets. The medicine was advised to be administered orally according to the age and estimated body weight of young yaks.

Herders were instructed to ensure proper swallowing of tablets during administration and to avoid under-dosing. Awareness was also provided on:

- ✓ Appropriate timing of deworming,
- ✓ Importance of regular deworming schedules,
- ✓ Hygienic management practices, and
- ✓ Safe disposal of faecal matter to reduce environmental contamination.

Praziquantel tablets were distributed to watch dog owners for strategic deworming against tapeworm infection associated with *Gid* transmission. Dog owners were advised to administer Praziquantel orally at recommended intervals to eliminate adult tapeworms from dogs and reduce shedding of infective eggs into grazing areas. The team also briefed dog owners on:

Proper dosage administration,

- ✓ Importance of routine deworming,
- ✓ Prevention of feeding raw infected carcasses or organs to dogs, and
- ✓ Responsible management of dog faeces.

Village	Nos. Herder	Nos.of Young Yaks	Total dose of Albendazole for twice a year (strip)	Nos. of Watch Dog	Total dose of Prazequintel tab for quarterly (tab)

Nubri	16	1216	870	45	180
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6. Awareness Activities Conducted

Awareness sessions were conducted extensively among yak herders and community members covering the following topics:

- ✓ Life cycle and transmission of Gid disease,
- ✓ Role of dogs in spreading infection,
- ✓ Importance of regular deworming of dogs and yaks,
- ✓ Safe disposal of infected carcasses and organs,
- ✓ Responsible dog ownership and dog population control,
- ✓ Importance of sterilization and vaccination,
- ✓ Public health significance of rabies prevention.

The awareness sessions encouraged active participation from community members, and practical discussions were held regarding local disease challenges and preventive measures.

7. Challenges Faced During the Program

- ❖ Despite successful implementation of the program, several challenges were encountered during field activities:
- ❖ Difficult terrain and remote geographic location created challenges in transportation of medicines, surgical instruments, and equipment.
- ❖ Unpredictable weather conditions occasionally disrupted field operations and movement.
- ❖ Scattered settlements and migratory movement of yak herders affected beneficiary mobilization and scheduling.
- ❖ Handling aggressive and semi-feral watch dogs posed risks to technical staff during capture and restraint.
- ❖ Limited infrastructure and temporary surgical setup in remote areas created operational constraints.
- ❖ Transportation and logistics limitations increased workload and delayed movement of materials.
- ❖ Some dog owners had limited awareness regarding sterilization and long-term disease prevention practices.

8. Conclusion

The Gid Control Awareness, Watch Dog Sterilization, and Pet Registration Program conducted at Yaksa–Nubri Chiwog was successfully implemented with active support from yak herders, local leaders, and technical staff. The program significantly enhanced awareness on Gid disease prevention, responsible dog ownership, and the importance of regular deworming and vaccination.

The sterilization, registration, vaccination, and strategic deworming of watch dogs are expected to contribute towards reducing the transmission cycle of Gid disease and improving livestock health and productivity in yak-rearing areas. Continued awareness campaigns, regular follow-up deworming programs, and sustained community participation are strongly recommended to strengthen long-term Gid control efforts in Chiwog.

Photos of whole program.



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Tsento Gewog

Report on GID control & Sterilization campaign at Yaksa-Nubri Chiwog under Tsento Gewog

PROGRESS REPORT ON STERILIZATION PROGRAM

Sterilization Program at Tsento Gewog, Paro

Duration: 28th April to 4th May, 2026

Implementing Agency: Livestock Sector and Tsento Gewog Administration

Funding Source: Gewog Development Grant, Tsento

1. Introduction

A comprehensive sterilization and castration program was successfully implemented in Tsento Gewog, Paro from 28th April to 4th May, 2026. The program was designed as an integrated veterinary public health intervention targeting population control of stray and owned dogs and cats, along with castration of horses and scrub bulls.

The intervention was implemented under field and clinical settings using standard veterinary surgical protocols to ensure animal welfare, disease prevention, and long-term population management.

Photographic documentation of field operations, surgical procedures, and post-operative care has been attached as part of this report.

2. Objectives of the Program

The key objectives of the program were to:

- Control the population of stray and owned canine and feline species within the Gewog through surgical sterilization
- Improve animal health, welfare, and reduce reproductive-related stress and disease burden
- Reduce public health risks, including zoonotic diseases (e.g., rabies) and dog bite incidents
- Promote responsible animal ownership through community awareness and engagement
- Reduce long-term operational and financial burden associated with uncontrolled animal population growth

3. Program Summary

The sterilization program was conducted for surgical neutering of both stray and owned canine and feline populations, as well as castration of horses and scrub bulls.

Small animal surgeries (dogs and cats) were performed in a designated veterinary surgical facility at the Livestock Office, Tsento Gewog. Large animal procedures (horses and bulls) were conducted through mobile veterinary outreach services in field conditions.

Stray dog management was performed through controlled field capture using chemical darting techniques. Capturing was carried out during early morning hours to minimize public disturbance, reduce stress to animals, and ensure safe handling. After sterilization and full recovery from anaesthesia, stray dogs were released back to their original location following the Catch–Neuter–Release (CNR) protocol, ensuring ecological balance and territorial stability.

Total duration: 7 days

2 days: Horse and bull castration (mobile field operation)

5 days: Dog and cat sterilization (clinical and field-supported operation)

Areas covered: Four Chiwogs

- I. Shana-Mitsi
- II. Zamtsa-Chunje
- III. Namji-Phongdo
- IV. Nyamey-Nichu

4. Team Composition

The program was implemented through a multidisciplinary veterinary team comprising veterinary officers, para-veterinary staff, and trained animal handlers.

The team was mobilized from the Dzongkhag Veterinary Hospital, Paro, and Livestock Sector, Tsento Gewog. Each member was assigned specific technical responsibilities including and is given below table 1.

- I. Clinical examination and case selection
- II. Anaesthesia administration and monitoring
- III. Surgical procedures (sterilization and castration)
- IV. Field animal capture and restraint
- V. Post-operative monitoring and documentation
- VI. Data recording and reporting

Sl. No	Name	Designation	Role
	Dr. Phuntsho	Veterinary	
1	Wangdi	Officer	Surgoen
2	Galey Jamtsho	Sr. LS	Surgoen
3	Kabita Dital	Sr. LS	Nurse
4	Leki Wangchuk	Sr. LS	Catching member
5	Sangay Tenzin	LS	Anaesthesia & Post-operative care
6	Sherab Thinley	Sr. LS	Anaesthesia & Post-operative care
7	Arjun	Driver	Dart man, catching, Prep and driver
8	Tenzin Wangmo	ESP	Decontaminator and prep
9	Tashi Jamtsho	Driver	

5. Implementation Details/Procedures

5.1 Awareness and Community Coordination

- Prior awareness and sensitization campaigns were conducted in all target Chiwogs before program initiation.
- Official notifications were issued by the Local Government to inform the public.
- Chiwog Tshogpas played a critical role in mobilizing households and compiling lists of unneutered owned animals and stray animal locations.

This coordination significantly improved program coverage and efficiency.

5.2 Animal Registration and Planning

- All animals were registered prior to surgery based on field verification and household reporting.
- Registration enabled proper planning of surgical workload, resource allocation, and anaesthesia scheduling.

It also ensured prioritization of high-risk and freely roaming animals.

5.3 Animal Restraint and Handling

- Horses and bulls were restrained using the casting technique, ensuring safe immobilization under field conditions with owner assistance.
- Dogs and cats were restrained using nets and baskets to minimize stress and prevent injury.

- Stray dogs were captured using chemical darting techniques, carried out under controlled veterinary supervision.

5.4 Stray Dog Capture Strategy

- Stray dog capture was conducted during early morning hours to reduce human interference and increase capture success rate. This timing also minimized public exposure to darting operations, ensuring safety and ethical handling of animals.

5.5 Pre-operative Clinical Assessment

- All animals underwent thorough clinical examination, including physical inspection, palpation, and owner history.
- Body condition scoring and estimated body weight measurement were performed, especially for large animals.
- Only clinically stable animals were selected for anaesthesia and surgery to reduce post-operative risk.

5.6 Anaesthesia Protocol

- ✓ Horses and bulls received local anaesthesia with sedation for pain control during castration procedures.
- ✓ Dogs and cats were administered general anaesthesia combined with local infiltration depending on species, temperament, and clinical condition.
- ✓ Standard anaesthetic monitoring protocols were followed to ensure patient safety.

5.7 Surgical Procedures Performed

Equine castration (Orchiectomy): Performed using the open surgical method under aseptic conditions.

Bull castration: Performed using bloodless castration technique (Burdizzo emasculatome) through spermatic cord crushing to induce permanent infertility without open surgery.

Male dogs and cats: Orchiectomy (neutering) was performed as a permanent sterilization method.

Female dogs and cats: Ovario-hysterectomy (spay surgery) was performed for complete removal of reproductive organs.

Additionally, ear notching and thermal cauterization were performed in stray dogs for permanent identification of sterilized animals.

5.8 Post-operative Care

- ✓ Antibiotics, analgesics, and multivitamin injections were administered as standard post-operative protocol.
- ✓ Animals were monitored continuously until full recovery from anaesthesia.
- ✓ Surgical sites were inspected for bleeding, swelling, and infection before release or discharge.

5.9 Release of Stray Dogs

- ✓ After full recovery from anaesthesia and clinical stabilization, stray dogs were released back to their original capture sites following the Catch–Neuter–Release protocol.

5.10 Biomedical Waste Management

- ✓ Biomedical waste was segregated using designated containers prior to surgical procedures.
- ✓ Post-operative waste, including sharps and contaminated materials, was collected and disposed of safely following veterinary biosecurity standards.

This minimized environmental contamination and ensured compliance with animal health regulations.

6. Achievements

The program initially targeted more than 150 animals; however, a total of 131 animals were successfully sterilized and castrated. This included both owned and stray populations, reflecting strong community participation and effective field coordination.

The intervention significantly contributed to population control considering the high reproductive potential of dogs and cats: Dogs can produce approximately two litters per year with 5–6 puppies per litter. Cats can produce up to three litters per year with 3–5 kittens per litter

Without intervention, this would have resulted in exponential population growth, increasing risks of rabies transmission, dog bite incidents, environmental nuisance, and economic burden.

The program achieved approximately 87% coverage of registered animals, indicating successful planning and execution and it is indicated following table.

Date	Castration		Neuter						Total
	Horse	Bull	Feline		Canine		Stray Canine		
			Male	Female	Male	Female	Male	Female	
28/04/2026	20	2							22
29/04/2026	9	5							14
30/04/2026			3	7	6	1	3		20
01/05/2026			1	2	1	3	3	6	16
02/05/2026			4	4	3	10	4	2	27
03/05/2026				5	4	4	3	1	17
04/05/2026			2	4	2	2	2	3	15
Total	29	7	10	22	16	20	15	12	131

7. Challenges Faced

- Difficulty in locating and capturing stray dogs due to lack of prior movement information
- Increased operational time and cost for field capture and transport
- Limited community awareness on risks associated with uncontrolled stray populations
- Adverse weather conditions (rainfall) affecting field mobility and logistics

8. Recommendations

- Institutionalization of regular annual sterilization programs
- Strengthening community awareness on livestock and animal control regulations
- Allocation of dedicated budget for sustainable population control programs
- Establishment of structured stray animal reporting and monitoring system at Chiwog level
- Continued collaboration between local government and veterinary services











9. Financial abstract of program

The summary of total expenses for seven days sterilization is calculated as follows.

Sl. No.	Particulars	Amount (Nu.)	Remarks
1	DSA for 5 technical staff deployed	52000	Mobilized from Dzongkhag Veterinary Hospital
2	Fuelling of two pool vehicles	11,450	
3	Working lunch and refreshments for 9 staffs	24,660	
4	Procurement of materials and stationaries	13,652.75	
5	Medicines and Consumable items cost	33,904.25	Calculated cost as per rate of medicine and consumable items
	Total	135,667.00	

10. Photos of program implemented with description as follows.

<p>Preoperative preparation (Recording of animal's details, health screening of patient and preparation of surgeon and nurse/helpers)</p>			
<p>Restraining and darting (Catching and darting and restraining of animal)</p>			

<p>Anesthesia (sedation of animal and local infiltration in bull)</p>			
<p>Preparation (sterilizing of operative site and removing hair)</p>			
<p>Castration and neutering</p>			
<p>Postoperative Care (Provided Antibiotic for infection prevention and analgesic to relieve pain, anti-rabies vaccine and Vitamins)</p>			
<p>Releasing of Dog (Neutered stray dog releasing to their territory and pet owner waiting their pet)</p>			

Report on sterilization campaign in Tsentu Gewog (Four Chiwogs)

<p>Biochemical waste management (segregation of waste and proper disposal of organ)</p>			
<p>other activities/decontamination (cleaning and washing of operative tool and material, disinfection operation room and preparation for next day)</p>			

11. Conclusion

The sterilization and castration program implemented in Tsentu Gewog was successfully completed within the planned duration. The program effectively contributed to controlling stray and owned animal populations, improving animal welfare, and reducing public health risks.

Despite logistical and environmental challenges, the program achieved its objectives through effective coordination, technical expertise, and strong community participation. The inclusion of photographic evidence further supports transparency and verification of field activities.

The intervention is expected to have long-term positive impacts on sustainable animal population management and reduction of associated economic and public health burdens in Tsentu Gewog.