# The Influences of Buddhism and Development on the Well-Being of Bhutan's Street Dogs

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## Abstract

Bhutan is the only country that has implemented a nationwide capture-neuter- vaccinate-release (CNVR) program to manage its street dog population. To explore motivations for the implementation of the program and the extent to which it is successful, face-to-face interviews were conducted with representatives of all three animal sanctuaries in Bhutan that focus on the well-being of street dogs. Results suggest that Bhutan's transition to democracy, coinciding with increases in socioeconomic development and tourism from the West, and incorporation of Buddhist teachings in its consideration of street dog management strategies guided the implementation of a nationwide CNVR program. A lack of both resources and a plan to acquire them, along with inexperience with democratic practices, however, may interfere with successful management of the program, resulting in a growing street dog population. Development in Bhutan also poses risks to the well-being of street dogs.

## Keywords

## Cover Page Footnote

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**Keywords**: street dogs, capture-neuter-vaccinate-release, development

## Introduction

Walking early one morning down the main street in Thimphu, the capital of Bhutan and its largest city, one sees dogs napping everywhere (the first author counted 38 dogs in three blocks on one street). Most of them are large, about the size of a Labrador Retriever. Almost all of them are black, tan, or both. Many have long-haired coats. A small number appear to be purebreds. Similar dogs may be found at monasteries or anywhere else people are likely to congregate. At this hour of the morning, they scarcely bother to notice a pedestrian walking by. Later, when people are going about their business, the dogs are more active, as they are frequently fed by pedestrians, monks, hikers, and restaurant employees. At night, the dogs are at their most active, roaming the streets and persistently barking.

Free-roaming dogs are those not confined to a specific property. Depending on the communities in which these dogs reside, some are legally owned by a particular individual but are permitted to roam freely. Others are not legally owned by anyone, but they are fed by community residents. Still others are not legally owned and no one in the community appears to feed them or otherwise provide any care to them (Arluke and Atema 'Understanding and Reducing Cruelty toward Roaming Dogs' 241). Unlike in the West, free-roaming dogs are not rounded up by an animal control-type facility; instead, they co-reside with the human inhabitants of these communities. Urban populations of free-roaming dogs (referred to as 'street dogs') are much larger than are rural populations, where few puppies survive to adulthood (Leach and Scott 1).

Estimates of the number of free-roaming dogs in the world vary. For example, CARO*dog* (Companion Animal Responsible Ownership – dog) puts the number at 480 million ('Statistics on Dogs' 1), and the European Society of Dog and Animal Welfare (ESDAW) puts the number at 600 million ('Stray Animals by Country – Europe' 1). Given the absence of accurate numbers, it cannot be determined what is the population of street dogs in any given country or region of the world. However, there is a widespread perception that larger populations may be found in the Global South as opposed to the Global North, in part because animal shelters are rare (Hsu et al. 15) and 95% of human deaths due to rabies occur in the

Global South, a result of contact almost exclusively with infected dogs, who cause almost all rabies cases in humans ('Rabies' 1). Additionally, while many free-roaming dogs in Western societies had been legally owned and either wandered off their keeper's property or were abandoned, many free-roaming dogs in the Global South are semi-feral (Strand 1), having descended from dog breeds native to particular countries, such as the 'pariah dog' in India (Majumder et al. 874) or the 'soi dog' in Thailand (Savvides 45), some of whom may have bred with free-roaming dogs kept as companions and who descended from European breeds.

Many human inhabitants who share urban spaces with street dogs perceive them as nuisances, as the dogs scavenge through garbage and follow pedestrians in search of food; relieve themselves on streets, in parks, etc.; bark throughout the night, disrupting the sleep of residents and tourists; and with increasing urbanization, are a cause of vehicular accidents (Farnworth et al. 480; Fielding 65; Majumder et al. 874; Srinivasan 'The Biopolitics of Animal Being and Welfare'115; Strickland 'The Roaming Dogs of Bhutan' 782). The presence of sick and starving dogs in some countries also results in concerns over the loss of Western tourist dollars in particular, an important source of income for low-income countries, as Westerners who can afford to travel internationally are unaccustomed to seeing such widespread suffering relative to tourists from countries in the Global South. For example, the local government in Bali attempted to remove free-roaming dogs from its beaches so that tourists would not have the 'distressing experience of seeing sick and injured dogs who might beg and follow them' (qtd. in Arluke and Atema 'Understanding and Reducing Cruelty' 240). In Samoa, Afoa writes that 'the dog problem will be on top of mind of any prospective runner thinking of heading to Samoa to race, let alone tourists who want to walk about freely…without being approached by dogs' (1). And in Bhutan, 'The sight of so many dead puppies along the roadways upset both the locals and visitors flooding the country as a result of its push to expand tourism' (Mowatt 1). Even the presence of apparently healthy street dogs may trouble Westerners who keep their dogs indoors, secure veterinary care for them, etc., and in the case of free-roaming dogs, rely on municipal animal control facilities and private animal rescues to provide them with shelter, food, veterinary care, and the possibility of finding a home. Strickland found that Western tourists to Bhutan viewed street dogs more negatively than did tourists from countries in the Global South

who 'are more tolerant of roaming stray dogs as they may be common in their own country' ('It's a Dog's Life' 8).

Efforts throughout the world to reduce the populations of free-roaming dogs vary (Arluke and Atema 'Understanding and Reducing Cruelty' 242). Jaipur, Chennai, and Jodhpur (in India) and Colombo (in Sri Lanka) have implemented capture-neuter-vaccinate-release (CNVR) programs with the assistance of non-profit organizations (Rinzin 52-53). In the U.S., animal control facilities capture dogs and kill them if not adopted (Kleinfeldt 1). Fielding et al. report that dogs in The Bahamas are stoned (34), shot, and poisoned (120-121). Arluke and Atema, in interviews conducted with scholars and those working in animal rescue, report that dogs have also been shot (for example, Bosnia), or deliberately run over (for example, Navajo reservations in the U.S.) to control free-roaming dog populations ('Understanding and Reducing Cruelty' 236). These practices are either sponsored by local governments or engaged in by random citizens who act as 'citizen vigilantes' (237). Removal of free-roaming dogs via culling methods has minimal to no effect on their numbers, as the dogs who survive continue to reproduce (Dalla Villa et al. 62) and dogs from outlying areas move into spaces where dogs had been killed (Narayanan 'Street Dogs at the Intersection of Colonialism and Informality' 486). Impoundment is rarely an option, as low-income countries do not have the financial ability to shelter and provide care to the dogs. In their review of the research, Dalla Villa and colleagues (62) assert that CNVR programs are the only method that has achieved any success in mitigating the growth of free-roaming dog populations. Such programs have become almost universally accepted among animal welfare organizations as the most humane method to manage these populations (Srinivasan 'Biopolitics' 115-116) as they are perceived as constituting a 'win-win approach' that enhances the well-being of street dogs while also addressing human residents' concerns about them (Srinivasan 'The Welfare Episteme' 209).

The purpose of the current study was to explore why Bhutan was the first country in the world to implement a nationwide CNVR program to reduce its populations of street dogs. A secondary goal was to explore how effective was the CNVR program.

The following research questions are addressed in this study:

1. What factors explain why Bhutan implemented a nationwide CNVR program for street dogs?

2. How effective is this program in managing its street dog population?

Bhutan's CNVR program was implemented at the same time during which other major social changes occurred in Bhutan; most notably a transition to democracy and increases in socioeconomic development and tourism. These changes occurred within the broader social context of Bhutan being a primarily Buddhist country whose people were desirous of maintaining their cultural traditions in the face of these changes. What follows is a discussion of Bhutan as a unique case due this context of change, followed by an overview of the implementation of Bhutan's CNVR program. A consideration of the well-being of animals in development frameworks is then presented, followed by a discussion of the role of religion in development. The data collection methods employed in the current study are then presented, followed by a discussion of the results and conclusions.

## The Unique Case of Bhutan

A transition to democracy was initiated by Bhutan's king in 2008. New democracies face multiple challenges, including continuing high levels of poverty, increasing disparities in wealth, and ethnic tensions (Singh and Kukreja 19). Although Bhutan's transition was peaceful, its poverty rate is relatively low (8.2% in 2017) ('Poverty in Bhutan' 1), and it enjoys the highest GDP per capita in South Asia (Brooks 3647), Bhutan continues to struggle with challenges to development, such as a high illiteracy rate (35.1% in 2015) and a high risk of food or waterborne diseases ('The World Factbook' 9-10). Additionally, a long history of ethnic conflict continues between those Bhutanese descended from Tibetan immigrants and those descended from Nepali immigrants (Sinha 282), fostered in part by the government's desire to promote a singular national identity (Brooks 3652). As a result, Sinha refers to 'low intensity conflict' in Bhutan, which 'poses a serious and long-term threat to nation-building exercises' (306-307). Despite these concerns, and although the instability inherent in new political systems has led to

the failure of some new democracies, Bhutan's transition to democracy has been described as successful (Isakhan 21).

As part of its transition to democracy and concomitant desire to engage in socioeconomic development ('Tourism Policy' 1), the government of Bhutan made the decision to gradually reduce the country's historic isolation by allowing an increasing number of tourists to visit. In 1974, Bhutan implemented a tourism policy titled 'High Value, Low Volume', renamed in 2008 as 'High Value, Low Impact'. The stated purpose of this policy is 'to foster a vibrant industry as a positive force in the conservation of environment, promotion of cultural heritage, [and] safeguarding sovereign status of the Nation for significantly contributing to Gross National Happiness'('Tourism Policy'). What this means, according to the Tourism Council of Bhutan, is that:

> the tourism industry in Bhutan is founded on the principle of sustainability, meaning that tourism must be environmentally and ecologically friendly, socially and culturally acceptable and economically viable. The Royal Government of Bhutan recognizes that tourism is a world-wide phenomenon and an important means of achieving socioeconomic development particularly for a developing country like Bhutan. It believes that tourism, in affording the opportunity to travel, can help to promote a deeper understanding among people and to strengthen ties of friendship based on a deeper appreciation and respect for different cultures and lifestyles. (1)

The Bhutanese government adopted a very cautious approach to growth and the development of tourism.  For example, tourists are required to spend a minimum of $250/day while in Bhutan, ensured by requiring them to book their travel through a licensed Bhutanese tour agency or through one of their international partners (the only exception to the booking requirement is for those who hold passports from India, Bangladesh, and the Maldives) ('Minimum Daily Package' 1). Tourists must be accompanied by a guide and a driver, who remain with tourists throughout their time in Bhutan.

 In anticipation of the coronation of the new king in 2008, the transition to democracy, and a desire to not offend the sensibilities of an increasing number of tourists (Mowatt 1),

government officials were under pressure to reduce street dog populations in Bhutan's cities ('Spay/Neuter Success in Bhutan' 1). According to Rinzin, the Department of Livestock in Bhutan estimated that there were approximately 50,000 dogs in Bhutan in 2006, with 32,000 of those dogs having 'owners' (6). Rinzin asserts, however, that this was likely an underestimate, given that an estimated 5,500 free-roaming dogs resided in Thimphu alone (6). Additionally, while rabies was rare in the interior areas of Bhutan where the main cities are located, it was common along the southern border with India (Tenzin et al. 1925). As a primarily Buddhist country, Bhutanese wished to implement a humane method of street dog removal ('Spay/Neuter Success in Bhutan' 1). Because at this time only two animal sanctuaries were operating in Bhutan (both in Thimphu), a plan was implemented to build shelters in all twenty Dzongkhags ('districts') and impound the dogs (Rinzin 12). The intention was that the dogs would reside at the shelters for the remainder of their lives while cared for by shelter employees ('Spay/Neuter Success in Bhutan' 1). Over the course of 15 months, government officials captured and impounded several thousand street dogs living in Thimphu and Paro (the location of Bhutan's only international airport); however, most of the impounded dogs perished due to a lack of resources and expertise in implementing and maintaining successful sheltering programs. The Bhutanese government closed the shelters and sought alternative strategies to manage its street dog population.

In 2009, Bhutanese officials entered into a partnership with Humane Society International (HSI) to implement a CNVR program. A two-month pilot program was implemented in Thimphu, with the goal of sterilizing 1200 street dogs. The Royal Government of Bhutan contributed approximately half the funding for the project, with the remainder coming from HSI. The estimated programmatic cost was $1,000,000 ('New Spay/Neuter Program Launches in Bhutan with Help from HSI' 1).

Because there were no veterinarians in Bhutan trained to perform large-scale sterilization surgeries, HSI sent their own team to Bhutan ('Spay/Neuter Success in Bhutan' 1). Approximately 90% of the staff were Indian, whereas 10% were Bhutanese (working primarily as dogcatchers and veterinary assistants) ('Passing the Baton to Bhutan' 1). India has an established history of CNVR programs; for example, Animal Aid, a non-profit organization

established in 2002, operates a rescue centre and hospital for free-roaming animals in Udaipur (Animal Aid Unlimited 1), and HSI has provided training in sterilization techniques to veterinarians in several major cities (Rowan 1).

Bhutan's program was extended for three years and throughout the country and was subsequently extended for another three years ('Street Dogs in Bhutan' 6). In the early years of the program, approximately 30 Bhutanese underwent veterinary training in India so Bhutan could eventually manage the CNVR program without the participation of HSI. By 2012, the staff was 90% Bhutanese and 10% Indian. In 2015, the program was placed entirely under Bhutanese control ('Passing the Baton to Bhutan' 2).

Two dog censuses have been conducted in Bhutan ('Bhutan's 2nd Dog Population Survey Shows Remarkable Progress in Canine Management Program' 1). The first, conducted in 2015, found relatively high sterilization rates of street dogs in urban areas (67% in Thimphu and 73.8% in Paro), with much lower rates in the rural areas surrounding these cities (45.5% and 57.6%, respectively). The second census, conducted in 2018, found that approximately 85,000 dogs (both street and those kept by humans) have been sterilized, which translates into sterilization coverage of approximately 60-80% of all dogs in Bhutan. Because analysis of the census data does not distinguish between street and kept dogs, however, the coverage of street dogs in particular is unknown. Animal Aid Unlimited found that a minimum coverage rate of 70% of specifically female dogs in a given community and in each reproductive season is needed to maintain a stable street dog population (Gibson 2).

CNVR programs are not without controversy. The capture of free-roaming dogs causes fear and injuries to the dogs (Srinivasan 'Biopolitics' 121; 'The Welfare Episteme' 212). The shelters housing the dogs for sterilization may be overcrowded and unsanitary, and post-surgery infections may be common. Sterilization is associated with various health risks (Narayanan 'Street Dogs' 480). Female dogs have been found disembowelled after return to the streets (Srinivasan 'The Welfare Episteme' 212). In addition, management by humans of street dogs' lives and bodies is problematic. Srinivasan argues that 'neutering is a biopolitical intervention in which certain behaviours and biological processes of the individual members of a population are

identified as threatening' to the well-being of the canine population as a whole, and as a result become the target of intervention ('The Welfare Episteme' 210). She goes on to argue that 'even though biopower is directed at fostering life, this does not mean that the violence and harm disappear; rather, they are rationalized as necessary for the flourishing of the population' (210). In short, individual street dogs endure harm for the well-being of the population. Finally, 'forced castration and sterilization would not be considered acceptable in the human context and poses not dissimilar ethical questions when it comes to other animals' (211).

## Development and the Well-being of Animals

Animals were first included in development frameworks in 2015, in the United Nations' 2030 Agenda for Sustainable Development ('UN Incorporate Animal Protection into 2030 Agenda for Sustainable Development' 2). Specifically, Goal 14 ('Conserve and sustainably use the oceans, seas, and marine resources') and Goal 15 ('Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss') concern issues such as overfishing, illegal poaching, and species extinction ('About the Sustainable Development Goals' 1). These goals, however, make explicit the anthropocentric approach taken to sustainability, as they address concerns of humans in their uses of animals, rather than the well-being and interests of animals themselves (Srinivasan and Kasturirangan 87). Thus, while Bhutanese are concerned with ensuring that socioeconomic development is conducted in a sustainable fashion, its adoption of a CNVR policy to mitigate the growth of its street dog populations deviates from these UN Goals.

Instead, Bhutan's approach is more akin to the approaches taken by several development theorists. Most notably, Nussbaum promotes a 'capabilities approach,' which asserts that animals have inherent value aside from that assigned to them for human purposes, and that humans not only must not interfere with a being's 'attempt to flourish' but instead, must 'support animal efforts to flourish in positive ways' (238). Nussbaum argues that 'we must and should exercise informed paternalistic judgments concerning the good of the creature' (238), and that animals are 'subjects of justice' (240), consistent with Narayanan's notions of

'sociozoologic justice' ('Where Are the Animals in Sustainable Development?' 178). Narayanan argues that the human history of animal domestication has resulted in responsibilities to the animals we have made dependent on us, which in turn demands 'sustainable development frameworks that are inclusive and attentive to animal sentience and rights' (179). In its adoption of a nationwide CNVR program, Bhutan has implemented a policy that best conforms to Nussbaum's approach in that it recognizes that street dogs should not only be permitted to flourish but that humans must assist in this flourishing by mitigating increases in street dog populations.

In discussing the weaknesses of the capabilities approach, Ilea asserts that while, in an ideal world, every sentient being's interests and well-being are protected, there are conflicts of interest that mean that such universal protection is not always possible (558). Such is the case with the CNVR program, particularly with regard to the controversies associated with such programs discussed earlier. Despite this and other weaknesses, Ilea argues that the capabilities approach 'is good at reminding policy-makers that nonhuman animals have a variety of needs and capabilities', and 'if we are really concerned about animals we should try to ensure that all of these capabilities are protected' (559).

## The Role of Religion in Development

Numerous scholars (for example, Clarke 5; Clarke and Halafoff 2; Narayanan 'Religion and Sustainable Development' 131) have argued that until recently, the role of religion has been largely ignored in studies of development. Because approximately 85% of the world's population subscribes to religious beliefs (Clarke and Halafoff 2), however, it is important to understand the influence religion could exert in development goals and planning. Narayanan ('Religion and Sustainable Development' 131-132) argues that religion may influence development by promoting particular values, encouraging activism, and inspiring individuals to become ethical persons who contribute to the common good. As Clarke and Halafoff state, for development practices to be successful, religious beliefs must be part of the lived experiences of residents where development occurs, rather than imposed by outsiders (2). The result is

'development goals that are relevant and appropriate to existing needs and that will resonate with the local population' (Clarke 8). Further, because religion is one of the most important societal institutions tasked with moral guidance, Narayanan asserts that its role in sustainable development 'is not only possible but necessary to enable the humanitarian and ecological work that preoccupies both equally' ('Religion and Sustainable Development' 133).

Despite the importance of religion in development, Narayanan argues that countries 'that have proclaimed a commitment to sustainable development are more shy and suspicious of religion,' as they wish 'to avoid compromising their purported secularity' ('Religion and Sustainable Development'132). Clarke and Halafoff concur, stating that with the exception of faith-based organizations, 'there remains a hesitancy to practically engage with the spiritual or religious beliefs of communities in development activities' (15).

This hesitancy appears not to apply to at least some Buddhist countries, such as Bhutan and Thailand. Approximately 93% of Thais (United States Department of State 2) and 75% of Bhutanese identify as Buddhist ('Bhutan Population 2020 (Live)' 2), and Bhutan's development efforts include a 'uniquely indigenous Buddhist tradition of concern for all forms of life' (Sinha 2). According to Buddhist teachings, it is 'incumbent upon humans to relate to animals on the basis of the same ethical principles that govern their relationships with other people' (McDermott 270), as humans and animals are 'considered part of the same chain of becoming, the same universal flux that in the Buddhist view constitutes phenomenal existence' (270). Additionally, Buddhists believe that their actions and beliefs have karmic consequences and are therefore concerned with the accumulation of merit in order to achieve a favourable rebirth (Tomalin and Starkey 33). The way to accumulate merit is by causing no harm to other living creatures and by extending kindness to them. Buddhists in Bhutan and Thailand, then, may increase their likelihood of achieving a favourable rebirth by feeding street dogs, a widespread practice in both countries (discussed in the Results section; also see Savvides 39-41), and also by the Bhutanese government's implementation of a nationwide CNVR program.

## Methods

*Participants*

Face-to-face semi-structured in-depth interviews were conducted with representatives of all three animal sanctuaries in Bhutan that have as their primary focus the well-being of street dogs (all sanctuaries provide care to other species as well, but street dogs comprise the vast majority of residents at the sanctuaries). All sanctuaries are located in western Bhutan (two in Thimphu, one in Paro). The first sanctuary in Bhutan was founded and is managed by a European couple who came to Bhutan for unrelated work in the late 1990s. They witnessed widespread animal suffering and as practicing Buddhists, made the decision to stay in Bhutan to establish and operate an animal rescue. The second sanctuary was founded in 2000 and is managed by Bhutanese. It is the only sanctuary that manages more than one property (seven sanctuaries are operating throughout Bhutan, with additional sanctuaries in India; the property with a primary focus on street dogs was included in this study, as the other sanctuaries focus on wildlife and livestock). The organization was founded by a Buddhist spiritual leader after an 'auspicious event' during which animals sought safety from slaughter at his monastery. The third sanctuary was founded by an American woman who visited Bhutan in 2007. She began taking sick dogs to the sanctuary run by the European couple but decided to stay in Bhutan to establish another sanctuary, given the high number of street dogs in need. While all sanctuary operators know each other and have collaborated on occasion, the operators of the European-run and American-run sanctuaries collaborate much more frequently. This may partly be due to the stated purposes of the sanctuaries. Specifically, both the European and American participants spoke of their personal emotional attachment to animals, whereas the Bhutanese participant described the main objective of the Bhutanese-run sanctuary as the realization of 'bodhicitta' — that is, 'compassion in action' — by caring for animals. Despite these different perspectives, there did not appear to be any differences among the sanctuaries with regard to the management practices or overall care provided to the dogs.

*Procedure*

All three sanctuaries were contacted via e-mail one month prior to arrival in Bhutan to request interviews and sanctuary visits. A follow-up email was sent two weeks later to the two sanctuaries that had not responded, and another follow-up e-mail was sent two days prior to arrival in Bhutan. One interview was scheduled prior to arrival; the other two interviews were scheduled after arrival. A 100% participation rate was achieved.

Interviews were conducted with an interview guide (available upon request). Participants were asked questions concerning the work of the sanctuaries, the health of street dogs, and Bhutanese treatment of the dogs. Participants were also asked about historic (i.e., impoundment) and current (i.e., CNVR) street dog programs and the extent to which (if at all) each program was successful. Interviews were approximately 1½ hours in duration.

Shortly after each interview, a written record was constructed that included a summary of it, particularly significant comments, and notes on the theoretical implications. The interviews were transcribed verbatim and then typed in a word processing program for analysis (Lofland et al. 107).

While in Bhutan, observation of street dogs mainly in Thimphu and Paro was undertaken throughout the day and evening. Street dogs were observed at popular tourist destinations (such as outside monasteries, temples, museums, a farmers' market and food stores, textile manufacturing shops, and on mountain hikes), as well as during walking tours of Thimphu and Paro, which included both main streets, side streets, and parks. Dogs were also observed at the animal sanctuaries discussed above. Observation was typically conducted from approximately 6:30 a.m. to 6:00 p.m., though a smaller number of observations were conducted at night during a visit to an overnight campsite and from the hotels where the first author was staying while in Bhutan (because tourists to Bhutan must be accompanied by a guide, late-night observations were only possible from the hotels). Photographs of the dogs were taken throughout the day and fieldnotes were logged by hand in a notebook during and after the

observations, with full fieldnotes typed during the evening hours (Lofland et al. 108-116). The purpose of the fieldnotes was to describe the physical condition of the dogs, their interactions with each other and with humans, and interpretations of those interactions.

*Analytical Strategy*

An issue-focused analysis was undertaken, the purpose of which is to gather as much information as possible concerning specific issues (Weiss 154). The focus of the interviews was to acquire a better understanding of the well-being of Bhutan's street dogs, the history of programs designed to reduce street dog populations and the factors explaining why those programs were implemented, and the extent to which the CNVR program in particular has been successful. The focus of the observations of street dogs was to assess their physical condition and the style and extent of their interaction with each other and with humans.

In the current study, both initial and focused coding were conducted in the transcriptions of the interviews and fieldnotes (Lofland et al. 201). Initial coding produces many different codes, some of which may be deleted or absorbed into other codes under focused coding. Excerpt files are then constructed, which bring together content across the interviews and observations pertaining to the same issue (Weiss 156). Files were constructed for inductive analysis of the interview and observational data and to explore the well-being of street dogs, what factors may have influenced the implementation of a nationwide CNVR program, and the extent to which the program was a success. Next, sorting is conducted (Weiss 156-160), which organizes the excerpt files into folders for integration into a coherent theoretical framework concerning street dog population management strategies employed in Bhutan, the extent to which they are successful, and their consequences for the well-being of street dogs.

## Results

*Bhutanese Treatment of Street Dogs*

According to the representatives of the animal sanctuaries, Bhutanese co-exist with street dogs in both peaceful and non-peaceful ways. Peaceful co-existence takes two main forms. First, some Bhutanese simply ignore the dogs. As one sanctuary representative explained, the dogs are 'part of the landscape'; another stated that because the entire lives of Bhutanese are spent around free-roaming dogs, 'they are just a part of us'. As a result, some Bhutanese do not intentionally cause harm to the dogs, but they do not provide any care to them, either. Other Bhutanese give the dogs leftover food from their own daily meals (giving dogs food specifically manufactured for them was never observed). In Thimphu and Paro, '90% of those stray dogs [street dogs] are actually taken care of by a shop…a canteen [restaurant]…a swimming pool guy. You know – he gives a bit of his lunch, he brings a bit – he shares that food with them'. As noted by another participant, giving food to street dogs 'is what saves them'. The first author frequently observed dogs being fed outside of monasteries, with leftovers from the monks' meal (overwhelmingly rice, peppers, and cheese) being placed on the grass for them. Pedestrians on main and side streets in Thimphu and Paro were often observed feeding crackers or other packaged goods to dogs, as were individuals on hikes in the mountains. Less frequently, street dogs were observed at food markets, waiting for something to eat. During the evening hours, restaurant employees were observed at closing time tossing food to dogs in the alley from the kitchen. And, on an overnight hike, a dog approached the camp at dinnertime; the crew immediately collected food in a bowl for the dog (the same dog returned to the camp the following morning and was fed breakfast by the crew, who explained that the monks residing at the monastery at the top of the mountain feed the dog daily). Finally, the animal sanctuaries often receive donated food such as biscuits, milk, and rice from Bhutanese, and every week the Bhutanese-run sanctuary receives unsold food from the vegetable market in Thimphu. As a result, the vast majority of street dogs observed by the first author in Thimphu and Paro appeared to be of healthy weight, without obvious indications of malnourishment such as protruding ribs. [Scabies and mange are common, however, as are distemper, gastrointestinal parasites, and with an increasingly urban population, dogs injured or killed in vehicular traffic.]

When asked about not feeding manufactured dog food, one participant explained that 'the international standards…we can't meet that….The food bill is so high; prices are steep….So, we go around the city begging [for] food, the wasted food….We just feed them, and they're happy.' Another participant also defended the practice of feeding leftovers to dogs, stating that 'in the States, they're rounded up and killed. They're allowed to live here'.

This latter response demonstrates a significant difference in animal welfare perspectives between the Global North and the Global South. In the Global North, those who keep dogs as companions are advised by veterinarians and other animal care experts to feed them food manufactured specifically for them, and are often admonished against feeding 'table scraps' that are considered to be unhealthy and often lead to weight gain in dogs. But in numerous countries in the Global South, street dogs would not survive without this food; it is fundamental to dog-keeping practices (Savvides 41). The legal definition of dogs as property in the Global North 'reinforces prevailing ideals of animal wellbeing by which dogs that are unable to live up to high welfare standards are rendered killable' (Srinivasan 'Biopolitics' 107), with the public spared by animal control facilities from witnessing the suffering and deaths of free-roaming dogs. However, practices that allow street dogs to live acknowledge 'the independent status of ownerless street dogs and so these animals are not confronted with the stark injunction to live well or die' (107). As a result, Srinivasan argues that there are 'opportunities for dog life' in countries in the Global South not available in the Global North, and such opportunities provide 'a form of interspecies cohabitation in which dogs … live alongside humans who might love, revile, fear or be indifferent to them' (121).

Despite daily interaction with dogs, a dog adoption culture is virtually non-existent in Bhutan. Some Bhutanese keep dogs as companions, but typically purchase them from puppy mills in India. Those who keep dogs vary in how well they care for them. There is what one participant described as 'the good pet owner. The dog will be inside sleeping at night, go for walks during the day, hang out in the front yard. That's the rarest.' A second type are those who 'have dogs, and they just let them go. But they're used to it, and there's no enforcement of policy, so called, for pet animals.' These dogs are typically not sterilized by their guardians and are permitted to roam free, thus contributing to the street dog population. The third type are

those who keep large dogs outside as guard dogs: 'They have these crappy little [kennels]. Horrible. And half the time, he's aggressive, and he's aggressive because he's pissed off because he hasn't ever run around in his whole life'. The last type keep small dogs: 'They're very cute as puppies, and their friends are impressed. But a lot of times, they just keep the animal on the balcony, or they get locked in the bathroom, or locked outside… That's by far the worst'.

These findings lend support to Srinivasan's assertion that the well-being of street dogs should not be assumed to be worse than that of dogs who are kept as companions. As she argues, 'animal (well)being is not contingent on direct human love and care' ('Biopolitics' 21). Similarly, Nolan explains that the freedom of street dogs may result in higher levels of well-being compared to dogs confined by their keepers, who may spend much of their time socially isolated (10).

While many Bhutanese either ignore street dogs or actively provide some care to them (mainly in the form of feeding them), cruelty does occur on occasion. Some Bhutanese who keep dogs as companions occasionally throw stones at street dogs to keep them away from their own dogs. Others throw stones out of fear of being injured by the dogs; they perceive the dogs as aggressive either because they have not been sterilized or because they have migrated from outside the cities in search of food and are unaccustomed to interacting with humans. Additionally, one participant reported that she 'encountered some drunk people trying to stab dogs… You know, you have your bad apples everywhere. It's happened a few times, [but] it's not a frequent occurrence'.

Additionally, Bhutan's population is rapidly urbanizing (Brooks 3655), which, according to the sanctuary representatives, has resulted in an increasing number of street dogs being injured and killed in road accidents. Also, Thimphu in particular has experienced a significant increase in violent crime and substance abuse. The mostly urban unemployed youth are often blamed for the increases in crime ('Bhutan 2019 Crime and Safety Report' 1). The relationship between urbanization and violent crime is well established and is typically attributed to a sense of relative deprivation (Sun et al. 15). As noted above, a challenge common to new democracies is increasing disparities in wealth; Bhutan is facing this challenge as an increasing proportion of

its population acquires disposable income while also being increasingly exposed to Western materialism (Brooks 3655). Goal 16 of the Sustainable Development Goals recognizes the importance of non-violence: 'to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels' ('About the Sustainable Development Goals' 1). This goal of non-violence does not include nonhuman animals, however. Furthermore, Bhutan does not address animal welfare in its Gross National Happiness policy ('Nine Domains' 1) and does not have an animal welfare law per se, although it does include legislation concerning the welfare of street dogs under Chapter IX of the Livestock Rules and Regulations of Bhutan of 2008 (Dorji 6). The legislation, however, only refers to the management of Bhutan's CNVR program. As a result, violence committed by random individuals against street dogs is not addressed in sustainable development frameworks in Bhutan. That Bhutanese co-exist in both peaceful and non-peaceful ways with street dogs illustrates a tension between the ideal of Buddhist teachings dictating that no harm be inflicted on any sentient being with the reality of multiple species co-residing in increasingly urbanizing areas.

*Concerns about Development*

The implementation of democracy and an increasing number of annual tourist visas brought development to Bhutan. Increasing access to media exposes Bhutanese to Western values and practices, which has some Bhutanese concerned about losing their traditional Buddhist values. While an obvious concern is how such exposure would affect Bhutanese themselves, all participants interviewed for this study expressed concerns about what would be the impact of development on the well-being of the animals in Bhutan. A representative of the sanctuary operated by Bhutanese referred to a 'fast changing mindset' — that Bhutanese were becoming more concerned with development and the acquisition of material goods than with traditional Bhutanese values. He said the animals suffer as a result:

> The enemy of animals is development. The works we call development are so shallow.
> The animals are never considered. You know this road [on which the sanctuary's office

is located], dogs are still running on it. Now, there are consequences. They are run over now… Ten years ago, you could just run across the road, there were no walls, or no fencing, nothing. Now, it's all getting smaller… And the worst about it is many people, they don't have time now [to stop to provide assistance to an animal].

He added that it has become increasingly difficult for the sanctuary to attract staff or volunteers: 'Having staff is becoming more difficult, because now, everyone is becoming busy. Everyone has their own work. It's unlike before; it's difficult to get volunteers now'. Additionally, he expressed concern over the growing practice of keeping companion animals (the second dog census determined that approximately one in five households in Thimphu and Paro include dogs) ('Bhutan's 2nd Dog Population Survey Shows Remarkable Progress in Canine Management Program' 1). 'About twenty years ago, people didn't have pet dogs. Dogs were looked after together. Now, they have pet dogs. They care so much about one dog; the others, they just live in the streets.' These comments suggest that the erosion of traditional values negatively affects the flourishing of street dogs, in that their well-being may be reduced as a function of the adoption of Western materialist values.

A European operator of one sanctuary echoed these concerns, stating that some Bhutanese subscribe to what he referred to as a 'development paradigm' based on Western values. He expressed concern about Bhutanese students travelling abroad to attain an education and returning with values that are in opposition to Bhutanese values. He elaborated when referring to the growing practices in Bhutan of purchasing dogs from puppy mills and of factory farming methods; they are both examples of 'the Western way of looking at development, because everything is monetized in the end, so as long as you can exploit others [it is acceptable].'

That some Bhutanese are too busy to care about animals in need reinforces anthropocentric development paradigms that place humans' needs and desires over those of nonhuman animals. These comments also demonstrate instrumental uses of animals; specifically, Bhutanese may care only about those animals that serve a human need or desire, say, for companionship or status. Animals that do not serve human needs (such as street dogs) may be

rendered invisible by those Bhutanese who perceive themselves as too busy to provide assistance or perform volunteer work.

Despite concerns about the negative consequences of development, the participants also expressed optimism that democracy in Bhutan could benefit animals, demonstrating the complexities associated with multi-species co-existence in developing countries:

> There's a bit more questioning as a society about the need to improve services for pets all over the country… So, I think there is a lot more demand for services, and people become more critical in general because of the introduction of democracy. There is more accountability of the government system and there is more accountability for quality services… Now that you have democracy, you have accountability; you have newspapers that are writing about things.

Inspired by this greater awareness, a goal of one of the sanctuaries is to establish a centre that would:

> reconnect people with animals to take care of them … but also to look beyond the specific animal they have in mind, to look at animals in their communities. Inspiring people and empowering people to act upon the animals they see – to take care of them, build relationships with them, give them food, we can take them out and sterilize them and put them back… So you have a whole outreach system.

These comments illustrate the importance of community participation in development, deemed necessary for successful community development initiatives. According to Clarke and Halafoff, 'it is unlikely that any impact of the particular intervention will persist without active community involvement (as compared to passive acceptance) in all stages of development' (11). Similarly, Arluke and Atema found that humane organizations working in Sri Lanka, India, Bhutan, and the Philippines influenced residents in local communities to interact in a more humane fashion with street dogs by 'role modelling more humane and compassionate behaviors' ('Roaming Dogs' 125). As a result, residents were more likely to seek care for dogs who were sick or injured. Community involvement in a centre would foster beneficial relationships with animals, which could in turn result in their higher levels of well-being.

*Efficacy of the CNVR Program*

The participants reported initial support for the CNVR program: 'They needed to do something…there was an awful lot of pressure to start doing something [about the street dog population]'. Because analysis of the most recent census of the dog population counted the total number of dogs sterilized, however, it cannot be determined to what extent the CNVR program has been successful specifically in managing the size of Bhutan's street dog population. Thus, changes in the street dog population are subject to individual perception. Participants disagree as to whether the street dog populations specifically in Thimphu and Paro have increased or remained stable, but none believed they had decreased over the long term. Rather, they explained that the populations had initially decreased as a function of HSI's involvement, but since the CNVR program is now run entirely by the Bhutanese government, it is unclear whether the population is increasing or remaining stable.

According to the participants, Bhutan faces three significant challenges in maintaining a successful nationwide CNVR program. First, as a poor country, Bhutan lacks the necessary resources:

> It's not that they don't want to [maintain a nationwide CNVR program] … You need a dedicated team – a driver, a dogcatcher… There's really only one or two doctors. When HSI was here, they were coming for four or five months, and they were catching 30, 40 dogs a day. Now, these guys don't even have a vehicle to catch dogs.

There are also only one or two veterinary teams participating in the program, and they travel throughout Bhutan to perform sterilizations. As a result, in any given location sterilization campaigns are only conducted once or twice a year. The sanctuaries attempt to compensate for the lack of government resources; for example, they often transport street dogs to the newly opened National Animal Hospital in Thimphu for care. But there is also a shortage of both staff and resources at the hospital. According to the participants, the hospital employs only one or two veterinarians and it does not possess basic diagnostic equipment commonly found in a private practice veterinary clinic in the West.

Sanctuaries also attempt to compensate for a lack of resources by providing veterinary care to the animals themselves. Specifically, one of the sanctuaries has a self-trained veterinarian who learned how to perform sterilization surgeries from veterinary manuals. That a self-trained veterinarian is performing surgeries on animals would be alarming to those with easy access to professionally trained veterinarians; however, it does not as yet appear to be a cause for concern among Bhutanese who have never benefited from such access. The self-trained veterinarian has been nicknamed 'Dog Mother' by Bhutanese, and is the recipient of several awards for her work on behalf of the animals in Bhutan, including one from the king and another from an international organization that gives compassionate leadership awards in both human and nonhuman animals work. The widespread acceptance of a self-trained veterinarian reflects the historic isolation of Bhutan and its lack of familiarity with professional veterinary services.

A second challenge is that the government of Bhutan has not developed a plan for acquiring the necessary resources for the CNVR program. According to one participant, there needs to be a 'higher-level policy. It's partially about how do you increase your capacity in the country, and do you want to increase that capacity through the government, or do you want to work with NGOs and allow them to have trained vets?' This challenge is complicated by the third challenge: given its recent transition to democracy and Bhutan's historic isolation, Bhutanese are not accustomed to either grassroots, community-level organizing or following the advice of Westerners affiliated with outside rescue organizations:

> There is an openness to discussion, but that openness is only starting. The way of democracy here is still very much like, you vote every four or five years. That is your expression of your freedom and of your rights. That's a very limited way. You [in the U.S.] have community action, you have engagement in public spaces. Mobilize friends and family — that is very new in Bhutan. I think it will take a few more generations before you have that kind of lively debate on the basis of which you have to make decisions.

## Conclusion

The results suggest that the implementation of a nationwide CNVR program was driven largely by two factors. The first factor was Bhutan's transition to democracy, accompanied by increases in socioeconomic development and the number of tourist visas issued each year. The Bhutanese government instituted a sheltering program in part due to concerns over the loss of tourism as a function of street dog populations. When this program resulted in the deaths of most of the dogs, the government eliminated it and commenced a collaboration with HSI to implement a CNVR program, a strategy that, as noted earlier, many animal welfare organizations consider to be the most humane approach to managing street dog populations.

The second factor is the influence of Buddhist values in designing street dog management strategies. While Bhutan is not the only majority-Buddhist country in the world that subscribes to the goals of sustainable development, it appears to have implemented Buddhist values in its street dog management program more so than has any other country. The CNVR program allows street dogs to live, in contrast to other methods of population control practiced throughout the world, and opportunities to accumulate merit through the well-being of street dogs exist everywhere. Clarke and Halafoff (11) argue that successful community development occurs in places where residents have easy access to the locations where development initiatives are planned. The spaces that Bhutanese occupy on a daily basis – sidewalks, homes, workplaces – become places where Buddhism is practiced, as many Bhutanese feed the dogs and may intervene on their behalf when they witness a street dog in need of veterinary care.

Alongside Bhutan's transition to democracy and the influence of Buddhism in its street dog management policy are the negative consequences for street dogs resulting from development and the CNVR program itself. As discussed above, increasing exposure to materialist values has resulted in an increasing number of Bhutanese feeling too busy to assist animals in need. The Bhutanese government lacks experience with following the advice of outsiders and has not dedicated sufficient resources to the CNVR program, nor does it have a plan to acquire them. The treatment of the dogs during capture, sterilization, and release are often inhumane, and sterilization poses health risks.

To increase both the efficacy of its CNVR program and humane care practices, we recommend that Bhutan's government strategize about what additional resources it can allocate to the program. One untapped resource is Bhutanese themselves; the government could consider implementing programs to increase community engagement in ways that would benefit street dogs. For example, incentives could be employed to encourage Bhutanese to develop relationships with street dogs and provide care to them by bringing them to veterinary clinics (thereby avoiding inhumane capture practices) and by providing post-operative care. The government could also award clinic staff who practice high standards of sanitation, and could also consider implementing an outreach program with Buddhist monks and nuns to emphasize Buddhist teachings concerning the accumulation of merit and how that may be achieved through caring for street dogs.

There are several limitations to the current study. The number of participants interviewed is small, despite achieving a 100% participation rate, as animal sanctuaries are rare in Bhutan. Government officials who implemented the CNVR program were not included, as it was not possible to recruit them for participation. Analysis of the data from the second census did not differentiate between street dogs and those kept by humans; thus, it is not possible to determine if a sufficient sterilization coverage rate has been achieved to maintain a stable street dog population.

Despite these limitations, this research contributes to the current state of knowledge of street dogs in the Global South by exploring how a transition to democracy and religious values may guide street dog population management strategies, and how these strategies in turn affect the well-being of street dogs. These results may be employed to inform development programs focused on maintaining stable street dog populations that place the well-being of the dogs at the centre of practice.

## Works Cited

'About the Sustainable Development Goals.' *UN.org*,
> https://www.un.org/sustainabledevelopment/sustainable-development-goals/.
> Accessed 17 Aug. 2019.

Afoa, Seti. 'A Dog of a Problem.' *Samoaobserver.ws,* 18 July 2016,
> https://www.samoaobserver.ws/category/article/35193. Accessed 17 Jun. 2020.

Animal Aid Unlimited. https://animalaidunlimited.org/. Accessed 16 Jun. 2020.

Arluke, Arnold, and Kate Atema. 'Understanding and Reducing Cruelty toward Roaming
> Dogs.' *Animal Cruelty: A Multidisciplinary Approach to Understanding, second edition,* edited
> by Mary P. Brewster and Cassandra L. Reyes, Carolina Academic Press, 2016, pp. 235-
> 249.

Arluke, Arnold, and Kate Nattrass Atema. 'Roaming Dogs.' *The Oxford Handbook of Animal
> Studies,* edited by Linda Kalof, Oxford University Press, 2017, pp. 113-134.

'Bhutan's 2$^{nd}$ Dog Population Survey Shows Remarkable Progress in Canine Management
> Program.' *MOAF.gov,* 9 August 2018, http://www.moaf.gov.bt/bhutans-2nd-dog-
> population-survey-shows-remarkable-progress-in-canine-management-program/.
> Accessed 8 Aug. 2019.

'Bhutan 2019 Crime and Safety Report.' *OSAC.gov,* 25 Mar. 2019,
> https://www.osac.gov/Country/Bhutan/Content/Detail/Report/2e1bb56d-f2f3-
> 46c7-b015-15f4aebaada0. Accessed 24 Aug. 2019.

'Bhutan Population 2020 (Live).' *Worldpopulationreview.com*,
> https://worldpopulationreview.com/countries/bhutan-population/. Accessed 15 Jun.
> 2020.

Brooks, Jeremy S. 'Avoiding the *Limits to Growth:* Gross National Happiness in Bhutan as a Model
> for Sustainable Development.' *Sustainability,* vol. 5*,* 2013, pp. 3640-3664.
> doi:10.3390/su5093640.

Clarke, Matthew. 'Understanding the Nexus between Religion and Development.' *Handbook of Research on Development and Religion,* edited by Matthew Clarke, Edward Elgar, 2013, pp. 1-12.

Clarke, Matthew, and Anna Halafoff. *Religion and Development in the Asia-Pacific: Sacred Places as Development Spaces.* Routledge, 2017.

Dalla Villa, P., et al. 'Free-Roaming Dog Control among OIE-member Countries.' *Preventive Veterinary Medicine,* vol. 97, no. 1, 2010, pp. 58-63. doi:10.1016/j.prevetmed.2010.07.001.

Dorji, K. 'Bhutan's Experience in Implementing OIE Animal Welfare Standards.' *Yumpu.com,* https://www.yumpu.com/en/document/read/38094090/bhutans-experience-in-implementing-oie-animal-oie-asia-pacific. Accessed 23 Aug. 2019.

Farnworth, M.J., et al. 'Incidence of Dog Bites and Public Attitudes towards Dog Care and Management in Samoa.' *Animal Welfare,* vol. 21, 2012, pp. 477-486. doi: 10.7120/09627286.21.4.477

Fielding, William J. 'Dogs: A Continuing and Common Neighborhood Nuisance of New Providence,

'The Bahamas.' *Society & Animals,* vol. 16, pp. 61-73. doi.org/10.1163/156853008X269890

Fielding, William J., Jane Mather, and Maurice Isaacs. *Potcakes: Dog Ownership in New Providence, The Bahamas.* Purdue University Press, 2005.

Gibson, Crystal. 'Animal Aid Unlimited Improves the Lives of India's many Street Dogs.' *Dogster.com,* 25 Aug. 2015, https://www.dogster.com/lifestyle/animal-aid-unlimited-improves-the-lives-of-indias-many-street-dogs. Accessed 8 Aug. 2019.

Hsu, Yuying, Lucia Liu Severinghaus and James A. Serpell. 'Dog Keeping in Taiwan: Its Contribution to the Problem of Free-roaming Dogs.' *Journal of Applied Animal Welfare Science,* vol. 6, no. 1, 2003, pp. 1-23. doi:10.1207/S15327604JAWS0601.01.

Ilea, Ramona. 'Nussbaum's Capabilities Approach and Nonhuman Animals: Theory and Public Policy.' *Journal of Social Philosophy,* vol. 39, no. 4, 2008, pp. 547-563.

Isakhan, Benjamin. 'The Complex and Contested History of Democracy.' *The Edinburgh Companion to the History of Democracy,* edited by Benjamin Isakhan and Stephen Stockwell, Edinburgh University Press, 2012, pp. 1-26.

Kleinfeldt, Alexandra. 'Overview of Animal Euthanasia.' *Animallaw.info,* 2017, https://www.animallaw.info/article/overview-animal-euthanasia. Accessed 17 Jun. 2020.

Leach, Anna, and Anna Scott. 'Taming Bhutan's Dog Population.' 2 May 2014, https://www.theguardian.com/global-development-professionals-network/gallery/2014/may/02/taming-bhutans-out-of-control-dogs. Accessed 9 Apr. 2017.

Lofland, John, David Snow, Leon Anderson, and Lyn H. Lofland. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis.* Wadsworth, 2006.

Majumder, Sreejani Sen, Ankita Chatterjee, and Anindita Bhadra. 'A Dog's Day with Humans – Time Activity Budget of Free-Ranging Dogs in India.' *Current Science,* vol. 106, no. 6, 2014, pp. 874-878.

McDermott, James P. 'Animals and Humans in Early Buddhism.' *Indo-Iranian Journal,* vol. 32, no. 4, 1989, pp. 269-280.

'Minimum Daily Package.' *Tourism.gov.bt,* https://www.tourism.gov.bt/about-us/minimum-daily-package. Accessed 16 Jun. 2020.

Mowatt, Twig. 'Saving Dogs in Bhutan, an Innovative Approach.' *Thebark,* Sept. 2016, https://thebark.com/content/saving-dogs-bhutan-innovative-approach. Accessed 17 Jun. 2020.

Narayanan, Yamini. 'Religion and Sustainable Development: Analyzing the Connections.' *Sustainable Development,* vol. 21, 2013, pp. 131-139. doi:10.1002/sd.1557.

---. 'Where Are the Animals in Sustainable Development? Religion and the Case for Ethical Stewardship in Animal Husbandry.' *Sustainable Development,* vol. 24, 2016, pp. 172-180. doi:10.1002/sd.1619.

---. 'Street Dogs at the Intersection of Colonialism and Informality: "Subaltern Animism" as a
    Posthuman Critique of Indian Cities.' *Society and Space,* vol. 35, no. 3, 2017, pp. 475-
    494. doi:10.1177/0263775816672860.

'New Spay/Neuter Program Launches in Bhutan with Help from HSI.' *HSI.org,* 2 July 2009,
    http://hsi-
    old.pub30.convio.net/news/press_releases/2009/07/spay_neuter_program_bhutan_
    070209.html. Accessed 9 Apr. 2017.

'Nine Domains.' *Centre for Bhutan Studies and GNH*,
    http://www.grossnationalhappiness.com/nine-domains/. Accessed 9 Apr. 2017.

Nolan, Kathy. '"Street Dog" Population Control.' *Stray-AFP.org*, http://www.stray-
    afp.org/nl/wp-content/uploads/sites/2/2012/09/Street-dog-population-control.pdf.
    Accessed 8 Aug. 2019.

Nussbaum, Martha. 'The Capabilities Approach and Animal Entitlements.' *The Oxford Handbook
    of Animal Ethics,* edited by Tom L. Beauchamp and R.G. Frey, Oxford University Press,
    2011, pp. 228-251.

'Passing the Baton to Bhutan.' *HSI.org,* 28 Jul. 2015, http://hsi-
    old.pub30.convio.net/news/news/2015/07/bhutan-street-dog-program-wrapup-
    072815.html. Accessed 9 Apr. 2017.

'Poverty in Bhutan.' *Asian Development Bank,* https://www.adb.org/countries/bhutan/poverty.
    Accessed 24 Aug. 2019.

'Rabies.' *WHO.int,* Sept. 2017, https://www.who.int/health-topics/rabies#tab=tab_1.
    Accessed 1 Nov. 2017.

Rinzin, Karma. *Population Dynamics and Health Status of Free-Roaming Dogs in Bhutan.* 2015,
    Murdoch University, Unpublished dissertation. *Research Repository,*
    *https://researchrepository.murdoch.edu.au/id/eprint/27867/*

Rowan, Andrew. 'The Case for India's Street Dogs (Op-Ed).' *Livescience.com,* 21 Sep. 2013, https://www.livescience.com/39842-the-case-for-india-street-dogs.html. Accessed 16 Jun. 2020.

Savvides, Nikki. 'Living with Dogs: Alternative Animal Practices in Bangkok, Thailand.' *Animal Studies Journal,* vol. 2, no. 2, 2013, pp. 28-50.

Singh, Mahendra Prasad, and Veena Kukreja. 'Introduction.' *Democracy, Development, and Discontent in South Asia*, edited by Veena Kukreja and Mahendra Prasad Singh, Sage Publications India Pvt. Ltd, 2008, pp. 19-58.

Sinha, Awadhesh Coomar. 'Ethnic Engagement in Bhutan and Regional Consequences.' *Democracy, Development, and Discontent in South* Asia, edited by Veena Kukreja and Mahendra Prasad Singh, Sage Publications India Pvt. Ltd, 2008, pp. 282-308.

'Spay/Neuter Success in Bhutan.' *HSI.org,* 2 Apr. 2009, http://hsi-old.pub30.convio.net/news/news/2009/04/bhutan_spayneuter_040209.html. Accessed 9 Apr. 2017.

Srinivasan, Krithika. 'The Biopolitics of Animal Being and Welfare: Dog Control and Care in the UK and India.' *Transactions of the Institute of British Geographers,* vol. 38, 2013, pp. 106-119. doi: 10.1111/j.1475-5661.2012.00501.x.

---. 'The Welfare Episteme: Street Dog Biopolitics in the Anthropocene.' *Animals in the Anthropocene: Critical Perspectives on Non-human Futures*, edited by Human Animal Research Network Editorial Collective, Sydney University Press, 2015, pp. 201-220.

Srinivasan, Krithika, and Rajesh Kasturirangan. 'In Search of Common Ground: Political Ecology and Conservation in the Development Age.' *Geoforum,* vol. 82, 2017, pp. 87-88. http://dx.doi.org/10.1016/j.geoforum.2017.04.002.

'Statistics on Dogs.' *CAROdog,* https://www.carodog.eu/statistics-on-cats-and-dogs/. Accessed 15 Jun. 2020.

Strand, Patti. 'The Global Stray Dog Population Crisis.' 17 Nov. 2011, naiaonline.org, http://www.naiaonline.org/articles/article/the-global-stray-dog-population-crisis-and-humane-relocation#sthash.3sCEnAjn.dpbs. Accessed 16 Jun. 2020.

'Stray Animals by Country — Europe.' *ESDAW.com,* http://www.esdaw-eu.eu/the-stray-dogs-in-europe.html. Accessed 15 Jun. 2020.

'Street Dogs in Bhutan.' *HSI.org,* 15 Nov. 2011, http://www.hsi.org/issues/street_dog/factsheets/street_dogs_bhutan.html. Accessed 9 Apr. 2017.

Strickland, Paul C. 'The Roaming Dogs of Bhutan. Friend or Foe?' *CAUTHE Conference Proceedings, Tourism and Global Change: On the Edge of Something Big, 11-14 February 2013, Christchurch, New Zealand,* edited by Joanna Fountain and Kevin Moore, CAUTHE, 2013, pp. 780-783.

---. 'It's a Dog's Life: International Tourists' Perceptions of the Stray Dog Population of Bhutan.' *Journal of Arts & Humanities,* vol. 4, no. 12, 2015, pp. 1-11.

Sun, Ivan, Doris Chu, and Hung-En Sung. 'A Cross-national Analysis of the Mediating Effect of Economic Deprivation on Crime.' *Asian Criminology,* vol. 6, 2011, pp. 15-32.

Tenzin, Basant Sharma, Navneet K. Dhand, Nilkanta Timsina, and Michael P. Ward. 'Reemergence of Rabies in Chhukha District, Bhutan, 2008.' *Emerging Infectious Diseases,* vol. 16, no. 2, 2010, pp. 1925-1930.

'The World Factbook.' *Central Intelligence Agency,* https://www.cia.gov/library/publications/the-world-factbook/geos/bt.html. Accessed 24 Aug. 2019.

Tomalin, Emma, and Caroline Starkey. 'Buddhism and Development.' *Handbook of Research on Development and Religion*, edited by Matthew Clarke, Edward Elgar, 2013, pp. 31-50.

'Tourism Policy.' *Tourism.gov.bt,* https://www.tourism.gov.bt/about-us/tourism-policy. Accessed 16 Jun. 2020.

'UN Incorporate Animal Protection into 2030 Agenda for Sustainable Development.' 9 Sept. 2015, https://www.worldanimalprotection.org/news/un-incorporate-animal-protection-2030-agenda-sustainable-development. Accessed 17 Aug. 2019.

United States Department of State, Bureau of Democracy, Human Rights, and Labor. 'Thailand 2018 International Religious Freedom Report.'state.gov, https://www.state.gov/wp-content/uploads/2019/05/THAILAND-2018-INTERNATIONAL-RELIGIOUS-FREEDOM-REPORT.pdf. Accessed 17 Jun. 2020.

Weiss, Robert S. *Learning from Strangers: The Art and Method of Qualitative Interview Studies.* The Free Press, 1994.