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# The Value of Waste: The Cycle of Products and Byproducts in Nepal's Eastern Hills

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# The Value of Waste: The Cycle of Products and Byproducts in Nepal's Eastern Hills

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In partial fulfillment of a Bachelor of Arts Degree  
in Environmental Analysis,  
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Readers:  
Lance Neckar  
Char Miller

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## TABLE OF CONTENTS

Preface .....	4
Glossary .....	7
Introduction .....	11
<i>My Field Site, Simigaau</i> .....	16
<i>Approaching Waste in Simigaau: What it is and where it goes</i> .....	26
<i>Research Methods</i> .....	28
Chapter 1: The Place for Phoharmailaa.....	34
Chapter 2: Crafting New Economies .....	38
Chapter 3: Fecal Functionality .....	44
Chapter 4: Social Implications of Changing Waste Patterns .....	52
Conclusion .....	56
References .....	59

## PREFACE

Figure 1: Kathmandu Valley as seen from Swayambhunath stupa, West of Kathmandu city. (Moore, Emily. Swayambhunath. Digital image. N.p., 2015.)



In the spring of 2016 I had the opportunity to study abroad on a Pitzer College coordinated program in Nepal. In the six months spent in the country, I travelled to rural communities in central, eastern and western parts of the country – where Kathmandu, the capital, is also the heart not only governmental affairs, but the only option for Nepalis interested in pursuing an education or becoming involved in a life outside of subsistence agriculture and animal husbandry in their home village. Despite this fact, I found that many young people migrating out of villages and relocating to Kathmandu quickly long for their villages, for more reasons than nostalgia. The rapid pace of development taking place in Kathmandu has left the city's streets, skies and soils polluted and without the resources to manage the inundation of non-

renewable items that are relatively new to Nepal’s social and physical landscape. The steady, and perhaps unsustainable, population growth does not help mitigate this issue. The city is growing at 4 percent per year, as the most rapidly growing metropolitan area in South Asia, with approximately 2.5 million residents now calling the Kathmandu Valley home.<sup>1</sup> While studying in Nepal, I quickly became interested in what it was the villages did differently in terms of managing waste, and what “waste” meant at large for a country experience such swiftly changing notions of production and consumption in the face of a development discourse. For my independent study project, I conducted research that evaluated the meaning of “waste” in one of Nepal’s most eastern villages, Simigaau. To begin to understand what exactly formed “waste” and how it was perceived in Simigaau, I observed and participated in daily routines transcending all spheres of life from a range of work in the fields to various forms of domestic chores. Equally important, were the attitudes I observed while completing these tasks towards the production and elimination – or repurposing – of waste items. I wanted to live with and observe the habits of villagers to develop an understanding of what waste means in Simigaau, how waste relates to village life, and if livelihoods are dependent on the presence of some form of waste. I spent the last weeks of my program living in Simigaau, traveling between different arenas of labor– the *aalu*<sup>2</sup> fields, wheat fields and small *khetbarris*<sup>3</sup> told very different stories about the importance waste from that of *goTh*<sup>4</sup> kitchens, time spent at the *dauraa*<sup>5</sup> washing clothes, or observing a long

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<sup>1</sup> Moran, Kerry *The Kathmandu Valley*. Boston, Ma.: Shambhala, 1998. Print.

<sup>2</sup> Aalu is the Nepali term for “potato” – tilling potato fields is a predominant labor in Simigaau

<sup>3</sup> Khetbarri is the Nepali term for a small field or garden, typically close to the home, providing a variety of seasonal vegetables and potentially a chicken coop or shelter for goats or cows

<sup>4</sup> GoTh is the Nepali term for the shelter used to house livestock, although in the wake of the earthquake many families, including the one I stayed with in Simigaau, are temporarily residing in these spaces

<sup>5</sup> Dauraa is the Nepali term for a water spigot – these are normally relatively close to the home and are shared by surrounding households for washing clothing, cleaning dishes or bathing

day preparing *chhang*<sup>6</sup> for an upcoming *puja*<sup>7</sup>. While I navigated these workspaces, and many more, I noticed an inherent overlap and sense of cyclical nature in the materials they demanded and those that they produced. I quickly became fascinated by the relationship between labor, material and waste and how these connections seemed essential to Simigaau's economy, social dynamics and history as a subsistence community. Because of this seemingly crucial role of waste in daily life, I became curious if villagers distinguished between *phoharmailaa*<sup>8</sup> and “waste,” and how this distinction might speak to a connection between notions surrounding waste and a growing development discourse ever-present in Simigaau.

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<sup>6</sup> Chhang is a kind of alcohol consumed by Sherpa and Tamang ethnic groups in Nepal's hill villages – served throughout the day it acts as a vehicle for a lot of social interaction and community gathering

<sup>7</sup> Puja is the Nepali term for a religious ceremony of some sort – it's use spans across both Buddhist and Hindu communities

<sup>8</sup> Poharmailaa is the Nepali term for “garbage”

## GLOSSARY

*Aalu*: potato; a staple in the Simigaau diet and work culture

*Aamaa*: mother

*Andaa*: egg

*Aushadhi*: medicine

*Baa*: father

*Bakraa*: goat

*Batabaran*: physical environment

*Bhaai*: younger brother

*Bhaat*: cooked rice

*Bhoj*: a large feast usually on a celebratory occasion of some sort

*Chakati*: woven mats made from wheat stalks; found in many Sherpa and Tamang households for sitting both indoors and outdoors

*Chaamel*: uncooked rice

*Chhang*: Nepali beer made from fermented millet; consumed nearly nightly in my Simigaau family and many others

*Chimeki*: neighbor

*Chinimal*: chemical fertilizer

*Chiso*: cold or wet

*Chitraa*: fences made from bamboo used to corral livestock as well as serve as roofs in *goThs* and other temporary shelters

*Chizbiz*: material things

*Chouchou*: Packaged snack food similar to ramen noodles; consumed both cooked and uncooked as morning and afternoon *khajaa*

*Chiyaa*: Nepali tea; occasionally prepared with milk, *dudh chiyaa*, or prepared black with tea leaf or more recently Nescafe instant coffee, *khaalo chiyaa*

*Coucara*: Chicken



*Daadaa*: surrounding hills

*Daai*: older brother

*Daal bhaat*: traditional Nepali meal of rice and lentils

*Daalo*: handwoven baskets; typically rather small and used to store a variety of household goods

*Daauraa*: firewood

*Dauraa*: water spigot

*Desa*: human or animal feces

*Dhaatu*: metal

*Dhungaa*: stone

*Didi*: older sister

*Dido*: wheat flour cooked with water into a thick paste; a traditional dish served multiple times a week in Sherpa and Tamang households

*Doko*: Large baskets made from bamboo used to porter a multitude of items; *dokos* are carried using a strap that fastens to the head and loops around the body of the basket

*GoTh*: traditionally a shelter made from *chitraa* and bamboo posts for livestock; in the wake of last year's earthquake many families are currently residing in these shelters

*Gummaa*: Buddhist temple

*Himaal*: Himalayas

*ITaa*: brick

*JaDi bhutti*: herbal medicine gathered from the local jungle

*Jangal*: jungle

*Jhankri*: a spiritual healer; a specialist in the meditation between humans and spirits

*Kaath*: wood

*Khajaa*: mid-day meal; typically potatoes or *chouchou* usually served between two and three in the afternoon

*Kharaani*: ashes

*Khet(barri)*: farmed fields; a *khetbarri* usually refers specifically to a smaller vegetable garden near the home while a *khet* tends to signify larger *aalu* or wheat fields farther away

*Kodo*: millet

*Maathi*: high; in the context of this research *maathi* typically refers to Simigaau's upper fields

*Mahatwapurna*: important

*Mailaa*: a group of predominantly women who work as a unit on whatever plot of land is ready to be harvested, hoed, planted, etc.

*Mal*: manure used as fertilizer in the fields

*Gaauko mal*: local goat, cow or chicken manure; the original form of *chinimal*

*Gai*: cow

*Massu*: meat; chicken and goat are amongst the commonly consumed meats, bison and yak being amongst the more rarely consumed

*Naamlo*: large, flat woven tray used to sift *chaamel*

*Nigaalo*: bamboo

*Ningru*: a variety of wild fern found in Simigaau's jungle; frequently harvested and served with rice or dido

*Nun*: salt

*Pasal*: small shop usually selling snack items, sodas, cigarettes and small household goods

*Phoharmailaa*: garbage

*Pito*: flour

*Pisa*: human or animal urine

*Pujaa*: religious ceremony often held by local lamas

*Raksi*: a genre of alcoholic drink made by fermenting grains; consumed and cooked by many ethnic groups throughout Nepal

*RoTi*: a staple *khaajaa* item similar to a flat bread and cooked either on gas stoves or, more commonly, over the fire; oftentimes served in the mornings with cooked vegetables

*Subidhaa*: facilities

*Tarkari*: a cooked item to supplement a plate of *dido* or *bhaat*; typically some sort of local green or *aalu*, though occasionally *andaa*, *massu* or curd is offered as a kind of *tarkari*

*Taato*: hot

*Tala*: lower; in the context of this research *tala* typically refers to Simigaau's low fields

*Topnus*: to refill typically a cup of *chhang*, *chiyaa* or *raksi*

## INTRODUCTION

The purpose of this thesis will be to explore conceptions of waste in Nepal's rural village of Simigaau to understand what constitutes waste and in what ways it is critical to the community's physical and cultural survival. Due to the contribution of many aspects of daily life in the creation of "waste" in Simigaau –what it is and what it means – I hope to use a whole systems approach to understand the multitude of factors that affect how villagers view waste and whether its value can provide insight into a local way of life. Moreover, I aim to explore whether a community's waste – seen and unseen – provide insight into a local way of life and if so, how this insight may be applied to both Nepal at large and connotations of "waste" in the West.

Central to my discussion on waste production in Nepal is the relationship between communities and their waste in the West. The fundamental concept of producing goods with an assumption they will eventually become "waste" is a relatively new thought pattern in Nepal's urban centers, like Kathmandu, and even less understood in its rural regions, such as Simigaau. In contrast to the consumerist, capitalist narrative of the United States, and other nations of the Global North, I found goods produced in Nepal to exist without expiration dates. Household items, clothing, food and byproducts of the human body itself live in Nepali communities as indicators of contemporary social values and links to a cultural heritage specific to a range of castes, ethnic groups and indigenous populations in Nepal today. The pages that follow will explore these various topics in depth in a discussion on "waste" – goods, food, excrement – as they relate to the preservation and perpetuation of traditional knowledge in the social, economic and political spheres of communities in rural Nepal.

In considering and evaluating the life of products and byproducts in Nepal, it is critical to acknowledge the comparatively absent lifecycle experienced by items in the West and the

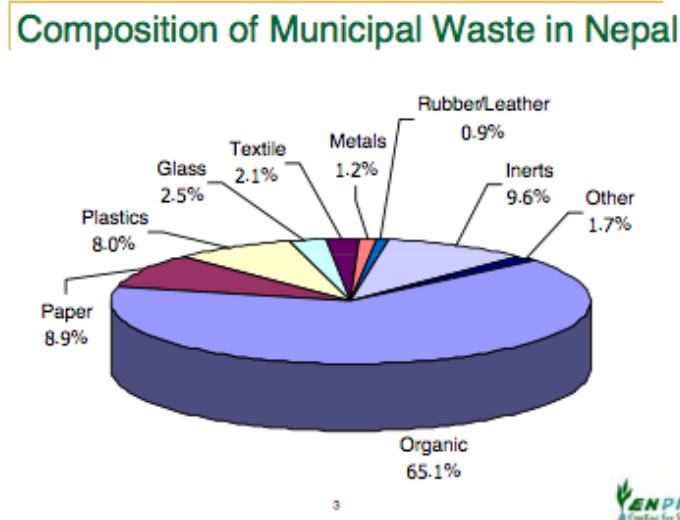
changing landscape of Kathmandu. Though the life patterns of products in Kathmandu also diverge from that of the West, and have experienced drastic shifts in the scale at which plastic is accumulating and necessitating management, this discussion concentrates on communities outside of the Kathmandu Valley, relying on subsistence farming for social and economic livelihood. It is clear, however, that changes exhibited in Kathmandu have transcended the valley, as indicators of “development” such as processed foods, foreign-made goods and new industry have already arrived in regions as rural as Simigaau. Nevertheless, this thesis aims to assess the ways a rural population, which continues to generate nearly zero waste amidst rampant development narratives spreading in and from Kathmandu, relies on traditional modes of “waste management” as not a solution to a pollution problem, but an informant of cultural value.

A glimpse at frameworks in place – though rarely enforced – to address waste in Kathmandu is important as a means to contextualize waste patterns in present-day Simigaau. Kathmandu’s municipal waste continues to be just over 65 percent organic matter; however, the inundation of non-renewables has placed an incredible amount of pressure on a newly “developing” urban center without the infrastructure to process high volumes of garbage that up until relatively recently never existed in Nepal. Paper, plastics and inerts, respectively make up the next largest category of generated waste, followed by glass, textiles and metals.<sup>9</sup>

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<sup>9</sup> Tuladhar, Bhushan. *Organic Waste Management in Nepal*. Environment & Public Health Organization, 2010. Web.

Figure 2: Waste produced in Nepal, by category (Adapted from Sustainable Sanitation and Water Management with permission of copyright owner Bhushan Tuladhar, 2016.)



A central actor in mitigating the increase in population and plastics in Kathmandu is the 1996 National Policy on Solid Waste Management, formulated specifically to address the solid waste problems emerging from rapid urbanization. Its primary objectives are to make solid waste management simple and effective, to minimize the impact of solid waste on environmental and public health, to treat solid waste as a resource, to include private sector participation, and to increase public awareness surrounding sanitation.<sup>10</sup> Local self-governance policies allow municipalities to develop localized bylaws that meet their diverse needs, however, of the 58 municipalities, only 23 reported having set directives pertaining to solid waste management in place, and very few of these have actually been implemented.<sup>10</sup> Just nine municipalities have operational guidelines regarding landfill sites and controlled dumping sites.<sup>10</sup> Similarly, the Agricultural Policy of 2016 promotes a return to “organic” agriculture in a valley now ridden with chemical fertilizers, but offers no enforced standards or infrastructural support.<sup>9</sup> In the realm

<sup>10</sup> Asian Development Bank. *Solid Waste Management in Nepal: Current Status and Policy Recommendations*. Mandaluyong City, Metro Manila, Philippines: Asian Development Bank, 2013. Print.

of plastic production, various districts in the Kathmandu Valley have placed a ban on polythene<sup>11</sup> bags and have attempted to put this policy to practice by fining shops selling plastic bags NRs500<sup>12</sup> and NRs200<sup>13</sup> to customers carrying plastic bags.<sup>10</sup> Yet it is rare that local authorities will administer these fines, and it is even more rare to find a shop in Kathmandu devoid of plastic bags, or Nepalis leaving the bazaar polythene-free. Municipality governing bodies generally lack resources and the political leadership critical to enacting policy on a local level. The majority of sustainable waste management efforts fall the private sector and NGOs, as they collect over 75 percent of household wastes and are predominantly responsible for sanitation and alternative waste management education and action.<sup>9</sup> Kathmandu City alone produces 457 metric tons of solid waste per day, the valley as a whole, including all 58 municipalities generates 670 metric tons, daily.<sup>14</sup> Since 2007, solid waste has been increasing exponentially, surging from 29.9 metric tons in 2007 to 318.4 metric tons in 2009.<sup>14</sup> Today the primary landfill site is the Sisdol Okharpauwa landfill in the Nuwakot district, about 16 kilometers northwest of Kathmandu city.<sup>15</sup> The landfill covers an area of about 15 hectares, the current region in use encompasses just over 2 hectares.<sup>15</sup> The Syuchatar landfill is smaller in size and even less managed than the Sisdol site. Financial and managerial challenges has led the Nepali government to permit dumping alongside the Bagmati River, despite the fact that communities in close proximity to this iconic water source have experienced health and environmental hazards in the decades prior to the “legalization” of riverside disposal, when people disposed of a range of solid wastes in the banks of the Bagmati.<sup>14</sup> The Kathmandu valley has been grappling with a garbage

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<sup>11</sup> The most commonly used plastic in Nepal; found chiefly in plastic bags, films and bottles

<sup>12</sup> The equivalent of approximately \$5.21

<sup>13</sup> \$2.08

<sup>14</sup> Shahi, Pragati. “KMC is largest waste generator.” *The Kathmandu Post*. n.p. 12 July, 2014. Web.

<sup>15</sup> Shahi, Nirmal Kumar. “Report on Sanitary Landfill Site at Sisdol.” Kathmandu University: Department of Environmental Science and Engineering, 2012. Web.

calamity for the last 20 years in conjunction with the beginning of an internal migration that only continues to inflate. Solid waste management policies struggle with implementation on the ground, especially in regards to the operation of landfill sites. Nepal's public services system is strained to meet the demands of relentless urbanization and development. The intersecting pressures of increased-population and a shortage of adequate management structures have made the valley vulnerable to severe environmental degradation and health concerns of irresponsible solid waste disposal in exchange for a "development discourse" often encouraged by Western authorities with negligible concern for Kathmandu's lacking underpinnings pertinent to managing such high levels of non renewables entering a country unfamiliar with having to "manage" "wastes," as a notion rooted in a rather inaccessible, capitalist, Western narrative. Though this discussion will not continue to explore waste principles so explicitly linked to Kathmandu's experience in management, it is useful in thinking about the present – and perhaps future – attitudes surrounding waste in Simigaau, as the following discourse will analyze.

As this thesis will address, the very term "waste" demonstrates the lack of life given to the "things" communities and corporations produce. Goods in the West are fleeting; they survive within a binary where they are either products or garbage, condemned to landfill or incendiary and deemed "waste" as beyond a point of productive usage. Entire social and economic frameworks in mainstream Western thought depend upon "waste," the consumption and assumed disposal of products and byproducts over relatively distressingly compressed quantities of time. As such, "waste," has received its very name based on its worthlessness, a learned concept fabricated from deep within the folds of industry interests and social constructs necessary to uphold the capitalist communities upon which much of the West is built.



*My Field Site, Simigaau*

Figure 3: Map of Nepal (Adapted from Wikimedia Commons image with permission of copyright owner Gabri 2006)



Figure 4: Location of Dolkha district in Eastern Nepal (Adapted from Wikimedia Commons image with permission of copyright owner Hégésippe Cormier 2007)



Figure 5: Clustering of several *goThs* on Simigaau’s hillside (Moore, Emily. Simigaau. Digital image. N.p., 2015)



Simigaau is a small, rural village in the Dolkha district tucked away in the Eastern mid-hills of Nepal. The village is home to people of both the Sherpa and Tamang castes, though culture is strongly rooted in Sherpa tradition. Sherpa dress, complete with colorful aprons, can be seen dotting terraced fields where women work – often in their *mailaa*<sup>16</sup> – all afternoon, the obligatory serving of *chiyaa*<sup>17</sup> and *chhang* to all houseguests, and routine *pujaas* carried out by Buddhist *lamas*<sup>18</sup> are only a few of indicators of this culture’s rich Sherpa tradition. Many of Simigaau’s facilities are being rebuilt a year after the devastating earthquake in April 2015; however, foreign contribution of funds has made the construction of a makeshift *gumbaa*<sup>19</sup>

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<sup>16</sup> Mailaa is a workforce of mostly women who jointly tend to the villages’ fields

<sup>17</sup> Chiyaa is the Nepali term for “tea” and can be prepared black or with milk – like chhang it’s also an indicator of social spaces and communication

<sup>18</sup> A lama is a Buddhist priest and responsible for carrying out local pujaas

<sup>19</sup> Gumbaa is the Nepali term for a Buddhist temple

possible, as it is one of the core elements to fostering a strong, healing community in Simigaau.<sup>20</sup> The village's K-5 grade school is currently in session, though taking place in temporary shelters, alongside its health post building with two trained workers presently residing in Simigaau.<sup>21</sup> In addition, the village is home to a lodge where community member often gather for *chiyaa* – both *chiso*<sup>22</sup> and *taato*<sup>23</sup> – as well as space for a small *pasal*<sup>24</sup> offering biscuits, *chouchou*,<sup>25</sup> beer and other types of packaged goods brought up from neighboring villages, but originating in Kathmandu.<sup>26</sup> While some villagers may use this shop for their own needs, it mostly serves trekking groups passing through as prices are slightly steeper than that of the next closest store in ChetChet<sup>27</sup> – an hour walk down to *Gunkar Kholaa* and across the river<sup>28</sup>. Simigaau also operates a water-generated mill used to grind seeds to *pito*<sup>29</sup> and an electricity house that produce light from around six in the evening to six in the morning.<sup>30</sup> People in Simigaau are primarily of the Buddhist faith, though many seem to relate this truth as more of a fact rather than a choice, and both Sherpa and Tamang are spoken interchangeably in homes speckling the hillside. While nearly every villager speaks Nepali, it is rarely exchanged between local people and reserved mostly for foreigners, or occasionally when traveling to other regions to purchase goods, porter items commercially or for trekking purposes, as well as with workers constructing the nearby road, bus drivers, or health post personnel currently residing in Simigaau.<sup>31</sup>

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<sup>20</sup> Interview with Anlak Baa; 9 May, 2016

<sup>21</sup> Interview with Phursand Tamang; 11 May, 2016

<sup>22</sup> Chiso is the Nepali term for “cold”

<sup>23</sup> Taato is the Nepali term for “hot”

<sup>24</sup> A *pasal* is a small shop selling a variety of packaged treats, minor household goods, cigarettes and maybe small toys – the shop can oftentimes be found attached to a family's home

<sup>25</sup> Chouchou is a packaged snack found in almost every shop and household within and outside of Nepal's Kathmandu Valley – made up of dried ramen noodles and included oil and spice packets it can be eaten both cooked or uncooked

<sup>26</sup> Interview with Anlak Baa

<sup>27</sup> ChetChet is a small town down the mountain and across the river from Simigaau – it's currently the last stop on the newly constructed road

<sup>28</sup> Interview with Poursand Tamang

<sup>29</sup> Pito is the Nepali term for “flour”

<sup>30</sup> Interview with Anlak Baa

<sup>31</sup> Interview with Tembe Sherpa; 14 May, 2016

Figure 6: *Gumbaa*, Simigaau (Moore, Emily. *Gumbaa*. Digital image. N.p., 2016.)



Figure 7: Mill, Simigaau (Moore, Emily. *Mill*. Digital image. N.p., 2016.)



Figure 8: Stream flowing to electricity house, Simigaau (Moore, Emily. Electricity house. Digital image. N.p., 2016.)



While Simigaau remains relatively remote – an hour and a half climb from the road at minimum – a new road has wound its way through the valley and dynamite explosions I often mistook for thunder, but are known locally as “blasts,” can be heard throughout the day. The project was started by the Nepali government and has been sustained by Chinese funds; the agents of which are eager to have a hand in a major water-electricity project in a village a several hours walk from Simigaau.<sup>32</sup> The Chinese are frequent sponsors of construction projects throughout Nepal, given their proximity to Tibet and the allure of convenient trade routes. Many villagers were pleased with the construction of a new road as it shortened long trips to bring back necessary goods in addition to gradually cheapening the cost of these items. The most commonly affected goods were basic household products such as salt, sugar, sesame oil, rice, and soap.<sup>33</sup> In

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<sup>32</sup> Interview with Tende Baa; 10 May, 2016

<sup>33</sup> Interview with Phursand Tamang

turn, however, road construction has changed the neighborly climate of Simigaau a bit – bringing untrustworthy people near villages and triggering many to invest in large steel locks for their homes when they are away for either a few weeks on a portering job or even a day in a field.<sup>34</sup> In addition, the new road has increased air and water pollution to an area otherwise rather free of the smoggy skies and stagnant rivers that have become commonplace in the Kathmandu Valley. The blasts produce large clouds of dust and construction equipment generates exhaust fumes otherwise absent from Simigaau’s fresh mountain air and chiseled views of the surrounding *daadaas*<sup>35</sup> and the occasional *Gaurishankar himaals*<sup>36</sup> on especially storm-free mornings. People in Simigaau are particularly proud of their “*raamro batabaran*”<sup>37</sup> – and their delight in comparing the clear water and pleasant conditions to that of Kathmandu was palpable in nearly every passing conversation, especially when I shared my topic of research. Aside from the immediate environmental effects, the road construction has also led to a considerable increase in landslides in the area, only worsened by the recent earthquake.<sup>38</sup> Many villagers are incredibly fearful of the approaching monsoon months, which bring heavy rains and increased risk for landslides even without the increased pressure from construction. Simigaau’s survival is at the whims of its climate, as are many subsistence agricultural communities. Both excessive rainfall and drought threaten their crops – a physical and cultural staple – and changes in the many microclimates that exist in the local environment alter the availability of wild plants that are harvested for dietary and medicinal purposes.<sup>39</sup>

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<sup>34</sup> Interview with Nima Aamaa; 14 May, 2016

<sup>35</sup> Daadaas are the small hills that generally precede a staggering view of the Himalayas

<sup>36</sup> The Gaurishankar himaals are the Himalayas most clearly visible from Simigaau’s perch in Nepal’s eastern mountain region – trekkers who pass through Simigaau are typically embarking on journeys through the Gaurishankar region

<sup>37</sup> “Raamro batabaran” translates to “good, healthy environment,” it was a phrase frequently used to describe Simigaau – or “the village” – physical environment in comparison to that of “the city” or Kathmandu

<sup>38</sup> Interview with Anlak Baa

<sup>39</sup> Bower, Barbara. *The Sherpa of Khumbu: People, Livestock, and Landscape*. Delhi: Oxford University Press, 1991. Print.

Figure 9: Clouds parting way to *Gaurishankar himaals* on a morning in Simigaau (Moore, Emily. *Gaurishankar himaals*. Digital image. N.p., 2016.)



The villagers of Simigaau find little rest in a typical day's routine. While the type, duration and location of work depends on the season, there are always crops to be planted, harvested or processed; fields to be prepared for new harvests or crop rotations; animals to be brought to pasture; firewood, bamboo, and grass to be cut, carried, and either fed to animals or stored; homes to be built, clothes to be washed, not to mention meals to be cooked and served with surely one or two unexpected guests who have stopped by on their way *tala*<sup>40</sup> after a long day's work. With the sunrise comes what might seem like an entire afternoon's work all to be completed before morning *daal bhaat*.<sup>41</sup> I would often start out on a morning walk to be greeted

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<sup>40</sup> Tala is the Nepali term for "lower" – this is commonly used to refer to homes further down the mountainside

<sup>41</sup> Daal bhaat is the staple meal in Nepal that transcends caste and ethnic group – while many communities enjoy their own variations a meal of rice, cooked lentil soup, and some sort of cooked vegetable or meat is at the heart of most families' diets

by my *bhaais*<sup>42</sup> returning with an overflowing *doko*<sup>43</sup> of grass for our goats strapped to head, only to be followed by washing last night's dishes, preparing *tarkari*<sup>44</sup> for the morning meal, and beating the seeds from freshly picked wheat. My frequent apologies to my *didi*<sup>45</sup> as I looked back on a plot of *aalu* I had just finished hoeing and it compared it to the work of other women in the *mailaa*, were followed by a bit of laughter and their assurance that a knack for this kind of labor comes with years of long, hard, hot afternoons in the fields. Most likely a classically Nepali way of protecting my feelings, my *didi*'s response segued into a conversation about her childhood responsibilities. Her physical growth served as less of a passage of time and rather a marker of her induction into Simigaau's labor force.<sup>46</sup> The unforgiving reality of living in Nepal's rural mountains requires the participation of every mouth that is to be fed whenever the body is physically able. While one task easily rolls into another, the people of Simigaau find their social spaces within their ever-changing spheres of work and rarely spend an evening without a cup of *chhang* or *chiyaa* surrounded by people who, direct relatives or not, are most certainly considered family.

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<sup>42</sup> Bhaai is the kinship term for "younger brother," and applies to people outside of your immediate, blood-related family – in Simigaau I had many bhaais home for their school holiday, as they typically reside in Kathmandu

<sup>43</sup> A doko is a large basket woven with small strips of bamboo used to carry harvests, building materials, or any other goods needing portering to a range of locations

<sup>44</sup> Tarkari is the Nepali term for "vegetable," though it can sometimes mean meat, it's prepared in accompaniment with rice

<sup>45</sup> Didi is the kinship term for "older sister," and like bhaai and all other kinship terms, extends beyond the immediate family but to friends, neighbors and fellow Nepalis

<sup>46</sup> Interview with Phursand Tamang; 11 May, 2016



Figure 10: *Didi* preparing *chiyaa* for neighbors, Simigaau (Moore, Emily. Chiyaa. Digital image. N.p., 2016.)



Figure 11: Tamang woman heading to collect firewood with *doko*, Tangting (Moore, Emily. Doko. Digital image. N.p., 2016.)



The growing, harvesting, cooking, and consuming of food is an aspect not to be forgotten in the defining routines of life in Simigaau. Due to the communal nature of the village, popping into neighbor's homes on the way to and from the fields is an important activity that defines Simigaau's social life. Along with these visits comes an insistence that the guest is served whatever is available or that a kettle is plopped over the fire to brew a mug of newly very popular coffee or some variation of *chiyaa*. Of course before the overflowing cup of *chhang* or handful of *aalu* is accepted the guest must refuse the offer. A back and forth between guest and host then ensues – a sloshing tin mug caught someplace in the middle – and as the host becomes increasingly more forceful, the guest begins to submit slowly until finally they surrender. The process is only to be repeated when a first cup or portion of *khajaa*<sup>47</sup> is consumed and they are insisted to *topnus*.<sup>48</sup> The purpose of this practice speaks to the social atmosphere ingrained in Simigaau's families and provides assurances that neighbors are cared for by physical and emotional means. The way food is shared ensures social interaction and bodily nourishment and serves as a sort of “payment” that others will reimburse when an *aamaa*<sup>49</sup> who served a fellow villager *ningru*<sup>50</sup> and *dido*<sup>51</sup> last week, finds herself at this neighbor's home during a uphill climb on a rainy evening. This is an example of how practices become grounded in social interactions as a result of daily lifestyles. In Simigaau, almost all modes of life – even that of free time and social pleasure – are grounded in cultivating and sharing food. As such, it is a pivotal part of

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<sup>47</sup> Khaajaa can be understood as any kind of snack or small meal that is not daal bhaat – in both my Simigaau and Kathmandu homestays, khaajaa was typically prepared between two and three in the afternoon and oftentimes consisted of boiled potatoes with salt or ground peppers, though chouchou or biscuits were also served on occasion

<sup>48</sup> Topnus is a Nepali term for “refilling” or “topping off” whatever the host has served – chiyaa, chhang, or some kind of khaajaa or even daal bhaat portions; though it's customary for a guest to refuse the first offer to topnus, it's a cultural expectation that after some insisting by the host, the guest will accept another serving

<sup>49</sup> Aamaa is the kinship term for “mother”

<sup>50</sup> Ningru is a kind of wild fern found in Simigaau's forest and is often gathered and cooked for morning and evening daal bhaat

<sup>51</sup> Dido is similar to “cream of wheat” – made with a range of flours – and takes the place of rice in a daily meal; it's specific to Sherpa and Tamang diets in the region

interacting with villagers and observing the way products and byproducts travel in and out of spaces, or how they continually reinvent themselves in Simigaau’s precious soils.

Figure 12: Tamang woman seated by the fire in her *goTh* preparing *khajaa* for visitors (Moore, Emily. *Khajaa*. Digital image. N.p., 2016.)



*Approaching Waste in Simigaau: What it is and where it goes*

In an attempt to get a grasp on conceptions of waste and its value for the people of Simigaau, I focused my inquiries on questions regarding certain byproducts – if they were useful and if so, how; where certain materials originally came from and where they went after use; what have new *chizbiz*<sup>52</sup>, such as plastics, formal toilets, or packaged foods taken the place of and why. From these questions I aimed to gauge an understanding of what influenced changes in the kinds of wastes produced and how it has affected life cycles and lifestyles in Simigaau. In the same light, I hoped to gain insight into what villagers understand as “waste” and if there is a fundamental difference between these items and *phoharmailaa*. With these broad strokes, I

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<sup>52</sup> Chizbiz is the Nepali term for material “things”

found that “waste” products and *phoharmailaa* are fundamentally different – in fact when building a necessary vocabulary list prior to departing for Simigaau, I struggled to find a way to communicate the Nepali equivalent for byproducts such as manure, used ashes and human waste. These are certainly not identified as *phoharmailaa*, in fact my attempt to “categorize” them and put a label to this category completely failed. While most components of *phoharmailaa* can almost always be observed as biscuit and *chouchou* wrappers, old plastic bottles and bags stuffed into *dokos* hanging to the side of the doorway, this other kind of waste is less visible and impossible to find in one place. I discovered that my interest in learning the difference between *phoharmailaa* and these other forms of wastes was quite misleading. To people of Simigaau these barely exist in the same realm at all – one is a more or less meaningless result of products that don’t come from their land, aren’t cared for and cultivated by their hands, and don’t nourish their friends and family in the same way that their ancient *aalu* and nearby *jangal’s*<sup>53</sup> *ningru* do. The other “things” I refer to as waste, are in fact not waste at all. In Simigaau, these byproducts are merely alternate forms of materials needed to fuel another sphere of life.

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<sup>53</sup> Jangal is the Nepali term for “jungle”

Figure 13: Assorted plastics in Kathmandu's streets (Rusev, Kiril. After the Festival. Digital image. N.p., 2014. Web.)



### *Research Methods*

I aimed to sustain an unbiased approach and remain mindful that my preconceived notions of waste did not interfere with my conversations and observations during my stay in Simigaau. I used participant observation as a means to gain perspective on waste principles and practices within the communities I interacted with. I lived, carried out and observed the daily work of villagers participating in various forms of labor to better understand how their routine tasks are all connected and dependent upon the byproducts of one another, and how villagers have come to understand and value this reality. A significant part of my research was done alongside my *didi*, shadowing her work cycles in the home and the fields, and asking about certain inputs and outputs of various tasks. I also spent time exploring other kinds of labor with different villagers, such as “*gai hernus*”<sup>54</sup> alongside *aamaas*, observing my *daai*<sup>55</sup> building many

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<sup>54</sup> The task of “*gai hernus*” translates to “watching cows” and it’s a daily chore done by both men and women in Simigaau; cows are taken to graze in the jungle and their caretakers generally spend the afternoon or morning moving them up and down Simigaau’s terraced lands

new homes throughout the course of two weeks, and speaking with a local *jhankri*<sup>56</sup> about local *jaDi buti*<sup>57</sup> – how it is harvested and employed.

Throughout my time in Simigaau I stayed within one larger extended family, sleeping in one home and eating meals as well as spending most social time in my *didi* and *daai*'s *goTh* next door. My *didi* and *daai* have two sons, one studying in Kathmandu and another, four-years old, living with them in Simigaau. My *didi* floats between different worlds of labor, often not knowing exactly where she will be working or what she will be doing until that day. Most evenings I would ask, “*didi bholi tapaa ke ke garnuhunchha?*,”<sup>58</sup> to which the reply was nearly always, “*taahaa chhaina malaai, bholi soddnu parchaa.*”<sup>59</sup> While most days she left the *goTh* after morning *daal bhaat* to work in the *aalu* or wheat fields, some days she stayed at home cooking *raksi*,<sup>60</sup> washing clothes and dishes, or commuting between *tala* fields and her *goTh* portering goat *mal*.<sup>61</sup> There is little space in her days with the additional responsibilities of cooking, cleaning, caring for her young son, and helping her *baa*<sup>62</sup> manage six cows, goats, chickens and a large *khetbarri* in Simigaau's *jangal*. While she speaks of the *jaaDo mahinaas*<sup>63</sup> as much more labor intensive, requiring her to wake up at four in the morning and head into the *jangal* to cut and carry *daauraa*, *Jet*'s<sup>64</sup> mornings don't appear much more relaxed. My *didi* and *daai* take turns venturing into the brush to collect bundles of grass for the goats every morning and evening. Oftentimes my *didi* would join in *mailaa* work before cooking *daal bhaat* and

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<sup>55</sup> Daai is the kinship term for “older brother”

<sup>56</sup> A *jhankri* is a local healer called upon by villagers to chase ghosts and other bad spirits ailing family members and friends from the body

<sup>57</sup> *JaDi buti* is the name for herbal medicine used by the *jhankri* and collected from the local environment – it's distinctly different from what's offered at Simigaau, and other villages', health posts, which is more westernized medication

<sup>58</sup> “*Didi, tomorrow what will you do?*”

<sup>59</sup> “*I don't know! I'll have to ask around tomorrow.*”

<sup>60</sup> *Raski* is another kind of alcohol enjoyed in Simigaau and like *chiyaa* or *chhang* also informs social culture and ritual in the village

<sup>61</sup> *Mal* is the Nepali word for “manure” – before the introduction of *chini mal*, “chemical fertilizer,” “manure” was the only term used to describe the fertilization process of cultivated lands

<sup>62</sup> *Baa* is the kinship term for “father”

<sup>63</sup> *JaaDo mahinaas* can be translated into “the cold months,” or “winter”

<sup>64</sup> *Jet* is a warm month in the Nepali calendar, which falls closely to the end of May or beginning of June

heading off to begin her day's task. Her work, however, is very much a part of her social space, like many women and men in Simigaau. Journeys both *tala* and *maathi*<sup>65</sup> were frequently interrupted by stops into *chimeki*'s<sup>66</sup> homes for a cup of *chiyaa* or *chhang* in the mornings and perhaps a bite of freshly fried Sherpa *roTi*<sup>67</sup> in the afternoons. Additionally, her work was never done alone – even days spent beside a smoky cauldron of materializing *raksi* were interwoven with neighborly visits and conversation.

Figure 14: *Didi* and *daai*'s temporary *goTh*, in the wake of April 2015 earthquake, Simigaau (Moore, Emily. *GoTh*. Digital image. N.p., 2016.)



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<sup>65</sup> Maathi is the Nepali term for “upper,” and is used in opposition to *tala* homes or fields

<sup>66</sup> Chimeki is the Nepali term for “neighbor”

<sup>67</sup> RoTi is a kind of *khaajaa* similar to a plain flatbread served alone or with cooked vegetables – it can also be made sweet by frying dough in rings with oil and sugar

Figure 15: Within *didi* and *daai*'s *goTh*, Simigaau (Moore, Emily. Inside *goTh*. N.p., 2016.)



My *daai*'s routines were slightly more invisible to me. Much of his time was spent *maathi* or *tala* building and repairing homes alongside other village men. Sometimes he would join my *didi* at her *baa*'s home around *khajaa* time, helping in the fields and providing her company while watching the cows. At least three separate times he was needed all day at the site of a *pujaa*, or in one case, a wedding, to lend a hand in preparing a massive *bhoj*<sup>68</sup> of *massu*,<sup>69</sup> *tarkari* and of course, *bhaat*. Though quiet, he was always especially conscious that his guests were comfortable in his home and would typically return to his *goTh* in the early evening to sit quietly with a cup of *chhang* and smile in the shared company of family and friends. While my *didi* spoke to some of his past jobs portering for trekkers and spending a small window of time in Kathmandu during my *didi*'s first pregnancy, she noted his strong preference for Simigaau. Isolated from his cherished community in the village, my *daai* hoped to leave Kathmandu as

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<sup>68</sup> A *bhoj* is an enormous feast that takes place on the occasion of a wedding, religious ceremony, or anniversary of a death; these gatherings begin early in the morning when men come together to cook ungodly amounts of rice, beans and meat while women bring caldrons of *raksi*, *chhang* and *chiyaa* to the site of the *bhoj*. It will last through the night with various meals and *khaajaa* served throughout the day; nearly all villagers will pass by to pay their respects or lend a hand in cooking or serving food, consuming food and drink, as well as music-making and dancing later in the night.

<sup>69</sup> *Massu* is the Nepali term for “meat,” – usually goat and chicken are eaten, though different communities consume different kinds of local meats



quickly as possible, regardless of the extra money he was making, and return home to Simigaau's demanding, but comforting slopes.<sup>70</sup>

At the heart of my research and time spent in Simigaau was eating, breathing and sleeping local traditions, labors and habits. Daily interactions and observations accrued from adopting these life patterns offered me a view of how the people of Simigaau create, perpetuate and understand cycles of waste. Moreover, by working alongside the community, I was able to develop relationships over a shared labor, rather than for the purpose of having my questions answered. In this sense, I believe I became privy to their personal ideas and stories in a way that would have been perhaps otherwise unavailable to me in an "interview" setting. Through organic conversations sprinkled with storytelling, I was able to understand how villagers regard waste, *phoharmailaa* and the role of byproducts in their lives. I found that living with my *didi* and *daai*, working in fields, attending gatherings, and generally engaging in conversation whenever the opportunity presented itself proved to provide the majority of my research.

Prior to traveling to Simigaau and throughout my stay, I supplemented my experience with academic works relating to waste practices and conceptions in Nepal. I believe this better prepared my study and helped guide the kinds of questions I was interested in asking and the kinds of waste patterns I was curious to explore. These works were an array of articles and texts concerned with the historical attitudes towards waste in the Kathmandu Valley and rural regions. Many also centered on the recent influx of plastics and non-renewables in Nepal and the effects this has had on local economies and lifestyles. In addition, a bulk of the works I considered addressed the historical role of human waste as a precious resource and how certain development models have altered, if not eliminated, this kind of mindset amongst Nepalis within and outside of the valley.<sup>71</sup> While these materials shaped my planned research and added to the kind of observations I made in Simigaau, my primary discussion relies on the experiences of women and

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<sup>70</sup> Interview with Phursand Tamang

<sup>71</sup> Tuladhar, Bhushan. *Kathmandu's Garbage: Simple Solutions Going to Waste. Studies in Nepali History and Society Vol. 1 (1996)*. Print.

men in Simigaau. Their routines and conceptions of waste lend a narrative of their own reality absent from academic works.

I quickly found technical interviews and the accompanying tools cumbersome and more or less unhelpful. Instead, I relied upon my own handwritten notes and memory to recall conversations, observations and key principles learned throughout each day. Because I found free-flowing communication was hindered by the presence of a lingering notebook, I preferred to leave it in my room during the days and would return in the evenings to make an account of the events and important dialogues I had gathered. In this way, I could document my impressions of experiences and conversations as close to verbatim as possible.

## CHAPTER 1: *The Place for Phoharmailaa*

It's noon and it's hot; the surrounding *jangal* is dripping with a suffocating humidity, its mossy floor bloated with yesterday's rainfall exuding a warm, damp bubble in which Simigaau's stone-laid path winds beneath the canopy. I'm walking slowly, pausing as I press up upon each flat rock on a very *ukaalo*<sup>72</sup> climb through Simigaau's green spaces. Focusing on my feet, so as not to misstep on these slippery surfaces, I don't see *Dorgieaamaa*<sup>73</sup> picking her way up the path behind me, her movements quick and clearly incredibly well practiced. She soon comes up alongside me and slows to my pace, "*bahini! Kahaa janne?*"<sup>74</sup> I'm amazed to see a full *doko* saddled to her thick, bony head and stopping on an awkward stone I manage, "*maathi.*" She falls in step with me as we chat about approaching *khaaja* time and how many days "*baaki chha*"<sup>75</sup> until I return to the valley. As I'm huffing and puffing under the weight of my Nepali, I wonder about the brimming *doko* on her head and if my deadly pace is prolonging a challenging journey uphill. "*Yo ghaaro chha?*"<sup>76</sup> I ask gesturing to my own head, unburdened by a load. She laughed peering sideways into the basket, "*yo?*"<sup>77</sup> Without stopping she whirled the *doko* around to her front and dipped her hand inside to show me a colorful smattering of *chocolate*<sup>78</sup>, *biscuit*<sup>79</sup> and *chouchou* wrappers. "*Ghaaro chhaina, yo ekdam sagilo chha,*"<sup>80</sup> and without breaking from her step she returned the *doko* to her backside. Pregnant with plastic packaging of the familiar snack brands, the *doko* was obviously light on *Dorgieaamaa*'s head and the ease at which she popped from one muddied stone grove to another demonstrated the reprieve this task had offered from

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<sup>72</sup> Ukaalo is the Nepali term for "uphill"

<sup>73</sup> Dorgie aamaa is an aamaa I met in Simigaau and spent time herding cows with – her name, as per Simigaau's culture, is the name of her first child, Dorgie, followed by her kinship term, aamaa

<sup>74</sup> "Little sister! Where are you going?"

<sup>75</sup> "Bakki chha" can be most easily understood as a quantifier for time – in this case, Dorgieaamaa was referring to the amount of days I had left before departing from Simigaau

<sup>76</sup> "Is that hard?"

<sup>77</sup> "This?!"

<sup>78</sup> Chocolate in the Nepali context doesn't necessarily mean the English sweet, but rather any kind of small sugary treat or candy

<sup>79</sup> Biscuit in the Nepali context is quite similar to English "biscuits"; generally rather bland and tasteless many of the popular brands are produced and packaged in Abu Dhabi and Dubai and travel to remote villages like Simigaau by way of Kathmandu

<sup>80</sup> "It's not hard at all, but very easy!"

the typical heavy loads of harvests, barrels of *chhang*, or house-building materials. Pleased with her “*sagilo*”<sup>81</sup> chore, I pointed to the *doko* once more and asked, “*bitra yo ke ho?*”<sup>82</sup> Surprised by my feigned cluelessness, she looked back to double check that we were looking at the same items in her basket, “*yo? Yo phoharmaillaa. Sabai,*”<sup>83</sup> she hung on to the “*ba*” portion of “*sabai,*”<sup>84</sup> as I found so many in Simigaau to do, and swung her hand around in a little circle, a little hole she seemed to create, made especially for this *phoharmailla*, these plastic packages that didn’t come from Simigaau and didn’t have any reason to stay.

Figure 16: *Dorgieaamaa* herding cows into the jungle for grazing, Simigaau (Moore, Emily. Doorgieaamaa. Digital image. N.p., 2016.)



I followed her a bit farther up the *jangal* pathway. We made our way to what seemed like the corner of the mountain – I looked out on what has become a very *rungichungi*<sup>85</sup> Simigaau with pops of orange, blue and “logo-ed” tarps marking *goThs* that would otherwise remain

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<sup>81</sup> *Sagilo* is the Nepali term for “easy”

<sup>82</sup> “What’s inside?”

<sup>83</sup> “In here? It’s all garbage.”

<sup>84</sup> *Sabai* is the Nepali term for “all” or “everything”

<sup>85</sup> *Rungichungi* is the Nepali term for “multicolored” or simply, “colorful”

relatively camouflaged against the greens and browns of the hillside.<sup>86</sup> As we wound around a huge boulders that had likely tumbled down in last spring's landslides, *Dorgieaamaa* began to slow a bit, looking at the underbelly of large rocks and gradually loosening the *doko* from her head. In a small pit shaded by one of these fallen boulders she effortlessly shook out the contents of the basket. As suspected, candy and cookie wrappers, an empty Nescafe box and, from what I could tell, a few plastic bags – clearly well used – colored the jungle floor. Without hesitation *Dorgieaamaa* drew a lighter from her waist cloth and using some dry foliage as kindling watched the flames lick up the last “high energy biscuit”<sup>87</sup> crumbs. I soon recalled the scent of burning plastic, made all too familiar to me during walks to school along Sirutar Road.<sup>88</sup> A delicate ringing above my eyes always seemed to accompany this smell, my body's sixth sense pleading with me not to take in any more of this toxic air. *Dorgieaamaa* didn't seem to mind, her sinuses accustomed to this chore, and her body, perhaps grateful for an afternoon free of dense barrels, firewood and crops. We watched the *phoharmailaa* turn from blue, yellow and red to brown, black and grey as it shriveled into nothingness. A charred, smoky lump we left the site and headed back down the path for *khaaja* as my attempts to ask *Dorgieaamaa* about this task were met with general disinterest; the deed had been done and she was now thinking about joining her *chimekis* for Simigaau's own *aalu* and *korsaani*.<sup>89</sup>

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<sup>86</sup> As a result of last spring's earthquake many Simigaau families have lost their homes, resorting to temporary structures constructed with bamboo fencing, locally harvested wooden beams, as well as orange, blue and white printed tarps donated by Pitzer College in Nepal, and a UAE-based donation fund, amongst others; in effect, a mountainside that used to appear relatively monochrome from the jungle above has become splattered with blocks of color

<sup>87</sup> International earthquake “relief” efforts often materialized in the form of biscuits air dropped into Simigaau last April; many families still harbor boxes of nutritionally deplete oblong biscuit packages claiming “high energy” content beside the UAE or USA national emblem

<sup>88</sup> Sirutar Road is the main road that runs from Ring Road – connecting Kathmandu and Bhaktapur municipalities – to a cluster of small “suburbs” on the outset of central Kathmandu; one of these neighborhoods, Sirutar, is where I spent the majority of my time on the Pitzer in Nepal program living with a joint, Hindu family. My walks to the program house followed along this road, with the exposure to burning plastics and engine fume dictating most of the experience.

<sup>89</sup> Korsaani is the Nepali term for “chili pepper”

Figure 17: Simigaau hillside as seen from the jungle (Moore, Emily. Simigaau hillside. Digital image. N.p., 2016.)



## CHAPTER 2: *Crafting New Economies*

By ten o'clock my *didi* and *daai*'s home had started to heat up; clear morning skies combined with the *aago*,<sup>90</sup> hard at work beneath a chattering pressure cooker and sizzling skillet of *saag*<sup>91</sup>, had my *didi* repeating “*paisinaa aayo*”<sup>92</sup> with a spatula shoving *tarkari* around in one hand and a handful of sliced *piaj*<sup>93</sup> in the other. I was often encouraged to “*basnus*”<sup>94</sup> on a *chakati*<sup>95</sup> just outside the doorway or atop the large rock marking our home from even the highest points in the jungle. Thick and firm, I found them a remarkably comfortable way to spend many hours, cross-legged *topnus*-ing *chiyaa* or *chhang* in *goThs* around Simigaau. One especially hot morning, as the smoke spiraled from its clay pit, graying the air, I was tossed a *chakati* and urged to find some relief from the “*piro*”<sup>96</sup> air inside. I easily plopped down on what my *didi* jokingly called “*thulo roTi*”<sup>97</sup> and wondered whose hands were responsible for my soft seat. “*Didi, tapaai yo chataki baanaunu bhayo?*”<sup>98</sup> Her face still pruning from the smoke, she shook her head, “*banaaune aaudaina.*”<sup>99</sup> Brushing my hand against its tight weave I asked, “*chakati bannaune chizbiz kahaa baaTa linu bhayo?*”<sup>100</sup> After yelling at my *bhaai* for sneakily snatching another sugar candy brought up from a neighbor's recent trip to Cherikot,<sup>101</sup> she answered, “*macai baaTa.*”<sup>102</sup> I ran my hand along the flattened stalks and imagined my *didi*

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<sup>90</sup> Aago is the Nepali term for “fire” and the context of this study refers to the small fires built within the home to provide both heat and a mechanism for cooking food and drink

<sup>91</sup> Saag is a common form of *tarkari* in Nepali meals; it's any variety of cooked green typically collected from a nearby family vegetable plot or perhaps the community's local forest

<sup>92</sup> “I'm sweating,” or “sweat has come”

<sup>93</sup> *Piaj* is the Nepali term for “onion”

<sup>94</sup> *Basnus* means “to sit” and is often the very first thing asked of a guest when they enter a home

<sup>95</sup> A *chakati* is a handwoven circular mat made from harvest corn or wheat stalks; families often have several *chakatis* they can offer for guests to sit on when they visit throughout the day

<sup>96</sup> *Piro* is the Nepali term for “spicy,” and while it often refers to a taste, it's also used to describe the burning sensation of the eyes when staying inside smoky homes with little ventilation

<sup>97</sup> “*Big roTi*,” jokingly equating the soft, squishy mats with freshly baked, doughy *roTi*

<sup>98</sup> “*Didi, did you make this chakati yourself?*”

<sup>99</sup> “I don't know how.”

<sup>100</sup> “Where do you get the materials to make *chakatis* from?”

<sup>101</sup> Oftentimes when villagers travel to other villages, Cherikot being one relatively closeby, it's expected that they return home with a little chocolate, or small candies for the little kids living with or near them

<sup>102</sup> “From corn.”

wielding her tools along the *mailaa* harvesting *macai*<sup>103</sup> in some months to come. “*Aarko manchee yo chakati banaaunu bhayo?*”<sup>104</sup> I probed, increasingly interested in my *chakati* that was to my *didi* nothing more than a household staple. “*Kunai kunai manchee tara ajaabholi kinna sakchaa.*”<sup>105</sup> She silenced the pressure cooker by jamming her ladle beneath the piping pin on the lid. “*Tara yo chakati,*” and slightly jutting her chin in my direction I realized she was referring to me, “*mero aamaale banaaunu bhayo.*”<sup>106</sup> My *didi* spun around on her stool to point at the other *chakati* situated by the foot of the bed, “*yo pani. Sabai chakati ra doko mero aamaale dinu bhayo.*”<sup>107</sup> Looked around the room for other items that seemed to have born beyond the *pasals* in Cherkot or Kathmandu. Glancing up I caught sight of the *chitras*<sup>108</sup> sheltering the space from sun, rain and wind, “*ani yo? Banaaunu parchha ki kinnu parchha?*”<sup>109</sup> My *didi* followed my eyes to the *chitras* above and simultaneously ran her hand along the wall, also compiled of *chitras*. “*Pahilo manchee banaayo tara ahile kinna sakchaa.*”<sup>110</sup> Made from *nigaalo*<sup>111</sup> rather than *macai*, I learned that these too had a history of local craftsmanship from materials found nearby, free of cost, and often the remains of a harvest. My *didi* carried on to tell me that many of these products, *chitras*, *chakatis*, *dokos*, *naaglos*<sup>112</sup>, etc. were handed down as an *aamaa*’s *chorri* or *chorra*<sup>113</sup> starts their own family. However, for those who don’t receive these critical items from family or friends, they must purchase them from anywhere from six to

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<sup>103</sup> Macai is the Nepali term for “corn”

<sup>104</sup> “Do other people know how to build these chakatis?”

<sup>105</sup> “Some people make them, but these days you can easily buy them.”

<sup>106</sup> “But my mother made this chakati.”

<sup>107</sup> “And this one too, actually all of these chakatis and dokos were made by my mother and then given to me.”

<sup>108</sup> A chitra is a kind of fence woven with thin strips of bamboo collected locally; traditionally they are crafted by villagers as a way to corral livestock or build makeshift shelters, goThs, for goats and chickens; today they are also used to provide temporary shelters for families affected by the earthquake

<sup>109</sup> “And this? Do you make it or buy it?”

<sup>110</sup> “People always used to make them, but these days you can buy these, too.”

<sup>111</sup> Nigaalo is small pieces of bamboo found in Simigaau’s jungle and used to weave a variety of household items like chitras, dokos, small baskets, etc.

<sup>112</sup> Naaglos are wide, flat trays used to dry harvested crops, certain vegetables and seed rice

<sup>113</sup> Chorri is the kinship term for “daughter” and chorra is the kinship term for “son”



nine hundred rupees.<sup>114</sup> My *did*i explained that fewer people, herself included, are learning how to weave Simigaau's wheat, corn and bamboo stalks and now must rely on outside markets to decorate their homes with crafts that originated and facilitated life in Simigaau.

Figure 18: *Chakati* and stool with a locally made *chitra* in the backdrop, Simigaau (Moore, Emily. Chakati. Digital image. N.p., 2016.)



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<sup>114</sup> As a point of reference, to purchase an entire week's worth of vegetables for a large family working in the fields from sun up to down would cost about two hundred to three hundred Nepali rupees

Figure 19: *Chitra* used as a fence, Simigaau (Moore, Emily. Electricity house. Chitra. N.p., 2016.)



Figure 20: *Chitra* used to shelter and corral livestock, Simigaau (Moore, Emily. Chitra. Digital image. N.p., 2016.)



In a natural pause in our conversation, *Tembe's*<sup>115</sup> voice filtered in through the twinkling gaps in the *chitra's* weave. He had just returned from a week in Cherikot where he had been attending to logistics regarding “*bideshko kaam.*”<sup>116</sup> Scooping out handfuls of *chocolate* for my *bhaai*, he called out to my *didi* in Tamang and she gave a throaty laugh, demanding he come receive the cup of *raksi* she had already poured. While *Tembe* sipped on my *didi's* freshly cooked *raski*, I continued to ask her about the exodus of skills mastered in Simigaau to bazaars like the one *Tembe* had just returned from, laden with other goods unavailable in the village, but, unlike the *chitras* and *chakatis*, with foreign factory origins rather than Dolka's terraced hillside. I found that it was a simple case of supply and demand; with so many villagers leaving for work in other countries, there were fewer families needing *chitras* to corral large numbers of goats and cows. Moreover, she noted that there were just fewer people in Simigaau; with most families sending their children to Jaggat<sup>117</sup> or Kathmandu for schooling and others seeking employment in Malaysia, Dubai, or Qatar – to name a few – my *didi* found little need for a heaping stack of *chakatis* or *dokos* as there are fewer bodies to *basnus* and *boknus*<sup>118</sup> these days. She noted that the weaving process was difficult and required a lot of time, if someone really needed another *chitra*, *chakati*, *doko* or other handmade good, they could find them in some other market, though it would be considerably expensive.

With these items coming from *aamaas* or outside markets, I wondered what happened to the barren stalks, messily toppling on one another with their fruits gone. My *didi* shrugged, but drawing the unoccupied *chakati* towards her gently rubbed her forefinger on its strong center weave, “*mero aamaako*”<sup>119</sup> she reminded me, lounging in the warm remembrance of her mother,

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<sup>115</sup> Tembe is a Sherpa man living next door to my *didi* and *daai's* goTh; he is the brother of my *didi's* sister's husband and oftentimes joins my *didi* and her family for meals

<sup>116</sup> “Bideshiko kaam” refers to work abroad in foreign countries; many of men in Simigaau look for contracts to work in countries such as the UAE, Malaysia, Iraq, Qatar, India and Japan

<sup>117</sup> Jaggat is another hill village a day's walk away; many Simigaau youth board there for higher quality education

<sup>118</sup> Boknus means “to carry” and refers to the heavy loads portered up and down the hillside, daily

<sup>119</sup> “My mother's”

clearly resurrected through the dip in the middle of *chakati*, worn down by many moments I could see fluttering through her memory.

Figure 21: Typical market stand in Kathmandu (Gordon, Paul. Vendor selling household goods near Durbar Square. Digital image. N.p., 2011.)



### CHAPTER 3: *Fecal Functionality*

By my second week in Simigaau I had joined my *didi*, *daai*, *baa* and numerous other *chimekis* in all sorts of tasks, finding that regardless of the labor, nearly all these activities were interrelated. Taking cows to pasture provided *mal* for yummy *aalu*, cooked by a fire built by local people (with *mal* and “*khetko mato*”)<sup>120</sup> with firewood from the jungle carried in *dokos* woven with *nigaalo*. Cooking *chhang* produced feed for animals, ashes for *jaDi buti*, a vehicle for local trade opportunities, not to mention sustenance for long, laborious days and a means for community gathering and socializing. Harvesting wheat generates a critical food staple, but also creates material for the production of handicrafts (like *chakatis*), feed for cows, and another opportunity for trade. These examples indicate the way all spheres of life depend on one another’s byproducts to sustain cycles critical to physical and cultural survival in Simigaau.

Figure 22: Women harvesting wheat, Simigaau (Moore, Emily. Wheat. Digital image. N.p., 2016.)



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<sup>120</sup> Khetko mal describes manure fertilizer produced and collected exclusively for the fields

Figure 23: Harvested *macai* drying in mid afternoon sun, Simigaau (Moore, Emily. Macai. Digital image. N.p., 2016.)



Figure 24: *Chhang* cooking in a family's *goTh*, Simigaau (Moore, Emily. Chhang. Digital image. N.p., 2016.)



As I caught a glimpse into these tasks and many more, I became curious if the “wastes” involved actually included fecal waste at all. The inquiries I had made about “*mancheeko desa pisa*”<sup>121</sup> fell relatively flat, with most responses indicating a general lack of knowledge. Though my *didi* and group of around ten other villagers spent an entire day traveling down to Chetchet and back to porter new “*toiletko chizbiz*,”<sup>122</sup> when I asked more specifically about where human waste goes she waved limply towards other *daadaas*, “*aarko taau jaane*.”<sup>123</sup> While I resorted to relieving myself in the jungle on many days at my *baa*’s home or during afternoons working *maathi*, most of Simigaau’s homes and *goThs* now have toilets. Though “*pahilo pahilo manchee*”<sup>124</sup> went to the bathroom in the jungle, as well as intentionally on potato fields for fertilizing purposes, toilets, while expensive and heavy to carry up to the village, are commonly used among people in Simigaau. While my *didi* had explicit answers as to where human *desa*<sup>125</sup> and *pisa*<sup>126</sup> went prior to outhouses, the arrival of toilets has exported an understanding and usage of fecal matter to some nameless “*aarko taau*.”<sup>127</sup>

Figure 25: Typical contemporary toilet, Simigaau (Moore, Emily. Electricity house. Toilet. N.p., 2016.)



<sup>121</sup> Human feces and urine

<sup>122</sup> Toilet materials

<sup>123</sup> “They go to another place”

<sup>124</sup> “People long ago”

<sup>125</sup> *Desa* is the Nepali term for “human feces” or “poop”

<sup>126</sup> *Pisa* is the Nepali term for “human urine” or “pee”

<sup>127</sup> “Another place”

Though human wastes cease to have a purpose in Simigaau’s product cycles, other animal wastes play a central role. I awoke one morning to my *didi* crouched in the space usually filled with white, brown and black speckled goats munching on fresh grass hanging, like a piñata, from their *chitra*-bound *goTh*. I ducked out into bright, early light managing to avoid, for once, knocking my head against a thick, threatening bamboo beam stretching over the doorway. *Chitra* clumsily folded on the ground, the only sign of goats were moist hoof prints stamped into the chocolatey soil. I watched my *didi* slip under the *doko* strap and use the adjacent stone wall to stand, torso pitched slightly forward under the weight of, what to me, looked like a giant heap of dirt. She caught sight of me and called out, “*bahini! Jam!*”<sup>128</sup> Breaking into a calculated trot, she headed someplace *tala* with me attempting to keep up behind her. What I assumed to be dirt in her *doko* crumbled perfectly, like the insides of a warm, fluffy brownie, rich and wet in color. “*Didi...yo...yo ke ho?*”<sup>129</sup> I asked tentatively, unsure if I was asking an absurdly obvious question. “*Mal. Bakraako mal.*”<sup>130</sup> The image of a fresh baked brownie my sweet tooth craved quickly vanished as I reevaluated the enormous basket of *shit* bobbing to the beat of my *didi*’s hastened steps.

The day was spent filling *dokos* with *mal*, discovered had been carefully curated over the span of several weeks, dumping them on a series of *tala aalu* fields and repeating the process with, of course, many visits along the way. When I asked about the presence of *chinimal*<sup>131</sup> in Simigaau, my *didi*’s face wrinkled up and she quickly shook her head, dismissing the foreign product. “*Simigaaumaa chinimal prayog garnu pardaina,*”<sup>132</sup> she dumped another bin full of *mal* in the *doko* and paused, dusting her hands on her pant legs and scanning the terraced stairway climbing up a distant *daadaa*. “*Kathmandumaa chinimal chha. Kathmanduko tarkari namiTho*

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<sup>128</sup> “Little sister! Let’s go!”

<sup>129</sup> “Didi, what is this?!”

<sup>130</sup> “Manure, goat’s manure.”

<sup>131</sup> Chinimal is chemical fertilizer new to Nepal in comparison to its ancient practice of livestock manure as the primary fertilizing mechanism

<sup>132</sup> “In Simigaau chemical fertilizer isn’t necessary.”



*chha*,<sup>133</sup>” she smiled launching into a *gaau* versus *sahar*<sup>134</sup> comparison game, one of her favorite pastimes. “*Kathmanduko aalu bandaa Simigaauko aalu miTho chha kinabhane gaauko mal ekdam raamro chha.*”<sup>135</sup> As she piled the precious manure high, my *didi* spoke of the differences between the *gaau* and *sahar khets* noting the way *chinimal* changed the tastes of *tarkari* made familiar to her by the cows and goats she grew up with. In addition, Simigaau’s “*raamro batabaran*”<sup>136</sup> eliminated the need to combat insects and mitigate other pollution-induced issues with chemical fertilizers, as many in the Kathmandu Valley have been forced to use. While Nepal’s drought has affected crop yields regardless of region, my *didi* concernedly noted that while Simigaau’s laundry, dish and bathing wastewater is never thrown near the fields, dry wells and vanishing access to water resources has required families in Kathmandu to water their produce with used water introducing chemical soaps and cleaners into the soil. At the heart of Simigaau’s unbeatable vegetables, however, is the partnership between livestock and crop cultivation. All but one of my, “*tapaaiko gailaai dudh dinchha?*”<sup>137</sup> My inquires were met with an unaffected, “*dudh dindina.*”<sup>138</sup> Though milk is processed, shared and happily consumed in Simigaau, the primary purpose of cows and goats is field fertilization. Unlike traditional Hindu practices, cows are eaten from time to time, and goats are killed for the occasional *puja* or *bhoj*, however livestock is raised on the premise of *mal* production.

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<sup>133</sup> “In Kathmandu they have to use chemical fertilizer. Kathmandu’s vegetables don’t taste good.”

<sup>134</sup> Gaau is the Nepali term for “village,” sahar is the Nepali term for “city”

<sup>135</sup> “Simigaau’s potatoes are much better than Kathmandu’s potatoes because our way of fertilizing is better.”

<sup>136</sup> “Healthy environment”

<sup>137</sup> “Does your cow give milk?”

<sup>138</sup> “Our cows don’t produce milk.”

Figure 26: Roadside field, Kathmandu (Moore, Emily. Khet. Digital image. N.p., 2016.)



Figure 27: Wheat field, Simigaau (Moore, Emily. Simigaau wheat. Digital image. N.p., 2016.)



By the time we returned from our third round of *mal* portering, the sun was beginning to sink into the jungle, villagers appearing on the crest of paths winding between high and low fields as they headed home from their day's work. While I immediately retired to the rock by the *goTh*, exhausted by many *ukaalo* and *oraalo*<sup>139</sup> hours, my *didi* wasted no time heading into the jungle to cut grass for the goats before the sun set. In the background I could hear their delicate bleating and recalled the events of my *didi*'s goat-centric day. Like many villagers in Simigaau, caring for goats, cows and chickens occupies a considerable amount time and informs the content of their social spaces. I walked over to our hungry, whining goats and observed the unseeingly strong *chitra* keeping them from munching on the *saag* on the *khet* nearby – and, as I had now learned, restricting their *desa* to a single, easily collectible spot. In a few moments I would see my *didi* drumming along the jungle path, a small green forest monster from a distance, with fresh grass for not only the goat's feed, but hers, too. Leaning against the *chitra*, watching for my *didi* and listening to the *baakra*<sup>140</sup> bleats on the other side of the fence, I marveled at how many aspects of Simigaau family's life would change with the presence of *chinimal*. Despite the indisputable hard labors of the day, my *didi*'s *gaauko mal*<sup>141</sup> was a source of pride; it was responsible for feeding her family and friends, generating wholesome crops available for trade, necessitating the raising of livestock that, in turn, call for items like *chitras* and *dokos* to be crafted. Not to mention her animals, and both the direct and indirect wastes they produce, dictate her work and social habits, defining cultural patterns in Simigaau.

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<sup>139</sup> Oraalo is the Nepali term for “downhill”

<sup>140</sup> Baakra is the Nepali term for “goat”

<sup>141</sup> Gaauko mal has become the equivalent of “organic” or “local” fertilizer as the introduction of chemical fertilizers, *chinimal*, in parts of Nepal have necessitated a distinction between “village fertilizer” and “chemical fertilizer”

Figure 28: Goats, Simigaau (Moore, Emily. Goats. Digital image. N.p., 2016.)



#### CHAPTER 4: *Social implications of changing waste patterns*

The first response to my curiosities hinting at waste practices in Simigaau was a comparison between *gaau* and *sahar*, Simigaau and Kathmandu. “*Kathmandumaa dherai phohar chha. Simigaauko batabaran ekdam raamro, hoina?*”<sup>142</sup> Regardless of what question I asked, or whom I asked it of, I was always interrupted by a burgeoning desire to boast about Simigaau’s clear rivers and skies, *baaTos*<sup>143</sup> with the very rare biscuit wrapper sighting and overwhelming appreciation for the local environment as a revered aspect of an otherwise demanding life in Simigaau. I quickly discovered this pattern and searched for a way around using the term *phoharmailaa* to discuss “waste” at large. As previously mentioned, I had discovered that a Nepali term for these other kinds of unneeded “things,” not necessarily items I could call “trash,” was unavailable to me before I departed for Simigaau. As a result, I resorted to labeling these sorts of materials “*nachaihine chizbiz*,”<sup>144</sup> however this too failed at conveying the “waste” concept I hoped to learn about. “*Tapaailaai nachaihine chizbiz ke garnuhunchha?*”<sup>145</sup> I would ask, to which I would watch faces fall slightly, hands bury themselves a bit deeper in their work as my *didi*, *chimeki* or *baa* meditated on this strange question. “*Nachaihine chizbiz?*” They’d repeat, and I’d observe them puzzling together the Nepali term they thought I was reaching for, “*eyy phoharmailaa?*”<sup>146</sup> they would ask, rather definitively. It became clear, after several conversations had arrived at this junction, that in Simigaau the items I conceive of as “waste” are not wasted, they aren’t “*nachaihine chizbiz*” and my conflation of these items and *phoharmailaa* denoted the imposition of my own values of waste on people in Simigaau.

I learned, almost immediately, that “*nachaihine chizbiz*” are *phoharmailaa*, *phoharmailaa* is garbage, and garbage is the only thing that can be likened to the Western understanding of “waste.” In other words, *phoharmailaa* is “wasted,” disposed of, useless for

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<sup>142</sup> “Kathmandu is so dirty! There is so much garbage! Simigaau is very clean, isn’t it?”

<sup>143</sup> BaaTo is the Nepali term for “road”

<sup>144</sup> “Unneeded things”

<sup>145</sup> “What do you do with things you don’t need?”

<sup>146</sup> “Unneeded things? Oh, you mean garbage!”

any significant future purposes, and it stands alone in this category. This realization is perhaps underwhelming oversimplified by a direct translation of “*phoharmailaa*” to the English term “garbage.” Western societies, too, produce trash that is burned, buried or shipped off to other countries – mostly developing countries, like Nepal, ironically.<sup>147</sup> In nearly every context, “garbage,” “trash,” “unneeded things,” these are understood as waste and are relieved of their life cycle, or rather prohibited from having one. The mere fact that Simigaau also participates in generating garbage, *phoharmaillaa*, is meaningless without an understanding of what exactly *phoharmaillaa* is, and how it got to Simigaau.

Bhushan Tuladhar’s *The Search for Kathmandu’s New Landfill*<sup>148</sup> chronicles the recent challenges adapting to an overwhelming increase in non-renewable waste relatively new to Nepal. Rapidly urbanizing spaces, like Kathmandu, and even rural regions barely grazed by the hands of development, are experiencing changes in waste management. In the past, as observed in Simigaau, not many non-renewable goods were produced. What was generated would be eventually recycled, as per the cultural mindset that “wastes” – separate from *phoharmailaa* – were valuable. So valuable in fact, that around fifty years ago human waste was actually sold for approximately fifty rupees a tin. In urban hubs, namely Bhaktapur, most households shared *sagaas* to manage their waste.<sup>149</sup> In Simigaau and most other Sherpa communities, villagers purposefully defecated and urinated on their fields as the nitrogen in urine and other elements found in fecal matter serve as valuable fertilizer. These practices demonstrate that literal human waste – and waste in a greater sense – had an economic and cultural value. In addition, recycling waste was an inherent part life and understood as a personal responsibility.<sup>150</sup>

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<sup>147</sup> Chitrakar, Anil. *Pitzer College Lecture: Conservation and National Resource Management*. 24 February, 2016.

<sup>148</sup> Tuladhar, Bhushan. *Kathmandu’s Garbage: Simple Solutions Going to Waste*

<sup>149</sup> Tuladhar, Bhushan. *Pitzer College Lecture: Urban Environmental Issues*. 29 February, 2016.

<sup>150</sup> Tuladhar, Bhushan. “User Survey Indicates Success of ‘Saaga’ Home Compost Bins.” *Environmental Public Health Organization Magazine*, 2004. Print.

Figure 29: Non-renewables flooding Bagmati River, Kathmandu (Lisa. Bagmati River in Kathmandu Nepal. Digital image. N.p., 2006.)



As discussed in the brief introduction to solid waste management in the Kathmandu valley, the increase in non-renewables in Nepal is a result of a development discourse rooted in Western consumerism and materialism, as well as a result of the physical exportation of garbage by the Global North to developing countries.<sup>151</sup> Combined, these realities have caused a “crap crisis” of sorts, in a country with a history of “recycling” as a part of cultural tradition rather than a chore or solution to a problem. Landfills, like the Okharpauwa site touched on previously, are not the answer to municipal waste management in Nepal.<sup>152</sup> Aside from their technical, environmental and economic unsuitability, they misrepresent a fundamental cultural aspect found certainly in Simigaau, and seemingly in communities within the Valley as well. The

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<sup>151</sup> Chitrakar, Anil. *Pitzer College Lecture: Conservation and National Resource Management*

<sup>152</sup> Tuladhar’s response to the Nepali government’s proposition to construct a new landfill at the Okharpauwa location demonstrates a move towards accepting a system where items are purchased with a definitive lifespan, one that ends in a landfill, rather than the traditional conception of “waste,” which pivoted on resource management and economization of byproducts

*phoharmailaa* problem littering the valley and finding its way to even Nepal's highest elevations is an entirely new one; it cannot be compared to the "wastes" previously produced before the insurgence of plastics and other imported, non-renewable goods as the waste originally generated was not made for landfills at all. It was, rather, a commodity, a shared responsibility to properly manage and repurpose, and an indicator of cultural values and way of life.



## CONCLUSION

As I've hoped to illustrate, people in Simigaau depend upon cycles of "waste," byproducts of overlapping labors for survival in Nepal's unforgiving Eastern hills and to sustain lifestyles and cultural comforts responsible for cultivating both crops and community. Carefully balanced inputs and outputs of the villages web of work patterns dictates economic and social spheres; and while the physical and conceptual introduction of *phoharmailaa* has meant a creation of some new economic opportunities – like the operation of a trekking lodge and *pasal* – it also changes the kinds of "wastes" produced and the value attached to products. While I have argued that *phoharmailaa* and "other wastes" – or byproducts – are intrinsically different, the ability for packaged goods that soon become *phoharmailaa* to replace the need for traditional byproducts and the practices attached to them threatens an entire way of life in Simigaau.

Simigaau, Kathmandu and Nepal, at large, have the right to benefit from economic and industrial development as the Global North has. The rhetoric of development in many of these regions, however, hinges on a newly conceived understanding of "waste," adopted from countries in the West, that forgoes value attached to goods produced and consumed, whether that a household staple or human excrement. Without the proper managerial and infrastructural support to process these items, soon considered *phoharmailaa*, Nepal struggles in the domain of environmental and public health. The national mindset forming around these goods as signs of social and economic progress is an attack on communities, like Simigaau, whose communities, economies and histories are affirmed by the byproducts they create and continually reinvent. My research demonstrates that non-renewables flowing into Kathmandu, and those beginning to appear on Simigaau's hillside, have the capacity to entirely replace traditional items, labors and economies. The replacement of culturally significant byproducts by foreign-made goods, ones that are quickly regarded as *phoharmailaa*, risks an erasure of both cultural and physical ecosystems in Simigaau and calls to question the relevancy of a longstanding societal value, waste. The danger of replacement is of particular concern given that in the time I spent in Simigaau I easily found that local environment and fruits of villagers' many labors are an

important source of pride, at the root of their traditional knowledge, and the foundation of Simigaau's vibrant community.

Figure 30: Entrance to Annapurna Base Camp village, a major trekking route for tourists travelling to Nepal (Moore, Emily. Trekking. Digital image. N.p., 2016.)



Figure 31: Simigaau's first and only *pasal* and tea house built primarily for Western trekkers on their climb to Everest base camp (Moore, Emily. Trekking lodge. Digital image. N.p., 2016.)



As this thesis exhibits, Simigaau’s work, habits, social and physical environment, and values reinforce and rely on one another. I found that at the core of this interwoven relationships are the tangible “wastes” produced by the fields and the forests, at the “table” and after visiting the *pasal*, by both livestock corralled by *chitras* and the people of Simigaau themselves in the more modern toilets, the jungle or on the *aalu khet*. As facilitators of life cycles and styles in Simigaau, products and byproducts tell a story about cultural values, how they are changing and how they have survived.

Figure 32: Tamang woman stringing *mala*, a flower chain made for farewell ceremonies from sacred Marigold and Rhododendron petals found in most middle hill villages throughout Nepal



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