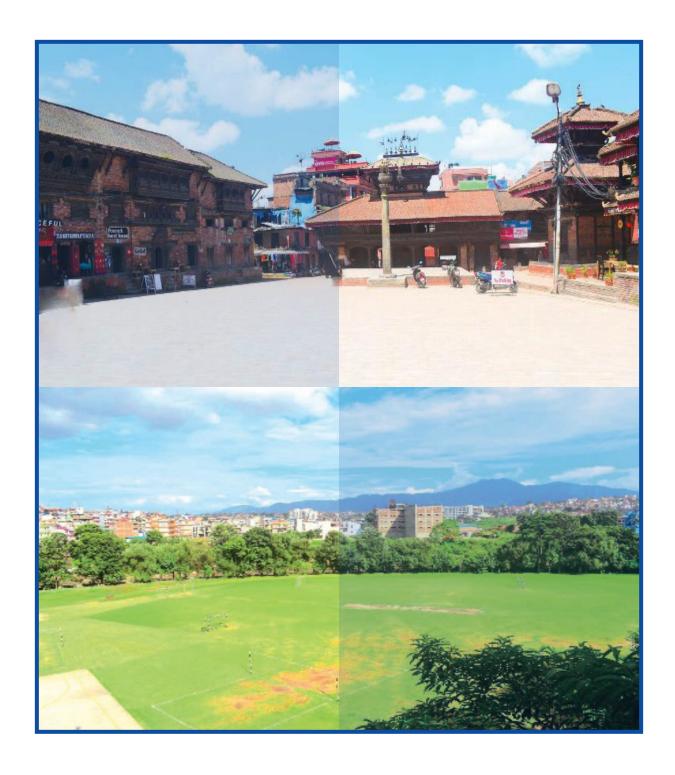
Updated Report on 83 Open Spaces Identified for Humanitarian Purposes in Kathmandu Valley









The opinions expressed in the report are those of the authors and do not necessarily reflect the views of the International Organization for Migration (IOM). The designations employed and the presentation of material throughout the report do not imply the expression of any opinion whatsoever on the part of IOM concerning the legal status of any country, territory, city or area, or its authorities, or concerning its frontiers or boundaries.

IOM is committed to the principle that humane and orderly migration benefits migrants and society. As an international organization, IOM acts with partners in the international community to: assist in meeting the operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.

Publisher: International Organization for Migration

768/12 Thirbam Sadak, Baluwatar – 5

P.O. Box 25503

Kathmandu, Nepal
Tel.: +977-1-4426250

Fax: +977-1-4435223

Email: iomnepal@iom.int
Website: http://nepal.iom.int

Research team: Uttam Pudasaini, Project Lead

Madan Acharya, GIS Analyst Aashish Sharma, GIS Analyst

Neelam Thapa Magar, Research and Documentation Officer

Yeshwant P.B. Pariyar, Graphic and Web Designer

Roniksh Budhathoki, GIS Officer Ashish Shrestha, GIS Officer

Aleena Khatiwada, Documentation and DRR Officer

Kamal Raj Shahi, Field Surveyor Ashish Dotel, Field Surveyor Manjil Pudasaini, Field Surveyor Muskan Dangal, Field Surveyor Anup Aryal, Field Surveyor Pratik Poudel, Field Surveyor

Editors: Louise Jönsson Andersson, IOM Nepal

Tripura Oli, IOM Nepal

Technical review team: Jitendra Bohara, IOM Nepal

Dipina Sharma Rawal, IOM Nepal

© 2020 International Organization for Migration

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of the publisher.

PUB2020/017/E

Updated Report on 83 Open Spaces Identified for Humanitarian Purposes in Kathmandu Valley







FOREWORD

I am pleased to present this publication, *Updated Report on 83 Open Spaces Identified for Humanitarian Purposes in Kathmandu Valley*, funded by the people of Thailand through the Government of Thailand.

IOM – the United Nations Migration Agency – has been supporting the Government of Nepal with the identification, mapping and protection of open spaces to be used for humanitarian purposes since 2013. Nepal is one of the most disaster-prone countries in South Asia and frequently experiences geologic and climate change-induced hazards. Floods, droughts, earthquakes and landslides are some of the natural hazards that have resulted in the loss of lives, and damage to properties in both urban and rural settings. Open spaces are identified and mapped with the aim to strengthen emergency preparedness and provide the initial response planning framework for local governments and partner agencies. This gives a starting point from which to provide life-saving assistance to those in immediate need of support, including displaced populations.

IOM, under the overall guidance of the Ministry of Home Affairs and as the co-lead of the Camp Coordination and Camp Management (CCCM) Cluster, conducted a detailed study and identified 83 open spaces that could be used for humanitarian purposes in an event of a disaster in Kathmandu Valley. The report on 83 open spaces was endorsed by the Council of Ministers and published in the national gazette in April 2013, describing the locations and the rules set forth around the application of the open spaces in an event of a disaster. In addition, the report also helped in identifying the catchment areas for possible displacement and details of current infrastructure of those areas.

This is the second report published by IOM analysing the current status of 83 protected open spaces in Kathmandu valley. The report captures evidence-based data, such as total usable areas and critical facilities in the vicinity of the open space that are important for humanitarian response, such as hospitals, schools and police stations, water and sanitation facilities.

IOM has come a long way on open-spaces identification and mapping in the last eight years. The Organization has supported 13 local governments with open-spaces identification and mapping across different provinces — Bagmati Province, Gandaki Province and Lumbini Province. IOM is also supporting in creating a module on open spaces into the Building Information Platform Against Disaster (BIPAD), owned by the Government of Nepal. BIPAD will display information on all open spaces identified and verified by IOM in coordination with local levels and the federal government. I am also glad to announce the launch of Open Space Nepal, which is available in Google Play Store for Android phones and AppStore for the iOS version, developed with the purpose of providing guidance for the public in the event of a disaster.

I express sincere gratitude to the Government of Nepal for providing strong leadership that supported in achieving the objectives of the project. I would like to reiterate that IOM remains committed to the principle that humane and orderly migration benefits all. IOM remains committed to supporting its Member States in implementing the Sendai Framework for Disaster Risk Reduction 2015–2030 coherently with the Sustainable Development Goals.

Mobility, risks and resilience are intrinsically linked. IOM, as the global migration agency, brings a unique perspective and added value to global efforts in reducing disaster risk and building resilience. Lastly, IOM stands ready to support all three tiers of government to reduce disaster risks and assist vulnerable communities and migrants in building a disaster-resilient society.

Lorena Lando

Chief of Mission of Nepal International Organization for Migration (IOM)

ACKNOWLEDGEMENTS

First and foremost, we would like to thank the Project Steering Committee members – Kali Prasad Parajuli, Joint Secretary of the Ministry of Home Affairs; Surendra Mohan Shrestha, Joint Secretary of the Ministry of Urban Development; and Rishi Acharya, Undersecretary of the Ministry of Federal Affairs and General Administration – for their support and guidance during the entire study period.

We would also like to extend our gratitude to the joint team from the Ministry of Home Affairs, Ministry of Urban Development and Ministry of Federal Affairs and General Administration, namely Indu Ghimire, Joint Secretary; Sarika Maskey, Joint Secretary; Bamsi Kumar Acharya, Undersecretary; Rishi Raj Acharya, Undersecretary; Renu Thapalia, Section Officer; Tulsi Prasad Dahal, Section Officer; and Tej Bimali, Section Officer, who joined the IOM team in conducting a monitoring visit to the identified open spaces in Kathmandu Valley during the months of April and May 2019. We would also like to thank all the individuals from the Government who took time to share their views and experiences during the meetings that greatly helped us in improving the content of the report.

Lastly, we would also like to thank the team of NAXA for the collection and analysis of data, maps, photos of each of the 83 open spaces protected through a gazette notification. This report would not be possible without the tireless efforts of the team involved.

TABLE OF CONTENTS

Foreword	i
Acknowledgements	iii
List of figures	vi
List of tables	xii
List of acronyms and abbreviations	×iii
Executive summary	×vii
CHAPTER I. INTRODUCTION	1
I.I. Background	I
I.2. Objectives	2
CHAPTER 2. METHODOLOGY	3
2.1. Synopsis of methodology	3
CHAPTER 3. SURVEY OUTPUTS	5
3.1. Updated details of open spaces in Kathmandu Valley	5
3.2. Open-space platform for humanitarian assistance	16
3.3. Open Space Map Atlas	17
3.4. Open Space mobile application	17
CHAPTER 4. FINDINGS	19
CHAPTER 5. LIMITATIONS	21
CHAPTER 6. SUMMARY AND RECOMMENDATIONS	23
CHAPTER 7. ANNEXES	25
Annex I. Checklist of attributes for data collection	25
Annex II. Environmental checklist	26
Annex III. Open spaces in Kathmandu Valley: Updated assessment details	27
Annex IV. Critical facilities	107
Annex V. Gazette notification list of open spaces in Nepali	127
References	135

LIST OF FIGURES

Figure I.	Methodology: Updated survey of open spaces in Kathmandu Valley	3
Figure 2.	A screenshot showing a section of the home page of the Open Space Platform for Humanitarian Assistance	16
Figure 3.	Screenshots showing the distance between the user and open space in the Open Space mobile app	17
Figure 4.	Adarsha Azad School area in Bhaktapur district	27
Figure 5.	Aerial view of Adarsa Azad School in 2013 and 2019	27
Figure 6.	Aerial view of the Army Golf Club in 2013 and 2019	28
Figure 7.	A building under construction in the vicinity of the open space at airport Central Dojo in the eastern side of Kathmandu Valley, near TIA	28
Figure 8.	Aerial view of Airport Central Dojo in 2013 and 2019	29
Figure 9.	Extension of existing bleachers of ANFA ground	29
Figure 10.	North side of ANFA Football Ground	30
Figure 11.	Aerial view of ANFA (North) in 2013 and 2019	30
Figure 12.	South side of ANFA Football Ground	31
Figure 13.	Newly constructed bleachers at ANFA Football Stadium	31
Figure 14.	Aerial view of ANFA (South) in 2013 and 2019	32
Figure 15.	Bagmati Corridor I area near Tribhuvan University, south-west of Kathmandu Valley	32
Figure 16.	Aerial view of Bagmati Corridor 1 in 2013 and 2019	33
Figure 17.	Bagmati Corridor 2 area, near Tribhuvan University, south-west of Kathmandu Valley	33
Figure 18.	Aerial view of Bagmati Corridor 2 in 2013 and 2019	34
Figure 19.	Bagmati Corridor 3 area, near Tribhuvan University in the south-west of Kathmandu Valley	34
Figure 20.	Slum settlement in Bagmati Corridor 3 area along the bank of Bagmati River	35
Figure 21.	Aerial view of Bagmati Corridor 3 in 2013 and 2019	35
Figure 22.	Bagmati Corridor 4 area, along the Bagmati River located in the south-west of Kathmandu Valley	36
Figure 23.	Aerial view of Bagmati Corridor 4 in 2013 and 2019	36
Figure 24.	Bagmati Corridor 5 area, located in the south-west of Kathmandu Valley, along the Bagmati River	37

Figure 25.	Slum settlement in Bagmati Corridor 5 area along the Bagmati River	37
Figure 26.	Aerial view of Bagmati Corridor 5 in 2013 and 2019	38
Figure 27.	A newly built park in the area of Bagmati Corridor 6	38
Figure 28.	Aerial view of Bagmati Corridor 6 in 2013 and 2019	38
Figure 29.	Balmiki Vidyapith School area	38
Figure 30.	Construction area at Balmiki Vidyapith School premises	40
Figure 31.	Aerial view of Balmiki Vidyapith in 2013 and 2019	40
Figure 32.	Basu School premises located in Bhaktapur district	41
Figure 33.	Aerial view of Basu School in 2013 and 2019	41
Figure 34.	Open-space area in Bhaktapur Bahumukhi Campus	42
Figure 35.	Aerial view of Bhaktapur Bahumukhi Campus in 2013 and 2019	42
Figure 36.	Temple under reconstruction in Bhaktapur Durbar Square	43
Figure 37.	Bhaktapur Durbar Square area	43
Figure 38.	Aerial view of Bhaktapur Durbar Square in 2013 and 2019	44
Figure 39.	Aerial view of Bhandarkhal in 2013 and 2019	44
Figure 40.	Construction materials accumulated in the open space of Bhelukhel	45
Figure 41.	Aerial view of Bhelukhel in 2013 and 2019	45
Figure 42.	Aerial view of Bhrikuti Mandap in 2013 and 2019	46
Figure 43.	Aerial view of Birendra Sainik area in 2013 and 2019	46
Figure 44.	Open space in Civil Aviation 1, Sinamangal	47
Figure 45.	Aerial view of Civil Aviation 1 in 2013 and 2019	47
Figure 46.	Aviation museum located in Sinamangal, near the airport	48
Figure 47.	Aerial view of Civil Aviation 3 in 2013 and 2019	48
Figure 48.	A ground view of Dasarath Stadium	49
Figure 49.	Aerial view of Dasarath Stadium in 2013 and 2019	49
Figure 50.	Datattraya area in Bhaktapur district	50
Figure 51.	Aerial view of Datattraya in 2013 and 2019	50

Figure 52.	Aerial view of DWSS in 2013 and 2019	51
Figure 53.	Open-space area of the office of Election Commission of Nepal	51
Figure 54.	Aerial view of the Office of Election Commission of Nepal in 2013 and 2019	52
Figure 55.	Aerial view of Civil Aviation 2 in 2013 and 2019	52
Figure 56.	Aerial view of the Gokarna Golf Club in 2013 and 2019	53
Figure 57.	Structures built in Gokul Chaur area	53
Figure 58.	Aerial view of Gokul Chaur in 2013 and 2019	54
Figure 59.	Aerial view of the Golf Club site near airport in 2013 and 2019	54
Figure 60.	Ongoing construction work for a dry port in Himal Cement Company	55
Figure 61.	Aerial view of Himal Cement Company in 2013 and 2019	55
Figure 62.	Hyatt Regency Hotel premises	56
Figure 63.	Aerial view of the Hyatt Regency Hotel in 2013 and 2019	56
Figure 64.	Jawalakhel Football Ground area located in Jawalakhel of Lalitpur district	57
Figure 65.	Aerial view of the Jawalakhel Football Ground in 2013 and 2019	57
Figure 66.	Khwopa College premises in Bhaktapur district	58
Figure 67.	Aerial view of Khwopa College in 2013 and 2019	58
Figure 68.	Waiting area built in Khwopa Engineering College's premises	59
Figure 69.	Aerial view of Khwopa Engineering College in 2013 and 2019	59
Figure 70.	A pond in Kwathandu area	60
Figure 71.	Aerial view of Kwathandu in 2013 and 2019	60
Figure 72.	A ground view of the Lagankhel Football Ground	61
Figure 73.	Aerial view of the Lagankhel Football Ground in 2013 and 2019	61
Figure 74.	Lagankhel Stupa premises	62
Figure 75.	Aerial view of Lagankhel Stupa in 2013 and 2019	62
Figure 76.	Aerial view of the Lalitpur Municipality Office in 2013 and 2019	63
Figure 77.	Madan Smarak premises	63
Figure 78.	Building under construction in the Madan Smarak school premises	64

Figure 79.	Aerial view of Madan Smarak in 2013 and 2019	64
Figure 80.	Maheshwori Football Ground located in Bhaktapur district	65
Figure 81.	Aerial view of the Maheshwori Football Ground in 2013 and 2019	65
Figure 82.	Open space of Modern Indian School located near Tribhuvan University	66
Figure 83.	Aerial view of the Modern Indian School in 2013 and 2019	66
Figure 84.	Aerial view of Narayan Chaur in 2013 and 2019	67
Figure 85.	Greenhouse tunnels in the premises of NARC located in Lalitpur district	67
Figure 86.	NARC premises	68
Figure 87.	Aerial view of NARC in 2013 and 2019	68
Figure 88.	A resting place in the Nasamana area of Bhaktapur district	69
Figure 89.	Aerial view of Nasamana in 2013 and 2019	69
Figure 90.	Exterior of Nepal Academy located at Kamaladi in Kathmandu district	70
Figure 91.	Aerial view of the Nepal Academy in 2013 and 2019	70
Figure 92.	Aerial view of Nepal Bal Mandir in 2013 and 2019	71
Figure 93.	Solar plant in the Oxygenation Park located near Chovar area	71
Figure 94.	Temporary structures built in the Oxygenation Park area	72
Figure 95.	Aerial view of the Oxygenation Park in 2013 and 2019	72
Figure 96.	Padma Higher Secondary School area	73
Figure 97.	Newly constructed buildings in the school area	73
Figure 98.	Aerial view of the Padma Higher Secondary School in 2013 and 2019	74
Figure 99.	Padma Kanya Campus premises	74
Figure 100.	Aerial view of the Padma Kanya Campus in 2013 and 2019	75
Figure 101.	Pashupati I area located nearTIA	75
Figure 102.	Aerial view of Pashupati 1 in 2013 and 2019	76
Figure 103.	Pashupati 2 area	76
Figure 104.	Aerial view of Pashupati 2 in 2013 and 2019	78
Figure 105.	Pashupati 3 open-space area	78

Figure 106.	Aerial view of Pashupati 3 in 2013 and 2019	78
Figure 107.	Pashupati 4 open-space area	78
Figure 108.	Aerial view of Pashupati 4 in 2013 and 2019	79
Figure 109.	Pashupati 5 open-space area	79
Figure 110.	Aerial view of Pashupati 5 area in 2013 and 2019	80
Figure III.	Cricket ground of Pulchowk Engineering College	80
Figure 112.	Pulchowk Engineering College I area	81
Figure 113.	Aerial view of Pulchowk Engineering College 1 in 2013 and 2019	81
Figure 114.	Pulchowk Engineering College 2 premises	82
Figure 115.	Aerial view of Pulchowk Engineering College 2 in 2013 and 2019	82
Figure 116.	Aerial view of Rastriya Sabha Griha in 2013 and 2019	83
Figure 117.	Ratna Park area	83
Figure 118.	Open-space area of Sainik Manch in Ratna Park area	84
Figure 119.	Aerial view of Ratna Park in 2013 and 2019	84
Figure 120.	Aerial view of Ring Road Balaju Kalanki in 2013 and 2019	85
Figure 121.	Aerial view of Ring Road Balkumari Gwarko in 2013 and 2019	85
Figure 122.	Aerial view of Ring Road Ekantakuna Balkhu in 2013 and 2019	86
Figure 123.	Aerial view of Ring Road Gwarko Satdobato in 2013 and 2019	86
Figure 124.	Aerial view of Ring Road Maharajgunj Balaju in 2013 and 2019	87
Figure 125.	Aerial view of Ring Road Maharajgunj Chabahil in 2013 and 2019	87
Figure 126.	Aerial view of Ring Road Satdobato Ekantakuna in 2013 and 2019	88
Figure 127.	NAST premises located in Lalitpur district	88
Figure 128.	Parking area in the NAST premises	89
Figure 129.	Aerial view of NAST in 2013 and 2019	89
Figure 130.	Sallaghari, Tinkune located in Bhaktapur district	90
Figure 131.	Sallaghari Tinkune area	90
Figure 132.	Aerial view of Sallaghari Tinkune in 2013 and 2019	91

Figure 133.	Aerial view of Sano Gaucharan in 2013 and 2019	91
Figure 134.	Open-space area in Saraswati Vidyagriha	92
Figure 135.	Saraswati Vidyagriha building	92
Figure 136.	Aerial view of Saraswati Vidyagriha in 2013 and 2019	93
Figure 137.	Shankha Park located in Kathmandu district	93
Figure 138.	A gate under construction in Shankha Park	94
Figure 139.	Aerial view of Shankha Park in 2013 and 2019	94
Figure 140.	Aerial view of Sifal ground in 2013 and 2019	95
Figure 141.	Aerial view of the Social Welfare Council in 2013 and 2019	95
Figure 142.	Open-space area in St. Mary's School	96
Figure 143.	St. Mary's School premises	96
Figure 144.	Aerial view of St. Mary's School in 2013 and 2019	97
Figure 145.	St. Xavier's School premises located in Jawalakhel, Lalitpur	97
Figure 146.	Aerial view of St. Xavier's School in 2013 and 2019	98
Figure 147.	A newly constructed waiting area in Suryamadi	98
Figure 148.	Aerial view of Suryamadi in 2013 and 2019	99
Figure 149.	A damaged building in the vicinity of Talako	99
Figure 150.	Aerial view of Talako in 2013 and 2019	100
Figure 151.	Open-space area in Taumadi	100
Figure 152.	Aerial view of Taumadi in 2013 and 2019	101
Figure 153.	A newly constructed building in the Tibetan Refugee Camp	101
Figure 154.	Aerial view of the Tibetan Refugee Camp in 2013 and 2019	102
Figure 155.	Open-space area in Tinkune	102
Figure 156.	Aerial view of Tinkune in 2013 and 2019	103
Figure 157.	Aerial view of the Tribhuvan University in 2013 and 2019	103
Figure 158.	UN Park at Jwagal area in Lalitpur district	104
Figure 159.	Aerial view of the UN Park, Jwagal in 2013 and 2019	104

Figure 160.	UN Park area in Gusingal of Lalitpur district	105
Figure 161.	Aerial view of the UN Park, Gusingal in 2013 and 2019	105
Figure 162.	Aerial view of Vidyarthi Niketan in 2013 and 2019	106
LIST O	FTABLES	
Table I.	Updated details of open spaces in Kathmandu Valley	6

LIST OF ACRONYMS AND ABBREVIATIONS

ANFA All Nepal Football Association

CAAN Civil Aviation Authority of Nepal

CCCM camp coordination and camp management

DIMS disaster information management system

DRR disaster risk reduction

DWSSM Department of Water Supply and Sewerage Management

GIS geographic information system

GPS Global Positioning System

HSS higher secondary school

IDP internally displaced person

IOM International Organization for Migration

MoHA Ministry of Home Affairs

NARC Nepal Agricultural Research Council

NAST Nepal Academy of Science and Technology

SOP standard operating procedure

TIA Tribhuvan International Airport

WASH water, sanitation and hygiene

EXECUTIVE SUMMARY

In 2015, the Constitution of Nepal was passed, and the country initiated its federalization process, which divided the Government into three tiers: federal, provincial and local. Before the federalization, 83 identified open spaces were a national-level responsibility and protected through the publishing of a national gazette in 2013 that listed all open spaces. The national gazette also includes provisions for monitoring of 83 open spaces to prevent encroachment of the sites. With the federalization, the local government is also responsible for the protection of such areas in their urban or rural municipalities.

In this context, IOM – the UN Migration Agency – as co-lead of the Camp Coordination and Camp Management Cluster and with support from the Ministry of Urban Development, Ministry of Home Affairs (MoHA) and Ministry of Federal Affairs and General Administration, undertook the survey to collect data on the current status of open spaces in the Kathmandu Valley in 2019. Building upon a previous survey conducted in 2013 that did the initial open-space identification, this survey updated the information about the current land use of open spaces, its status and also calculated the current usable flat area for the 83 open spaces identified for humanitarian purpose in the valley.

The scope of this updated survey covers a field survey that collected updated data on open-space attributes, general environment assessment, preparation of updated maps for all locations, and development of humanitarian open-space digital platform including an open-space map atlas. This survey shows that many of the open spaces have remained in their pre-identified condition in terms of emergency preparedness, the presence of water, sanitation and hygiene facilities, critical infrastructures and other emergency facilities, when compared to the previous survey. Some open spaces have been altered by the construction of temporary, semi-permanent or permanent structures, some have been encroached, and others have remained almost intact. While this survey was being conducted, the Social Welfare Council was being developed within the residence of the vice president of Nepal, the Himal Cement Company area was being turned into a dry port, and the whole section of the Ring Road has been expanded. Open spaces in the Social Welfare Council, the Himal Cement Company and Airport Golf Course could not be accessed for the survey due to security and administrative reasons.

The data analysis shows that a total area of 2,968,134 m² is usable flat area out of the total area of 5,956,452.74 m² of all the identified open spaces. This accounts for about 50 per cent of the open-space areas. The updated maps of all open spaces, along with attribute information, have been compiled into an Open Space Map Atlas. The Map Atlas includes updated maps of each open space, a vicinity map showing nearby emergency services, recent pictures and short descriptions of each open space. All the outcomes, including geographic information system data sets and maps prepared during this project, have been integrated in a web-based digital open-space platform for humanitarian assistance, as well as an open-space mobile app. The finalized data sets of open-space status survey will also be integrated into the national disaster information management system that was developed by the National Emergency Operations Centre under MoHA.

This assessment was conducted as a part of the People to People Support for Building Community Resilience through Recovery and Reconstruction in Nepal (P2P) project, financially supported by the people of Thailand through the Government of Thailand. The project is being implemented in the eight worst earthquake affected rural and urban municipalities in 2015.

CHAPTER I INTRODUCTION

I.I. Background

Nepal is prone to a multitude of disasters that cause loss of lives, property and infrastructure. Globally, Nepal ranks fourth, eleventh and thirtieth in terms of its vulnerability to climate change, earthquake and flood risk respectively (United Nations Development Programme, 2019). Likewise, Kathmandu is located in a high earthquake risk zone. The Gorkha earthquake in April 2015 and subsequent aftershocks resulted in loss of lives, physical infrastructures and cultural monuments, and left thousands of people homeless. People took shelter in temporary settlements and tents for months, as their houses were completely or partially destroyed. Several small and large land areas available around the affected areas were used by internally displaced persons (IDPs) for temporary shelters, as well as relief distribution by various national and international relief organizations. Open spaces in Kathmandu Valley were used as temporary shelters during the earthquake by the affected people in and outside the valley.

The concept of open spaces in Nepal started initially in 2009 following the Koshi flood response. Activation of the cluster approach in Nepal has developed into being the only project of its kind in the developing world (Ministry of Home Affairs (MoHA), USAID and IOM, 2013). IOM Nepal is co-lead of the Camp Coordination and Camp Management (CCCM) Cluster under the overall leadership of MoUD. In that role, IOM undertook a study to identify open spaces within Kathmandu Valley that could be used for humanitarian purposes. The study identified a total of 83 open spaces in 2013. The identified open spaces were published in the Government of Nepal Gazette in April 2013, describing the locations and the rules set forth around the application of the open-space programme. Kathmandu Valley was divided into grids of 5x5 km sections depicted for planning and geographical significance in which the grids were taken as a reference point for mapping and planning purposes. Additionally, the survey also helped in identifying the catchment areas for possible displacement and details of current infrastructure in those areas.

IOM conducted another rapid assessment from 29 to 30 April, five days following the Gorkha earthquake in 2015. The assessment found that 33 open spaces were in use, accommodating 30,904 IDPs from 5,529 households (IOM, 2018). The identified open spaces proved to be exceptionally useful for the public in Kathmandu Valley following the Gorkha earthquake in terms of providing temporary shelter. IOM has worked in close coordination with the Government and municipalities of Kathmandu Valley to plan emergency preparedness response to mitigate disaster impact. Likewise, IOM continues to work with the Government and partners to protect open spaces and develop an earthquake debris management operations plan and finalize standard operating procedures (SOPs) for first responders and camp management in the event of a large-scale disaster (IOM, 2015).

With realization of the significance of open spaces during emergency situations, especially in densely built urban areas such as Kathmandu, IOM decided to conduct another survey to update the open spaces in Kathmandu Valley. The updated survey also assessed the current status of the spaces in terms of total and usable area, critical resources in and around them and the potential uses of this type during emergency situations.

This updated survey of open spaces in Kathmandu Valley is one of the two components of the project titled GIS Mapping of Identified Open Spaces in 5 Earthquake Affected Districts of Nepal and Information

Update on Open Spaces Identified – Kathmandu Valley. This assessment aimed to update the 83 previously identified and mapped open spaces in Kathmandu Valley with their current status for humanitarian purpose in case of major crisis.

1.2. Objectives

The primary objective of this assessment is to update the maps of the 83 previously identified and mapped open spaces within Kathmandu Valley, as well as compile evidence-based data, such as current total usable area, availability of water, sanitation and hygiene (WASH) facilities, catchment areas and critical infrastructures near the open spaces.

The specific objectives of the assessment are as follows:

- (a) To carry out a Global Positioning System (GPS) survey of all 83 open spaces in Kathmandu Valley;
- (b) To capture evidence-based data (GPS locations, change in usable open-space area, photos and other attribute information on their current status);
- (c) To prepare the Open Space Map Atlas;
- (d) To disseminate open-space data to stakeholders and the public through digital platforms like the webbased Open Space Platform for Humanitarian Assistance, the Open Space mobile application and national disaster information management system (DIMS);
- (e) To prepare an updated assessment report on the status of all open spaces in Kathmandu Valley.

CHAPTER 2 METHODOLOGY

2.1. Synopsis of methodology

The primary sources of information included a field-based GPS survey, an attribute data survey of all 83 open spaces in the valley and an examination of nearby critical infrastructures and facilities. The secondary sources included review of the previous report on identified open spaces in Kathmandu Valley, previously prepared maps, identified critical facilities from previously prepared Google site of open spaces and different open map platforms. In order to conduct the survey of the open spaces and prepare a detailed account of them accordingly, the following technical methodology was applied:

STEP 2 STEP 4 Field Survey **Data Verification** and Open Space Atlas Preparation • GPS based survey Verification of data · Collection of relevant attribute details, • Preparation of map layout and atlas book photographs and critical facilities STEP 5 STEP 1 STEP 3 **Data Compilation** Finalization and **Preparatory Phase** and GIS Mapping Handover Data collection Final detailed report • Review relevant reports and publications • Compilation of data from multiple sources • Handover to IOM • Geodatabase preparation • Data standardization • Preparation of map layouts · Revision of attributes • Preparation of preliminary maps for field survey

Figure 1. Methodology: Updated survey of open spaces in Kathmandu Valley

Note: This infographic is made by NAXA based on the data from the 2019 survey.

Step 1. Preparatory phase

All the available data sets from the previous survey (including geographic information system (GIS) maps, shape files and database of 83 open spaces and detailed report of open spaces) were collected from IOM in the initial phase of the project, and relevant reports and publications were studied. The list of data and attributes to be collected was prepared based on previous tools used, as well as feedback and revision from IOM. A revised set of attributes is mentioned in Annex I of this document. Likewise, general environment assessment conducted previously was also updated during the physical verification of the open spaces. A checklist for the general environmental assessment is found in Annex II.

The preliminary maps for the field survey were also prepared. These maps consist of the boundary information of each open space overlaid over the freely available satellite imagery of the same site. A team of GPS surveyors were oriented on the methodology of data collection and trained by the coordinator from the GIS team.

Step 2. Field survey

The team conducted GPS surveys in the identified open spaces. Printed satellite images were used to identify and mark the objects in the open spaces. New features were updated within the open spaces and their vicinities. Likewise, all the relevant attribute details, photographs and details of critical facilities within some hundred metres were collected. The surveyors used a GPS device, mobile phones, digital single-lens reflex (DSLR) cameras, printed maps and satellite images to collect all the required data from the field.

Step 3. Data compilation and GIS mapping

After completing the field survey, all the data was compiled to develop a geodatabase¹ of open spaces. The GIS team used the location data sets captured from the field to digitize the updated features in the open spaces. For each open space, a detailed topographical map, a vicinity map showing nearby critical infrastructure, satellite image snapshot for 2013 and 2019 from Google Earth, site photographs and an updated table of attributes were prepared. Descriptions of overall field observations as well as output maps were compiled for better dissemination of the findings.

The survey of open spaces conducted in 2013 calculated the total area of each identified open space in Kathmandu Valley. The updated survey team concluded that the entire area of the open spaces cannot be used during an emergency for camp management, as vegetation, buildings and other structures within the open spaces affect the total usable capacity. Hence, the technical team of the updated survey revised the calculations of total area occupied by various temporary and permanent structures and objects within an open space. The usable area of each open space was then calculated by deducting the area occupied by vegetation, buildings and other structures from the total area of an open space. The total capacity of an open space to accommodate displaced people during a disaster was calculated by using the Sphere standard $-3.5 \, \text{m}^2$ per person (Sphere Association, 2018).

Step 4. Data verification and Open Space Map Atlas preparation

A field verification was conducted following the initial compilation of the data and preparation of maps. It was implemented by mobilizing the field surveyors to verify that all the objects in the open spaces were captured by the updated maps, as well as the attribute data were accurately collected. After the field-level verification of the data and maps, the GIS team were engaged in preparing a map atlas. The Open Space Map Atlas consists of updated topographical maps, updated attribute information and photographs of each open space and usable area details, suggested purpose of use, environment checklist table, as well as vicinity maps showing the critical facilities around the site.

Step 5. Finalization and handover

The updated assessment report and the Open Space Map Atlas were shared with IOM for further review and feedback. The suggestions by IOM were incorporated accordingly in the updated assessment report, and finalization of all the outputs were completed. This included compiling the final report and preparation of updated Open Space Map Atlas of all 83 open spaces and integration of open-space data sets into Open Space Platform for Humanitarian Assistance, and the national DIMS and the handover of data sets to the technical team for further use.

A geodatabase is an alternate way to store GIS information in one large file, which can contain multiple point, polygon and/or polyline layers. Geodatabases often appear as single files with the ".gdb" extension or ".mdb" extension.

CHAPTER 3 SURVEY OUTPUTS

For all the surveyed spaces, the key outputs are updated maps and attribute data, recent photographs of the open spaces, vicinity maps along with the locations of nearby critical infrastructures and recent satellite image snapshots. This also includes updated information on usable open-space area for each open space, as well as developing the web-based Open Space Platform for Humanitarian Assistance. These outputs have been compiled into a printable Open Space Map Atlas. The updated survey followed the open space identification report of 2013² for the baseline data sets (names and ownership details) of all 83 open spaces in Kathmandu Valley. The descriptions of these open spaces are included in Annex III of this document.

3.1. Updated details of open spaces in Kathmandu Valley

The following table is a list of all 83 open spaces along with their suggested use type, total area, usable area in 2013 and encroached area in all open spaces that determines the usable area calculated in the updated survey. The table also includes the approximate capacity of all 83 open spaces calculated using the Sphere Standard, which estimates 3.5 m² per person and a short remark on current status of all 83 open spaces.

Table 1. Updated details of open spaces in Kathmandu Valley

S. Z	Location	Suggested use	Total area (m²)	Usable area (m²) in 2013	Usable area (m²) in 2019	Encroached area (m²)	Approximate capacity (3.5 m² per person)	Remarks
-	Adarsha Azad Higher Secondary School (HSS)	Medical assistance area	2,171.66	066'1	016'1	80	545	Slight reduction in the usable area.
7	Army Golf Club, Airport	Multiple: Military installation, civil—military coordination centre, warehouse, humanitarian coordination area	176,853.64	120,395	102,100	18,295	29,171	Significant reduction in the usable area due to the addition of five new buildings; detailed inspection of the site was not allowed due to security reasons.
M	Airport Central Dojo	Humanitarian coordination area	21,328.91	15,360	12,410	2,950	3,545	Significant reduction in the usable area due to the construction of a new structure, ongoing construction of parks and a business complex in the site.
4	All Nepal Football Association (ANFA) Football Ground (North)	Settlement camp	18,238.22	17,344	14,475	2,869	4,135	Significant reduction in the usable area due to the addition of a new building on the eastern side, extension of existing bleachers and a new bleacher on the western side.
5	ANFA Football Ground (South)	Vulnerable population assistance area	11,405.23	11,320	10,500	820	3,000	Significant reduction in the usable area due to the addition of two buildings, a generator building and bleachers in the site.
9	Bagmati Corridor I	Settlement camp	16,054.67	12,280	11,955	325	3,415	Significant reduction in the usable area due to the addition of three new buildings in the site.

7	Bagmati Corridor 2	Multiple: Settlement camp, logistics hub	19,450.14	18,927	18,795	132	5,370	Slight reduction in the usable area due to the construction of three buildings, and some land area is used as a garage.
ω	Bagmati Corridor 3	Settlement camp	43,787.67	43,577	33,545	10,032	9,584	Significant reduction in the usable area due to the addition of temporary and permanent settlements, four construction sites and a petrol pump; vulnerable to flooding during the monsoon season.
6	Bagmati Comidor 4	Multiple: Debris, dead body management/morgue	15,994,22	15,640	15,550	96	4,442	Slight reduction in the usable area due to the construction of new buildings.
01	Bagmati Corridor 5	Multiple: Debris, dead body management/morgue	20,705.69	19,210	18,850	360	5,385	Slight reduction of usable area due to the addition of new buildings; high risk of flood during the monsoon season.
Ξ	Bagmati Corridor 6	Debris collection	6,261.10	6,050	5,235	815	1,495	Significant reduction in the usable area due to the addition of five buildings in the site; risk of flooding during the monsoon season.
12	Balmiki Vidyapith	Multiple: Distribution and medical assistance area	5,603.63	5,350	4,280	0/00	1,222	Significant reduction in the usable area due to the construction of five new buildings and addition of accommodation facilities in the site.
<u>3</u>	Basu School	Humanitarian camp	2,625.05	1,500	1,475	25	421	Slight reduction in the usable area due to the addition of two buildings and ongoing construction of a building near the school gate.
<u>-</u>	Bhaktapur Bahumukhi Campus	Settlement camp	25,970.81	24,590	22,110	2,480	6,317	Significant reduction in the usable area due to the addition of three recent constructions following the demolition of an old building.
15	Bhaktapur Durbar Square	Distribution area	5,936.30	5,370	5,200	170	1,485	The usable area has been reduced temporarily, as many areas of the site are being used to store construction materials.

91	Bhandarkhal	Settlement camp	21,238.28	16,045	15,785	260	4,510	Significant reduction in the usable area due to the addition of three buildings in the site.
17	Bhelukhel	Logistics hub	4,659.93	4,410	4,150	260	1,185	Slight reduction in the usable area due to the addition of a building in the southern part and a temple in the south-east side.
8	Bhrikuti Mandap	Settlement camp	84,138.70	59,216	45,640	13,576	13,040	Significant reduction in the usable area due to the addition of different kinds of facilities, such as cafes, benches, sheds, tracks and fences.
<u>6</u>	Birendra Sainik School	Multiple: Civil— military coordination centre, warehouse, medical assistance, helipad, humanitarian coordination, vulnerable population assistance, telecommunication area, potable water	67,089.78	66,334	56,100	10,234	16,028	Significant reduction in the usable area due to the addition of two buildings and two restrooms in the site.
20	Civil Aviation I (Sinamangal)	Settlement camp	17,457.82	14,630	14,630	0	4,180	No significant change in the area.
21	Civil Aviation 3	Logistics hub	76,292.66	23,650	20,955	2,695	5,987	Significant reduction in the usable area due to the construction of an aviation museum and four new buildings in the site.
22	Dasarath Stadium	Multiple: Humanitanian coordination area, humanitanian camp, helipad	32,249.58	23,970	22,860	1,110	6,531	Temporary accumulation of construction materials has reduced the usable area temporarily.
23	Datattraya	Medical assistance	1,937.70	1,735	1,735	0	495	No major changes in the usable area.

24	Department of Water Supply and Sewerage Management (DWSSM)	Settlement camp	45,022.32	34,795	0	34,795	0	Significant reduction in the usable area due to the addition of several wastewater treatment plants and new office buildings in the site.
25	Election Commission Office	Multiple: Helipad, distribution area, telecommunication area	16,168.61	15,530	14,360	1,170	4,102	Significant reduction in the usable area due to the addition of new constructions and a garage in the site.
26	End of airport site (Civil Aviation 2)	Warehouse	142,215.32	98,540	98,540	0	28,154	No significant change in the usable area of the open space.
27	Gokama Golf Club site	Multiple: Settlement camp, assembly point for displaced, distribution area, warehouse, medical assistance, helipad, potable water	290,060.86	191,695	191,650	45	54,757	No significant changes in the environment and structure were detected; the site could not be accessed for detailed survey due to security issues.
28	Gokul Chaur	Distribution area	7,328.13	7,300	6,765	535	1,932	The addition of three water reservoirs has significantly reduced the usable area.
29	Golf Club site (airport)	Multiple: Logistics hub, civil—military coordination, warehouse, humanitarian camp, helipad, humanitarian coordination area, potable water	141,414.10	71,400	71,400	0	20,400	No major changes in terms of construction besides one newly constructed building.
30	Himal Cement Company	Logistics hub	91,756.67	29,915	0	29,915	0	Significant reduction in the usable area; ongoing construction of a dry port during the updated survey.

3.	Hyatt Regency Hotel	Humanitarian camp	82,979.29	80,575	80,410	165	22,974	Slight reduction in the usable area due to the construction of a new building in the southwest of the site.
32	Jawalakhel Football Ground	Settlement camp	7,501.69	7,385	7,290	95	2,082	Slight reduction in the usable area due to the addition of a small walking path around the ground.
33	Khwopa College	Settlement camp	26,692.29	23,840	22,650	1,190	6,471	Significant reduction in the usable area due to the addition of college buildings and facilities.
34	Khwopa Engineering College	Settlement camp	10.916,11	8,795	7,235	1,560	2,067	Significant reduction in the usable area due to recently built structures in the site.
35	Kwathandu	Medical assistance area	1,531.74	1,445	1,445	0	412	No significant changes in the area.
36	Lagankhel Football Ground	Multiple: Warehouse, medical assistance area, helipad	11,211.30	11,125	11,120	Σ	3,177	No major changes in the area.
37	Lagankhel Stupa	Humanitarian coordination area	17,717.58	7,400	7,395	ſΩ	2,112	The whole area has been converted into a park with many new structures; three buildings, three transformers and several benches in the site. However, there is no significant change in the usable area.
38	Lalitpur Municipality Office	Humanitarian coordination area	6,359.01	5,545	5,530	15	1,580	No significant reduction in the usable openspace area.
39	Madan Smarak	Distribution area	13,096.04	11,345	10,885	460	3,110	Slight reduction in the usable area due to the construction of new buildings and temporary accumulation of construction materials in the site.
40	Maheshwori Football Ground	Settlement camp	8,354.00	8,354	8,354	0	2,386	No major changes in the area.

Product Indian Settlement camp 1479590 14645 14595 50 4170 300 3187 reduction in the usable area due to the product of the sail has been changed into a path Additional Changed into a path Additional Changed Settlement camp 10.266.17 10.115 7.815 2.300 2.222 Entirement camp 10.266.17 10.115 7.815 2.300 2.222 Entirement camp 10.266.17 10.115 2.815 2.300 2.222 Entirement camp 10.266.17 10.115 2.815 2.300 2.222 Entirement camp 10.266.17 10.115 2.815 2.300 2.222 Entirement camp 2.442.20 2.2222 2.2222 2.222 2.2222 2.2222 2.2222									
Nagodyan's Nagodyan's Nagodyan's Nagodyan's Nagodyan's Nagodyan's Nagodyan's Nagodyan's Nagodyan's Camp, logistics hub, Research Council distribution area, potable water 10,166.17 10,115 7,815 2,300 2,232 Nepal Agricultural Research Council distribution area potable water 493,702.60 389,310 381,305 8,005 108,944 Nepal Academy Plumanitarian camp 24,423.20 20,220 18,145 2,075 5,184 Nepal Bal Mandir Settlement camp 14,948.80 14,430 12,890 1,540 3,6190 Oxygenation Park Debris collection 359,400.56 151,825 126,665 25,160 36,190 Padma Higher Humanitarian coordination 12,230.23 11,345 7,250 4,095 2,071 Padma Kanya Settlement camp 17,093.61 11,585 11,550 35 3300	4	Modem Indian School	Settlement camp	14,795.90	14,645	14,595	50	4,170	Slight reduction in the usable area due to the addition of a building at the north-east comer of the site.
Nepal Agricultural Research Council (NARC)/Khumaltar Leteronmunication area, potable water 762.30 389,310 381,305 8,005 108,944 Nepal Agricultural Research Council (NARC)/Khumaltar) distribution area, helipad, distribution area, helipad, distribution area 762.30 755 725 30 207 Nepal Academy Humanitarian camp 24,423.20 20,220 18,145 2,075 5,184 Nepal Bal Mandir Settlement camp 14,948.80 14,430 12,890 1,540 3,682 Oxygenation Park Debris collection 359,400.56 151,825 126,665 25,160 36,190 Padma Higher Humanitarian coordination 12,230.23 11,345 7,250 4,095 2,071 Padma Kanya Settlement camp 17,093.61 11,585 35,180 33300	45	Narayan Chaur/ Nagpokhari	Settlement camp	10,266.17	10,115	7,815	2,300	2,232	Entire area has been changed into a park reducing the usable area significantly; new tracks have also been made.
Nasamana Distribution area 762.30 755 725 30 207 Nepal Academy Humanitarian camp 24,423.20 20,220 18,145 2,075 5,184 Nepal Bal Mandir Settlement camp 14,948.80 14,430 12,890 1,540 3,682 Oxygenation Park Debris collection 359,400.56 151,825 126,665 25,160 36,190 Padma Higher Humanitarian coordination 12,230,23 111,345 7,250 4,095 2,071 Padma Kanya Settlement camp 17,093,61 11,585 11,550 35 3,300		Nepal Agricultural Research Council (NARC)/Khumaltar	Multiple: Settlement camp, logistics hub, medical assistance area, distribution area, helipad, telecommunication area, potable water	493,702.60	389,310	381,305	8,005	108,944	Significant reduction in the usable area due to the addition of numerous greenhouse tunnels within the site.
Nepal Academy Humanitarian camp 24,423.20 20,220 18,145 2,075 5,184 Nepal Bal Mandir Settlement camp 14,948.80 14,430 12,890 1,540 3,682 Oxygenation Park Debris collection 359,400.56 151,825 126,665 25,160 36,190 Padma Higher Humanitarian coordination 12,230.23 11,345 7,250 4,095 2,071 Padma Kanya Settlement camp 17,093.61 11,585 35 3,300	44	Nasamana	Distribution area	762.30	755	725	30	207	Additional constructions in the south-west side has slightly reduced the usable area.
Nepal Bal Mandir Settlement camp 14,948.80 14,430 12,890 1,540 3,682 Oxygenation Park Debris collection 359,400.56 151,825 126,665 25,160 36,190 Padma Higher Humanitarian coordination 12,230.23 11,345 7,250 4,095 2,071 Padma Kanya Settlement camp 17,093.61 11,585 11,550 35 3,300	75	Nepal Academy	Humanitarian camp	24,423.20	20,220	18,145	2,075	5,184	Significant reduction in the usable area due to the addition of three buildings and one temple in the site.
Oxygenation Park Debris collection 359,400.56 151,825 126,665 25,160 36,190 Padma Higher Humanitarian coordination 12,230.23 11,345 7,250 4,095 2,071 Padma Kanya Settlement camp 17,093.61 11,585 11,550 35 3,300	46	Nepal Bal Mandir	Settlement camp	14,948.80	14,430	12,890	1,540	3,682	Significant reduction in the usable area due to the addition of buildings in the site.
Padma Higher Humanitarian coordination 12,230,23 11,345 7,250 4,095 2,071 Secondary School area Padma Kanya Settlement camp 17,093.61 11,585 11,550 35 3,300	74	Oxygenation Park	Debris collection	359,400.56	151,825	126,665	25,160	36,190	Significant reduction in the usable area due to the addition of several temporary structures in the westem and southern parts of the site.
Padma Kanya Settlement camp 17,093.61 11,585 11,550 35 3,300	84	Padma Higher Secondary School	Humanitarian coordination area	12,230.23	11,345	7,250	4,095	2,071	Significant reduction in the usable area due to the construction of three new buildings in the site.
	46	Padma Kanya Campus	Settlement camp	17,093.61	11,585	11,550	35	3,300	Slight reduction in the usable area due to the addition of buildings in the campus premises.

								Significant reduction in the usable area as
C	- 	Cott lomont comp	17 99 1 15	000 71	000 31	0121	1 2 1 1	the site has been changed to a park, with
2	rasındpatı ı	settlement camp	C+.107,71	0006'9	0,00,0	0 - /, -	_ _ _	the addition of eight new buildings and some
								temporary structures.
								Significant reduction in the usable area due to
51	Pashupati 2	Medical assistance area	10,753.01	10,750	7,390	3,360	2,111	the construction of a crematorium and three
								buildings in the site.
								Slight reduction in the usable area due to the
52	Pashupati 3	Settlement camp	19,798	14,720	14,600	120	4,171	construction of three buildings, four benches
								and several stairs replacing trails in the site.
								Slight reduction in the usable area due to the
53	Pashupati 4	Medical assistance area	11,363.81	11,035	10,865	170	3,104	addition of four buildings and three gates in
								the site.
								The entire site has been converted into a
47	7, cr. r. r	دومرد وكمداماتهم اسالموالا	33 103 88	18615	17 180	1 435	4 908	park and the construction of eight buildings
<u> </u>	ן מאוועף מון	ו ופתורמו מאואמו ורפ מו פמ	00:00	0.00	00-,,-) - -	90 F	and a staircase have reduced the usable area
								significantly.
	Pulchowk	Multiple: Distribution area,						Significant reduction in the usable area due to
55	Engineering College	potable water	20,516.28	18,105	17,370	735	4,962	the addition of three new buildings.
	Pulchowk	Multiple: Settlement camp.						Slight reduction in the usable area due to the
26	Engineering College	potable water	86,406.82	84,850	84,755	95	24,215	addition of two new buildings in the site.
57	, in the contract of the contr	+00000 +00000	12 500 72	770	0 0	3100	7 757	Significant reduction in the usable area due to
()	Nastriya sabila Gilla	ספנוופוויפוור כמוווף	ر2./٥٠,ر ا	000,-	000,1	C17,7	70,17	the addition of seven new buildings in the site.

28	Ratna Park/ Tundikhel	Multiple: Settlement/ camp, helipad, civil-military coordination, medical assistance area, vulnerable population assistance area	177,228.49	174,695	172,290	2,405	49,225	Temporary reduction in the usable area due to the construction of temporary structures; also used for the temporary accumulation of construction materials.
59	Ring Road Balaju Kalanki	Settlement camp	308,480.95	308,480.95	0	308,480.95	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
09	Ring Road Balkumari Gwarko	Debris collection	78,169.03	78,169.03	0	78,169.03	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
- 19	Ring Road Ekantakuna Balkhu	Multiple: Settlement camp, distribution area	166,804.61	166,804.61	0	166,804.61	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
62	Ring Road Gwarko Satdobato	Debris collection	71,129.10	71,129.10	0	71,129.1	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
63	Ring Road Maharajgunj Balaju	Settlement camp	272,338.98	272,338.98	0	272,338.98	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
64	Ring Road Maharajgunj Chabahil	Debris collection	174,041.10	174,041.10	0	174,041.1	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
65	Ring Road Satdobato Ekantakuna	Debris collection	117,111.31	117,111.31	0	117,111.31	0	The road has been expanded and blacktopped; previously suggested use may not be applicable.
99	Nepal Academy of Science and Technology (NAST)	Multiple: Camp, medical assistance, humanitarian coordination area	73,071.58	64,765	43,930	20,835	12,551	Significant reduction in the usable area due to the addition of temporary set-ups and six new buildings in the site.

29	Sallaghari, Tinkune	Settlement camp	66,896.13	66,865	64,310	2,555	18,374	Temporary reduction in the usable area due to five temporary buildings and deposits of construction materials.
89	Sano Gaucharan	Distribution area	8,747.76	7,875	7,845	30	2,241	No significant reduction in the total usable area of the site.
69	Saraswati Vidyagriha	Logistics hub	2,895.44	2,895	2,895	0	827	No significant changes in the site
70	Shankha Park	Multiple: Debris collection, logistics hub	10,751.35	9,925	016'6	15	2,831	The park has been well designed with three buildings, two resting platforms and a few stairs; slight reduction in the usable area.
71	Sifal Ground	Settlement camp	7,182.78	7,175	7,175	0	2,050	No major changes in the site.
72	Social Welfare Council	Vulnerable population assistance area	13,319.00	12,070	0	12,070	0	The site was being used for the construction of the residence of the vice president of Nepal during the field survey; hence, previously
								suggested use may not be applicable.
73	St. Mary's School	Humanitarian camp	10,825.32	9,962	8,915	1,047	2,547	Five buildings and two bleachers have been constructed in the north-west and south-west part of the site, and the usable area has been
								reduced significantly.
74	St. Xavier's School	Humanitarian camp	21,382.94	21,382.94	21,280	102.94	6,080	The usable area has been slightly reduced due to the addition of two buildings in the northern side, a statue and a resting platform in the south-east of the site.
75	Suryamadi	Distribution area	795.61	929	029	0	161	No significant changes in the usable area.
76	Talako	Distribution area	1,054.47	1,035	1,030	5	294	No new constructions in the site, and the usable area has not been reduced significantly.
77	Taumadi	Humanitarian coordination area	1,998.70	1,950	1,670	280	477	Slight reduction in the usable area due to the expansion of a building.

78	Tibetan Refugee Camp	Medical assistance area	5,982.58	5,735	5,720	15	1,634	Slight reduction in the usable area due to the addition of four new buildings in the site.
79	Tinkune	Settlement camp	28,372.15	26,330	26,330	0	7,522	No significant changes in this area.
80	Tribhuvan University	Multiple: Settlement/camp, assembly point for IDPs, Tribhuvan University distribution, warehouse, medical assistance, helipad, potable water source	1,431,956	960,540	716,130	244,410	204,608	Most parts of this site are occupied by trees and vegetation, and the site may not be utilized for shelters during a disaster.
8	UN Park, Jwagal	Settlement camp (tents only)	42,300.46	42,010	40,975	1,035	11,707	Significant reduction in the usable area due to the construction of seven new buildings in the site.
82	UN Park, Gusingal	Settlement camp	81,380.22	78,370	72,390	5,980	20,682	The area has been converted into a park, and the usable area has been significantly reduced due to added structures.
83	Vidyarthi Niketan	Distribution area	2,324.70	2,105	1,555	550	444	Significant reduction in the usable area due to the addition of six new buildings and one stage in the south of the site.
	TOTAL	AL	5,956,452.74	4,639,277.02	2,968,134	1,671,143.02	848,038	

Critical facilities available in each identified open space is mentioned in Annex IV of this document.

The Gazette notification list of 83 open spaces with their details published by the Government of Nepal in 2013 is found in Annex V of this document.

3.2. Open-space platform for humanitarian assistance

Besides data collection and mapping, this project also focuses on open-space data dissemination to a wide range of stakeholders using digital platforms for evidence-based decision support. The platform titled Open Spaces Mapping for Humanitarian Assistance is a web-based platform that contains both locations and attribute data of all open spaces in Kathmandu Valley that have been identified and mapped by IOM. The platform also has location details of emergency facilities in close proximity to the open spaces.

Figure 2.A screenshot showing a section of the home page of the Open Space Platform for Humanitarian Assistance



Note: This platform is currently being developed by IOM Nepal in partnership with NAXA.

The main features of the Open Space Platform for Humanitarian Assistance include the following:

About open spaces: The platform provides information through text, as well as audiovisuals regarding the identified open spaces, campsites, logistics, distribution areas, medical assistance areas and other details.

Maps: The platform contains an interactive mapping feature where the users can select the respective municipalities and find details of each open space like attribute tables, the nearest critical facilities and photographs.

Encroachment reports: This is the most important feature of the platform, as it allows system admins to view reports regarding open-space encroachment submitted by the public and forward it to concerned authority for necessary actions. The report function contains GPS location, photographs and report message.

Resources: The resources section is a file management system where users can download and view publications regarding camp management, open spaces and its importance, open-space mapping reports and other useful reports and publications related to the open spaces and their role in disaster preparedness and management.

Humanitarian assistance details: The humanitarian assistance tab in the web platform and in the mobile app is enabled only in the event of a disaster. This tab is mainly for various humanitarian agencies to

upload details of emergency supplies or relief distribution in a location and notify the public about their humanitarian efforts during and after a disaster.

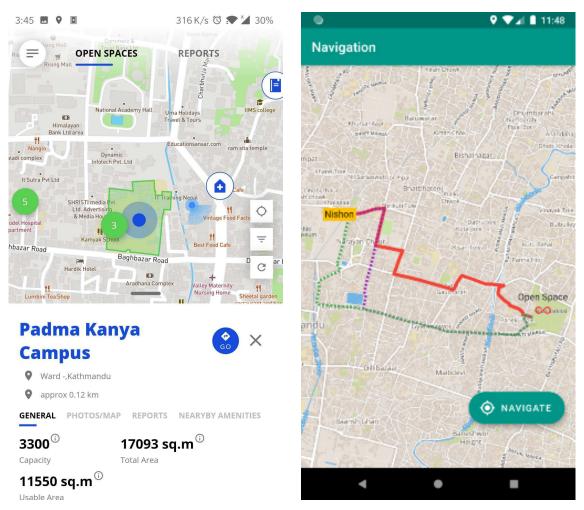
3.3. Open Space Map Atlas

The hard copy of the Open Space Map Atlas of Kathmandu Valley contains all the maps of the identified open spaces. The map atlas specifically contains a summary for each open space along with the total usable area and suggested use type details, topographical maps of open space containing map data for all updated ground features, a vicinity map showing nearby critical facilities, attribute table with different thematic information, and a general environment checklist table.

3.4. Open Space mobile application

The Open Space mobile application was developed to provide the general public with information regarding open spaces and the nearest critical facilities so that they can promptly use it during emergencies. The app contains location data of all open spaces in Kathmandu Valley, and users can navigate to each of these open spaces from their locations at the push of a button in the app. The app works both online and offline and can provide multiple routes from users' locations to the nearest open space during an emergency.

Figure 3. Screenshots showing the distance between the user and open space in the Open Space mobile app



Note: The mobile app is currently being developed by IOM Nepal in partnership with NAXA.

CHAPTER 4 FINDINGS

The updated survey of open spaces in Kathmandu Valley has been greatly effective in terms of changing the detection of open spaces. Compared to the data collected in 2013, significant differences were observed in some of the open spaces. Some of the open spaces identified in 2013 may no longer be categorized as open spaces due to their changed purpose, construction, encroachment or road construction. Out of 83, 10 locations (Himal Cement Company, Social Welfare Council, DWSS, Ring Road Balaju Kalanki, Ring Road Balkumari Gwarko, Ring Road Ekantakuna Balkhu, Ring Road Gwarko Satdobato, Ring Road Maharajgunj Balaju, Ring Road Maharajgunj Chabahil and Ring Road Satdobato Ekantakuna) may no longer be categorized as open spaces, as the entire usable area of these locations have been used for various purposes. The usable area of the remaining 73 open spaces have been reduced due to the construction of buildings or other new infrastructures within the area categorized as usable in the previous survey. After the 2015 earthquakes, semi-permanent structures built for temporary shelter remain in some cases. Some key observations and findings of the field survey are listed below.

(a) Reduction in usable area

The usable areas of some open spaces have been reduced due to the addition of new structures. Temporary deposits or storage of construction materials have reduced the size of the total usable area. For example, accumulation of construction materials in Tundikhel, construction of water treatment plants in DWSS and new buildings constructed in the periphery of Nepal Bal Mandir have reduced the usable areas of these open spaces. Similarly, some open spaces have been beautified into parks and recreational area, which is not necessarily a reduction of the area but the total capacity to hold the estimated population for shelter during an emergency might be altered.

(b) Changed purpose

Some open spaces have changed purpose, including the Social Welfare Council being converted into the residence of the vice president, Himal Cement Company being changed to a dry port, and the whole section of the Ring Road has been widened; hence, the open spaces no longer exist in these areas.

(c) Water, sanitation and hygiene (WASH) facilities

WASH facilities are one of the crucial considerations for open spaces for humanitarian purposes. Initial identification of open spaces in 2013 showed the necessity to build WASH facilities in all viable open spaces. As per this finding, WASH facilities were planned to be installed in most of the identified open spaces by the relevant private agencies and concerned government bodies. However, the updated survey concluded that the installation of WASH facilities was not implemented as per the commitment, hence, making the open spaces less favourable for the people seeking shelter during a disaster. Further, camp management planning is likely to become more resource-consuming in case of a disaster.

(d) Access to open space

Fences and protection measures have been constructed in some of the open spaces, making them less readily available for post-disaster management and accessible to the public seeking shelter during crisis. However, a majority of identified open spaces in the valley are accessible by road and have an easy access to ambulance and fire trucks.

(e) Open-space management issues

The identified open spaces were published in 2013 in the Government of Nepal's Gazette list detailing the rules and regulations. On the contrary, the construction of new structures in the open spaces indicates the lack of monitoring and preservation of the spaces by the concerned authority. Moreover, the local governments in which the open spaces are located were not aware of the Gazette list. A majority of local bodies were not informed about the identified and mapped open spaces within their areas, neither were they informed of the potential use of such spaces during crisis. It is evident that at a community level, people have used the open spaces during a disaster. However, with low awareness of the basic standards, the open spaces are not properly managed. This finding infers the communication gap among the relevant stakeholders for open-space preservation and promotion.

(f) Associated risks with open spaces

Areas near river basins like the Bagmati Corridor are also identified as open spaces; however, these basins are vulnerable to flood risks during the monsoon season. These open spaces may no longer be suitable for post-disaster management considering that rivers have now been reduced to a smaller width and thus vulnerable to high-flood levels. Likewise, in such areas, there is a heightened risk for drainage problems and accumulation of water considering that most of the spaces are flat and not well drained. On the contrary, some open spaces such as in the periphery of Tribhuvan University are not completely flat. Such spaces with gradient (>5%) are not suitable for temporary shelters in the event of a disaster.

A general observation is that open spaces have not been recognized as vital city infrastructures that can be of great significance during a disaster. The updated survey of open spaces in the valley has concluded that the open spaces need to be preserved and promoted by both the local government and the general public. Kathmandu Valley is vulnerable to floods during the monsoon season, as well as earthquakes. Hence, proper open spaces management with essential facilities to be used as temporary shelters or distribution camps is crucial in a congested city such as Kathmandu. Moreover, the outputs of this updated survey have recognized these open spaces as critical infrastructures that can contribute in preemptive planning and implementation during a disaster.

CHAPTER 5 LIMITATIONS

The limitations may subside the validity of the project undertaken; however, when limitations are revealed, the project findings are still relevant. Although the plan of action for the updated survey was carefully designed, there were some inevitable limitations during the detailed field visit and verification.

- (a) The Social Welfare Council and Army Golf Club could not be accessed for detailed field inspection due to security and administrative reasons.
- (b) The team used available Google Earth images to compare the changes in the open spaces. The changes could have been clearly detected and better visualization could have been achieved if high-resolution satellite images or drone-captured images had been used.
- (c) Minute details might have been overlooked during the field visits; for example, details on tube wells, water pump structures and their placements within the open spaces. Other organizations working on disaster risk reduction (DRR) might have worked in this sector. This infers the lack of coordination and communication in data and information-sharing among agencies assisting the Government of Nepal with DRR.
- (d) Inputs from local government bodies of the respective open spaces could not be incorporated due to issues regarding the jurisdiction and the responsibility in monitoring and managing the open spaces in the project sites.
- (e) Furthermore, in some open spaces, the local and/or representative personnel could not be consulted and interviewed on the management of open spaces.
- (f) While the maps and attribute data were collected with the highest possible accuracy, some gaps are expected considering the time, resources and methodology of the project.

CHAPTER 6 SUMMARY AND RECOMMENDATIONS

The updated assessment report of open spaces in Kathmandu Valley encompasses the activities undertaken to collect detailed information on the current status of the pre-identified 83 open spaces and the critical facilities around them. The technical team conducted GPS surveys in all accessible open spaces in the valley and collected updated information on the current condition, current land use, general description of the sites, GPS coordinates, critical infrastructures, special features of the site, catchment areas, security, WASH facilities and other amenities. The project activities have been implemented as per the plan of action, along with necessary consultations and interactions with the local community members and concerned stakeholders of the project. Updated GIS maps of all open spaces have been prepared and included in the Open Space Map Atlas.

Kathmandu Valley epitomizes as the fastest growing city in Nepal, and the growth of settlements is generally spontaneous. Rapid population growth in the valley has created several environmental challenges, such as pollution, haphazard construction, water scarcity and loss of open spaces. Kathmandu Valley has inadequate infrastructure to support the increasing population leading to chaotic and densely constructed urban structures. The situation is likely to become worse, and post-disaster management is even more challenging due to increasing loss of open spaces in the valley. Open spaces are critical urban resources, and their significance is generally recognized only when disaster strikes. Thus, it tends to be a phenomenon that open spaces are taken for granted until the need arrives. Kathmandu Valley has witnessed similar phenomena in the past, and after the 2015 earthquakes, the open spaces proved to be of great use. Nevertheless, these spaces have gradually been reduced, encroached, transformed into non-usable areas or heavily built up. The decrease in usable area of open spaces in Kathmandu Valley can be taken as a prediction of extreme difficulties in post-disaster crisis management. Hence, preservation of available open spaces should be prioritized before these spaces are completely exploited.

Disaster preparedness at community level is crucial, and identifying suitable open spaces can be one of the first initiatives to accommodate people during emergencies. It is essential that the concerned government authorities in Kathmandu Valley inform all the stakeholders and local communities about the availability and use of such open spaces during and after a disaster.

Following are some recommendations:

- (a) Update assessments of the identified open spaces to be carried out in regular intervals, formulating detailed action plan and strictly enforcing the laws for the protection of open spaces are fundamental activities that need to be implemented by the Government.
- (b) It is paramount that the output data sets and maps are shared widely with the Government, national and international agencies, private stakeholders as well as disseminated to the public so that they would at least know about these places, its importance and start thinking about better use of open spaces in the future.
- (c) Involvement of local government in the preservation and promotion of open spaces is critical. It not only enhances the participation and coordination among all stakeholders for preservation, but also clears the confusion among concerned bodies regarding assigned responsibilities.

- (d) Additionally, awareness-raising campaigns aimed towards the general public can strengthen the local community's contribution to the maintenance of open spaces within the periphery.
- (e) Strict rules and regulations regarding the open spaces and the critical infrastructures should be planned and implemented effectively to ensure optimum security of the open spaces. It is important that the open spaces are preserved in consideration to the potential use type.
- (f) Information on a mobile application can be widely shared with the public. With the application, the public can support the preservation of open spaces by reporting any breaching of rules, disturbances or encroachments.

This updated survey has enhanced contextual understanding of the significance of open spaces in urban development and disaster management. The outputs of the project shall be shared to all stakeholders as well as the general public so that information on open spaces can be readily available during post-disaster crisis. Likewise, the data collected and compiled during the assessments are targeted to be incorporated in a publicly accessible web platform and mobile application, making it more useful and interactive.

CHAPTER 7 ANNEXES

ANNEX I. CHECKLIST OF ATTRIBUTES FOR DATA COLLECTION

GENERAL INFORMATION	
Province	
District	
Municipality	
Ward	
Coordinates, elevation	
Total area	
Usable open-space area	
Capacity	
Current land use	
Catchment area	
Access to site	
Ownership	
Special features	
ON-SITE AMENITIES	
Water, sanitation and hygiene (WASH) facilities	
Wi-Fi	
Boundary wall	
Electricity line	
Trees and vegetation	
NEAR-SITE AMENITIES	
Health facilities	
Market	
Security	
Helipad	
Educational infrastructures	
ISSUES/REMARKS IF ANY	
Issues	

ANNEX II. ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL CHECKLIST				
Is it a protected area?				
Is it a buffer zone of protected area?				
Is it a cultural heritage site?				
Is it a densely populated area?				
Is it a special area for protection of biodiversity?				
Will the project require temporary or permanent support facilities?				
Are project-related ecosystems fragile or degraded?				
Will the project cause an increase in peak and flood flows (including from temporary or permanent waste waters)?				
Will the project cause air, soil or water pollution?				
Will the project cause soil erosion and siltation?				
Will the project cause an increase in waste accumulation?				
Will the project cause hazardous waste accumulation?				
Will the project cause a threat to local ecosystems due to invasive species?				
Will the project cause greenhouse gas emissions?				
Will the project make use of pesticides?				
Does the project encourage the use of environmentally friendly technologies?				
Are there other environmental issues, such as noise and traffic?				

ANNEX III. OPEN SPACES IN KATHMANDU VALLEY: UPDATED ASSESSMENT DETAILS

I.ADARSHA AZAD HIGHER SECONDARY SCHOOL

Adarsha Azad Higher Secondary School (HSS) is located towards south-east of the densely populated Bhaktapur city. It extends to an area of 2,171.66 m², out of which 1,910 m² is found to be usable. The site is under the ownership of the Ministry of Education, Science and Technology.



Figure 4. Adarsha Azad School area in Bhaktapur district

Note: All location photos are owned by IOM Nepal, unless otherwise indicated.



Figure 5. Aerial view of Adarsha Azad School in 2013 and 2019

Note: All aerial images are taken from Google Earth, unless otherwise indicated.

The previous study suggested the site to be suitable for medical assistance during a disaster. The updated survey shows no significant change in the usable area of the site, as there were no new structures in the area. The site is located on school grounds and has a proper WASH facility that can be used during an emergency.

2.ARMY GOLF CLUB, AIRPORT

Army Golf Club is located adjacent to Tribhuvan International Airport (TIA). It extends to an area of 176,853.64 m², out of which 102,100 m² is found to be usable. The site is under the ownership of the Pashupati Development Trust Board and the Civil Aviation Authority of Nepal (CAAN).

Figure 6. Aerial view of the Army Golf Club in 2013 and 2019



The previous study suggested the site to be appropriate for multipurpose use including military installation, civil—military coordination centre, warehouse and humanitarian camp during a disaster. The updated survey shows that few structures were constructed in the area. An addition of five buildings in the south-west corner of Army Golf Club have reduced the usable open-space area. As the site is guarded by the Nepal Army, a detailed inspection of the site was not allowed. Consequently, the survey team could assemble limited information about the site.

3. AIRPORT CENTRAL DOJO

Airport Central Dojo is located in the eastern side of Kathmandu Valley, near TIA. It extends to an area of $21,328.91 \text{ m}^2$, out of which $12,410 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.

Figure 7.A building under construction in the vicinity of the open space at airport Central Dojo in the eastern side of Kathmandu Valley, near TIA





Figure 8. Aerial view of Airport Central Dojo in 2013 and 2019

The previous study suggested the site to be a suitable humanitarian coordination area during a disaster. According to the updated survey, major areas of the site are being used for the construction of parks and a business complex. These added structures in the site have significantly reduced the usable area and its capacity to accommodate potential IDPs in an event of a disaster.

4.ANFA FOOTBALL GROUND (NORTH)

ANFA Football Ground (North) site is located near the dense settlement of Patan with its proximity to Bagmati River. It extends to an area of $18,238.22 \, \text{m}^2$, out of which $14,475 \, \text{m}^2$ is found to be usable. The site is under the ownership of the National Sports Council.



Figure 9. Extension of existing bleachers of ANFA ground



Figure 10. North side of ANFA Football Ground

Figure 11. Aerial view of ANFA (North) in 2013 and 2019



The previous study suggested the site to be suitable for settlement camp in the event of a disaster. The updated survey shows some structures added in the site. A building on the eastern side, extension of the existing bleachers on the southern side, a new bleacher on the western side, and two newly built gates have significantly reduced the usable open-space area and its capacity to accommodate people during a disaster.

5.ANFA FOOTBALL GROUND (SOUTH)

ANFA Football Ground (South) is located in the south-east corner of Kathmandu Valley. It extends to an area of 11,405.23 m^2 , out of which 10,500 m^2 is found to be usable. The site is under the ownership of the National Sports Council.



Figure 12. South side of ANFA Football Ground

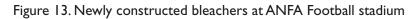






Figure 14. Aerial view of ANFA (South) in 2013 and 2019

The previous study suggested the site to be suitable for vulnerable population assistance area during a disaster. Changes observed during the updated survey include the addition of newly built structures: two buildings near the entrance gate, a generator building and bleachers in the new site have reduced the usable area of the open space. However, the electric lights installed in the site aid in camp management during a disaster.

6. BAGMATI CORRIDOR I

Bagmati Corridor I is located close to Tribhuvan University, south-west of Kathmandu Valley. It extends to an area of 16,054.67 m², out of which 11,955 m² is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 15. Bagmati Corridor I area near Tribhuvan University, south-west of Kathmandu Valley



Figure 16. Aerial view of Bagmati Corridor 1 in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows that three new buildings have been constructed in the site, reducing the total usable open-space area. However, a wall built alongside the river from north to south aids in the camp management by reducing the flood risk.

7. BAGMATI CORRIDOR 2

Bagmati Corridor 2 is located in the south-west of Kathmandu Valley, near Tribhuvan University. It extends to an area of 19,450.14 m^2 , out of which 18,795 m^2 is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 17. Bagmati Corridor 2 area, near Tribhuvan University, south-west of Kathmandu Valley



Figure 18. Aerial view of Bagmati Corridor 2 in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp and logistics hub during a disaster. The updated survey shows three buildings added on the north-western and eastern side of the site. Some land area in the north-eastern side was being used as a garage. A bridge was constructed to connect Bagmati Corridor 2 with Oxygenation Park, thus increasing the accessibility to the site. The addition of a few structures has reduced the usable open-space area.

8. BAGMATI CORRIDOR 3

Bagmati Corridor 3 is located in the south-west of Kathmandu Valley, near Tribhuvan University, along the bank of Bagmati River. It extends to an area of $43,787.67 \text{ m}^2$, out of which $33,545 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.

Figure 19. Bagmati Corridor 3 area, near Tribhuvan University in the south-west of Kathmandu Valley





Figure 20. Slum settlement in Bagmati Corridor 3 area along the bank of Bagmati River

Figure 21. Aerial view of Bagmati Corridor 3 in 2013 and 2019



The previous study suggested the site to be suitable for settlement/camp and to be used as a logistics hub in the event of a disaster. The updated survey shows temporary settlements in the bank of the river. The temporary settlements consist of 18 buildings, 4 construction sites and a petrol pump. Being located in close proximity to the river, the entire area is vulnerable to flooding. The addition of temporary and permanent slum settlement has reduced the usable area significantly. With the reduced usable area and the vulnerability to floods, this updated survey concludes that the Bagmati Corridor area is less favourable for settlement/camp during a disaster.

9. BAGMATI CORRIDOR 4

Bagmati Corridor 4 is located in the south-west of Kathmandu Valley, along the Bagmati River. It extends to an area of 15,994.22 m², out of which 15,550 m² is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.

Figure 22. Bagmati Corridor 4 area, along the Bagmati River located in the south-west of Kathmandu Valley



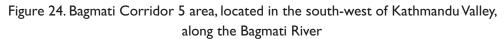
Figure 23. Aerial view of Bagmati Corridor 4 in 2013 and 2019



The previous study suggested the site to be suitable for debris collection and dead body management/ morgue during a disaster. The updated survey shows new buildings in the site that have reduced the total usable area of the open space, hence, less accommodation capacity during an emergency. However, the addition of electrical poles and fences around the site strengthens its capacity for camp management.

10. BAGMATI CORRIDOR 5

Bagmati Corridor 5 is located in the south-west of Kathmandu Valley, along the Bagmati River. It extends to an area of $20,705.69 \text{ m}^2$, out of which $18,850 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



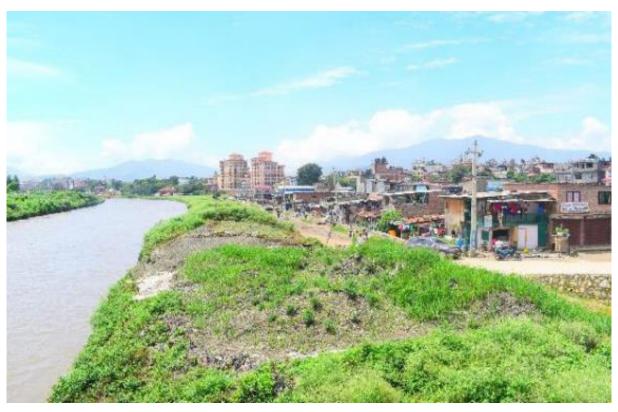


Figure 25. Slum settlement in Bagmati Corridor 5 area along the Bagmati River





Figure 26. Aerial view of Bagmati Corridor 5 in 2013 and 2019

The previous study suggested the site to be suitable for debris collection and dead body management/ morgue during a disaster. The updated survey shows the reduction of usable area due to the slum settlements in the site. As the area is close to the river, there is a high risk of flood during the monsoon season. However, a few electrical poles added in the area may aid in camp management if other factors are favourable.

II. BAGMATI CORRIDOR 6

Bagmati Corridor 6 is located close to the dense settlement of Shankhamul in Kathmandu Valley. It extends to an area of $6,261.10 \text{ m}^2$, out of which $5,235 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 27.A newly built park in the area of Bagmati Corridor 6

Figure 28. Aerial view of Bagmati Corridor 6 in 2013 and 2019

The previous study suggested the site to be suitable for debris collection during a disaster. The updated survey shows the reduction of usable area due to the addition of five buildings in the site. Moreover, the site's proximity to the river has further increased the risk of flooding. The addition of five electrical poles and 18 solar panels strengthens the camp management during a disaster.

12. BALMIKI VIDYAPITH

Balmiki Vidyapith is centrally located in Kathmandu Valley. It extends to an area of $5,603.63 \text{ m}^2$, out of which $4,280 \text{ m}^2$ is found to be usable. The site is under the ownership of Nepal Sanskrit University.

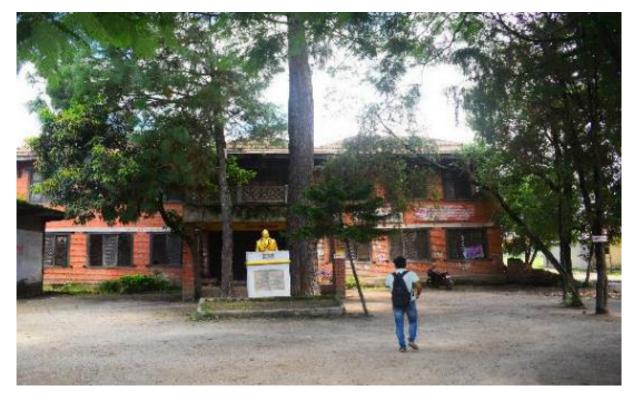


Figure 29. Balmiki Vidyapith School area



Figure 30. Construction area at Balmiki Vidyapith School premises

Figure 31. Aerial view of Balmiki Vidyapith in 2013 and 2019



The previous study suggested the site to be suitable for distribution and medical assistance during a disaster. The updated survey concludes that new buildings and accommodation facilities in the school have been added. Five new buildings have been built in the southern part of the school premises, which significantly reduced the total usable area. However, as the identified open space is within the school premises, it has a proper WASH facility that will strengthen camp management during an emergency.

13. BASU SCHOOL

Basu School is located in the eastern side of Bhaktapur Durbar Square. It extends to an area of 2,625.05 m², out of which 1,475 m² is found to be usable. The site is under the ownership of the Ministry of Education, Science and Technology.



Figure 32. Basu School premises located in Bhaktapur district

Figure 33. Aerial view of Basu School in 2013 and 2019



The previous study suggested the site to be suitable for humanitarian camp during a disaster. The updated survey shows the reduction of usable area for humanitarian camp due to the addition of two buildings, one in the north of the garden and another in the south-west part of the school. There is also ongoing construction of a building in the south of the school gate. The identified open space is within the school premises and has a proper WASH facility that can strengthen camp management during a disaster.

14. BHAKTAPUR BAHUMUKHI CAMPUS

Bhaktapur Bahumukhi Campus is located south of the main road leading to Bhaktapur city. It extends to an area of 25,970.81 m², out of which 22,110 m² is found to be usable. The site is under the ownership of the Ministry of Education, Science and Technology.



Figure 34. Open-space area in Bhaktapur Bahumukhi Campus

Figure 35. Aerial view of Bhaktapur Bahumukhi Campus in 2013 and 2019



The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the reduced usable area due to the addition of three recent constructions following the demolition of an old building. The identified open space is within the school premises and has a proper WASH facility that can strengthen the camp management during a disaster:

15. BHAKTAPUR DURBAR SQUARE

Bhaktapur Durbar Square is centrally located in Bhaktapur and included in the UNESCO World Heritage list. It extends to an area of $5,936.30 \text{ m}^2$, out of which $5,200 \text{ m}^2$ is found to be usable. The site is under the ownership of the Department of Archaeology.



Figure 36. Temple under reconstruction in Bhaktapur Durbar Square





Figure 38. Aerial view of Bhaktapur Durbar Square in 2013 and 2019

The previous study suggested the site to be suitable as a distribution area during a disaster. Bhaktapur Durbar Square was highly affected by the Gorkha earthquake in 2015, and numerous structures are still under reconstruction. For renovation purposes, many areas of the site are being used to store construction materials, and people are not allowed to enter those specific areas of the site. This has reduced the usable area temporarily.

16. BHANDARKHAL

Bhandarkhal is located in the north-east of Kathmandu Valley. It extends in an area of $21,238.28 \text{ m}^2$, out of which $15,785 \text{ m}^2$ is found to be usable. The site is under the ownership of Pashupati Development Trust Board.



Figure 39. Aerial view of Bhandarkhal in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the reduction of usable area due to the addition of three buildings in the south-east corner of the site. The site is close to Mahendra Ved Vidhya Ashram (School), which has a proper WASH facility.

17. BHELUKHEL

Bhelukhel is located in the densely populated area of Bhaktapur city, near the manure production site in Bhaktapur. It extends to an area of 4,659.93 m², out of which 4,150 m² is found to be usable. The site is under the ownership of the municipality of Bhaktapur.



Figure 40. Construction materials accumulated in the open space of Bhelukhel





The previous study suggested the site to be suitable for logistical purposes during a disaster. The updated survey shows the addition of one building in the southern part and a temple in the south-east of the identified open space, on the way to Jagati. A few parts of the site have been used to store the construction materials. These added structures have reduced the usable area of the site.

18. BHRIKUTI MANDAP

Bhrikuti Mandap is centrally located in Kathmandu Valley. It extends to an area of 84,138.70 m², out of which 45,640 m² is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.





The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the addition of different kinds of facilities within the area. The addition of cafes on the western side was observed during the updated survey. Similarly, two ponds, some benches and sheds were constructed at the amusement park site. Tracks and fences were also constructed around the area. These added structures have significantly reduced the usable area for settlement/camp planning during an emergency. However, the exhibition ground is fenced, which aids in the security of the open spaces. Also, the removal of two buildings in the southern part is noticeable. The smaller open spaces scattered in the site are currently being used as a playground and for filming and commercial purposes.

19. BIRENDRA SAINIK SCHOOL

Birendra Sainik School is located along the main road leading to Bhaktapur city. It extends to an area of 67,089.78 m², out of which 56,100 m² is found to be usable. The site is under the ownership of the Nepal Army and the Ministry of Defence.

Figure 43. Aerial view of Birendra Sainik area in 2013 and 2019





The previous study suggested the site to be suitable for multiple purposes, including civil—military coordination centre, warehouse, medical assistance, helipad, humanitarian coordination, vulnerable population assistance, telecommunications and for accessing potable water during a disaster. The updated survey shows the addition of two buildings and two restrooms that have reduced the usable area of the site. The area is located within the school premises and has a well-managed WASH facility, which is a key factor for the people residing here during a disaster.

20. CIVIL AVIATION I, SINAMANGAL

Civil Aviation I (Sinamangal) is located close to TIA, east of Kathmandu Valley. It extends to an area of I7,457.82 m², out of which I4,630 m² is found to be usable. The site is under the ownership of CAAN.



Figure 44. Open space in Civil Aviation 1, Sinamangal





The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows no major changes besides one newly constructed building in the site.

21. CIVIL AVIATION 3

Civil Aviation 3 is located in the eastern part of Kathmandu Valley. It extends to an area of 76,292.66 m², out of which 20,955 m² is found to be usable. The site is under the ownership of CAAN.





Figure 47. Aerial view of Civil Aviation 3 in 2013 and 2019



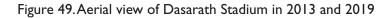
The previous study suggested the site to be suitable for logistical purposes during a disaster. The updated survey found that a recently constructed aviation museum covers a significant area of this open space. In addition, four new buildings and a gate have reduced the usable area and its total capacity to accommodate displaced people during a disaster:

22. DASARATH STADIUM

Dasarath Stadium is located in the south-west of Kathmandu Valley. It extends to an area of $32,249.58 \text{ m}^2$, out of which $22,860 \text{ m}^2$ is found to be usable. The site is under the ownership of the National Sports Council and Ministry of Youth and Sports.



Figure 48.A ground view of Dasarath Stadium





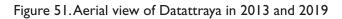
The previous study suggested the site to be suitable for multiple purposes including humanitarian coordination, humanitarian camp and helipad during a disaster. The updated survey shows ongoing renovation in the site. Hence, construction materials were accumulated in some parts of the site. The accumulation of construction materials has reduced the total usable area in the site temporarily.

23. DATATTRAYA

Datattraya Square is located in Bhaktapur district. It extends to an area of 1,937.70 m^2 , out of which 1,735 m^2 is found to be usable. The site is under the ownership of Guthi Sansthan.



Figure 50. Datattraya area in Bhaktapur district





The previous study suggested the site to be suitable for medical assistance during a disaster. The updated survey shows no major changes in the site besides one electrical pole added in the site. The usable area has not been reduced and can be utilized during a disaster.

24. DEPARTMENT OF WATER SUPPLY AND SEWERAGE MANAGEMENT

DWSSM is located in the north-east corner of Kathmandu Valley. It extends to an area of 45,022.32 m². The site is under the ownership of the Ministry of Water Supply.





The previous study suggested the site to be suitable for settlement/camp during a disaster. In the updated survey, the addition of several wastewater treatment plants, and office buildings were observed. The added structures along with old structures have almost occupied the entire area of this site. Hence, previously suggested use for this site may not be applicable.

25. ELECTION COMMISSION OFFICE

The Election Commission Office is located at the centre of Kathmandu district with dense settlement near the identified site. It extends to an area of 16,168.61 m², out of which 14,360 m² is found to be usable. The site is under the ownership of the Ministry of Law, Justice and Parliamentary Affairs.

Figure 53. Open-space area of the office of Election Commission of Nepal



Figure 54. Aerial view of the Office of Election Commission of Nepal in 2013 and 2019

The previous study suggested the site to be suitable for multiple purposes, including helipad, distribution area and telecommunication during a disaster. The updated survey shows new constructions in the periphery consisting of four buildings, two sheds renovated as a single building and a garage. The recent construction has reduced the usable area of this site. However, several electrical poles added in the site can strengthen camp management during a disaster.

26. END OF AIRPORT, CIVIL AVIATION 2

Civil Aviation 2 is located in the southern end of the runway of TIA. It extends to an area of $142,215.32 \text{ m}^2$, out of which $98,540 \text{ m}^2$ is found to be usable. The site is under the ownership of CAAN.



Figure 55. Aerial view of Civil Aviation 2 in 2013 and 2019

Source: Google Earth Nepal.

The previous study suggested the site to be suitable for warehouse during a disaster. The updated survey shows the addition of a few constructions in the open space, including a badminton court in the southwest part of the site, electrical poles and a tower in the south-west part near the track. The electrical poles installed in the site can be useful during camp management.

27. GOKARNA GOLF CLUB

Gokarna Golf Club is located about 10 km from the centre of Kathmandu. It extends to an area of $290,060.86 \text{ m}^2$, out of which $191,650 \text{ m}^2$ is found to be usable. The site is under the ownership of the Gokarna Forest Club and the Department of Forests and Soil Conservation.



Figure 56. Aerial view of the Gokarna Golf Club in 2013 and 2019

The previous study suggested the site to be suitable for multiple uses including logistics, civil—military coordination, warehouse, humanitarian camp and accessing potable water during a disaster. According to the updated survey, no significant changes in the environment and structure were detected on the golf course. However, due to security issues, the site could not be accessed for detailed survey.

28. GOKUL CHAUR

Gokul Chaur is located close to dense settlement of Patan, along the Bagmati River. It extends to an area of $7,328.13 \text{ m}^2$, out of which $6,765 \text{ m}^2$ is found to be usable. The site is under the ownership of Lalitpur Metropolitan City.



Figure 57. Structures built in Gokul Chaur area

Figure 58. Aerial view of Gokul Chaur in 2013 and 2019

The previous study suggested the site to be suitable for a distribution area during a disaster. The updated survey shows the addition of three water reservoirs in the north, south and south-east parts of the site. These structures have reduced the usable area of the open space significantly. A walking trail has been made in the centre of the site for aesthetic purposes.

29. GOLF CLUB SITE (AIRPORT)

Golf Club site is located near the airport in the north-east of Kathmandu Valley. It extends to an area of 141,414.10 m², out of which 71,400 m² is found to be usable. The site is under the ownership of the Pashupati Development Trust Board and CAAN.



Figure 59. Aerial view of the Golf Club site near airport in 2013 and 2019

The updated survey shows no major changes besides one newly constructed building. The site is used as a golf course and for military purposes. Since the area is guarded by the Nepal Army, a detailed survey could not be carried out. A recent aerial image of the site does not show major changes in terms of construction in the site.

30. HIMAL CEMENT COMPANY

Himal Cement Company is located in the south-west of Kathmandu Valley, near Tribhuvan University, along the bank of Bagmati River. It extends to an area of 91,756.67 m². The site is under the ownership of the Himal Cement Company.



Figure 60. Ongoing construction work for a dry port in Himal Cement Company





The previous study suggested the site to be suitable for logistical purposes during a disaster. As per the updated survey, a dry port is under construction and no further study could be carried out. As the whole area is being used for the construction of a dry port, the area may no longer be suitable for logistical purpose in the event of a disaster as proposed by the previous study. Once construction is completed, the smaller area inside the location might be a usable open space.

31. HYATT REGENCY HOTEL

Hyatt Regency Hotel is located in the northern side of Kathmandu Valley, close to the Bouddha Stupa. It extends to an area of $82,979.29 \text{ m}^2$, out of which $80,410 \text{ m}^2$ is found to be usable. The site is under the ownership of DWSSM.



Figure 62. Hyatt Regency Hotel premises





The previous study suggested the site to be suitable to be used as humanitarian camp during a disaster. The updated survey shows a new building in the south-west of the site. The road connected to the site is being expanded.

32. JAWALAKHEL FOOTBALL GROUND

The Jawalakhel Football Ground is located at the centre of Lalitpur district, in front of the Central Zoo. It extends to an area of $7,501.69 \text{ m}^2$, out of which $7,290 \text{ m}^2$ is found to be usable. The site is under the ownership of Machhindranath Development Trust Board.

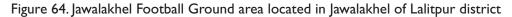




Figure 65. Aerial view of the Jawalakhel Football Ground in 2013 and 2019



The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows a small walking path around the ground. No other significant changes were identified in the site.

33. KHWOPA COLLEGE

Khwopa College is located in the eastern part of Bhaktapur Durbar Square. It extends to an area of $26,692.29 \text{ m}^2$, out of which $22,650 \text{ m}^2$ is found to be usable. The site is under the ownership of the municipality of Bhaktapur.



Figure 66. Khwopa College premises in Bhaktapur district





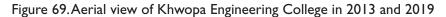
The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the addition of a few new structures including college buildings and facilities that have significantly reduced the usable open-space area. However, proper WASH facilities available within this site will strengthen the camp management during an emergency.

34. KHWOPA ENGINEERING COLLEGE

Khwopa Engineering College is located in the eastern side of Bhaktapur Durbar Square. It extends to an area of 11,916.01 m^2 , out of which 7,235 m^2 is found to be usable. The site is under the ownership of the municipality of Bhaktapur.



Figure 68. Waiting area built in Khwopa Engineering College's premises





The previous study suggested the site to be suitable for settlement/camp during a disaster. As per the updated survey, the recently built structures in the site have significantly reduced the usable area. Nevertheless, the addition of few electrical poles can strengthen the camp management during a disaster.

35. KWATHANDU

Kwathandu is situated in the densely populated area of Bhaktapur. It extends to an area of $1,531.74 \text{ m}^2$, out of which $1,445 \text{ m}^2$ is found to be usable. The site is under the ownership of Guthi Sansthan.



Figure 70.A pond in Kwathandu area





The previous study suggested the site to be suitable for medical assistance during a disaster. The updated survey concluded that there were no significant changes in the area and the open space can be utilized for medical assistance during a crisis.

36. LAGANKHEL FOOTBALL GROUND

Lagankhel Football Ground is located in the heart of Lagankhel, south-east of Kathmandu Valley. It extends to an area of 11,211.30 m^2 , out of which 11,120 m^2 is found to be usable. The site is under the ownership of Lalitpur Metropolitan City.



Figure 72.A ground view of the Lagankhel Football Ground





The previous study suggested the site to be suitable for multiple uses including warehouse, medical assistance and helipad during a disaster. The updated survey shows no major changes in the area and can be used for multiple purposes in the event of a disaster.

37. LAGANKHEL STUPA

Lagankhel Stupa is located in the south-east of Kathmandu Valley. It extends to an area of 17,717.58 m², out of which 7,395 m² is found to be usable. The site is under the ownership of Lalitpur Metropolitan City.



Figure 74. Lagankhel Stupa premises





The previous study suggested the site to be suitable to be utilized as a humanitarian coordination area during a disaster. As per the updated survey, the whole area has been converted into a park. The updated survey shows three buildings in the south-west of the entrance gate, three transformers and several sitting benches in the site. However, no significant change in the usable area was observed.

38. LALITPUR MUNICIPALITY OFFICE

Lalitpur Municipality Office is centrally located in Lalitpur district near the dense settlement of Patan.³ It extends to an area of 6,359.01 m², out of which 5,530 m² is found to be usable. The site is under the ownership of Lalitpur Metropolitan City.

Figure 76. Aerial view of the Lalitpur Municipality Office in 2013 and 2019



The previous study suggested the site to be suitable as a humanitarian coordination area during a disaster. The updated survey shows two new buildings near the pond. As no other major changes were detected, there is no significant reduction in the usable open-space area.

39. MADAN SMARAK

Madan Smarak is located near the dense settlement of Patan in Lalitpur district. It extends to an area of 13,096.04 m², out of which 10,885 m² is found to be usable. The site is under the ownership of the District Education Office.

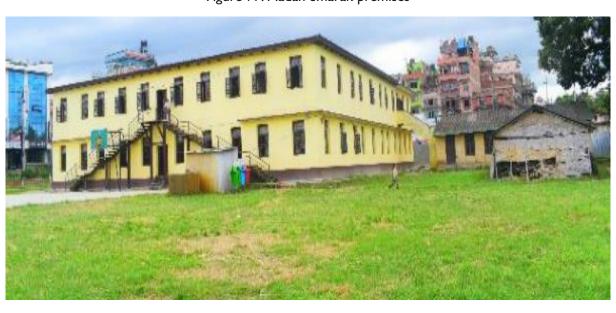


Figure 77. Madan Smarak premises

³ Lalitpur Municipality Office was named as the Office of Lalitpur Sub-Metropolitan City in the Gazette notification of 83 open spaces published by the Government of Nepal.



Figure 78. Building under construction in the Madan Smarak school premises

Figure 79. Aerial view of Madan Smarak in 2013 and 2019



The previous study suggested the site to be suitable as a distribution area during a disaster. The updated survey shows the addition of 10 buildings, and some parts of the site have been used to deposit construction materials. While this has slightly reduced the usable area of the open space, the site has well-managed WASH facilities.

40. MAHESHWORI FOOTBALL GROUND

Maheshwori Football Ground is located at the south-east of densely populated Bhaktapur city. It extends to an area of $8,354 \text{ m}^2$, and the entire area is found to be usable. The site is under the ownership of the Bhaktapur District Sports Development Committee.



Figure 80. Maheshwori Football Ground located in Bhaktapur district





The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows no major changes in the usable area of the open space. The site has a well-managed WASH facility that can strengthen the camp management during a disaster.

41. MODERN INDIAN SCHOOL

Modern Indian School⁴ is located at the south-west of Kathmandu Valley, near Tribhuvan University, along the bank of Bagmati River. It extends to an area of 14,795.90 m², out of which 14,595 m² is found to be usable. The site is under the ownership of Modern Indian School.

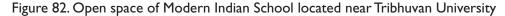




Figure 83. Aerial view of the Modern Indian School in 2013 and 2019



The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the addition of a building at the north-east corner of the site. Since the site is within the school premises, it has a well-managed WASH facility that strengthens camp management in the event of a disaster.

⁴ Modern Indian School area is also known as Chovar Bhutkhel according to the Gazette notification of 83 open spaces published by the Government of Nepal.

42. NARAYAN CHAUR/NAGPOKHARI

Narayan Chaur⁵ is located at the north-east of Kathmandu Valley inside the Ring Road. It extends to an area of $10,266.17 \text{ m}^2$, out of which $7,815 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.





Figure 84. Aerial view of Narayan Chaur in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. According to the updated survey, the whole area has been changed into a park that has completely changed the landscape of the area and hence, reduced the capacity to accommodate people during a disaster. Likewise, the new constructions in the park have slightly elevated areas in all the edges and new tracks have been made. However, many electrical poles and solar panels have been added in the area that can strengthen camp management. The site is commonly used as a sports ground and for leisure activities.

43. NEPAL AGRICULTURAL RESEARCH COUNCIL/KHUMALTAR

NARC is situated in Khumaltar⁶ of Lalitpur district, south of the Ring Road of Kathmandu Valley. It extends to an area of $493,702.60 \, \text{m}^2$, out of which $381,305 \, \text{m}^2$ is found to be usable. The site is under the ownership of the Ministry of Agricultural, Land Management and Cooperatives.



Figure 85. Greenhouse tunnels in the premises of NARC located in Lalitpur district

According to the Gazette notification of 83 open spaces, Narayan Chaur is also known as Nagpokhari area located in Naxal of Kathmandu district.
 NARC as an open space was formerly known as Khumaltar area in the Gazette notification of 83 open spaces published by the Government of Nepal.



Figure 86. NARC premises

Figure 87. Aerial view of NARC in 2013 and 2019



The previous study suggested the site to be suitable for several purposes including settlement/camp, logistics, medical assistance, distribution, helipad, telecommunications and accessing potable water during a disaster. The updated survey shows numerous greenhouse tunnels for research purposes within the site, which has significantly reduced the usable area for the proposed use as per the previous study. However, the army camp near NARC and adequate water supply in the area can strengthen the camp management during a disaster.

44. NASAMANA

Nasamana is located in the densely populated area of Bhaktapur city. It extends to an area of 762.30 m², out of which 725 m² is found to be usable. The site is under the ownership of the municipality of Bhaktapur.



Figure 88. A resting place in the Nasamana area of Bhaktapur district





The previous study suggested the site to be utilized as a distribution area during a disaster. The updated survey shows additional constructions as two buildings were renovated in the south-west side of the site which has slightly reduced the usable area. However, the site has a large area and is suitable for the establishment of a large IDP camp and to serve as a distribution point to the nearest clustered areas.

45. NEPAL ACADEMY

The Nepal Academy is located in the densely populated central region of Kathmandu Valley. It extends to an area of 24,423.20 m², out of which 18,145 m² is found to be usable. The site is under the ownership of the Ministry of Federal Affairs and General Administration, Constituent Assembly, Parliamentary Affairs and Culture.



Figure 90. Exterior of Nepal Academy located at Kamaladi in Kathmandu district





The previous study suggested the site to be utilized as a humanitarian camp during a disaster. The updated survey shows the addition of three buildings and one temple. These structures have reduced the usable area for humanitarian camp as proposed by the previous study. Nevertheless, the attached automated teller machine and a well-managed WASH facility will aid in the camp management during a disaster.

46. NEPAL BAL MANDIR

Nepal Bal Mandir is located in the north-east of Kathmandu Valley inside the Ring Road. Dhobi Khola intersects the identified site. It extends to an area of 14,948.80 m², out of which 12,890 m² is found to be usable. The site is under the ownership of the Ministry of Women, Children and Social Welfare.



Figure 92. Aerial view of Nepal Bal Mandir in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the reduction in usable area due to a few added buildings in the site. However, fencing around the site adds to the security of location during camp management. The site is located within the school premises and has a well-managed WASH facility that can strengthen camp management.

47. OXYGENATION PARK

Oxygenation Park is located in the Bagmati Riverbank opposite to Tribhuvan University. It extends to an area of 359,400.56 m², out of which 126,665 m² is found to be usable. The site is under the ownership of the Ministry of Agricultural, Land Management and Cooperatives.



Figure 93. Solar plant in the Oxygenation Park located near Chovar area



Figure 94. Temporary structures built in the Oxygenation Park area

Figure 95. Aerial view of the Oxygenation Park in 2013 and 2019



The previous study suggested the site to be suitable for debris management and setting up camps for IDPs during a disaster. The updated survey shows that two new bridges have been added in its vicinity, which has increased accessibility to this site. Numerous electrical poles have been added that can aid in camp management during a disaster. The small ponds in the site have now been covered with bushes.

48. PADMA HIGHER SECONDARY SCHOOL

Padma Higher Secondary School is located in Bhaktapur district. It extends to an area of 12,230.23 m², out of which 7,250 m² is found to be usable. The site is under the ownership of the Ministry of Education, Science and Technology.



Figure 96. Padma Higher Secondary School area





Figure 98. Aerial view of the Padma Higher Secondary School in 2013 and 2019



The previous study suggested that the site is suited to be utilized as a humanitarian coordination area during a disaster. The updated survey shows three new buildings in the site. These buildings have significantly reduced the usable area of the open space. This site is located within the school premises and has a well-managed WASH facility that can strengthen camp management during a disaster.

49. PADMA KANYA CAMPUS

Padma Kanya Campus is located in the densely populated central region of Kathmandu district. It extends to an area of 17,093.61 m², out of which 11,550 m² is found to be usable. The site is under the ownership of Tribhuvan University.



Figure 99. Padma Kanya Campus premises

Figure 100. Aerial view of the Padma Kanya Campus in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the reduction of open spaces due to the addition of new buildings north-east to the campus office and south to Pragya Hostel. The total usable area has been reduced to some extent due to these new constructions. Furthermore, the open spaces in south-east corner is being utilized for parking purpose. The open space is within the college premises and has a well-managed WASH facility that strengthens the camp management during a disaster.

50. PASHUPATI I

Pashupati I is located in the north-east corner of Kathmandu Valley. It extends to an area of 17,981.45 m^2 , out of which 15,090 m^2 is found to be usable. The site is under the ownership of Pashupati Development Trust Board.⁷



Figure 101. Pashupati I area located near TIA

⁷ All five open spaces located in Pashupati were categorized as Pashupati area in the national Gazette notification published by the Government of Nepal in 2013.

Figure 102. Aerial view of Pashupati 1 in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows that the landscape of the site has drastically changed, as the site has been turned into a recently designed park. Both temporary and permanent structures have been built in the site. Eight new buildings have been added, along with a gate in the west and foot trails in the centre and the south-west of the site. Plenty of open spaces are being used for vehicle parking. Nonetheless, the site is fenced to the west that would strengthen camp management.

51. PASHUPATI 2

Pashupati 2 is located in the north-east corner of Kathmandu Valley. It extends to an area of $10,753.01\,\text{m}^2$ out of which 7,390 m^2 is found to be usable. The site is under the ownership of Pashupati Development Trust Board.



Figure 103. Pashupati 2 area

Figure 104. Aerial view of Pashupati 2 in 2013 and 2019

The previous study suggested the site to be suitable for medical assistance. The updated survey shows the reduction of significant usable area due to the construction of a crematorium in the site. Likewise, the construction of three buildings and three gates have reduced the usable area of the open space.

52. PASHUPATI 3

Pashupati 3 is located in the north-east corner of Kathmandu Valley. It extends to an area of 19,798 m^2 , out of which 14,600 m^2 is found to be usable. The site is under the ownership of Pashupati Development Trust Board.



Figure 105. Pashupati 3 open-space area



Figure 106. Aerial view of Pashupati 3 in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp. The updated survey shows addition of three new buildings, four benches and several stairs replacing trails in the site. These structures have slightly reduced the usable area of the open space. The three electrical poles have been added, which aids in camp management. In the periphery of the site, deer farming, a temperate forest and the Bagmati River can be found.

53. PASHUPATI 4

Pashupati 4 is located in the north-east corner of Kathmandu Valley. It extends to an area of 11,363.81 m² out of which 10,865 m² is found to be usable. The site is under the ownership of Pashupati Development Trust Board.



Figure 107. Pashupati 4 open-space area



Figure 108. Aerial view of Pashupati 4 in 2013 and 2019

The previous study suggested the site to be suitable for medical assistance during a disaster. The updated survey shows a slight reduction of usable spaces due to the addition of three buildings (two in the southwestern side and one in the north-south road) and three gates (two in the eastern side and one in the southern side). In the periphery of the site, deer farming and a temperate forest can be found.

54. PASHUPATI 5

Pashupati 5 is located in the north-east corner of Kathmandu Valley. It extends to an area of 33,103.66 m², out of which 17,180 m² is found to be usable. The site is under the ownership of Pashupati Development Trust Board.

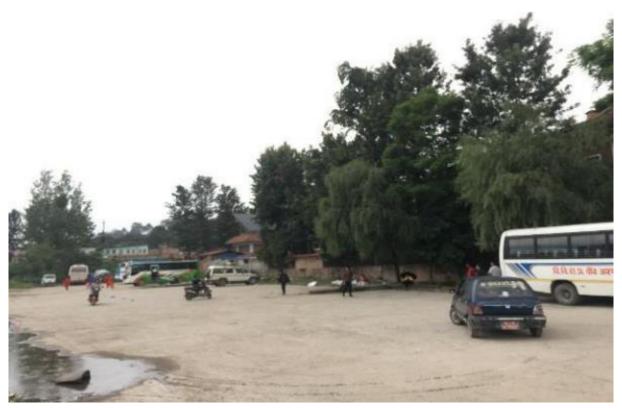


Figure 109. Pashupati 5 open-space area



Figure 110. Aerial view of Pashupati 5 area in 2013 and 2019

The previous study suggested the site to be suitable for medical assistance during a disaster. According to the updated survey, the entire site has been converted into a park, and the construction of eight buildings and a staircase have reduced the usable area significantly.

55. PULCHOWK ENGINEERING COLLEGE I

Pulchowk Engineering College I is located near the Bagmati River in Lalitpur district. It extends to an area of $20,516.27 \text{ m}^2$, out of which $17,370 \text{ m}^2$ is found to be usable. The site is under the ownership of Tribhuvan University.



Figure III. Cricket ground of Pulchowk Engineering College



Figure 112. Pulchowk Engineering College 1 area

Figure 113. Aerial view of Pulchowk Engineering College 1 in 2013 and 2019



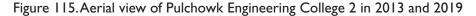
The previous study suggested the site to be suitable as a distribution area and for accessing potable water during a disaster. The updated survey shows three new buildings in the south-western side, which have significantly reduced the usable area of the open space. Pulchowk Engineering College offers additional facilities, such as catering and accommodation useful for the camp management.

56. PULCHOWK ENGINEERING COLLEGE 2

Pulchowk Engineering College 2 is located near the Bagmati River in Lalitpur district. It extends to an area of $86,406.82 \text{ m}^2$, out of which $84,755 \text{ m}^2$ is found to be usable. The site is under the ownership of Tribhuvan University.



Figure 114. Pulchowk Engineering College 2 premises





The previous study suggested the site to be suitable for settlement/camp and for accessing potable water during a disaster. The updated survey shows the reduction of usable area due to the addition of two buildings (one at the south-eastern side and another near the suspension bridge). The open space is within the college premises and has a well-managed WASH facility that can strengthen camp management during a disaster.

57. RASTRIYA SABHA GRIHA

Rastriya Sabha Griha is centrally located in Kathmandu Valley with relatively flat land and with some vegetation. It extends to an area of 13,589.23 m², out of which 9,650 m² is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 116. Aerial view of Rastriya Sabha Griha in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp. The updated survey shows the addition of seven new buildings that have reduced the usable open-space area significantly. There is a frequency modulation tower in the site, and the site is close to the Mahendra Police Club, making security facilities accessible in the area.

58. RATNA PARK/TUNDIKHEL

Ratna Park, also known as Tundikhel area, is located centrally in Kathmandu and is an assembling point for IDPs. It extends to an area of 177,228.49 m², out of which 172,290 m² is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 117. Ratna Park area



Figure 118. Open-space area of Sainik Manch in Ratna Park area

Figure 119. Aerial view of Ratna Park in 2013 and 2019



The previous study suggested the site to be suitable for multiple purposes including camp, helipad, civil—military coordination, medical assistance area and as a vulnerable population assistance area during a disaster. The updated survey shows that a major area of the site has been occupied by temporary constructions and is also being used for temporary deposit of construction materials. The iron pillars and fencing around the site may aid in camp management. In the southern part lies the construction set-up for new Dharahara (collapsed in the April 2015 earthquake). Sainik Manch is situated in the centre of Ratna Park area and can be used for military purposes. Khulla Manch is used as a bus park in the northern side, while the northwestern part is being used to deposit materials for the construction of Durbar High School. In total, five buildings have been built and two bleachers in the north-west and south-west part have been constructed, while the remaining areas remain the same as in the previous survey.

59. RING ROAD BALAJU KALANKI

Ring Road Balaju Kalanki is located in the highly populated area to the west of Kathmandu. It extends to an area of 308,480.95 m². The site is under the ownership of the Department of Roads.



Figure 120. Aerial view of Ring Road Balaju Kalanki in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the expansion of roads in most of the areas namely Balaju, Bhauchaa, Kalanki and Sano Bharyang. Several new constructions and road enhancements like the underpass is constructed in Kalanki area. The previously suggested use may not be applicable due to road expansions.

60. RING ROAD BALKUMARI GWARKO

Ring Road Balkumari Gwarko is located in the highly populated area to the west of Kathmandu. It extends to an area of 78,169.03 m². The site is under the ownership of the Department of Roads.



Figure 121. Aerial view of Ring Road Balkumari Gwarko in 2013 and 2019

The previous study suggested the site to be suitable for debris collection during a disaster. The open spaces along the roadside that were recorded from the previous study have been used for road expansion; hence, the previously suggested use may not be applicable.

61. RING ROAD EKANTAKUNA BALKHU

Ring Road Ekantakuna Balkhu is situated in the south-east corner of Kathmandu Valley. It extends to an area of 166,804.61 m². The site is under the ownership of the Department of Roads.

Figure 122. Aerial view of Ring Road Ekantakuna Balkhu in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp, as well as a distribution area during a disaster. The open spaces along the roadside recorded by the previous study have been used for road expansion; hence, the previously suggested use may not be applicable.

62. RING ROAD GWARKO SATDOBATO

Ring Road Gwarko Satdobato is located at the centre of Lalitpur district. It extends to an area of $71,129.10 \text{ m}^2$. The site is under the ownership of the Department of Roads.

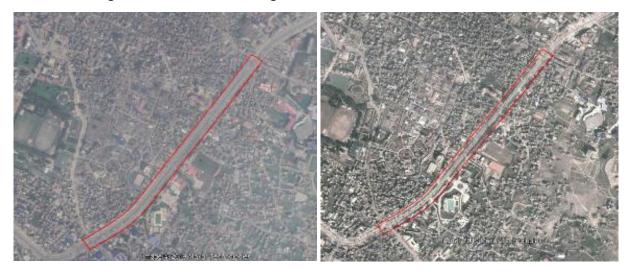


Figure 123. Aerial view of Ring Road Gwarko Satdobato in 2013 and 2019

The previous study suggested the site to be suitable for debris collection during a disaster. All the open spaces along the roadside recorded by the previous study have been used for road expansion; hence, the previously suggested use may not be applicable. Also, an overhead bridge has been constructed near the B&B Hospital in Gwarko.

63. RING ROAD MAHARAJGUNJ BALAJU

Ring Road Maharajgunj Balaju is located in the northern side of Kathmandu Valley with its proximity to the Nagarjun forest. It extends to an area of 272,338.98 m². The site is under the ownership of the Department of Roads.

Figure 124. Aerial view of Ring Road Maharajgunj Balaju in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The open spaces along the roadside recorded by the previous study have been used for road expansion with maximum expansion in Chakrapath Chowk. Hence, the previously suggested use may not be applicable.

64. RING ROAD MAHARAJGUNJ CHABAHIL

Ring Road Maharajgunj Chabahil is located in the northern side of Kathmandu Valley. It extends to an area of 174,041.10 m². The site is under the ownership of the Department of Roads.



Figure 125. Aerial view of Ring Road Maharajgunj Chabahil in 2013 and 2019

The previous study suggested the site to be suitable for debris collection during a disaster. The updated survey shows the expansion of roads along the area with maximum expansion in Chabahil. Hence, the previously suggested use may not be applicable.

65. RING ROAD SATDOBATO EKANTAKUNA

Ring Road Satdobato Ekantakuna is located towards the south-east of Kathmandu Valley. It extends to an area of 117,111.31 m². The site is under the ownership of the Department of Roads.

Figure 126. Aerial view of Ring Road Satdobato Ekantakuna in 2013 and 2019



The previous study suggested the site to be suitable for debris collection during a disaster. All the open spaces recorded by the previous study along the roadside have been used for road expansion. Hence, the previously suggested use may not be applicable. The Rajdal Army Barrack is located close to the identified site.

66. NEPAL ACADEMY OF SCIENCE AND TECHNOLOGY

NAST is situated in the south-east corner of Kathmandu Valley. The site is 1 km away from the Ring Road. It extends to an area of $73,071.58 \text{ m}^2$, out of which $43,930 \text{ m}^2$ is found to be usable. The site is under the ownership of NAST.

Figure 127. NAST premises located in Lalitpur district





Figure 128. Parking area in the NAST premises

Figure 129. Aerial view of NAST in 2013 and 2019



The previous study suggested the site to be suitable for camp, medical assistance and a humanitarian coordination area. The updated survey shows that the temporary setups and construction of six new buildings have significantly reduced the usable area of the site. However, the site has proper WASH facilities in the office buildings which can aid in camp management during a disaster.

67. SALLAGHARI, TINKUNE

Sallaghari Tinkune is located near the Sallaghari Traffic Police post. It extends to an area of $66,896.13 \, \text{m}^2$, out of which $64,310 \, \text{m}^2$ is found to be usable. To the south of the site is the Araniko Highway. The site is under the ownership of the municipality of Bhaktapur.



Figure 130. Sallaghari, Tinkune located in Bhaktapur district

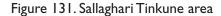






Figure 132. Aerial view of Sallaghari Tinkune in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp. The updated survey shows that five temporary buildings and deposits of construction materials in various parts of the site have occupied the usable area of the open space temporarily. A fully fenced park has been made in the south-east corner of the site, and the improper management of the drainage has been a major issue of the site that might in turn hinder camp management.

68. SANO GAUCHARAN

Sano Gaucharan is located in the north-east of Kathmandu Valley inside the Ring Road. It extends to an area of $8,747.76 \text{ m}^2$, out of which $7,845 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 133. Aerial view of Sano Gaucharan in 2013 and 2019

The previous study suggested the site to be suitable for a distribution area during a disaster. The updated survey shows that the renovation of bleachers has been done and the truss has been managed properly. No major steps have been taken to manage WASH facilities in the site. Since major changes such as construction of new buildings were not observed in the site, there is no significant reduction in the total usable area of the site.

69. SARASWATI VIDYAGRIHA

Saraswati Vidyagriha is situated close to the Kamalbinayak bus park. It extends to an area of 2,895.44 m², and the entire area is found to be usable. The site is under the ownership of the Ministry of Education, Science and Technology.



Figure 134. Open-space area in Saraswati Vidyagriha







Figure 136. Aerial view of Saraswati Vidyagriha in 2013 and 2019

The previous study suggested the site to be suitable for logistical purposes during a disaster. The updated survey shows no significant changes in the site. Since the open space is within the school premises, it has a well-managed WASH facility that can strengthen camp management during a disaster.

70. SHANKHA PARK

Shankha Park is located in the northern side of Kathmandu district. It extends to an area of $10,751.35 \text{ m}^2$, out of which $9,910 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 137. Shankha Park located in Kathmandu district



Figure 138. A gate under construction in Shankha Park

Figure 139. Aerial view of Shankha Park in 2013 and 2019



The previous study suggested the site to be suitable for debris collection and logistical purposes during a disaster. The updated survey shows that the park has been well designed with three buildings, two resting platforms and a few stairs have been constructed, which has reduced the usable area of the site.

71. SIFAL GROUND

Sifal Ground is located in the north-east of Kathmandu Valley inside the Ring Road. It extends to an area of 7,182.78 m², out of which 7,175 m² is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 140. Aerial view of Sifal ground in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows no major changes besides a basketball court and a few electrical poles added in the site. The drainage management system is the major issue of the site that hinders the site from being suitable for camp management during a disaster.

72. SOCIAL WELFARE COUNCIL

Social Welfare Council is centrally located in Kathmandu district. It extends to an area of $13,319 \text{ m}^2$. The site is being used for the construction of the residence of the vice president; hence, the site could not be accessed for a detailed survey. The previous study suggested the site to be suitable as an assistance area for vulnerable populations. As the site is being used for construction, the previously suggested use may not be applicable.



Figure 141. Aerial view of the Social Welfare Council in 2013 and 2019

73. ST. MARY'S SCHOOL

St. Mary's School is located at the centre of Lalitpur district. It extends to an area of $10,825.32 \text{ m}^2$, out of which $8,915 \text{ m}^2$ is found to be usable. The site is under the ownership of the Society of Jesus.



Figure 142. Open-space area in St. Mary's School

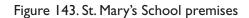






Figure 144. Aerial view of St. Mary's School in 2013 and 2019

The previous study suggested the site to be suitable for a humanitarian camp during a disaster. The updated survey shows the addition of five buildings and two bleachers in the north-west and south-west part of the site. This construction has reduced the usable area significantly. The site is within the school premises and has a well-managed WASH facility that can strengthen the camp management.

74. ST. XAVIER'S SCHOOL

St. Xavier's School is situated at the centre of Lalitpur district. It extends to an area of $21,382.94 \text{ m}^2$ and the usable area is $21,280 \text{ m}^2$. The site is under the ownership of the Society of Jesus.



Figure 145. St. Xavier's School premises located in Jawalakhel, Lalitpur

Figure 146. Aerial view of St. Xavier's School in 2013 and 2019

The previous study suggested the site to be suitable for a humanitarian camp during a disaster. According to the updated survey, the usable area of the site has been slightly reduced due to the recent construction of two buildings in the northern side, a statue and a resting platform in the south-east of the site. The site is within the premises of the school and has a well-managed WASH facility that can strengthen camp management during a disaster.

75. SURYAMADI

Suryamadi is located at Dattatraya Square in Bhaktapur district. It extends to an area of 795.61 m², out of which 670 m² is found to be usable. The site is under the ownership of the municipality of Bhaktapur.



Figure 147. A newly constructed waiting area in Suryamadi

Figure 148. Aerial view of Suryamadi in 2013 and 2019

The previous study suggested the site to be suitable for a distribution area during a disaster. The updated survey shows no significant changes in the site. Water facilities have been added that can be useful during camp management.

76.TALAKO

Talako is located in the densely populated area of Bhaktapur city. It extends to an area of 1,054.47 m^2 , out of which 1,030 m^2 is found to be usable. The site is under the ownership of the municipality of Bhaktapur.



Figure 149.A damaged building in the vicinity of Talako

Figure 150. Aerial view of Talako in 2013 and 2019

The previous study suggested the site can be utilized as a distribution area during a disaster. The updated survey shows no new constructions, and the usable area of the site has not been reduced significantly.

77.TAUMADI

Taumadi is located in the densely populated area of Bhaktapur city. It extends to an area of 1,998.70 m², out of which 1,670 m² is found to be usable. The site is under the ownership of Guthi Sansthan.



Figure 151. Open-space area in Taumadi



Figure 152. Aerial view of Taumadi in 2013 and 2019

The previous study suggested the site to be suitable for a humanitarian coordination area during a disaster. The updated survey shows a slight reduction in usable area due to the expansion of a building in the site. However, the suggested use of this open space is not affected.

78.TIBETAN REFUGEE CAMP

The Tibetan Refugee Camp is situated at the centre of Lalitpur district. It extends to an area of 5,982.58 m², out of which 5,720 m² is found to be usable. The site is under the ownership of the Nepal Red Cross Society.



Figure 153.A newly constructed building in the Tibetan Refugee Camp

Figure 154. Aerial view of the Tibetan Refugee Camp in 2013 and 2019

The previous study suggested the site to be suitable for medical assistance during a disaster. The usable area has been reduced due to the addition of four new buildings in the site. No other major changes have been observed.

79.TINKUNE

Tinkune is located in the eastern side of Kathmandu Valley, near TIA. It extends to an area of $28,372.15 \text{ m}^2$, out of which $26,330 \text{ m}^2$ is found to be usable. The site is under the ownership of Kathmandu Metropolitan City.



Figure 155. Open-space area in Tinkune

Figure 156. Aerial view of Tinkune in 2013 and 2019

The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows no significant changes in this area. Numerous electrical poles and solar panels have been added in the site, which can aid in camp management during a disaster. However, no initiatives have been undertaken for the management and preservation of the open space.

80.TRIBHUVAN UNIVERSITY

Tribhuvan University is located outside the Ring Road but near the main population centre of Kathmandu. It extends to an area of 1,431,956 m², out of which 716,130 m² is found to be usable. The site is under the ownership of Tribhuvan University.



Figure 157. Aerial view of the Tribhuvan University in 2013 and 2019

The site includes the university grounds and an adjacent cleared block of land identified as an oxygenation park. The previous study suggested the site to be suitable for multiple purposes, including camp, assembly point for IDPs, distribution, warehouse, medical assistance, helipad and for accessing potable water during a disaster. The updated survey shows a new building for Tribhuvan University service commission within the periphery. Since the site is occupied by trees and vegetation in many areas, it cannot be utilized for temporary shelters. The site has a well-managed WASH facility and can be suitable for multiple purposes during a disaster.

81. UN PARK, JWAGAL

The UN Park in Jwagal is located near the Bagmati River and centrally located in Lalitpur district. It extends to an area of 42,300.46 m², out of which 40,975 m² is found to be usable. The site is under the ownership of the Government of Nepal.



Figure 158. UN Park at Jwagal area in Lalitpur district





The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows the reduction in usable area due to the addition of seven buildings. The site is located close to water sources, and the addition of numerous electrical poles can aid in camp management during a disaster.

82. UN PARK, GUSINGAL

The UN Park in Gusingal is located south-west of Kathmandu Valley, along the Bagmati Riverbank. It extends to an area of $81,380.22 \text{ m}^2$, out of which $72,390 \text{ m}^2$ is found to be usable. The site is under the ownership of the Government of Nepal.





Figure 161. Aerial view of the UN Park, Gusingal in 2013 and 2019



The previous study suggested the site to be suitable for settlement/camp during a disaster. The updated survey shows that the area has been made into a park, and the usable area has been reduced due to the added structures. Likewise, gabions have been made in a few areas along the river, which reduces the chances of flooding during monsoon. Numerous electrical poles have been added in the site from southeast to south-west that can aid in camp management.

83. VIDYARTHI NIKETAN

Vidyarthi Niketan is located near Bhaktapur Durbar Square. It extends to an area of 2,324.70 m², out of which 1,555 m² is found to be usable. The site is under the ownership of the Ministry of Education, Science and Technology.



Figure 162. Aerial view of Vidyarthi Niketan in 2013 and 2019

The previous study suggested the site to be suitable as a distribution area during a disaster. The usable area has been reduced significantly due to the addition of six new buildings and one stage in the south of the site. The site is within the school premises and has a well-managed WASH facility that can aid in camp management during a disaster.

ANNEX IV. CRITICAL FACILITIES

ial ber				List of	List of critical facilities		
nec mun	Location	WASH facilities	Health facilities	Market	Security	Helipad	Educational institutions
-	Adarsha Azad Higher Secondary School (HSS)	Available	Siddhi Smriti Hospital, Bhaktapur Cancer Hospital, Bhaktapur Hospital, Dr. Iwamura	Bhaktapur Durbar market area, Sukuldhoka market	District Police Beat, Bhaktapur, Birendra Sainik Army, Jagati Police Checkpost	1	Vidyarthi Niketan, Basu School, Bageshwari HSS, Kathmandu University's Department of Music
2	Army Golf Club, Airport -	Available	Siddhi Smriti Hospital, Kathmandu Medical College and Teaching Hospital, Nobel Hospital, Tilganga Institute of Ophthalmology	Mitrapark and Gaushala market	Amed Police Force Camp and Nepal Police at airport and Gaushala	At TIA	Peace Nepal Academy, Texas International College, Orchid College, Shree Sarada Lower Secondary School, Shree Bal Batika Secondary School, Paragon Public School, New Shrine Boarding School
М	Airport Central Dojo	Available	Kathmandu Medical College and Teaching Hospital, Nobel Hospital, Tilganga Institute of Ophthalmology	Sinamangal market, Gaushala market	Nepal Police, Gaushala and Nepal Army at Army Golf Club	At TIA	Orchid College and NASA International College, Bridgewater International School, Abhishek Gyan Mandir, Prasphutan International Academy, Mount Olives High School
4	ANFA Football Ground (North)	Available	Shankhamul Healthcare, Punarjeevan Hospital, Nepal Red Cross Society Blood Bank	Patan market, Baneshwor market, Gwarko market	Amed Police Force Satdobato, Metropolitan Police Station at Satdobato, Community Police Service Centre	At TIA	Himalaya College of Engineering, Pulchowk Engineering College, Chandani Secondary School, Manakamana English Boarding School

B&B Medical Institute, KIST Medical College, Moonlight Secondary School, The Rising School, Namuna Machhindra HSS, United Academy, Samata Sikshya Sadan	Modern Indian School, Tribhuvan University, Shree Adinath Secondary School, Shree Bhaisnavi Secondary School, Shree Pancha Kumari Primary School	Modern Indian School, Tribhuvan University, Shree Adinath Secondary School, Shree Bhaisnavi Secondary School, Shree Pancha Kumari Primary School	Modern Indian School, Tribhuvan University, Shree Adinath Secondary School, Shree Bhaisnavi Secondary School, Shree Pancha Kumari Primary School	Nightingale International Secondary School, Advanced College of Engineering and Management, Sagarmatha Engineering College, Tribhuvan University, Mitra High School, Dynamic
At TIA	At Vayodha Hospital	At Vayodha Hospital	At Vayodha Hospital	At Vayodha Hospital
Amed Police Force Satdobato, Metropolitan Police Beat and Nepal Ammy on the way to Hattiban	Amed Police Force Chovar and Nepal Police near Chovar	Amed Police Force Chovar and Nepal Police near Chovar	Amed Police Force Chovar and Nepal Police near Chovar, Sanepa Police Station, Balkhu Police Station	Metropolitan Police at Teku and Sanepa, Kalimati Police Station
Satdobato- Gwarko market, Lagankhel market	Balkhu market, Dhobighat market	Balkhu market, Dhobighat area	Balkhu market, Dhobighat area	Teku market, Balkhu market
Norvic Hospital, Civil Service Hospital of Nepal, KIST Teaching Hospital, Global Hospital, B&B Hospital	Vayodha Hospital, Kirtipur Hospital, Astamatrika Polyclinic, Jhigu Bagh Bhairab Polyclinic	Vayodha Hospital, Astamatrika Polyclinic, Jhigu Bagh Bhairab Polyclinic	Vayodha Hospital, Astamatrika Polyclinic, Jhigu Bagh Bhairab Polyclinic	Teku Hospital, Vayodha Hospital, Blue Lotus Hospital
Available	Not available	Not available	Not available	Available
ANFA Football Ground (South)	Bagmati Corridor I	Bagmati Corridor 2	Bagmati Corridor 3	Bagmati Comidor 4
N	9	7	∞	0,

At Vayodha Nightingale International Secondary School, Advanced College of Engineering and Management, Dynamic Public School, Nazareth School, Kanti Ishwari School	Himalaya College of Engineering, Kathmandu University School of Management, Kathford International College of Engineering and Management, Asian Engineering College, Nepal College of Information Technology	At Sainik Kathmandu Model College, Manch, Nepal Law Campus, Ratna Tundikhel Rajya Laxmi Campus, Shanker Dev Campus, Padma Kanya Multiple Campus, Royal Public School	Basu School, Khwopa College, Khwopa Engineering College, Genuine Secondary School
Metropolitan Police At V at Teku, Riot Control Hos Police Battalion	Amed Police Force At TIA Satdobato and Baneshwor Police Station, Community Police Service Centre	Ranipokhari Police, Mahendra Police Club And Nepal Army at Bhadrakali, Janasewa Metropolitan Circle, Samudayik Prahari Kendra, Metropolitan Traffic Police Division	District Police Beat - Bhaktapur, Nepal Amy at Sainik School, Bhaktapur Metro Range
Teku market, Tripureshwor market	Baneshwor market, Shankhamul market, Buddhanagar market	Bhrikuti Mandap market, Bagbazar, Dillibazar	Byasi market
Norvic Hospital, Teku Hospital, Vayodha Hospital, Nepal Eye Hospital	Civil Service Hospital of Nepal, HAMS Hospital, Punarjeevan Hospital	Kathmandu Model Hospital, Bir Hospital, National Trauma Center, Kathmandu ENT Hospital	Bhaktapur Hospital, Bhaktapur Cancer Hospital, Byasi Polyclinic
Not available	Available	Available	Available
Bagmati Comidor 5	Bagmati Comidor 6	Balmiki Vidyapith	Basu School
0	=	12	<u>~</u>

Bhaktapur Bahumukhi Campus, Khwopa Higher Secondary School, Birendra Sainik School, Khwopa Engineering College, Sunshine School, Little World School, Shree Ganesh Lower Secondary School, Seducon Pvt. Ltd.	Padma Higher Secondary School, Everest English School, Prabhat School, Adarsha Azad HSS, Khwopa College, Basu School, Saraswati Vidyagriha	Deerwalk Institute of Technology, Texas International College, Himalaya Vidhya Mandir HSS, Alok Vidyashram	Adarsha Azad HSS, Khwopa Engineering College, Khwopa College, Basu School	Nepal Law Campus, Ratna Rajya Laxmi Campus, Balmiki Vidyapith, Padmodaya Secondary School, Padma Kanya Multiple Campus, Royal Public School
1	1	At TIA	T.	At Tundikhel
District Police Beat - Bhaktapur, Nepal Amy at Sainik School, Bhaktapur Metro Range, Metropolitan Police Thimi	District Police Beat – Bhaktapur, Nepal Army at Sainik School, Bhaktapur Metro Range	Gaushala Police Beat, Nepal Army at airport, Gaushala Police Station, Metropolitan Police Range	District Police Beat – Bhaktapur, Nepal Amy at Sainik School, Jagati Police Checkpost	Mahendra Police Club and Nepal Army at Bhadrakali, Janasewa Metropolitan Circle, Samudayik Prahari Kendra, Metropolitan Traffic Police Division
Bansagopal market, Bhaktapur market	Bhaktapur Durbar market, Sukuldhoka market	Mitrapark and Gaushala market, Chabahil market	Bhaktapur Durbar market, Sukuldhoka market	Bhrikuti Mandap market, Bagbazar, Dillibazar
Bhaktapur Hospital, Bhaktapur Cancer Hospital, District Community Eye Centre – Bhaktapur, Dr. Iwamura Memorial Hospital	Bhaktapur Cancer Hospital, Human Organ Transplant Centre, Siddhi Memorial Hospital	Medicare National Hospital (2 km), Tilganga Institute of Ophthalmology, Swacon International Hospital, Nepal- Bharat Maitri Hospital, Welcare	Bhaktapur Cancer Hospital, Dr. Iwamura Memorial Hospital	Kathmandu Model Hospital, Bir Hospital, National Trauma Center, Kathmandu ENT Hospital
Available	Available	Available	Not available	Available
Bhaktapur Bahumukhi Campus	Bhaktapur Durbar Square	Bhandarkhal	Bhelukhel	Bhrikuti Mandap
4	15	9		<u> </u>

Bhaktapur Bahumukhi Campus, Birendra Sainik School, Kanya Co- Education Secondary School, Gyan Sagar Academy, Seducon Pvt. Ltd., Bhaktapur Education Centre	Orchid College, NASA International College, Bridgewater International College, Nobel College	Kathmandu Medical College, NASA International College, Bridgewater International College, Himalayan Institute of Science and Technology	Everest College, Viswa Niketan Secondary School, Arunima Boarding School, Institute of Engineering Thapathali	Saraswati Vidhya Griha, Basu School, Siddhi School, Khwopa Higher Secondary School, Kanya Co-Education Secondary School, Gyan Sagar Academy, Seducon Pvt. Ltd.
1	At TIA	At TIA	Available	ı
Nepal Army within the periphery, Bhaktapur Metro Range, Metropolitan Police Thimi	Gaushala Police Beat, Nepal Army at Golf Club airport	Gaushala Police Beat and Nepal Army at Golf Club airport	Metropolitan Police at Teku, Nepal Amy at Bhadrakali, Riot Control Police Battalion	Bhaktapur Police Beat and Nepal Army at Sainik School
Siddha Pokhari market, Sallaghari market	Sinamangal market	Gaushala market, Sinamangal market	Ratna Park– Sundhara market, Bhrikuti Mandap, World Trade Center at Tripureshwor	Chyamasingh market
Bhaktapur Hospital, Human Organ Transplant Centre, Bhaktapur Cancer Hospital, Dr. Iwamura Memorial Hospital, District	Kathmandu Medical College and Teaching Hospital, Nobel Hospital, Tilganga Institute of Ophthalmology	Kathmandu Medical College and Teaching Hospital, Nobel Hospital, Tilganga Institute of Ophthalmology, Kantipur Hospital	Norvic Hospital, Teku Hospital, Maternity Home, Blue Lotus Hospital, Nepal Eye Hospital, Annapurna Neurological Institute and Allied Sciences	Bhaktapur Hospital, Bhaktapur Cancer Hospital, Siddhi Memorial Hospital
Available	Available	Available	Available	Available
Birendra Sainik School	Civil Aviation I (Sinamangal)	Civil Aviation 3	Dasarath Stadium	Datattraya
<u>o</u>	20	21	52	23

24	DWSSM	Available	Samata Hospital, Dirghayu Guru Hospital	Gaurighat market, Kharibot market	Gaushala Police Beat and Nepal Army at Golf Club	1	Arunima HSS, Mahan Siddhartha HSS, Mokshada School, Kathmandu International School
25	Election Commission Office	Available	Grande City Hospital, Bir Hospital	Jamal market, Thamel and Durbamarg market	Amed Police Force and Nepal Police within the premises, Nepal Army at Dubamarg Army Camp, Traffic Police Durbarmarg, Ranipokhari		Tri-Chandra College, National College Computer Studies, Durbar High School, National Institute of Science and Technology, Lalit Kala Campus, Amrit Science Campus
26	End of airport site (Civil Aviation 2)	Available	Kathmandu Medical College and Teaching Hospital, Hospital for Children, Lokanthali Hospital, Punarjeevan Hospital	Tinkune– Koteshwor market	Gaushala Police Beat, Nepal Army at airport, Koteshwor Police Station	At TIA, the site itself can be used as a helipad	Koteshwar Saraswoti Ma. Vi., Nawajyoti HSS, KMC Teaching Hospital, Pragya Secondary School, Kanjirowa National Secondary School Nepal Central HSS, Himalaya College
27	Gokarna Golf Club site	Available	Nepal Orthopaedic Hospital, Nepal Medical College and Teaching Hospital, Shankarapur Hospital	Gokarneshwor market	Nepal Police at Bouddha and Nepal Army Eleventh Brigade	-	Gokarna Lower Secondary School, Aakash Deep English School, Manakamana English HSS, Himalaya International Model Secondary School, Chamunda HSS, Shankarapur Academy, Jaya

Academia International College, Kathford International College of Engineering and Management, National College of Information and Technology, Shree Shanti Vidhyashram HSS, Pragati Higher Secondary School	Kathmandu Medical College, Baba Batika Secondary School, Nepal Vidyashram, Sharada Secondary School, Arunima HSS, Mahan Sidhhartha High School, Mokshada	Modern Indian School, Shree Taudaha Rastriya HSS, Shree Balkumari Lower Secondary School, High Land Secondary Boarding School, Nirmal School	Reliance College, Lumbini College, St. Lawrence College, Pushpalal Memorial College, Ideal English Higher Secondary School
	At TIA	ı	The open space in the site could be used as a helipad
Nepal Police near Balkumari temple, Tourist Police Post, Metropolitan Police Station	Nepal Police at Gaushala Police Beat and Nepal Army at airport	Amed Police Force and Nepal Police on the way to Chovar	Ward level Nepal Police
Gwarko market, Balkumari market, Lagankhel market	Some local shops near airport and Gaushala market	Few shops in Chovar area	Chabahil market, Bhatbhateni supermarket
B&B Hospital, MIDAT Hospital, Punarjeevan Hospital	Kathmandu Medical College and Teaching Hospital, Tilganga Institute of Ophthalmology, Samata Hospital	Vayodha Hospital, Kritipur Hospital, Diyas Hospital, Chovar Sub-Health Post	Medicare National Hospital, Helping Hands Community Hospital, Om Hospital and Research Centre, Dirghayu Guru Hospital, Buddha
Available	Available	Available	Available
Gokul Chaur	Golf Club site (Airport)	Himal Cement Company	Hyatt Regency Hotel
28	53	30	E

St. Xavier's School, St. Mary's High School, DAV School and College, Nepal Administrative Staff College, Asian College of Management and Technology, Ideal Model School, Caspian Valley College, United Academy, Tri-Padma Vidhyashram Secondary School	Khwopa Engineering College, Genuine Secondary School, Basu School	Saraswati Vidhyagriha, Helpless Education Service, Kanya Co-Education Secondary School, Gyan Sagar Academy, Seducon Pvt. Ltd.	Khwopa Engineering College, Khwopa College, Everest English School, Bagiswori College, Genuine Secondary School
Vayodha Hospital helipad (1.95 km), Nepal Mediciti helipad (1.45 km)	-	-	
Ward level Nepal Police, Jawalakhel Police Station, Metro Range Pulchowk, Metro Range Lalitpur	Bhaktapur Police Beat, Nepal Army at Sainik School, Bhaktapur Metro Range	Bhaktapur Police Beat, Nepal Army at Sainik School, Bhaktapur Metro Range	Bhaktapur Police Beat and Nepal Army at Sainik School
Jawalakhel– Kumaripati market, Lagankhel market, Pulchowk market	Khasi market, Kamalbinayak market	Kamalbinayak market	Kamalbinayak market
Alka Hospital (Pulchowk), Alka Hospital (Ekantakuna), Nidan Hospital, Patan Hospital, Sumeru City Hospital, Megha Hospital and many pharmacies nearby the site	Bhaktapur Hospital, Human Organ Transplant Centre, Bhaktapur Cancer Hospital, Siddhi Memorial Hospital	Bhaktapur Hospital, Bhaktapur Cancer Hospital, Siddhi Memorial Hospital	District Community Eye Centre Bhaktapur, Bhaktapur Cancer Hospital, Siddhi Memorial
Not available	Available	Available	Available
Jawalakhel Football Ground	Khwopa College	Khwopa Engineering College	Kwathandu
32	33	34	35

Available Nepal Engineering College, at nearby Namuna Machhindra Nepal Army School and College, Camp Oxbridge International HSS, Pinnacle Academy	At Nepal Pulchowk Engineering Mediciti College, Moonlight Secondary School, Namuna Machhindra School and College, Oxbridge International HSS, Pinnacle Academy	At Vayodha Pulchowk Engineering Hospital College, Moonlight Secondary School, Rato Bangala School, St. Mary's School, St. Xavier's School	Available Madan Smarak School, at nearby Pulchowk Engineering Nepal College, Moonlight Secondary School, St. Mary's Hospital Bangala School, St. Xavier's School
Metropolitan Police Availab Station Lagankhel, at near Nepal Army at Nepal , Rajdal Army Barrack, Camp Satdobato Police Station	Metropolitan Police At Nepa Station Lagankhel, Mediciti Nepal Army at Hospital Rajdal Army Barrack, Satdobato Police Station	Nepal Police and At Vayo Nepal Army at Hospital Lagankhel	Nepal Police at Lalitpur Available Metropolitan Office, at nearby Mangal Bazar Police, Nepal Station, Tourist Police, Mediciti Metro Police Range, Hospital
Lagankhel market, Satdobato market, Kumaripati market	Patan–Lagankhel market, Satdobato market	Patan–Lagankhel market, Pulchowk market	Patan– Mangalbazar market, Pulchowk market
Patan Hospital, MIDAT Hospital, Ganeshman Singh Memorial Hospital and Research Center, Alka Hospital, Patan Mental Hospital, B&B Hospital, Rhythm Neuropsychiatry Hospital and Research Center	Patan Hospital, MIDAT Hospital, Ganeshman Singh Memorial Hospital and Research Center, Alka Hospital, B&B Hospital, Rhythm Neuropsychiatry Hospital and Research Center	Patan Hospital, Sumeru City Hospital, Alka Hospital, Nepal National Hospital	Patan Hospital, Sumeru City Hospital, Alka Hospital, Nepal National Hospital
Not available	Available	Available	Available
Lagankhel Football Ground	Lagankhel Stupa	Lalitpur Municipality Office	Madan Smarak
38	37	38	39

ns	Ψ	dical	se 1000l, ight sight hool
Siddhi School, Adarsha Azad HSS, Khwopa Engineering College, Basu School	Modern Indian School, Tribhuvan University, Himalaya Kindergarten Pre-School, Annapurna Secondary School, Shree Pancha Kumari Primary School	Hems School, KIST Medical College, Tangal HSS, Malpi International College	Little Angels' Higher Secondary School, Premier International IB World School, Sampurna Secondary Boarding School, Kathmandu International College of Theology, Bright Vision College, Grand Academy, Kathmandu University School of Arts, GEMS School, Ullens School
Siddhi School, Adar Azad HSS, Khwopa Engineering College School	Modern Indian School, Tribhuvan University, Himalaya Kindergarten Pre-School, Annapuma Secondary School, Shr Pancha Kumari Primary School	Hems School, KIST M College, Tangal HSS, International College	Little Angels' Higher Secondary School, Premier International World School, Sampu Secondary Boarding S Kathmandu Internatio College of Theology, Vision College, Grand Academy, Kathmandu University School of A GEMS School, Ullens \$
Siddhi S Azad H Enginee School	Moden Tribhuv Himalay Pre-Sch Second Pancha School	Hems College College Internar	Little A Second Premie World Second Kathma College Vision (Acaden Univers
	Available		Available
1	××××××××××××××××××××××××××××××××××××××	· =	
Police Police	Force on hovar	Nepal Police at Naxal, Community Police Service Center, Nepal Police Headquarters, Kamal Pokhari Police Station	Traffic Office Satdobato, Nepal Army Camp – Lalitpur
Kamalbinayak Police Station, Jagati Police Checkpost	Armed Police Force and Nepal Police on the way to Chovar	Nepal Police at Naxa Community Police Service Center, Nepa Police Headquarters, Kamal Pokhari Police Station	Traffic Office Satdobato, Nepal Army Camp – La
Kama Statio Check	Arme and N the w		Traffic Satdo Army
market, ak	ķet	Naxal, Bhatbhateni	market,
Bhaktapur market, Kamalbinayak market	Balkhu market	xal, Bha'	Satdobato market, Lagankhel market
Bha Kar ma	,	Z	
norial	Vayodha Hospital, Star Hospital, Kirtipur Hospital, Megha Hospital, Nepal Mediciti Hospital	spital, oital, y epal al Clinic, ology	Patan Hospital, Sumeru City Hospital, Nepal Cancer Hospital and Research Centre, Tranquility Hospital and Research Centre, KIST Medical College and Teaching Hospital
Siddhi Memorial Hospital	Vayodha Hospital, Star Hospital, Kirti Hospital, Megha Hospital, Nepal Mediciti Hospital	CIWEC Hospital, Himal Hospital, Grande City Hospital, Nepal International Clinic, Metro Radiology Hospital	Patan Hospital, Sumeru City Hospital, Nepal Cancer Hospital a Research Centre, Tranquility Hospita and Research Centre, KIST Medical College aı Teaching Hospital
Side	Star Hos Me	H Met Inte	Patt Sun Hos Car Tra and Cer Ter Ter
Poorly managed WASH facilities	Available	Facility of drinking water only	Available
Poorly manage WASH facilities	A	Fac	A
puno		inari.	
tball Gr	chool	Vagpok	Ç
oni Foo	ndian S	Chaur/l	humalta
Maheshwori Football Ground	Modern Indian School	Narayan Chaur/Nagpokhari	NARC/Khumaltar
04 V	4	24	£4 5

Sainik Awasiya Mahavidyalaya, Everest English School, Adarsha Azad School HSS, Basu School, Saraswati Vidyagriha	Kathmandu Model College, Uniglobe College, Tri-Chandra College, Annapurna Secondary School, Times International College	Available in Tangal HSS, Vidyapath Narayanhiti School, Galaxy Public Durbar School, Mahendra Bhawan Museum HSS Iocated near the site	At Vayodha Tribhuvan University, Hospital Modern Indian School	Khwopa Engineering College, Khwopa HSS, Adarsha Azad HSS, Basu School, Saraswati Vidyagriha
1	ı	Available in Narayanhiti Durbar Museum located nea	At Vayod Hospital	ı
Bhaktapur Police Station, Nepal Army at Sainik School, Bhaktapur Metro Range	Nepal Police nearby, Nepal Amy at Bhadrakali, Metropolitan Police Office	Nepal Police within 100 m, Nepal Army Eleventh Brigade, Kamalpokhari Police Station	Amned Police Force on the way to Chovar, Police Checkpost at Chovar	Bhaktapur Police, Nepal Army at Sainik School, Bhaktapur Metro Range
Bhaktapur market	Ratna Park and Durbarmarg market	Tangal market, Naxal, Bhatbhateni	Balkhu market	Bhaktapur Durbar Square market
Siddhi Memorial Hospital, District Community Eye Centre, Bhaktapur Cancer Hospital, Human Organ Transplant Centre	National Trauma Center, Bir Hospital, Grande City Hospital, Kathmandu Model Hospital, Himal Hospital	Himal Hospital, Metro Radiology Hospital, Welcare hospital	Vayodha Hospital, Kirtipur Hospital, Megha Hospital, Nepal Mediciti Hospital	Bhaktapur Cancer Hospital, Human Organ Transplant Centre, Siddhi Memorial Hospital
Available	Available	Available	Not available	Available
Nasamana	Nepal Academy	Nepal Bal Mandir	Oxygenation Park	Padma Higher Secondary School
4	45	94	47	84

64	Padma Kanya Campus	Available	Bir Hospital, National Trauma Center, Grande City Hospital, Kathmandu Model Hospital, Himal Hospital	Asan market, Bhrikuti Mandap market, Bagbazar, Dillibazar, Putalisadak market	Nepal Police at Sabha Griha, Mahendra Police Club, Nepal Army at Bhadrakali, Kamalpokhari Police Station, Metropolitan Police Station	1	Kathmandu Model College, Trinity International College, Tri-Chandra College, Nepal Law Campus, Shanker Dev Campus
50	Pashupati I	Available	Tilganga Institute of Ophthalmology, Kathmandu Medical College and Teaching Hospital, Nobel Hospital, Mahendra Narayan Nidhi Memorial	Gaushala market, Tilganga area	Nepal Police at Gaushala Police Beat, Nepal Army at airport, Metro Police Range	At TIA	Vinayak College of Health Science, Classic College International, Pashupati Briddha Ashram
5	Pashupati 2	Available	Tilganga Institute of Ophthalmology, Kathmandu Medical College and Teaching Hospital, Dirghayu Guru Hospital, Nobel	Gaushala market	Gaushala Police Beat and Nepal Army at airport	At TIA	Texas International College, Deerwalk Institute of Technology, Paragon Public School, Pyramid International College, Golden Gate International College, Classic College International
52	Pashupati 3	Available	Tilganga Institute of Ophthalmology, Kathmandu Medical College and Teaching Hospital, Mahendra Narayan Nidhi Memorial Hospital, Biraj Dental Hospital	Gaushala market, Gaurighat market, market areas inside the periphery of the site	Gaushala Police Beat and Nepal Army at airport	At ⊤IA	Texas International College, Deerwalk Institute of Technology, Paragon Public School, Himalayan College

Texas International College, Deerwalk Institute of Technology, Paragon Public School, Kathmandu Medical College, Himalayan College	Texas International College, Deerwalk Institute of Technology, Paragon Public School, Himalayan College	Pulchwok Engineering College, Nagarjuna College of Information Technology, Rato Bangala School, Tri- Padma HSS
At TIA	At TIA	Available
Gaushala Police Beat and Nepal Army at airport	Gaushala Police Beat, Nepal Army at airport, Metro Police Station	Pulchwok Police Beat, Tourist Police Post
Gaushala market, Pingalasthan market	Gaushala market, Pingalasthan market	Patan– Mangalbazar market, Jawalakhel market
Tiganga Institute of Ophthalmology, Kathmandu Medical College and Teaching Hospital, Nepal-Bharat Maitri Hospital, Swacon International Hospital	Tilganga Institute of Ophthalmology, Kathmandu Medical College, Swacon International Hospital, Nepal-Bharat Maitri Hospital, Welcare Hospital	Patan Hospital, Medanta Ortho and Neuro Care Center, Nidan Hospital, Sumeru City Hospital, National Hospital and Cancer Research Center, Pashupati Homeopathic
Available	Available	Available
Pashupati 4	Pashupati 5	Pulchowk Engineering College I
23	45	55

9	Pulchowk Engineering College 2	Available	Patan Hospital, Medanta Ortho and Neuro Care Center, Nidan Hospital, Sumeru City Hospital, National Hospital and Cancer Research Center, Pashupati Homeopathic	Patan– Mangalbazar market, Jawalakhel market	Pulchowk Police Beat, Tourist Police Post	Available	Pulchwok Engineering College, Nagarjuna College of Information Technology, Rato Bangala School, Tri- Padma HSS
57	Rastriya Sabha Griha	Available	Bir Hospital, National Trauma Center, Kathmandu Model Hospital, Kathmandu ENT Hospital	Bhrikuti Mandap, market area near bus park	Mahendra Police Club and Nepal Army Bhadrakali	Available	Padma Kanya Campus, Shanker Dev Campus, Royal Public School, Kathmandu Model Secondary School, Shree Mahankal Secondary School
28	Ratna Park/Tundikhel	Available	Bir Hospital, National Trauma Center, Kathmandu Model Hospital, Kathmandu ENT Hospital	Ratna Park–Bhrikuti Mandap market	Amed Police Force– Election Commission Office, Nepal Police at Ranipokhari, Nepal Amy Eleventh Brigade, Janasewa Metropolitan Circle, Samudayik Prahari Kendra, Metropolitan Traffic	At Sainik Manch and Tundikhel	Padma Kanya Campus, Shankardev Campus, Royal Public School, Kathmandu Model Secondary School, Shree Mahankal Secondary School

Acme Engineering College, Kathmandu BernHardt College, Kamana International College, Henry Ford International College, Balaju School of Engineering and Technology, Siddhartha Vanasthali School, The Excelsior School	Himalayan Nursing College, Kanjirowa National School and College, Capital College and Resource Center, Nepal College of Information Technology, Kathford International College of Engineering and Management, Prabhat Higher Secondary School	Laboratory HSS, Pathshala Nepal Foundation, Asian College of Management and Technology	Himalayan Nursing College, Kathmandu College of Management, KIST Medical College, Bright Future HSS
At Armed Police Force Halchowk, Birendra Sainik Hospital	At TIA	At Vayodha Hospital, Nepal Mediciti Hospital	1
Shree Yuddha Kawach Gadh, Mahanagariya Prahari Beat Swayambhu, Armed Police Force Halchowk, Temporary Metropolitan Police Division, Balaju	Kathmandu Metropolitan Police Sector (Koteshwor), Police Beat Koteshwor	Jawalakhel Police Station, Sanepa Police Station, Nakhu Temporary Police Beat	Satdobato Police Beat, Armed Police Force 21 Battalion
Kalanki market, Sitapaila, Balaju market, Vanasthali market	Gwarko market, Patan market, Bhatbhateni Supermarket, Koteshwor market	Balkhu market	Satdobato, Gwarko market, Patan market
Birendra Sainik Hospital, National Kidney Center, Sahid Smriti Ayurved Hospital, Manmohan Memorial Medical College and Teaching Hospital, Suvekchya International Hospital and Research Center	B&B Hospital, KIST Teaching Hospital	Megha Hospital, Star Hospital, Vayodha Hospital, Alka Hospital, Nepal Mediciti Hospital, Rhythm Neuropsychiatry Hospital and Research Center	B&B Hospital, KIST Teaching Hospital
1	ı	-	ı
Ring Road Balaju Kalanki	Ring Road Balkumari Gwarko	Ring Road Ekantakuna Balkhu	Ring Road Gwarko Satdobato
59	09	9	62

Herald International College, Southwestern College, Morgan International College, Canvas International College, Supreme College, Adhyayan School, Saptagandaki Boarding School, Glen Buds Secondary School	Pasang Lhamu College, Kathmandu Valley HSS, Kantipur English High School, Brooklyn College, Bagmati Boarding Secondary School, New Millennium College, College of Applied Business, Pushpalal Memorial College, Pashupati Multiple Campus, Texas International College	Caribbean School, Delight Secondary School, Adarsha Vidya Mandir, Machhapuchchhre School, Einstein Academy, Araniko College, Hope International College, Asian College of Management and Technology, National Colse of Engineering, Cosmos College of Management and Technology, National
At Grande International Hospital		At Nepal Mediciti Hospital, Vayodha Hospital
Temporary Police Beat Balaju, Metropolitan Police Station Maharajgunj	Metropolitan Police Beat Sukedhara, Metropolitan Police Station Narayan Gopal Chowk	Jawalakhel Police Station, Nakkhu Temporary Police Beat, Lagankhel Metropolitan Police Station
Machhapokhari market, Balaju market, Gongabu market, Narayan Gopal Chowk market	Narayan Gopal Chowk, Sukedhara market, Chabahil market	Jawalakhel market, Balkhu market
All Nepal Hospital, Grande International Hospital, Green City Hospital, Kantipur Dental Hospital, Ishan Children and Women's Hospital, Metro Kathmandu Hospital, Vinayak Hospital	Om Hospital and Research Centre, Metro Kathmandu Hospital and Maternity Home, HAMS Hospital, Medicare National Hospital, Helping Hands Community Hospital, Nepal- Bharat Maitri	Ganeshman Singh Memorial Hospital and Research Center, Alka Hospital, Nepal Mediciti Hospital, Rhythm Neuropsychiatry Hospital and Research Center
1		
Ring Road Maharajgunj Balaju	Ring Road Chabahil Maharajgunj	Ring Road Satdobato Ekantakuna
63	49	65

%	NAST	Available	Sumeru City Hospital, Nepal Cancer Hospital and Research Center, Tranquility Hospital and Research Centre, KIST Medical College and Teaching Hospital, Global Hospital, B&B	Satdobato market	Traffic Police Satdobato, Nepal Army Hattiban	At TIA	Premier International College, Little Angels School, GEMS School, Modern Graded School, Oasis English School, Jugal English Medium Secondary School
29	Sallaghari, Tinkune	Not available	Dr. Iwamura Memorial Hospital, Bhaktapur Polyclinic	Sallaghari market	Bhaktapur Police Beat, Nepal Army at Sainik School, Police Booth Duwakot	1	Nilcholson College, KMCTH Duwakot, Rajarshi Gurukul, Oxford Practical English School, Birendra Sainik School
89	Sano Gaucharan	Not available	Himal Hospital, Nepal Center for Rheumatic Diseases, Welcare Hospital	Private shops, Naxal, Dillibazar	Nepal Police Headquarters and Kamalpokhari Police Station	ı	KIST Medical College, International School of Management and Technology College, Tangal HSS, Galaxy Public School
69	Saraswati Vidhyagriha	Available	Bhaktapur Cancer Hospital, Siddhi Memorial Hospital	Bhaktapur market, Kamalbinayak market	Bhaktapur Metro Range	ı	Khwopa College, Khwopa Engineering College, Bagiswori College, Genuine Secondary School
70	Shankha Park	Available	Tribhuvan University Teaching Hospital, Kanti Children's Hospital, Dhanwanti Ayurvedic Hospital, HAMS Hospital, Kapan Hospital, Metro Kathmandu	Bhatbhateni supermarket, Maharajgunj area	Metropolitan Police Beat Sukedhara, Maharajgunj Police Station, Metropolitan Circle Maharajgunj	Tribhuvan University Teaching Hospital Helipad	Loyalty Academy, Kantipur English High School, Alpine Valley School, NCCS School

	Sifal Ground	Available	Shahid Gangalal National Heart Centre, Tribhuvan University Teaching Hospital, Om Hospital and Research Centre, Swacon International Hospital, Dirghayu Guru Hospital	Kalopul market, Chabahil Ganeshthan market	Metropolitan Police Beat Sukedhara, Metropolitan Police Circle Gaushala, Maitidevi Police Post	1	Kathmandu Valley High School, Orient College, British Gurkha College, College of Applied Business, Pasang Lhamu College, Canvas International College, Brilliant Multiple Campus, Golden Gate International College, Paragon Public School, Xavier International College
72	Social Welfare Council	Survey not possible	ssible				
73	St. Mary's School	Available	Alka Hospital, Medanta Ortho and Neuro Care Center, Patan Hospital, Megha Hospital, Nidan Hospital, National Hospital, and Cancer Research Center	Jawalakhel-Patan market	Nepal Police Lalitpur	Possibility of landing in the site	St. Xavier's School, St. Mary's School, Pulchwok Engineering College, Caspian Valley College, Tri-Padma Vidyashram Secondary School, Ideal Model School
74	St. Xavier's School	Available	Alka Hospital, Medanta Ortho and Neuro Care Center, Patan Hospital, Megha Hospital, Nidan Hospital, National Hospital and Cancer Research Center	Jawalakhel-Patan market	Metropolitan Police Council, Lalitpur	Available at nearby Vayodha Hospital	St. Xavier's School, St. Mary's School, Pulchwok Engineering College, Caspian Valley College, Tri-Padma Vidyashram Secondary School, Ideal Model School, United Academy

Vidyarthi Niketan, Helpless Education Service, Kanya Co-Education Secondary School, Gyan Sagar Academy, Seducon Pvt. Ltd.	Birendra Sainik School, Siddhi School, Saraswati Vidyagriha, Khwopa HSS, Adarsha Azad HSS, Basu School	Sainik Awasiya Mahavidyalaya, Everest English School, Siddhi School, Adarsha Azad HSS, Khwopa College, Basu School, Saraswati Vidyagriha	St. Xavier's School, St. Mary's School, Caspian Valley College, United Academy, Ideal Model School, Tri-Padma Vidyashram Secondary School	WhiteHouse College of Management and Technology, Himalaya College, NASA International College, Pentagon International College, VS Niketan College
1	Possibility of landing at Birendra Sainik ground	Possibility of landing at Sainik ground		At TIA
District Police Force - Bhaktapur, Nepal Army at Sainik School, Bhaktapur Metro Range	Police Beat Bhaktapur and Nepal Army at Sainik School	District Police Force Bhaktapur, Nepal Army at Sainik School, Bhaktapur Metro Range	Mahanagariya Police Beat	Koteshwor – Tinkune Police Beat, Nepal Army at airport
Durbar area market	Bhaktapur market	Bhaktapur Durbar market	Jawalakhel market	Koteshwor market, New Baneshwor market
Bhaktapur Cancer Hospital, District Community Eye Centre, Bhaktapur, Siddhi Memorial Hospital	District Community Eye Centre – Bhaktapur, Human Organ Transplant Centre, Siddhi Memorial Hospital	Siddhi Hospital, District Community Eye Centre, Bhaktapur, Bhaktapur Cancer Hospital, Human Organ Transplant Centre	Alka Hospital, Patan Hospital, Nepal Mediciti Hospital, National Hospital and Cancer Research Center, Megha Hospital	Kantipur Hospital, Civil Service Hospital of Nepal, Kathmandu Medical and Teaching Hospital, Motherland Hospital
Available	Available	Available	Available	Not available
Suryamadi	Talako	Taumadi	Tibetan Refugee Camp	Tinkune
75	76	77	78	62

08	Tribhuvan University	Available	Vayodha Hospital, Kritjour Hospital, Megha Hospital	Balkhu market	Amed Police Force and Nepal Police on the way to Chovar	Possibility of landing in the site, also Chovar helipad is located nearby	Laboratory English Boarding School, Mangal HSS, Annapurna Secondary School, Nawajeevan Secondary School, Sudesha School, Shree Bhaisnavi Secondary School, Shree Pancha Kumari Primary School, Salvinia Academy, Ujiwal Shishu Niketan
$\overline{\infty}$	UN Park, Gusingal	Available	Norvic Hospital, Nidan Hospital, Sumeru City Hospital, Blue Cross Hospital, Teku Hospital, Nepal Eye	Kupandol market	Nepal Police Kupandole, Metropolitan Police Beat, Riot Control Police Battalion	1	Nightingale International Secondary School, Sagarmatha English Secondary School, Campion College, Araniko Boarding School, Viswa Niketan Secondary School
85	UN Park, Jwagal	Available	Nidan Hospital, Sumeru City Hospital, National Hospital and Cancer Research Center, Pashupati Homeopathic	Jwagal side road market	Police Beat Jwagal, Tourist Police Post	1	Pulchwok Engineering College, Himalaya College of Engineering, Kantipur Valley College
83	Vidyarthi Niketan	Available	Bhaktapur Hospital, Bhaktapur Cancer Hospital, Human Organ Transplant Centre, Siddhi Memorial Hospital	Bhaktapur Durbar Square market	Jagati Police Station, Nepal Army of Sainik School within 1.7 km, Bhaktapur Metro Range	1	Vidyarthi Niketan, Padma Higher Secondary School, Adarsha Azad HSS, Khwopa College, Basu School, Saraswati Vidyagriha

ANNEX V. GAZETTE NOTIFICATION LIST OF OPEN SPACES IN NEPALI

खण्ड ६२ संख्या ५९ नेपाल राजपत्र भाग ५ मिति २०६९।१२।२६

भाग ५

नेपाल सरकार

गृह मन्त्रालयकोसूचना

नेपाल सरकार, मिन्त्रपरिषद्ले मिति २०६९।१९।१४ मा विपत्को समयमा तत्काल शिविर खडा गरी पीडितहरुलाई मानवीय सहयोग, उचित सुरक्षा, राहत तथा उद्धार कार्यक्रम सञ्चालन गरी विपद् व्यवस्थापन गर्न लिलतपुर भक्तपुर र काठमाडौं जिल्लाका देहायका स्थानलाई खुला क्षेत्र घोषणा गर्ने र ती क्षेत्रहरुमा थप भौतिक संरचना निर्माण गर्न अत्यावश्यक भएमा त्यस्तो संरचना निर्माण गर्नु पूर्व यस मन्त्रालयको स्वीकृति लिनु पर्ने निर्णय गरेकोले सर्वसाधारणको जानकारीको लागि यो सूचना प्रकाशन गरिएको छ ।

खुला क्षेत्रहरु जिल्ला :- लिलतपुर

सि.नं.	स्थान	ठेगाना	जम्मा कित्ता संख्या	स्वामित्व	कुल क्षेत्रफल
٩	खुमलटार	ल.न.पा४, खुम लटार	१३६	रा.कृ.अ.केन्द्र प्याथोलोजिकल	२८४-६-१-२
٦ .	मलपार्क	ल.न.पा४, वालकुमारी	४४४	ने.खा.पा.संघ	३६६-२-०-३
¥	NAST	ल.न.पा४, खुमलटार	5 ¥	ने.रा.वि.प्र.प	७८-१४-२-०
8	एन्फा मैदान	ल. न. पा९, सातदोवाटो	22	ने.खा.पा. संघ	२२-१४-०-०
×	गोकूलचौर	ल.न.पा८, वालकुमारी	٩	नेपाल सरकार	₹0-90-0-0
ę	वागमती वगर UN पार्कसमेत	ल.न.पावडा नं.१ देखि १४ सम्म	93	नेपाल सरकार	9 ४७२-9 ४-9 -३
G	सेन्ट जेभियर्स स्कूल	ल. न. पा४ जा वलाखेल	٩	सेन्ट जेभियर्स स्कूल	६७-२-२-०
5	सेन्ट मेरिज स्कूल	ल. न. पा४ जावलाखेल	٩	सेन्ट मेरिज स्कूल	२३-९-२-०

खण्ड ६२ संख्या ५९ नेपाल राजपत्र भाग ५ मिति २०६९।१२।२६

9	जावलाखेल	ल.न.पा४	9	नेपाल सरकार	३७-5-0-0
,				गमाल सरकार	¥0-G-0-0
	फुटवल मैदान	जावलाखेल			
90	तिब्बतीय	ल.न.पा४	٩	ने. रे. सो.	६-२-३-०
	शरणार्थी शिविर	एकान्तकुना	19.02	केन्द्रीय कार्यालय	
99	मदन स्मारक	ल. न. पा.,	99	मदन स्मारक	२०-११-०-०
	स्कूल	पाटन ढोका		स्कुल मा. वि.	
92	ल.उप.म.न.पा.	ल.न.पा१२	98	नेपाल सरकार	४९-१४-२-०
	कार्यालय परिसर	पुल्चोक			
93	पुल्चोक इन्जिनियरिङ्ग	ल.न.पा१,	79	पुल्वोक इ.कलेज	९८-०-३-०
	कलेज (क)	पाटन ढोका			
9.8	पुल्चोक	ल.न.पा१,	६१	पुल्चोक इ.	६२-११-०-०
	इन्जिनियरिङ्ग	पाटन ढोका		कलेज	
	कलेज (ख)	,		#	
91	एन्फा फुटबल	ल.न.पा६,	29	रा.खे. परिषद्	२०-६-०-०
	मैदान	सातदोवाटो			
१६	पाटन कलेज	ल.न.पा.,	5	पा.संयुक्त	95-0-0
		पाटन ढोका		क्याम्पस, ल.पु.	
99	लगनखेल	ल.न.पा५,	٩	राजदल गण,	२२२-९-०-०
	फुटबल मैदान	लगनखेल		पाटन छाउनी	मध्ये ०-१५-०-
					0
95	लगनखेल स्तुप	ल.न.पा१२,	93	नेपाल सरकार	२७-१३-१-२
	एरिया	लगनखेल			-
99	रिङ्गरोड ग्वार्को	ल.न.पा वडा नं	598	नेपाल सरकार/	<u>५८७-८-३-२</u>
	देखि बल्खुसम्म	२ देखि ८ सम्म,		(चक्रपथ)	
		रिङ्गरोड			

जिल्ला :- भक्तपुर

सि.नं.	स्थान	ठेगाना	जम्मा कित्ता	स्वामित्व	कुल क्षेत्रफल
	100		संख्या		
२०	प्र ल्लाघारी तीनकुने	कटुञ्जे गा.वि.स९ हाल, भ.न.पा१७, सल्लाघारी	٩	नेपाल ट्रष्ट	905-2-9-0
29	गैमढी	भ.न.पा११, बजार	٩	नेपाल सरकार	२-२-३-३
. २२	तालाको	भ.न.पा१४, बजार	٩	नेपाल सरकार	9-5-3-9
२३	ने लेखेल	भ. न. पा११,व जार	9	नेपाल सरकार	€-9-0-0
२४	नासमना	भ.न.पा१३, बजार	٩	नेपाल सरकार	

२४	मक्तपुर दरवार	भ.न.षा१३, बजार	9	नेपाल सरकार	90-0-३-३
	स्रवायर				
२६	गद्म मा.वि.	भ.न.पा१०, बजार	٩	पद्म मा.वि.	98-3-2-0
२७	वद्यार्थी निकेतन	भ.न.पा८, बजार	9	विद्यार्थी निकेतन	9-3-7-7
२८	रतात्रय स्ववायर	भ.न.पा३, बजार	9	नेपाल सरकार	5-0-2-0
२९	प्ररस्वती विद्यागृह	भ.न.पा३, बजार	9	सरस्वती विद्यागृह	0-9-2-0
३०	पूर्यमाढी विद्यागृह	भ.न.पा१, बजार	8	नेपाल सरकार	9-६-9-9
39	कबाढण्डौ विद्यागृह	भ.न.पा४, बजार	٩	नेपाल सरकार	४-१३-१-३
३२	व्यप कलेज	भ.न.पा५, लिवाली	(a. 1	ख्वप कलेज	X\$-0-0-0
33	त्रासु विद्यालय	भ.न.पा१ <i>०</i> , लिवाली	٩	बासु विद्यालय	0-9-3-0
38	ज्ञप इन्जिनियरिङ्ग कलेज	भ.न.पा२, लिवाली	٦ ، ، ، ،	ख्वप इ. क्लेज, लिवाली	5- 9-0-३
₹X	भक्तपुर वहुमुखी स्याम्पस	भ. न. पा१७	9	रक्तपुर बहुमुर्ख क्याम्पस	7-9-0-0
35	प्रादर्श आजाद उ.मा. वि.	भ. न. पा९ सिपाडोल	9 .	आदर्श उ.मा.वि.	0-5-9-0
३७	रीरेन्द्र सैनिक वद्यालय	भ.न.पा१७	nt.	वीरेन्द्र सैनिक विद्यालय	855-8-0-0
३८	नहेश्वरी फुटबल बेल मैदान	भ,न.पा८ ताथली	95	भक्तपुर जिल्ला खेलकुद विकास समिति	२०-७-१-०

जिल्ला :- काठमाडौं

चावहिल क्षेत्र

सि.नं.	स्थान	ठेगाना	जम्मा कित्ता संख्या	स्वामित्व	कुल क्षेत्रफल
38	सिफल चौर	का. म.पा७	2	नेपाल सरकार	89-7-0-3
80	गोकर्ण गल्फ साईट	का.म.पा८, मुलपानी	₹ .	नेपाल सरकार	१४९-२-०-०

खण्ड ६२ संख्या ५९ नेपाल राजपत्र भाग ५ मिति २०६९।१२।२६ कलंकी क्षेत्र

४१	चोभार	भूतखेल -४,	94	मोर्डन	०,२२९७ २७
(भूतखेल	चोभार		इन्डियन	व.मी.
	,	1		स्कुल	
85	हिमाल सिमेन्ट	भूतखेल -३,	१२६	हिमाल	१२,३६,९३,१०
100	कम्पनी	चोभार		सिमेन्ट	व.मी.
3.57				कम्पनी	
83	त्रिभुवन विश्व	किर्तिपुर न.पा९	७९	त्रि.वि.वि,	२,९९,३७.४१
	विद्यालय			किर्तिपुर	व.मी.
88	बगमती बगर	कालिमाटी	ą	-	9-0-0-0
	खुला क्षेत्र	किर्तिपुर		*, , 1/	रोपनी
		वगमतीखोला			(११,९४१.००
-3 .	56.	7.			व.मी.)

डिल्ली बजार क्षेत्र

ति १३०-५-१-१
r 1
क्षेत्र ६३२-६-३-१
खाल १०९-७-१-३
त्रा
ार्क २२-६-२-१
`.
्य ३२-१४-१-३
गृह
टी २१४-१४-२-०
उ प
बेल २७६-११-२-२
की ७-२-०-३
स
म ३७-४-३-३
या
पस
T ४९-०-०-१
5ान

78	समाज कल्याण	का.म.पा३१,	१९०	समाज	२८-9४-0-0
	केन्द्र	लैनचौर		कल्याण	
	,			केन्द्र	
ሂሂ	नागपोखरी	का.म.पा१,	४७९,	नागपोखरी	२६-१०-०-१
		नक्साल	४७७		j.
४६	वालमन्दीर	का. म.पा१	७६०,	वालमन्दीर	=9- ₹- 9- ₹
	1 1 1 1 1 1 1		৩६৭		
५७	नागरिक	का.म.पा९	३ देखि ७	नगरिक	993-8-0-3
	उड्डयन		सम्म	उड्डयन	

अन्य क्षेत्र

सि.नं.	स्थान	ठेगाना	जम्मा कित्ता	स्वामि त्व	कुल क्षेत्रपत्रल
			संख्या	3	
ሂട	गल्पर क्लव	का.म.पा९	३१ - ३२,	गल्फक्लव	934-3-0-2
			२-४		1 1
48.	त्रिभुव न	का.म.पा९	७४	त्रि.अ.विमानस्थल	३9-६-३-२
	अन्तर्राष्ट्रिय				
	विमानस्थल				
६०	3	का.म.पा.	હય	नेपाल सरकार	२-९-३-२
	रिङ्गरोड क्षेत्र	का.म.पा.	७७	नेपाल सरकार	२०-७-१-9
	एराहिटीदेखि				
	विष्णुमती				
	पुलसम्म ट्रयाक				
	रिङ्गरोड क्षेत्र	का.म.पा.	. १३२	नेपाल सरकार	9-8-3-9
	एराहिटीदेखि	, .			
	विष्णुमती				
	पुलसम्म ट्रयाक				
	रिङ्गरोड क्षेत्र	का.म.पा.	४३⊏	नेपाल सरकार	७९.४८ व.मी.
	एराहिटी देखि				
	विष्णुमती				
	पुलसम्म ट्रयाक रिङ्गरोड क्षेत्र	70.77.77	χοχ	नेपाल सरकार	V0 -4 7 76
	एराहिटी देखि	का.स.पा.	χοχ	नपाल सरकार	बर्-दर व.मा.
	प्राहिटादाख विष्णुमती				
	पुलसम्म ट्याक				
	रिङ्गरोड क्षेत्र	का म पा	949	नेपाल सरकार	=3 ४४ व मी
	एराहिटीदेखि	71.71.71.	14.1	HAIRI GICANIC	TT. V V T. 111.
	विष्णामती				
	पुलसम्म ट्रयाक				
	3 7				

खण्ड ६२ संख्या ५९ नेपाल राजपत्र भाग ५ मिति २०६९।१२।२६

रिङ्गरोड क्षेत्र एराहिटीदेखि	का.म.पा.	१०६	नेपाल सरकार	0-9-7-0
विष्णुमती				
पुलसम्म ट्रयाक				
रिङ्गरोड क्षेत्र	का.म.पा.	988	नेपाल सरकार	००५७ ६२
एराहिटी देखि			1	व.मी.
विष्णुमती				
पुलसम्म ट्रयाक				
रिङ्गरोड क्षेत्र	का.म.पा.	99	नेपाल सरकार	9-97-3-0
एराहिटीदेखि				
विष्णुमती				
पुलसम्म ट्रयाक				
चऋपथ	का.म.पा.	90	नेपाल सरकार	5-5-0-3
चऋपथ	का.म.पा:	9	नेपाल सरकार	₹-४-₹-२
ट्रयाक	का.म.पा.	5	नेपाल सरकार	0-90-9-2
चऋपथ	का.म.पा.	99	नेपाल सरकार	9-97-3-0
चऋपथ	का.म.पा.	90	नेपाल सरकार	5-5-0-3
चक्रपथ	का.म.पा.	9	नेपाल सरकार	₹-8-₹-₹
चक्रपथ	का.म.पा.	5	नेपाल सरकार	0-90-9-2
चक्रपथ बाटो	का.म.पा.	50	नेपाल सरकार	४८३.५७ व.मी.
चक्रपथ कुलो	का.म.पा.	928	नेपाल सरकार	0-३-२-३
चक्रपथ	का.म.पा.	9 ३9	नेपाल सरकार	३४८५.२९ व.मी.
चक्रपथ वाटो	का.म.पा.	१३०	नेपाल सरकार	9-4-9-2
चऋपथ	का.मे.पा.	२०	नेपाल सरकार	५९३६.४० व.मी
चक्रपथ ट्रयाक	का.म.पा.	१८४	नेपाल सरकार	0-8-5-0
चक्रपथ ट्रयाक	का.म.पा.	१९२	नेपाल सरकार	१२७.१६ व.मी.
चऋपथ ट्रयाक	का.म.पा.	985	नेपाल सरकार	७२.५७ व.मी.
चक्रपथ ट्रयाक	का.म.पा.	२००	नेपाल सरकार	१४२.७० व.मी.
चऋपथ	का.म.पा.	२	नेपाल सरकार	३२-९-३-०
चक्रपथ बाटो	का.म.पा.	१३७	नेपाल सरकार	३३०९४.४५ व.म
चक्रपथ बाटो	का.म.पा.	994	नेपाल सरकार	२-१४-०-०
चक्रपथ	का.म.पा.	११६	नेपाल सरकार	२८८८.३० व.मी
चक्रपथ	का.म.पा.	999	नेपाल सरकार	१४८५.७० व.मी.
चक्रपथ	का.म.पा.	98	नेपाल सरकार	१४२४८५०६ व.मी.
चक्रपथट्रयाक	का.म.पा.	२७	नेपाल सरकार	9-3-0-9

	चक्रपथट्रयाक	का.म.पा.	१५	नेपाल सरकार	११ ७८. २७ व. मी.
	चक्रपथट्रयाक	का.म.पा.	९७	नेपाल सरकार	१४९७,३८ व.मी.
	चक्रपथ	का.म.पा.	٩	नेपाल सरकार	७-४-१-०
६१	तीनकुने क्षेत्र	का.म.पा१०	सि.नं. १०२ देखि ०४ सम्म	नेपाल सरकार	२९-२-१-३
६२	दशरथ रंगशाला	का.म.पा११	सि.न. १०२ देखि१० सम्म	नेपाल सरकार	६१-५-२-०
६३	खाने पानी विभाग	का.म.पा३, पानीपोखरी	सि.नं. १०२ देखि ९ सम्म	नेपाल सरकार	३०-१४-३-०
६४	निर्वाचन आयोग	का.म.पा.	सिट नं. १०२ देखि १०६४-२०	नेपाल सरकार	8x-9-\$-0
ξX	सानो गौचर	का.म.पा.	सिट नं. १०२ देखि १०६६-११	नेपाल सरकार	95-99-9-₹
६६	विमान स्थल केन्द्रीय डोजो	का.म.पा.	मालपोतवाट विवरण प्राप्त छैन	विवरण प्राप्त छैन	९१,१३७ व.मी. IOM अनुसार
६७	वागमती बगर	काठमाडौँ क्षेत्र		विवरण प्राप्त छैन	
& 5	U.N. Park	काठमाडौँ क्षेत्र	- 1	विवरण पाप्त छैन	- 9552 ; -

२. उल्लिखित खुला क्षेत्रहरूमा विपद् व्यवस्थापन सम्बन्धमा गरिने कार्यान्वयन स्थितिको अनुगम्, अन्तर निकाय समन्वय तथा सहजीकरणका लागि देहाय बमोजिमको समिति गठन रहनेछ :-

(क) सचिव, गृह मन्त्रालय

- संयोजक

(ख) सचिव, कानून, न्याय, संविधानसभा तथा संसदीय

(98)

मामिला मन्त्रालय

- सदस्य

(ग) सचिव, सङ्घीय मामिला तथा स्थानीय

विकास मन्त्रालय

- सदस्य

(घ) सचिव, अर्थ मन्त्रालयञ

- सदस्य

(ङ) सिचव, भैतिक पूर्वाधार तथा

यातायात मन्त्रालय

- सदस्य

(च) सचिव, शहरी विकास मन्त्रालय

- सदस्य

(छ) सह-सचिव, योजना तथा विशेष सेवा महाशाखा,

गृह मन्त्रालय

-सदस्य-सचिव

- खुला क्षेत्रहरू व्यवस्थापनका सम्बन्धमा समितिको अन्य कार्यक्षेत्र देहाय बमोजिम हुनेछ :-
 - (क) खुला क्षेत्रहरूको नियमित अनुगमन गर्ने, गराउने,
 - (ख) खुला क्षेत्रहरू थपघट गर्ने सम्बन्धी सम्भाव्यता अवलोकन गर्ने, गराउने,
 - (ग) खुला क्षेत्रहरूमा स्थायी संरचना निर्माण गर्ने स्वीकृतिका लागि गृह मन्त्रालयले बनाएको मापदण्ड स्वीकृत गर्ने,
 - (घ) स्वीकृत मापदण्ड बमोजिम काम कारबाही भए नभएको नियमित निगरानी गर्ने, गराउने ।

REFERENCES

International Organization for Migration (IOM)

- 2015 IOM urges Kathmandu residents to preserve humanitarian open spaces. Press release, 8 July. Available at www.iom.int/news/iom-urges-kathmandu-residents-preserve-humanitarian-open-spaces.
- 2018 83 Open spaces to SAM: Setting an example in Nepal how parks and open spaces can strengthen communities' resilience toward disaster. IOM Mission in Nepal story, 31 May. Available at https://nepal.iom.int/stories/83-open-spaces-sam.

Ministry of Home Affairs, USAID and IOM

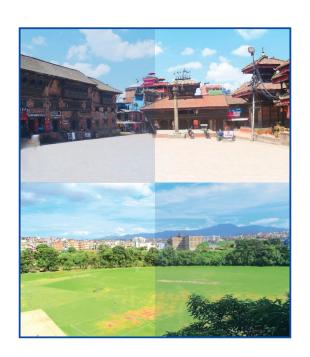
Summary of open spaces allocation report. Available at www.flagship2.nrrc.org.np/sites/default/files/knowledge/Summary%20of%20Open%20Spaces%20Allocation%20Report.pdf.

Sphere Association

2018 The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response. Geneva. Available at https://spherestandards.org/wp-content/uploads/Sphere-Handbook-2018-EN.pdf.

United Nations Development Programme (UNDP)

2019 Energy, environment, climate and disaster-risk management. Available at www.np.undp.org/content/nepal/en/home/energy-environment-climate-and-disaster-risk-management/in-depth.html.





INTERNATIONAL ORGANIZATION FOR MIGRATION

768/12 ,Thirbam Sadak, Baluwatar-5, Kathmandu, Nepal

> Tel:+977 | 4426250 Fax:+977 | 4434223 Email:iomnepal@iom.int Website:www.iom.int