



**animalNEPAL.org**

**RESEARCH INTO  
WORKING HORSES  
AND MULES USED  
TO PULL TANGA AND  
BUGGY**

SUPPORTED BY



**RESEARCH INTO WORKING HORSES AND MULES USED TO PULL TANGA AND BUGGY**  
**A FIELD STUDY CONDUCTED IN SOUTHERN PLAINS OF NEPAL**

Supported by

**THE WORLD HORSE WELFARE**



**WorldHorseWelfare**



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## Table of Contents

# TABLE OF CONTENTS

1. Executive Summary.....	4
2. Background and Introduction.....	6
2.1. Animal Nepal's Profile.....	6
2.2. Research Background.....	8
2.3. Introduction.....	8
2.4. Methodology.....	9
2.5. Limitation.....	9
3. Political Context of Nepal.....	10
3.2. Disputes/ Demonstrations.....	10
3.3. Support to Low Income Households.....	10
4. Key Stakeholders in the Development Sector of Nepal.....	11
4.1. Government (Management and Allocation of Funds).....	11
4.2. Civil Society (NGOs – Human Development and Animal Welfare).....	11
4.3. Donors.....	11
5. Tanga Horse Owner Profile.....	12
6. Socio-Economic Context in Focus Regions.....	14
7. Tanga Horse Profile.....	16
8. Service Provision (Veterinarians, Farriers, Harness-Makers, Cart-Builders).....	24
8.1. Availability & Willingness of Owners to Use/ Pay For These Services.....	24
8.2. Affordability.....	25
9. Community Profile.....	26
9.1. Local Industries.....	26
9.2. Local Community Groups.....	28
10. Solutions to Improve the Welfare of Tanga Horses and the Well-Being of Their Owners.....	29
10.1. Outline of Each Potential Solution.....	29
10.2. Swot Analysis of Each Solution .....	29
11. Assessment of Potential Risks to a Working Equine Welfare Programme in Nepal.....	31
12. Conclusions.....	32
13. Recommendations.....	33
14. Appendices.....	34

## Executive Summary



# EXECUTIVE SUMMARY

Animal Nepal conducted a survey on horses and mules used in pulling Tanga and Buggy in 2 district of southern plains of Nepal .i.e. Nepalgunj and Birgunj. The survey was conducted on May 2016.

A total of 231 equine owners were interviewed during the survey. The objective of the research was to identify current welfare condition of horses and mules used to pull Tanga and Buggy, to identify economic situation of equine owner and to find out the willingness of the owners to replace equines with electric vehicle.

Only 19 % of respondents were from Nepalgunj and remaining 81 % of them were from Birgunj since the majority of equine owners from Nepalgunj had travelled to other district to work in the brick kilns since it was brick production season in Nepal whereas, temporary migration of equine owners of Birgunj was drastically lower than that of Nepalgunj.

The research is based on descriptive method and the respondents were selected from a random sampling method. The data was collected through interviewing each respondents. Most of the owners were between 26-40 years old (34%) where all the respondents are male.

Among the surveyed equines 70 % of them are ponies, 13 % are local breed horses and other 9 % are a mixture of mules, Marwari and Rashi breed horses. 75% of the horse were between the age ranges of 7-12 years old and the average height of horses and

mules used to pull Tanga and Buggy was 4.5 feet. Among the owned equines about 1/3 of them has some kind of wounds or illness. The survey also shows others minor problems in equines like colic, lameness, leg injuries, skin problems and osteoarthritis. In 33% of horse the wound was caused by halter bridle (10%), girth (1%) and saddle (28%). Besides the case of wound, few of them also suffered from dehydration, diarrhea and eye infection problem. 81% of respondents said they clean the hoof of their equines regularly. Similarly about 12 % of them only cleaned once in a week and remaining 7 % owners never cleaned hooves of their equines. 19% of lameness issues and 3% of parasite infection were recorded. 99% of the owners fed their animals a mixed food and only 1% of them provide their animals with forage and concentrated feeds. 88% of the owners have provided shed for their animals while 10% let the animals stay under an open sky.



High number of respondent were the sole earner of their family. About two third of the respondent's families were totally dependent on a single person for their livelihood. While the earning from Tanga and Buggy business is only Rs.680 on average per day which makes an average annual income of the respondents to be Rs. 212160. But the area of expenses is quite large compared to what they earn i.e.Rs.185200. Their income are limited to buying daily food, clothing, providing health and medication to family and school education for their children. Because of their poor financial condition 3% of equine owner are unable to send their children to school.

Hence, the work satisfaction and socio economic condition of

equine owners is quite low in Tanga and Buggy business and 81% of owners believe that their business is directly being hampered by other transportation alternatives like auto rickshaw, e- rickshaw or tempo. 86% of owners are even ready to switch their business and 62% of them would go for alternatives like auto rickshaw or e rickshaw if provided with some kind of financial support. 97% of them are even willing to take a loan and pay interest on daily basis.

On an average the equines are made to work 7 days a week. And survey also shows that average working hours per day was 6 hours. The longest working hour of the animals is up to 12 hours a day and depending on the trip, sometime equines were being used for a full day. The respondents also feel that the Tanga and Buggy

business is not as dignified as those of auto and e- rickshaws which has posed a great treat to their job. To raise their financial condition they would easily choose an alternative business if provided enough support. This will not only improve their economic status but will also end the suffering of working animals of Nepal.

# BACKGROUND AND INTRODUCTION

## ANIMAL NEPAL'S PROFILE

Shocked to see the conditions of thousands of donkeys, mules and horses working in the brick factories of Kathmandu Valley, AN launched a Working Equine Outreach Programme in 2009. Since then, with the support of The Donkey Sanctuary UK, AN has been working in over fifteen brick factories in Lalitpur, where it organises regular health camps and educates the owners, handlers and factory owners on equine welfare. In addition to equine welfare education training, AN also provides skill based training and programmes for the equine owners and their families to enhance their economic situation (for example micro-credit programme for wives of equine owners and farrier training for equine owners); this was possible by extending AN's outreach programme to Nepalgunj, Nepal's main equine bazaar.

Animal Nepal (AN) is an NGO based in Lalitpur District, Kathmandu Valley, ran by an enthusiastic board and a team of animal welfare campaigners and educators. AN was established as a non-profit company in 2004 and was registered as an NGO in 2009. AN was founded by Pramada Shah and Lucia de Vries with the support of an animal loving board. In 2009, AN launched a Community Based Stray Dog Rescue & Release Programme called Kathmandu Rescue Programme. The programme was developed with an objective of creating a healthy, reduced stray dog population in Kathmandu Valley through Animal Birth Control (ABC), community based education and rehabilitation care.

Shocked to see the conditions of thousands of donkeys, mules and horses working in the brick factories of Kathmandu Valley, AN also launched a Working Equine

Outreach Programme in 2009. Since then, with the support of The Donkey Sanctuary UK, AN has been working in over fifteen brick factories in Lalitpur, where it organises regular health camps and educates the owners, handlers and factory owners on equine welfare. In addition to equine welfare education training, AN also provides skill based training and programmes for the equine owners and their families to enhance their economic situation (for example micro-credit programme for wives of equine owners and farrier training for equine owners); this was possible by extending AN's outreach programme to Nepalgunj, Nepal's main equine bazaar.

In 2013 AN conducted a research on captive elephants of Sauraha, Chitwan. Recognising the poor welfare conditions of the working elephant AN has continuously lobbied with stakeholders, including Elephant co-operatives,

Hotel entrepreneurs and Warden of Chitwan National Park, to stop inhumane elephant safari (which includes inhumane training and shelters with chains). Collaborating with Elephant Aid International, AN has supported to build chain free corrals for elephants in one of the popular Sauraha resort. In addition, to the community based and outreach programmes AN also runs a Mobile Treatment Programme in Lalitpur District, for efficient and effective response to sick and injured animals; whilst we mostly treat dogs the team has also treated sheep, cows, calves and monkeys.

AN is well known for its national campaigns in the areas of working animals, livestock transport and slaughter, elephant abuse, dog poisoning, humane zoo conditions and urban greenery. AN conducts awareness campaigns among school students and media representatives.





11000+ EQUINE  
TREATED



50+ EQUINE  
RESCUED



3000+ EQUINE  
VACCINATED



500+ EQUINE OWNERS  
AND HANDLERS  
REACHED



AN has also actively lobbied with the Government of Nepal for betterment of animals, and has collaborated with the government to promote and ensure animal welfare.

In 2011 AN initiated drafting of a model Animal Welfare Act which was then handed over to Shanta Chaudhary, Chair of the Natural Resource Committee. In 2013 AN signed a MOU with office of the Lalitpur Sub-Metropolitan City to conduct humane dog management program in Lalitpur District; before that dog poisoning was used as a population controlling strategy by the Government. In 2014, AN devised a petition against cruel treatment of equines in the brick kiln industry, with the support of 151,782 signatures this was handed over to Ministry of Finance, Ministry of Agriculture and Ministry of Industries. As a result of this petition, Ministry of Industry, instructed all the registered brick

kilns owners to eradicate equine abuse in their factories. After the devastating earthquake in 2015 AN collaborated with the Department of Livestock to conduct rescue and treatments of injured animals in the affected districts.

With the establishment of the Ministry of Livestock Development in the end of 2015, AN now has a solid platform to advocate for animal welfare. AN has conducted a legal study on national and international legal instruments addressing animal welfare in Nepal. This was handed over to the Ministry in order to assist the Ministry with one of its 40 points commitment which is to revise current legislation addressing animal welfare and draft an Animal Welfare Act.

AN also supported the Ministry to draft a working animal directive. With the authorization of the Secretary of the Ministry

a Committee encompassing Government Bodies and AN has been formed to draft this directive. AN intends to work with the Government to develop other animal welfare standards in the future (for example standards on stray dog management, standard on livestock industry, etc).

AN contributes to improving the conditions of animals in Nepal by raising awareness through animal welfare education and campaigning, by providing medical treatment to various kinds of animals and by lobbying to the Government to regulate the industries thriving from animal use.

## Background and Introduction

### RESEARCH BACKGROUND

As most of the equine owners working in Brick Kilns were from Nepalgunj AN extended its outreach program to Nepalgunj in order to address the root causes of abuse and make a lasting change in the lives of Nepal's working equines and their owners. While working in Nepalgunj, AN noticed that the horses and mules used by Tangas and Buggies were in poor conditions and overloaded. We also observed that if any organizations were involved to improve the conditions of the equines their work was not adequately visible. Similarly, due to rapid development in this region it's seemed that electric rickshaws were preferred by passengers leading to difficult economic condition for Tanga and Buggy drivers (which we felt affect the welfare of equines). While these were our observations, for further intervention there lacked a study to verify or disprove our observation. Thus we felt a study of this kind was necessary. Additionally, this coincided with Animal Nepal's intention to expand its working equine outreach program in the Terai region of Nepal and such study was important to facilitate further planning and determine the specific issues that needed to be addressed.

### INTRODUCTION

With the aim of improving the lives of horses pulling the 'tangas' and 'buggies' in Nepal and eventually replace the 'tangas' with electric vehicles, it became necessary to comprehend the current welfare of these particular equines, the economic situations of their owners and the willingness of their owners to replace equines with electric vehicles. In order to gain a clearer perspective on the conditions of the equines and economic situation of the owners a situational analysis of horses pulling the tangas and their owners in Nepalgunj and Birgunj was conducted. This analysis also allows us to clearly identify the problem that lies behind lack of welfare, where lack of welfare is noted.







## METHODOLOGY

The research is based on a descriptive method. Location of the research was selected through purposive sampling method. Random sampling method was chosen to select respondent. Interview schedule were used to obtain data from respondents.

- Desk research: Desk research on the political context of Nepal, situational analysis of Nepalgunj and Birgunj.
- Field research: An interview scheduled was drafted to determine welfare condition of equine used for Tanga and Buggy as well as to identify the socio-economic condition of their owners. Through the interview scheduled enumerators were able to obtain primary data on the issues mentioned above.

## LIMITATION

The research is limited to two cities of the southern plain district of Nepal. The study was focused on the equines used for driving Tanga and Buggy, the owners of these equines and their families. One restriction that was faced by the study was that it was conducted during the off season. During this season most of the equine owners of Nepalgunj traveled to some other districts to work in brick factories, in this case mostly mules are sent to work in the brick kiln factories and not the horses as the latter are generally used to pull human load. Additionally during the season there aren't any festivals (during festivals there is influx of people that come into Nepalgunj and Birgunj) resulted in overloaded tangas and buggies<sup>1</sup>).

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<sup>1</sup> This had been observed by the Animal Nepal team on various occasion.

## POLITICAL CONTEXT OF NEPAL

### PROFILE OF CURRENT GOVERNMENTAL SYSTEM AND ITS LEVEL OF STABILITY

The current Government is a coalition amongst the largest party the Nepali Congress, UCPN Maoist, few smaller parties; and the government is supported by network of Madhesi parties from outside the government. This Government is led by UCPN Maoist Chairperson Pushpa Kamal Dahal. In the last 26 years since the restoration of democracy in 1990 there has been 24 governments<sup>2</sup>. One of the major problem in a Nepal has been the frequent change of government/s that has led to political and economic instability.

### DISPUTES/ DEMONSTRATIONS

The history of demonstrations and strikes has made the socio-political structure of Nepal corruptly infamous. The disputes are prevalent due to the presence of many parties with different agendas. However, through diplomatic conjectures, such disputes are kept within working framework. There was a time where nationwide strikes and “bandhas” had lasted for weeks. Currently, such accounts are fairly less, perhaps due to strict policies from the local and national administrations<sup>3</sup>. However, in the late months of 2015 and early months of 2016 Nepal faced an unofficial blockade in the Terai region, which affected the whole country. The heart of this movement was in the Nepali border town of Birgunj (which borders the Indian town of Raxaul). About 70 percent of imports to Nepal from India flow through this border point; trucks carrying fuel, medicine and other vital supplies, were barred from entering Nepal<sup>4</sup>. For a country recovering from a devastating earthquake this blockade was another devastating event.

### SUPPORT TO LOW INCOME HOUSEHOLDS

The rate of inflation in Nepal is fairly high leading to an increase in prices of daily amenities<sup>5</sup> making it very difficult for the low income households to sustain. Although there has been some support committed by the Government, substantial change has not been recorded.

However, the current budget presented by Nepal Government does highlight certain mandates that may act like a relief to the households with low income.

The following commitment have been made by the current Nepali Government<sup>6</sup>:

1. Nrs. 4.2 billion has been allocated to complete Postal road which is very important for the development of infrastructure of Tareli- Madhesh. After feasible studies are conducted, necessary urban infrastructure will be extended in Biratnagar, Janakpur, Birgunj, Bhairahawa, Nepalgunj and Dhangadi. Also, Preliminary work for the construction of greater ring road encircling all areas of Nepalgunj will be initiated in line with the concept of greater Nepalgunj city. The continuation of the social security programs has been declared keeping in mind safeguarding the economically vulnerable communities.
2. The number of people receiving the social security form state's cash transfer program is 2,152,561. Among these are: senior citizen 964,292, single women 621,980, disabled 60,656, endangered and marginalized castes and communities 22,899 and Dalit along with the children of Karnali.
3. Along with the various incentives, the government is working on to secure social security and ration cards for low income households so that they receive provisions in amenities.

2 P. Jha, 'Can Nepal Pull Itself Together Before It Falls Apart Again?', World Politics Review, September 15th, 2016, available at <<http://www.worldpoliticsreview.com/articles/19929/can-nepal-pull-itself-together-before-it-falls-apart-again>>

3 Research team's observations

4 V. Plesch, 'Crisis on Nepal-India border as blockade continues' Aljazeera News, 24th December 2015, available at <<http://www.aljazeera.com/indepth/inpictures/2015/12/crisis-nepal-india-border-blockade-continues-151223082533785.html>>

5 Nepal: Inflation rate from 2010 to 2020 (compared to the previous year)' The Statistics Portal, 2016, available at <<https://www.statista.com/statistics/422594/inflation-rate-in-nepal/>>

6 Delivered by Finance Minister Mr. B.P. Paudel, 'Budget Speech of Fiscal Year 2016/2017', Government of Nepal, 28th May 2016, pp.7, 8, 11,14, 20, 29, 33, Annex pp. 1 available at <[http://www.mof.gov.np/uploads/document/file/Budget\\_Speech\\_final\\_2016\\_20160602105902.pdf](http://www.mof.gov.np/uploads/document/file/Budget_Speech_final_2016_20160602105902.pdf)>

# KEY STAKEHOLDERS IN THE DEVELOPMENT SECTOR OF NEPAL

## GOVERNMENT (MANAGEMENT AND ALLOCATION OF FUNDS)

The funds dispersed to various local projects through NGOs are automatically viable to be reported to social welfare council in central level in order to be allowed to operate. Government admits flow of funds to various projects from international donors to local NGOs and government bodies only after required paper work and modalities are undertaken and completed. Government in itself has full right to manage and allocate funds if and as required.

## CIVIL SOCIETY (NGOS HUMAN DEVELOPMENT AND ANIMAL WELFARE)

Nepal has hundreds of NGOs with specific working areas and project based modules. In metropolitans like Nepalgunj and Birgunj, there are various NGOs along with INGOs working for the overall development of various sectors contributing to the human development. The following issues are prevalent areas of focus among the INGOS/NGOs: women, child and minorities rights; rural and community development; public health development; sustainability in agricultural and addressing climate change. However, there are very few NGOs working in animal welfare sector overall, especially in Nepalgunj and Birgunj.

## DONORS

As laid down in article 12, Section 1, of the Social Welfare Act 2049, the international non-governmental organizations (INGOs) seeking to work in the Kingdom of Nepal must apply to the Social Welfare Council and seek permission prior to starting work. The Council upon receiving such applications may give permission to such INGOs, not exceeding three months of time, from the date of receiving the applications.

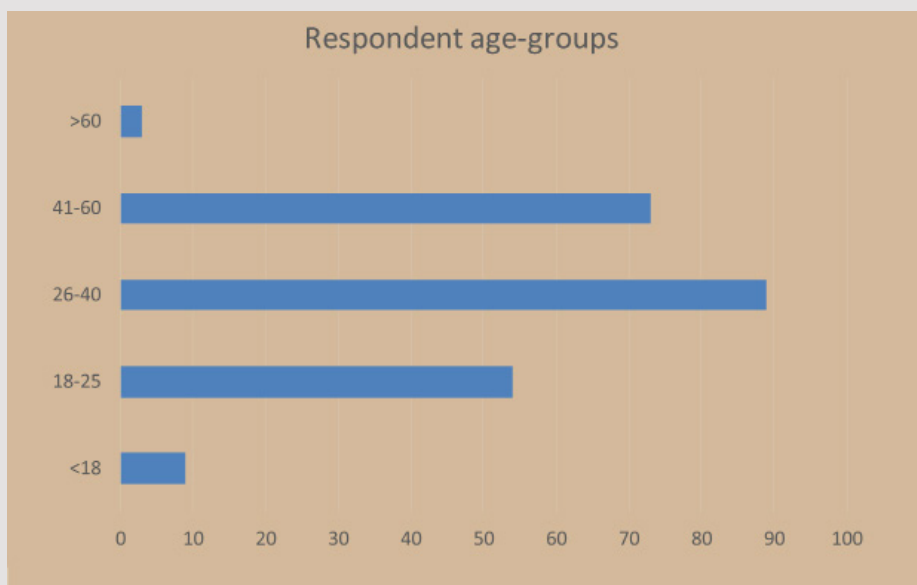
# TANGA HORSE OWNER PROFILE

## DISTRIBUTION AND NUMBER OF OWNERS IN EACH REGION

Total number of 231 equine owners were interviewed during the data collection process. Only 19 % of them were from Nepalgunj and remaining 81 % of them were from Birgunj. The survey team noticed that majority of equine owners from Nepalgunj had travelled to other district to work in the brick kilns since it was brick production season in Nepal; whereas, temporary migration of equine owners of Birgunj was drastically lower than that of Nepalgunj.

### AGE (AVERAGE)

Among 231 respondents most of the owners (34%) were between 26-40 years old. 4% of them were found below 18 years old and only 1% of owners were above 60 years old. 31% of equine owners were between 18-25 years old and 32% of them were between 41-60 years old.



### GENDER

There was zero presence of females, all the respondents were males; this is most probably due to the traditions of the KASGAR community. The KASGAR community who works with equines are marginalized Muslims. The tradition of this community only allows females to work indoors. It is believed by this community that men are supposed to do outdoor work and earn for their families (even if not the sole earner, the man should be the main earner).

### SOLE EARNER

High number of respondents were the sole earner of their family. About two-thirds of the respondent's families were totally dependent on a single person for their livelihood. Only about 34 % of the respondent said that shared this responsibility with their family members. This could be one reason to leading community towards poor financial condition.

### DAILY WAGE FROM TANGA BUSINESS (AVERAGE)

The study shows that both Tanga and Buggy owners were earning same amount of money per day. A buggy owner was earning the average of 670 Rs per day. Similarly, a Tanga owner was earning 690 Rs per day. There is no significant difference in earning of both groups.



## OTHER MEANS OF GENERATING INCOME

75% Tanga owners said they don't have any other source of income. 5 % work for an employer and 20 % were self-employed in their other work. Similarly, for a large number (64%) of Buggy owner, Buggy was their one and only source of income.

## TENDENCY TO WORK INDEPENDENTLY FROM OR COLLABORATIVELY WITH OTHER TANGA HORSE OWNERS

During the survey it was noticed that they prefer to work independently. Since the scope of Tanga has sharply reduced because of electric rickshaws they were having a tough time to find regular trip. That could be a reason that people wanted to work individually.



## SOCIO-ECONOMIC CONTEXT IN FOCUS REGIONS



**NEPALGUNJ** The recent census states that the population of Nepalgunj is 1,41,700 inclusive of 72,376 male population and 69,324 female demographics. The density of population is 1592.13 per square kilometer. The urban population growth is 2.731 per year (Nepalgunj, chamber of commerce and industry).

Nepalgunj is a Sub- Metropolitan Municipality in Banke district, in the Terai region bordering Bahraich district, and Uttar Pradesh State of India. Nepalgunj is a business hub and the most important city for the villages of western Nepal; It's a trading post that provides link to a majority of the least developed and far flung district in the country, which are located in the far and mid-western region of the country. Nepali, Hindi and Awadi are the language normally spoken in the city.

Nepalgunj has a diverse culture with habitants from different religious backgrounds. Hinduism or Islam are practiced by most residents.

**BIRGUNJ** According to the 2011 Census, Birgunj had a population of 207,980. Birgunj was established as a conglomerate of several villages in and around Gahawa Mai Temple. Gahawai Mai Temple remains the epicentre of the town. The settlement was named after the Rana Prime Minister Bir Shamsher, thus acquiring the name Birgunj.

The town has significant economic importance for Nepal as a large proportion of Nepali trade with India and other countries in the world is done through the customs post located here. Birgunj Customs is also the largest revenue earner for the Government of Nepal. In order to handle the large volume of goods, a Dry Port has been established in Birgunj recently.

Birganj is one of the major commercial and Industrial towns of Nepal. Located on the south of the capital Kathmandu, bordering India, is also known as the gateway of Nepal. The town at one time, was the only route to the capital Kathmandu. Thousands of tourists from India and other countries visit the capital via Birganj. The town has played a significant role in the economic and political development of Nepal. Birgunj, the second largest city in Nepal and the largest in the Narayani Zone, is a multilingual and multi-ethnic city.

ATTRIBUTES	NEPALGUNJ	BIRJUNG
LANGUAGES	Nepalgunj has a diverse culture with people from different faiths living within mixed communities. Hinduism and Islam are two major religions in the city with Hindus comprising larger percentage of the population. Other religions like Buddhism and Christianity are among the minorities. The mother tongue for the native inhabitants is still Awadhi, which is understood and normally spoken by the entire population of the district. Others speak Nepali and other regional languages like Maithali and even Hindi (Nepalgunjmun.gov.np)	A large number of people are of Indian origin having migrated mostly from Bihar and Rajasthan over a period of time ranging from 50-200 years. Several languages are spoken in the town including Bhojpuri, Nepali, Maithili, Newari, Marwari and Hindi.
EDUCATION LEVELS	Total literate population of Nepalgunj is 69 %. Male and female literate are respectively 74% and 62%.	The literacy rate in Parsa districts among those aged five and above is 56%, ten percentage below the national literacy rate. Most schools in the district are run by School Management Committees (SMCs). (UNDAF District Profile: Parsa, UNRCHCO, 2013)
PUBLIC HEALTH	Among many things that makes Nepalgunj a much sought after region, one of the prime entities is Nepalgunj Medical College. It is one of the renowned colleges in whole of South Asia and provides excellent academic foundation for students nationwide. It also runs Kohalpur hospital and Nepalgunj hospital to execute intricate services to the public. Besides these, Nepalgunj houses other hospitals like Bheri Zonal Hospital and Fatah Children's eye hospital. The issue of public health and the provisions of the same is very limp in Nepal. However, irrespective of challenges, Nepalgunj has risen to provide basic health amenities to the public through various public health programs through different NGOs and governmental programs.	Throughout Nepal the major public health issues range from Cholera and bird flu to diarrhea and Scrub Typhus. Birgunj, situated in the southern plains of Nepal, is highly susceptible to heat waves and dire health issues. However as Birgunj is a metropolitan, the health provision is not rare. There are many health institutes and hospitals in Birgunj that offer facilities to general public. Birgunj health care hospital and National Teaching hospital are some of the popular ones.



## Tanga Horse Profile

# TANGA HORSE PROFILE

## DISTRIBUTION AND NUMBER OF HORSES IN EACH REGION

*The survey was limited to 231 equines in two cities (Nepalgunj and Birgunj) of two districts (Banke and Parsa) of Terai. Out of that 33 were males and 198 were females. 70 % of these equines were ponies; 13 % were local breed horses and other 9 % were a mixture of mules, Marwari and Rashi breed horses. The survey conducted in Nepalgunj and Birgunj showed that 90% of equines were used in Tanga business while only 10% were used for buggy pulling. Out of 231 equines 85% were female and 3 of them were pregnant. Remaining 15% were male.*



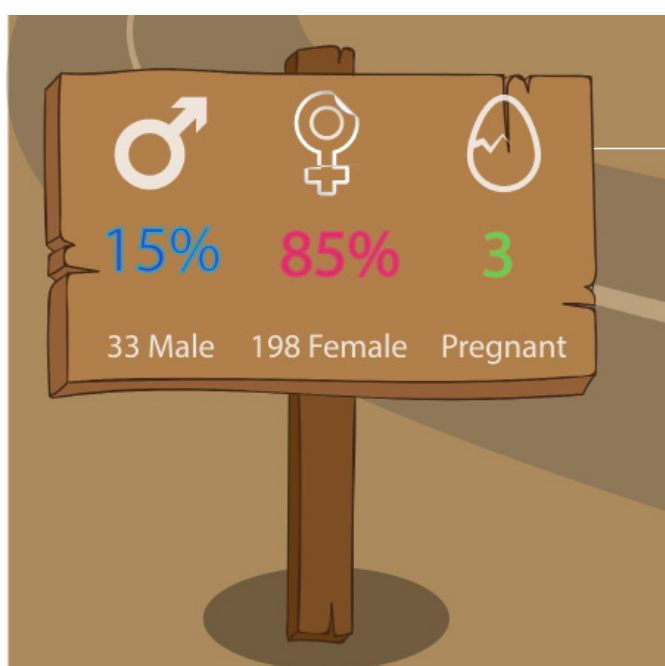
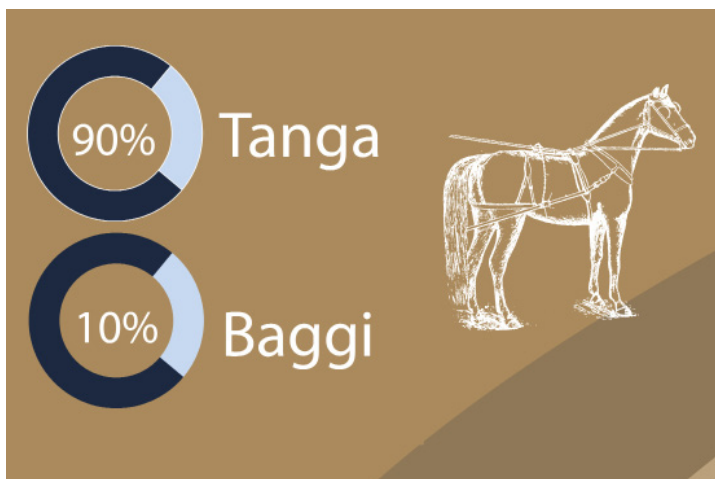
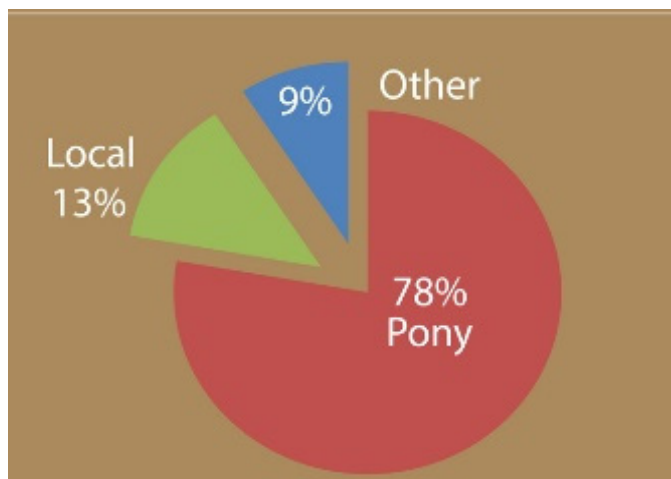
## BREED(S)/ TYPE(S)

Nepalgunj: 43 horses were taken as a sample in this research. Among the 43 tanga horses, 32 were female and 11 were male horses. The most common breed of horses is local pony with 34 accounted for; there was a small number of Mules, Turkmene and Rashi breeds.

Birgunj: 188 equines were taken as sample from Brigunj in this research. Out of the total, 181 were ponies, 3 were Marwari and remaining 4 were mules. It is found that majority of ponies were being used to carry people and loads.

Overall, maximum number of equines were ponies (78%) whereas 13% of them were local horses and 9% belonged to other category of horse. The average age of the horse is 8 years old ranging from oldest age being 25 years old to youngest being 1 year old. 75% of the horse were between the age ranges of 7-12 years old. Among the owned horses 20% of them has some kind of wound on them or suffered from illness.





## HEIGHT (AVERAGE)

The average height of horses and mules used to pull Tanga and Buggi was 4.5 feet. Minimum of 3.5 to maximum of 5 feet height was recorded during the survey.

## Tanga Horse Profile



## LOAD AND EARNING

The capacity of a Buggy is 200Kg and average daily income from the Buggy is no less than Rs.670. Whereas, a Tanga can accommodate 6 people at a time and the average daily income in a Tanga business is Rs. 690. In the family of horse owners 36% of them had earning members in their family. 75% of these owners had Tanga and Buggy as their only source of income whereas only 5% of them had additional employment. Most of the owners were engaged in the jobs like tailoring, driving and other labor works. 20% of the owners were also self-employed where they owned their own shop, garage or workshop; few of them were also found to be engaged in agriculture and animal husbandry.

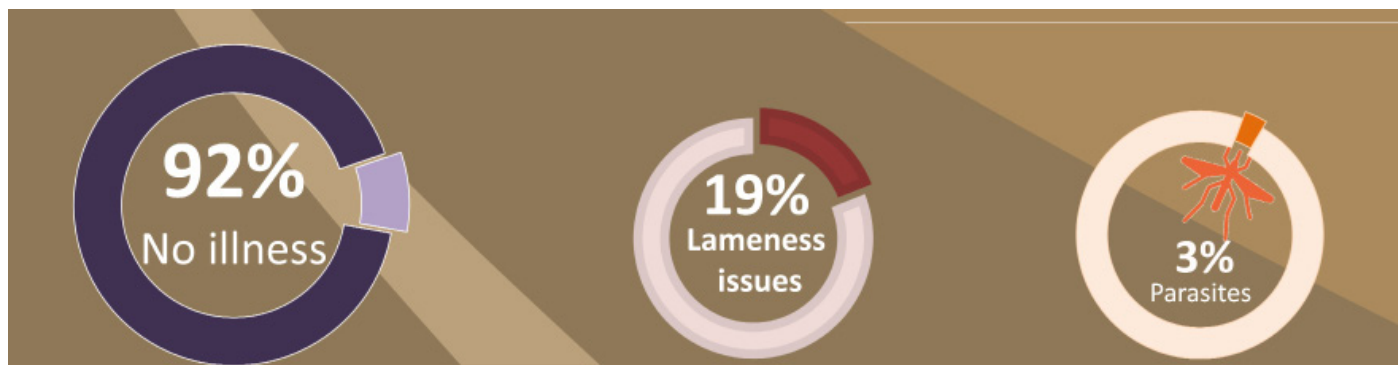
## BODY CONFORMATION, CONDITION AND ILLNESSES

Working equines should be physically fit enough to carry loads. To identify physical condition of working equines, body condition score were measured during the survey.

Body Condition Score was recorded as below:

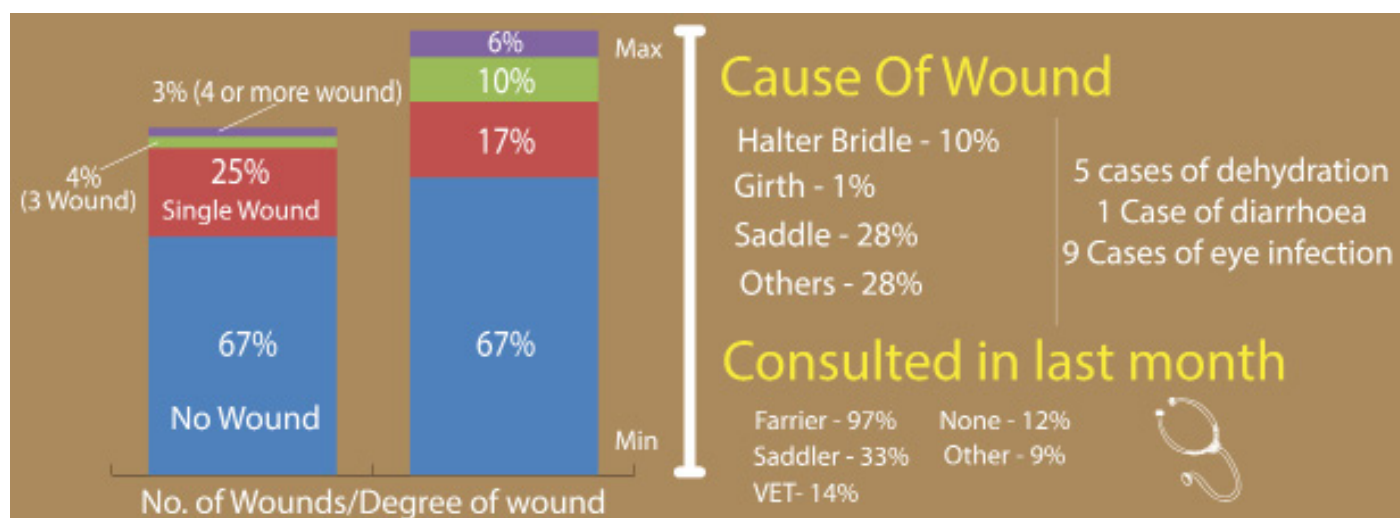
SCORE	1 - 1.5	2 – 2.5	3	4 - 5
NUMBER	2 (0.8%)	135 (58.4%)	91 (39.4%)	3 (1.3%)

It was found that a large percentage of equines had moderate body conditions, about 2 % had very poor body conditions; and a significant amount had ideal body conditions. Considering the data, almost 61 % of the equines were not in ideal condition.



## Illnesses

According to the survey, it is found that 8 equines were having colic, others minors problems seen among equines were lameness, leg injuries, skin problems and osteoarthritis.



## Wound

Among the surveyed equines 67% of them had no wounds on their body. 25% of them has single wound on their body while 4% had 3 wounds on their bodies. We found that only 3% of horse suffered from 4 or more than 4 wounds on their bodies. In equines 10 % of the equines the wound was caused by their halter or bridle, girth (1%) and saddle (28%). Besides the case of wound, 5 horse suffered from dehydration, 1 suffered from diarrhea and 9 of them had eye infection problem. In the past one month 14% of the owners consulted veterinarian regarding their animal's health. 97% of the owners consulted the farrier while 33% of them consulted with saddlers.

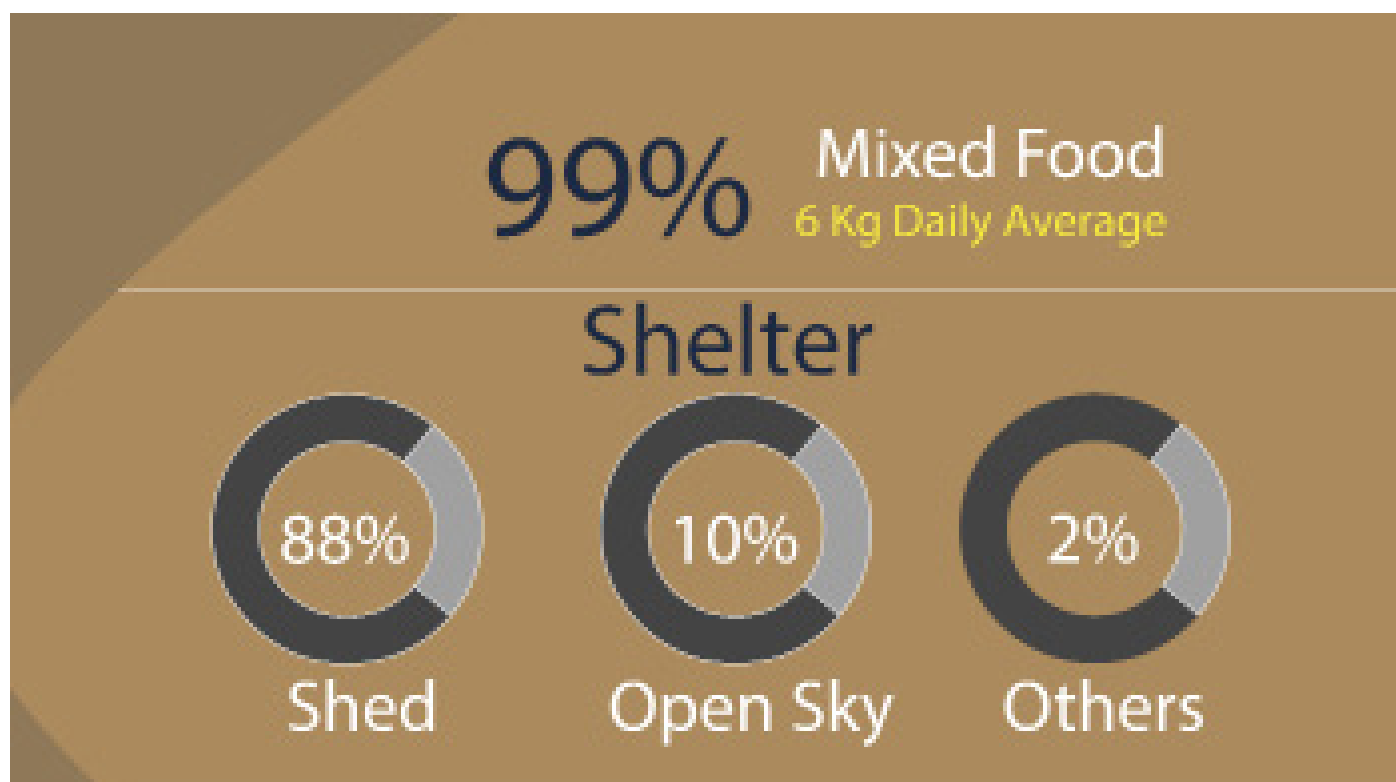
## Tanga Horse Profile

### Hoof Cleaning and condition

The study showed that about 81% of respondents said they clean the hoof of their equines every day. Similarly, about 12 % of them only clean once in a week and remaining 7 % owner never cleaned hooves of their equines. It is found that about 87% of equines have normal hooves, other 8 % were had abnormal hooves, similarly 4% of them had cracked hooves and last 2 % of them had overgrown hooves.

## HUSBANDRY PRACTICES AND LIVING CONDITIONS

### Shade and Food



The feeding practices were impressive with 99% of the owners feeding their animals mixed food and only 1% of the owners provide their animals with just forage or just concentrated feeds. On average 6 kg of feed is provided to each horse on a daily basis. We found that the owners take good care of their horse with 88% of the owners having made a sheds for their animals while 10% of the owners let the animals stay under an open sky. Our survey also shows that owners' take good care of their animals as 99% of the owners manage to provide daily cleanings to their animals. During our survey we came across 19% of lameness issues and 3% of parasite infection. 92% of animals were healthy and didn't suffer from any illness or health issues.



## Grooming

Nearly 100% of the equines were groomed every day. Since the horses were being used to carry people, owners may want to keep their horse in good shape leading to 100% daily grooming everyday.

99% Horses  
Daily Cleaning



## TYPE OF WORK, SUITABILITY TO THIS AND WORK SATISFACTION

93% 

are happy to work as tanga/baggi owners, while the remaining few are unsatisfied mainly because of less money and low respect



51%

28%

31%

While on a busy road there is a mixed feeling among the owners

27% 

have never had accidents on the road



A large portion believes that their business is being hampered by other transport alternates. The distribution on which is shown in the bar on the Right



28 %

Auto



32 %

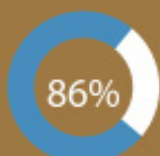
E-Rickshaw



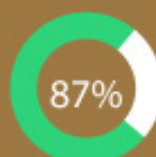
40 %

Tempo

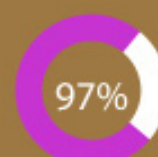
13% Think that too many e-rickshaws have made the marketplace highly competitive



Will opt out and choose some other business if financial support was provided. 62% want to continue being in transport space and own an auto or e-rickshaw, while others wanted to start other small businesses



Will replace tanga/baggi with E-rickshaw if financial assistance is provided



Willing to take loan and pay interest on daily basis

## Tanga Horse Profile

Among the horse owners 93% of them are happy with their tanga/ buggy business. Those who were not satisfied with their business was either because of financial problems and low earning from the business or because tanga/ buggy being a less dignified job. Among them 31% of owners were totally dissatisfied with their business. However, there are 81% of owners who believe that their business is directly being hampered by other transportation alternatives like auto rickshaw, e- rickshaw or tempo. 8% of them take auto rickshaw as a threat to their business whereas 32% take e-rickshaw as a treat. 40% of the owners feels the same about tempo. 13% of the owners felt that too many rickshaws have created a very competitive market.

If provided with some kind of financial support and a chance to choose any other business, 86% of horse owners are ready to switch their business. 62% of the owners would go for alternatives like auto rickshaw or e rickshaw but would want to stay in the transportation business. 87% of the owners would like to replace tanga/ buggy with e rickshaw if financial support is provided while 97% of them are willing to take a loan and pay interest on daily basis. Remaining owners would choose to start other small business.

## WORKING CONDITIONS, HOURS AND OWNERSHIP



Since the Tanga is used as a means of transportation, equine was being used for 7 days in a week. Similarly, Since the Tanga is used as a means of transportation, equine was being used for 7 days in a week. Similarly, average working hours per day was 6 hours. Minimum working hours per day was 2 hours and maximum was 12 hours. It shows that depending on the trip, sometime equines were being used for a full day but if there was not sufficient business they were used just for few hours per day. The horse owners have owned their horse for an average of 3.5 years. Normally, the owners make their animal work when they reach 3 years old.



## MAIN WELFARE PROBLEMS IDENTIFIED

Main welfare issues were related to wounds due to poor use of saddle, bridle, halter; about 1/3 of the sample group (equines) had some form of wound. While few equines had low body condition score, not a large percentage had an ideal body condition score (only 38% had ideal body condition score). A smaller percentage (13%), yet still a significant amount, of equines were faced with hoof problems. Very small percentage of equines had been ill, colic a recurring answer among most of the respondent that claimed their equine had been ill. Also majority of the equines used are females. There were 6 horses who were pregnant but they were made to work throughout the week. Till the final hours of pregnancy, the horses are still used in the field. This issue has to be addressed strictly. The wounds, moderate or poor body condition and the abnormal hoof conditions could be a lack of awareness as the owners seem to take care of their equines by providing them adequate feed, clean resting place and by grooming them on a regular basis.



# SERVICE PROVISION (VETERINARIANS, FARRIERS, HARNESS-MAKERS, CART-BUILDERS)

## AVAILABILITY & WILLINGNESS OF OWNERS TO USE/ PAY FOR THESE SERVICES

Out of the total respondents about 10% said that they have consulted the community based equine advisor. Similarly about 50% of the equine owners had access with both the CBEA and Farrier. Nominal number of respondent said that they have also contacted saddler. About 10 of equine owners reached out to vets for some sort of consultancy. According to the field based experience of enumerators, there were one or two people in town who had basic training of equine management who are acting as a CBEA. The survey showed that there is lack of service provider in the region which shows the need to empower the community so they can take care of their equines themselves. The reason why there are no service providers in the region is because the working equines does not come under the mandate of Livestock of Ministry of Livestock Development. Also, the district livestock service office has limited resources and are not sufficiently trained to handle such cases. Similarly, the work done by other non governmental organizations involved in the welfare programme is not visible.

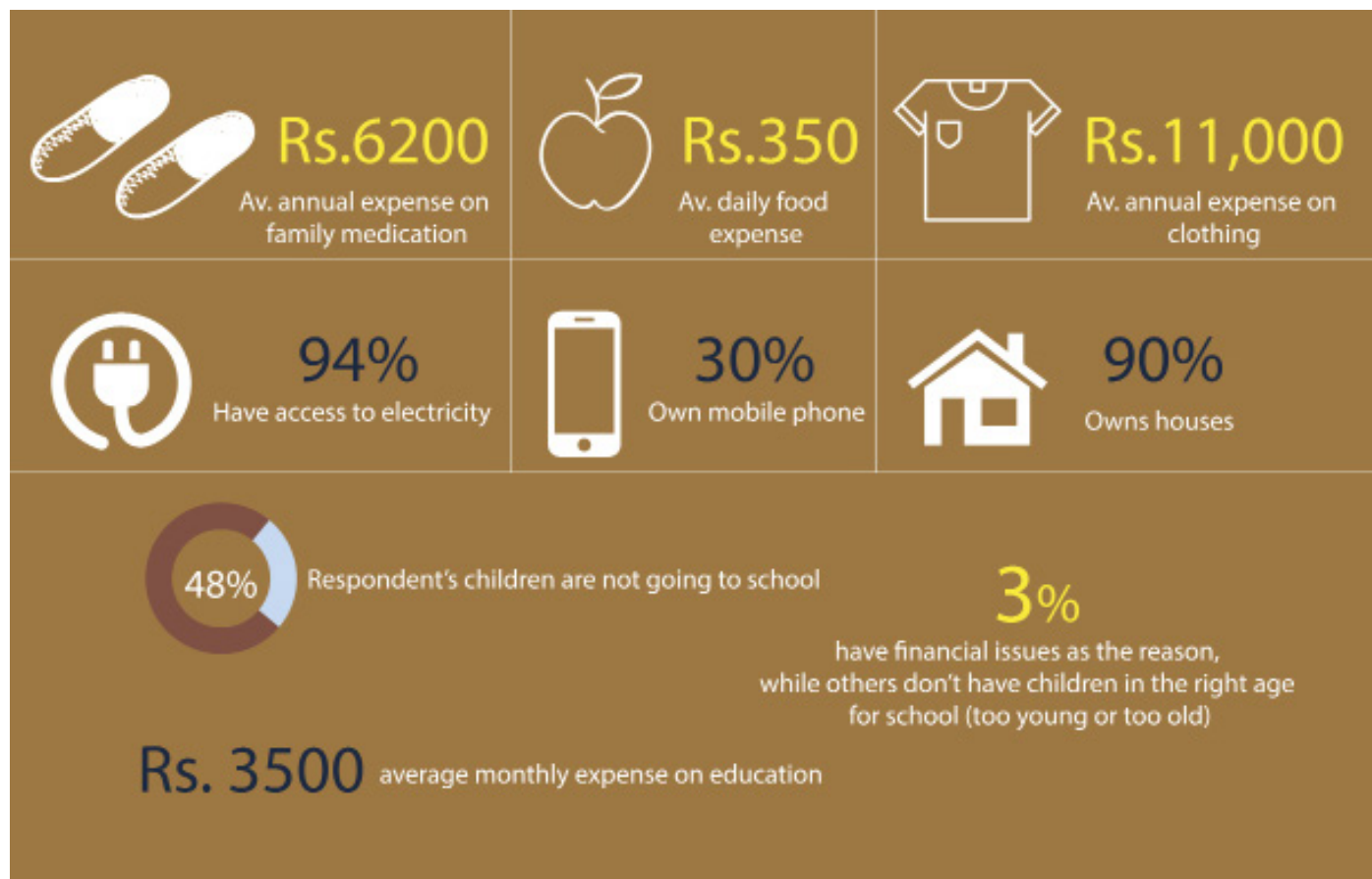




An average daily income of a horse owners was 690 Rs. Similarly a mule owners was earning 670 Rs. Per day. Their area of expenses is daily food, clothing, health and medication and education for their children. The average daily expenses in their food is rs. 350. They spend Rs.11,000 on clothing each year. Only 52% of the respondent's children are attending school. Among the remaining ones, 3% have financial issues as the reason for not sending their children to school while others don't have children at the right age for education (either too young or too old).

## AFFORDABILITY

90% of the owners owned their own houses. 94% of them have electricity access in their house. 30% of the owners carry their own mobile phone. The average annual income of the respondents is 212160 (on the basis of 680 rs per day, 26 working days in a month and full 12 month work of a year). On the other hand average annual expenses is 185200 (includes food, medication, education and clothing but excluding equine related expenses). There must be significant amount of expenses for food, medication of their horses or mules and repairing cost of their Tanga and Buggy. According to these calculations the Tanga and Buggy driver, if they are the sole earner of their family, would struggle to take care of their horses.



# COMMUNITY PROFILE

## LOCAL INDUSTRIES



## NEPALGUNJ

Nepalgunj is considered to be the hub of trade and is a major business port. Through years it has been growing as a prime region in the Mid – Western Nepal. Although some factories and industries have had been negatively affected due to history of national political turmoil, Nepalgunj still pioneers as industrial sect of Nepal. There are number of local industries predominant in the region. These are inclusive of cotton industries, Lentil producers, handicrafts, shoes, woman based enterprises and others.

Birgunj is situated on the southern region of Nepal and is known as “gateway to Nepal”, the term that can be credited to porous but busy border it shares with India. Being the busiest trading centre, the major industries operating in this area are steel and rolling mills, textiles, cigarette, aluminium and other metals, LPG gas, pharmaceuticals, edible oil and other agro based industries.

Besides the industries, even more important section of the economical aspect of Birgunj is Inland Clearance Depot where internal trade as well as major import and export business and trades are carried out making it one of the major hub for revenue generation in Nepal.

## BIRGUNJ

Inland Clearance Depot (ICD) is also known as Dry Port. UNCTAD has defined ICD/Dry Port as “ A common user inland facility, other than a port or an airport, approved by a competent body, equipped with fixed installations and offering services for handling and temporary storage of any kind of goods (including container) carried under customs transit by any applicable mode of inland surface transport, placed under custom control and with customs and other agencies competent to clear goods for home use, warehousing, re-export, temporary storage for onward transit and outright export.”

ICDs promote the concept of multimodal transport, as container seal can remain unbroken from a place close to the consignor to a place close to the consignee. Apart from changing the concept of transport, both in physical and organizational terms, ICDs will have beneficial effect on the trading and industrial activities of Nepal.



## Community Profile

### LOCAL COMMUNITY GROUPS



#### NEPALGUNJ

There are number of religious groups found in Nepalgunj. The dominant one is Hindu followed by Islam, Buddhist, Christian and others. There are also various castes and ethnic groups inclusive of Muslim, Chettri, Brahmin, Thakuri, Yadav, Magar, Newar and Tharu.

#### BIRGUNJ

This Terai based city is occupied equally by followers of Hinduism and Islam. Chhath, Dipawali, Eid etc. are major festivals celebrated in Birgunj. Small proportion of the religious diversity of Birgunj is occupied by Christians and Buddhists. The culture of this city is not limited to religious diversity but ethnic diversity is found too. People of Madhese tribe/ethnicity are also found which includes castes like Yadav, Shah, Mahato and so on.



# SOLUTIONS TO IMPROVE THE WELFARE OF TANGA HORSES AND THE WELL-BEING OF THEIR OWNERS

## OUTLINE OF EACH POTENTIAL SOLUTION

1. *Carry out trainings and provide basic material on making better harnesses for the horses.*
2. *Assist wives of Tanga drivers to develop entrepreneurial skills for work that can be done indoors (such as sewing, making candles, local design pottery, etc).*
3. *Involve local governmental agencies to create long term impact on welfare issues.*

## SWOT ANALYSIS OF EACH SOLUTION

### More Trainings

**STRENGTH:** By conducting trainings, the handlers and owners of the horses will be provided with more knowledge on developing and using better saddle materials. Also, this can be an opportunity for them to learn how to take better care of their horses by making simple alterations in working style.

**WEAKNESS:** This approach has its weakness in case the condition of poor execution of the training is undertaken and sustainability issues in providing material.

**OPPORTUNITIES:** This mode of solution is an ideal method to involve local communities in the project and the cause involved so that more awareness can be disseminated regarding welfare of the horses.

**THREATS:** A major aspect that needs to be taken into account is that while this approach has its fruition, in case of lack of usage of local knowledge, this whole initiative can be jeopardized. The solution is to incorporate local knowledge, resources and aspects like local language to make the training effective.

### Develop Entrepreneurial Skills for Females of the Community

**STRENGTH:** Women are the backbone of development. In order to create an environment where all the sectors of the communities become progressive, it is important to involve women thereof through various enterprises. By doing so, the level of economic status of communities advances considerably.

**WEAKNESS:** As it is still a patriarchal system in most parts of Nepal and especially in the working section of the project area, the women need to get permission from their husbands to work. Therefore, the weakness lies in the lack of independence in decision making that might jeopardize the development process through various entrepreneurial activities.



## Solutions to Improve the Welfare of Tanga Horses and the Well-Being Of Their Owners



**OPPORTUNITIES:** While most of the families in the project area belong to marginalized communities, the women can actually gain full benefit from the opportunities presented to them if such trainings related to develop their skills as entrepreneurs and agent of positive change is acknowledged.

**THREATS:** The main threat of this solution is lack of knowledge regarding local culture and socio-economic condition of the community. In case the cultural sensitivity and social structure of the communities and region are not properly studied before designing and implementing the project, there would a serious threat that the solution might backfire.

### ***Involvement of Local Governmental Bodies***

**STRENGTH:** The strength of this solution lies in the prospect of creating long term initiatives to ensure that the welfare modules for the horses and the owners are executed.

**WEAKNESS:** There is a degree of uncertainty when working with Government. This solution's weakness is that the local authorities at the moment change with the central Government. As mentioned above the Government has changed 24 times in the past 26 year.

**OPPORTUNITIES:** Irrespective of the weaknesses and possible threats, the fact that cannot be ruled out is that with the involvement of the government entities, long term potential of the project can be channelized through them. This is a tremendous opportunity for the project itself to be highlighted in mainstream development goals i.e welfare of equines and animals as a whole.

**THREATS:** The main threats of this set of solution is constant change in the governmental sector and absence of welfare guidelines.



## ASSESSMENT OF POTENTIAL RISKS TO A WORKING EQUID WELFARE PROGRAMME IN NEPAL

There are few potential risks in the area of working equine welfare program in Nepal. Although these risks can be mitigated without heightened obstacles, they still need to be dealt with precautionary measures.

1. One of the major aspects of this report based on the comprehensive research is representation of the whole universe through sampling methodologies. It means that there is a risk of misrepresentation until and unless there is a thorough knowledge of the local structure of the project area along with strict methodology to follow through.
2. The owners of the tanga horses are the main stakeholders of this project. These communities have been engaged in the tanga business since generations. Thus, there is a high risk of cultural lag where the stakeholders might refuse to change their ways of treating and dealing with their horses heeding little or no attention to their welfare.
3. As the project incorporates local bodies, governmental and non-governmental entities, an absence of balance among the same in managing, allocating responsibilities and ensuring overall wellbeing can cause collateral damage to the project. The roles of each entity needs to be clearly identified and allocated accordingly.



## Conclusion

# CONCLUSIONS

The outcomes of this research clearly shows that the horses were fairly well taken care of by their owners with more than 99% of the equines provided with sheds and grooming as well as adequate feed. However, there were few horses with perfect body scores. Over 1/3 of the equines had some form of wound, illness, lameness or sign of weakness, thus there is room for improvement in welfare of equines used in tanga and buggy.

Additionally, looking at the survey, 64 % of tanga/buggy owner, who

are sole earner, face financial constraints and struggle to provide for their equines. The study also shows that 81% of tanga/buggy owners felt that their business is directly being hampered by other transportation alternatives like auto rickshaw, e- rickshaw or tempo. Additionally, it was found that 87% of the owners would like to replace tanga/ buggy with e-rickshaw/ vehicle if financial support is provided, with 97% of them willing to take a loan and pay interest on daily basis.

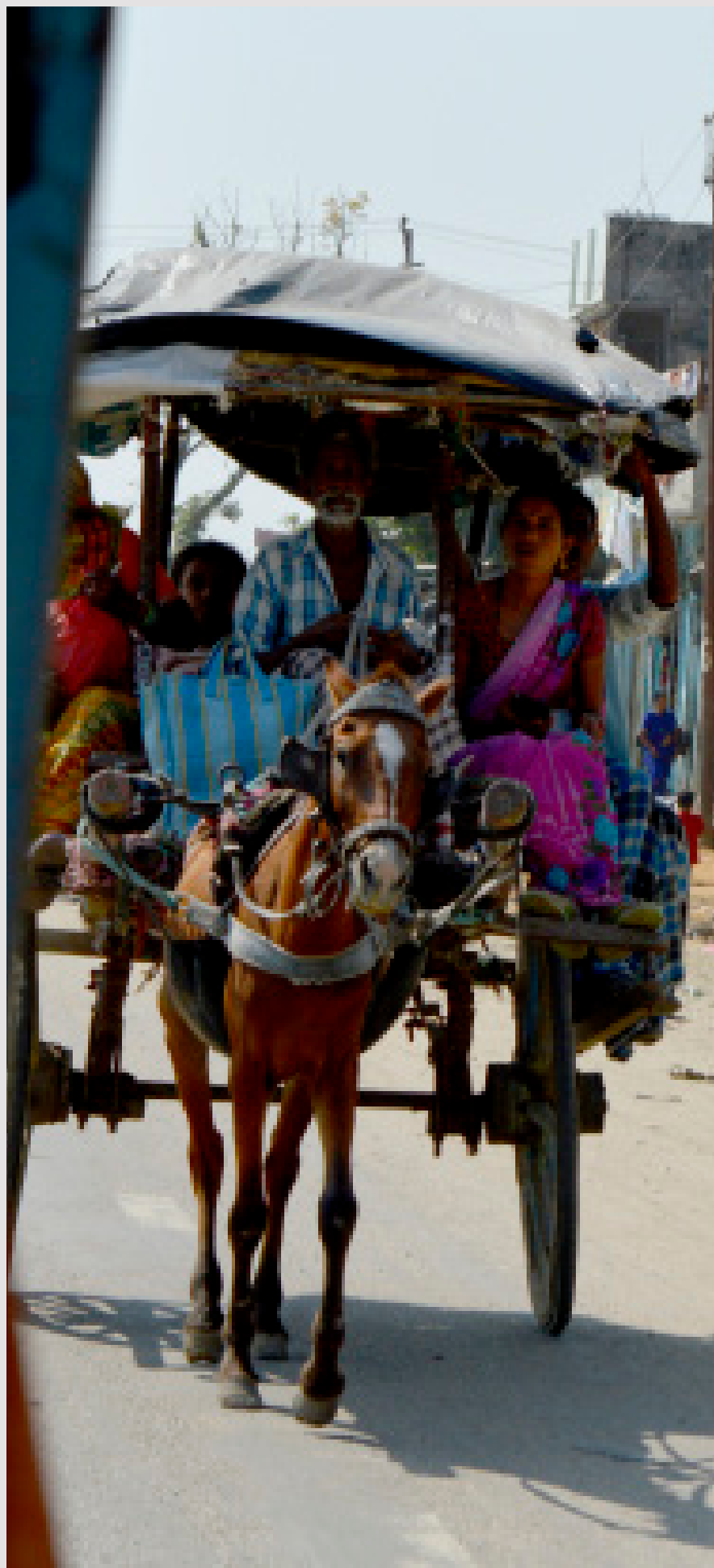
Also, there is a limitation on the relevance of the research itself. The research was conducted during off-season (during brick production season), which means that most of the horses were in the brick Kilns and there was less people in the cities.



## Recommendations

### RECOMMENDATIONS

1. A series of awareness programs and community outreach initiatives needs to be undertaken so that the concept of welfare is disseminated within the communities. The main purpose of it is to create an environment where the equines are considered more as companions than only vehicles of production.
2. The number of wounds accounted for are caused due to poor harnesses and belts without cushions. Therefore, it is recommended that more intensive trainings are given to the owners to make cushioned harnesses for the horses in order to decrease the so that the numbers of wounds. Final assistance should be initially provided for the materials.
3. Skill based training (of indoor enterprises such as candle making or sewing) for wives of equine owners should be provided so 2/3 of them no longer remain the sole earner, thus improving their economic situation as well as increasing their capacity to take of their equines.
4. As a large portion of the owners are willing to switch to electric vehicles, provisions should be provided to phase out tanga/buggy driven by horses and some sort of loan system should be provided to obtain these electric vehicles.





## Appendices

# APPENDICES

*-Sources of information – list of individuals/ groups met, literary references*

*<http://www.nepalgunjcci.org.np/>*

*<http://www.nepalgunjmun.gov.np/en/node/40>*

*[http://www.numbeo.com/cost-of-living/city\\_result.jsp?country=Nepal&city=Nepalgunj](http://www.numbeo.com/cost-of-living/city_result.jsp?country=Nepal&city=Nepalgunj)*

*<http://www.theinfolist.com/php/SummaryGet.php?FindGo=birgunj>*

*<http://www.cgibirgunj.org/page/detail/1>*

*<http://www.ngmc.edu.np/>*

*<http://www.np.undp.org/>*

*[http://www.mof.gov.np/uploads/document/file/Budget\\_Speech\\_final\\_2016\\_20160602105902.pdf](http://www.mof.gov.np/uploads/document/file/Budget_Speech_final_2016_20160602105902.pdf)*

*-Horse data collection sheets (sample)*

*-Completed horse assessment sheet spreadsheet*

*-Completed owner questionnaires (sample)*

*-Photos of horses and the environment in which they live/ work*

*-Maps of potential project areas*

*-Expenses journal*

*Note: All the references and appendices will be included in the final report.*





**A RESEARCH INTO WORKING HORSES AND MULES USED TO PULL TANGA AND BUGGY**  
A Field Study Conducted in Southern Plains of Nepal  
Supported by the **WORLD HORSE WELFARE**

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