Dakshinkali Municipality, Nepal

Situation Analysis for Green Municipal Development

May 2018

Global Green Growth Institute
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This report is one of a set of seven situation analyses of the Nepalese municipalities of Belkotgadhi, Dakshinkali, Mahalaxmi, Melamchi, Namobuddha, Palungtar and Thaha.
All seven reports are available at www.gggi.org/country/nepal/

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Kirti Joshi undertook field research and focus group discussions, the assessments of individual municipalities and data analysis, and was lead author of the reports. Additional contributions were provided by Aarsi Sagar, Donovan Storey, Vikram Basyal, Anantaa Pandey, and Rowan Fraser of GGGI. The reports were edited by Stephen J. Keeling. Photos were provided by Rameshwor Maharjan and Robic Upadhayay. Design and layout was undertaken by Pentagram.

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Abbreviations and Acronyms

AAGR	average annual growth rate (exponential)
BS	Bikram Sambat (Nepali calendar)
CBO	community-based organization
GGGI	Global Green Growth Institute
GMDP	Green Municipal Development Program
ICT	information and communication technology
LGCDP	Local Governance and Community Development Programme
LPG	liquefied petroleum gas
MoFAGA	Ministry of Federal Affairs and General Administration
MoFE	Ministry of Forests and Environment
MoUD	Ministry of Urban Development
NA	not available
NGO	non-governmental organization
NPR	Nepali rupees
RCC	reinforced cement-concrete
SDG	Sustainable Development Goal
USD	United States Dollars
VDC	village development committee

PART 1: INTRODUCTION

1. Background

1.1 Urbanization in Nepal

The rapid pace of urbanization in Nepal in recent decades and the recent declaration of many new municipalities has reinforced the need to bring sustainable urban development to the forefront of Nepal's development agenda.

Nepal recorded an average annual urban growth rate of 3.38 percent between 2001 and 2011 (CBS 2014: 31) – one of the highest in Asia, and as of 2011 had 58 municipal governments (metropolitan cities, sub-metropolitan cities and municipalities), which covered 17.1 percent of the population. In recent years the number of municipal governments has increased five-fold with the number standing at 293 in May 2018 including 6 metropolitan cities, 11 sub-metropolitan cities and 276 municipalities (nagarpalikas). These areas now cover about 42% of Nepal's population (MoUD 2016a).

This situation, alongside the greatly increased levels of authority and the increased funding provided to municipal governments under Nepal's new federal constitution (2015), set the stage for the planned development of Nepal's municipal areas.

The development of Nepal's new municipalities presents many challenges and opportunities. On the one hand, many have neither adequate populations nor adequate economic structures to justify significant infrastructure investments. On the other hand, their early stage of development provides the opportunity to guide them along the path of sustainable development.

The Government of Nepal has committed to the sustainable development of its urban areas in its Environmentally Friendly Local Governance Framework and associated program (EFLGP) (MoFALD 2013), its Fourteenth National Plan (2016/17–2018/19) (NPC 2017), its National Urban Development Strategy (2017-2031) (MoUD 2017) and its National Report for Habitat III (2016–2036) (MoUD 2016b).

1.2 Green Municipal Development Program

Since 2015, the Global Green Growth Institute (GGGI) has supported the Government of Nepal to align its national development policies with the green growth paradigm. This paradigm builds on a model of economic growth that targets the key aspects of economic performance of environmental sustainability, poverty reduction and economic growth (Figure 1).

In 2017, GGGI in partnership with Nepal's Ministry of Federal Affairs and General Administration (MoFAGA) and seven of Nepal's new municipalities, launched the Green Municipal Development Program (GMDP). The focal point for the program is the Ministry of Forests and Environment (MoFE). Phase one of the program began in 2017 and will run to December 2018.

The goal of the program is to support the seven municipalities to identify and capture localized green growth opportunities. The program is designed to respond to the needs of federal and local governments and is founded on long-term municipal engagement. It aims to provide a range of customized technical and financial services to the municipalities as well as supporting inter-municipal learning and capacity building.

An initial program activity was carrying out a green municipal growth situation analysis in the seven partner municipalities of Belkotgadhi, Dakshinkali, Mahalaxmi, Melamchi, Namobuddha, Palungtar, and Thaha, which are shown in Figure 2. This report is one of a series of seven reports that present the findings of the analysis for Dakshinkali Municipality in Kathmandu District.

[1]It is important to note here that the recent increases in the number of municipal governments have mainly been
[2]outcomes of political decisions and many parts of the new municipalities have more rural than urban characteristics.
See http://gggi.org/ for information on the Global Green Growth Institute.

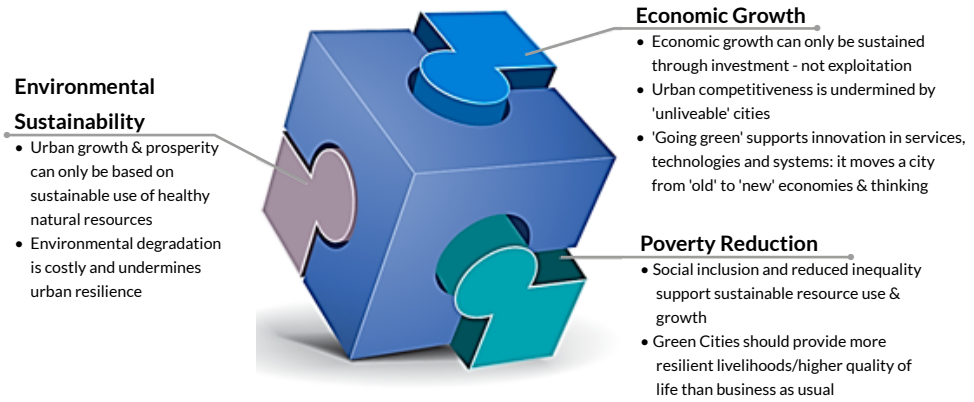


Figure 1: GGGI's Green Growth concept
Source: GGGI 2017a

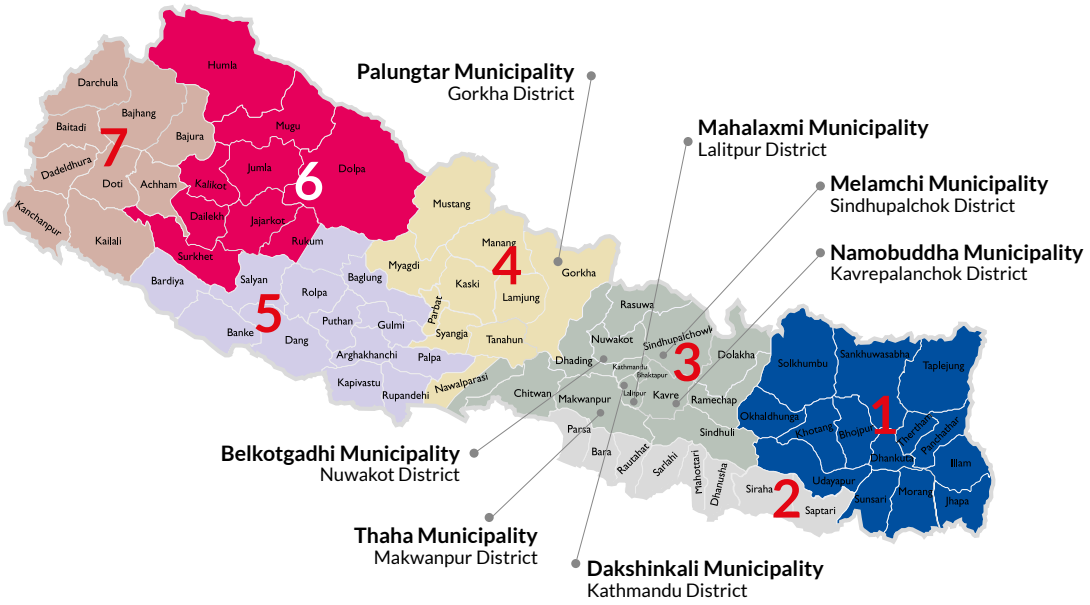


Figure 2: Location of the seven GMDP partner municipalities

1.3 Objectives

The objectives of the situation analysis of the seven new municipalities were as follows:

- Analyze and assess the current baseline and trends in the municipalities across economic, social and environmental dimensions, and understand the deeper reasons and drivers of change.
- Analyze and assess the policy and regulatory landscape in which the municipalities operate.
- Analyze and assess the institutional, technical, managerial and financial structure and capacity of the municipal administrations.
- Identify and formulate practical, operational and strategic findings based on the assessment.
- Advise on priority sectors, policy and planning interventions and possible projects that could be pursued to support green growth in the municipalities with GGGI inputs and consultations.
- Conduct a stakeholder assessment of the findings at national and municipal levels.

1.4 Methodology

This situation analysis report was prepared through the following steps and inputs:

- Studied secondary information about the municipality from authentic sources, which were verified by consulting other sources to the extent possible.
- Held discussions with the mayor Mr. Mohan Basnet and his team on 22 October 2017 at the Dakshinkali municipal office guided by a five-point questionnaire (see Annex 1.1 for research questions and Annex 2 for meeting minutes in Nepali).
- On 24 October 2018, held focus group discussions with local entrepreneurs and persons affiliated with social and environmental NGOs (see Annexes 1.2–1.4 for research questions and Annex 3 for participants).
- Shared preliminary findings at the GMDP Launch and First National Consultation Workshop on 14–15 November 2017 in Kathmandu in the presence of high-level officials from partner ministries, mayors and the chief administrative officers (CAOs) of all seven partner municipalities, and representatives from relevant ministries.
- GGGI Nepal and Headquarter teams reviewed final drafts of the report.

Discussion with the mayor and his team (October 2017)

Focus group discussions with local entrepreneurs (left) and NGO activists (right) (October 2017)

Opening session of GMDP Launch and First National Consultation Workshop (Above); Dakshinkali Municipality CAO Ms. Sushila Poudel Dhakal speaking at the event (Below), November 2017

2. Green Municipal Development in Nepal

2.1 Overview

'Green growth' is a model of economic growth that targets the key aspects of economic performance of poverty reduction, job creation, social inclusion and environmental sustainability (see Figure 1). In other words, green municipal growth aims to ensure that investments on infrastructure and other types of physical development create socioeconomic benefits that are proportionately distributed in societies while ensuring that development does not result in environmental degradation. The green growth concept builds on the concept of sustainable development.

The commitments of the Government of Nepal to sustainable development are explained in Section 1.1. above. Among these, Nepal's National Report for Habitat III (MoUD 2016b) builds on the country's commitment to Sustainable Development Goal 11 of making cities and human settlements inclusive, safe, resilient and sustainable by 2030. The sustainable development of Nepal's urban areas is also key to enabling Nepal to achieve its aim of graduating from Least Developed Country to Middle-Income Country status by 2030, for which cities have a major role to play as engines of economic growth.

Nepal's National Urban Development Strategy (2017–2031) has the five underlying and interconnected guiding principles of inclusivity, resilience, green development and efficiency (Table 1).

Table 1: Guiding principles of National Urban Development Strategy, Nepal (2017-2031)

Guiding principles	Explanation
Inclusivity	Urban areas should be socially inclusive in terms of ethnicity, caste, gender, and economic class. Inclusion should be reflected in the space the city provides for the nurturing and celebration of social and cultural diversity and sensitivity particularly to disadvantaged, marginalized and minority groups, and poor people and youth in general. Inclusivity promotes social justice and contributes to equity and balanced development. The increasing rates of poverty in urban areas mean that their development needs to be pro-poor in terms of addressing the poor's basic needs for education, health, housing, livelihoods and transportation.
Resilience	Resilience refers to physical and social resilience to make urban areas safer and adaptable to environmental and economic change. The major focus should be on physical, social, economic and institutional resilience, which are pivotal for mitigating short and long-term vulnerability resulting from disasters and the regional and global impacts of climate change. Planning and urban development should enhance the capacity of urban areas to cope with different types of hazards and to absorb shocks and risks.
Green development	Strategies for urban development should be guided by keeping urban areas green, cool, and wet. The main thrust should be on saving, protecting and promoting greenery including green parks, green open spaces, urban agriculture and forests. Urban areas should promote low carbon emission land use and technology and the use of green materials, increase the use of alternative energy, reduce the effects of urban heat islands and lower ambient temperatures. They should also promote and protect clean water bodies (ponds, wells, rivers and canals) that contribute to the survival of aquatic life, urban biodiversity and the recharging of ground water.
Efficiency	Urban areas need to be efficient, well governed and effectively managed to become sustainable, inclusive, resilient and green. The strategy should therefore be guided by i) enhancing the capability and technical competence of local governments, ii) the institutionalization of transparency and accountability in urban planning and development processes, and iii) the citizen-oriented delivery of services and development outcomes.

Many of Nepal's new municipalities are predominantly rural in character. Most have limited technical capacity and have only limited funds. Given their limited resources, a fundamental question for Nepal's new municipalities is whether they should focus on large-scale projects or on creating livable communities.

Many of Nepal's municipalities are rich in terms of natural resources and need to avoid a business as usual path of haphazard urbanization, which has predominantly occurred so far across most of South Asia development. The green growth concept offers an alternative approach to urban development by stressing the optimal and wise use of local resources for sustainable and inclusive economic development through public participation. There is immense scope for green urban development in Nepal, and the time is right to promote this as municipalities gear up to exercise their newly acquired executive powers following the recent establishment of a federal system of governance in Nepal.

2.2 Green Urban Growth for Nepal

The characteristics and the transformations needed to produce green urban areas are listed in Boxes 1 and 2. The realization of such green urban areas will make a very large contribution to the achievement of Nepal's national development goals, including the Sustainable Development Goals and its 'Nationally Determined Contributions' to reduce greenhouse gas emissions.

Box 1: The characteristics of green urban areas

In line with the green growth paradigm, green urban areas are:

- innovative and smart
- resource efficient and low carbon
- climate smart and resilient
- prosperous and bankable
- healthy and livable
- inclusive and pro-poor (GGGI 2017b).

Box 2: The transformations needed to produce green urban areas

- Transform the way they plan, to achieve the vision of smart, green and sustainable urban areas. Unplanned growth has negative environmental consequences that can be avoided by creating well-informed urban plans.
- Transform the way they design and operate buildings, to achieve resource efficient, low carbon and disaster-proof built environments.
- Transform the energy they produce and consume, to shift away from using polluting fossil fuels to cleaner forms of renewable energy.
- Transform waste to resources, to close the waste and resources loop and to move towards circular economies.
- Transform water resource management, to improve access to clean water and sanitation.
- Transform the way people move and connect, to achieve connected and non-motorized cities to limit the use of fossil fuel-based transportation.
- Balance expansion and growth with inclusion, to move to inclusive and pro-poor urban areas.
- Transform the way urban areas manage and account for their assets, to create bankable and creditworthy cities that attract green finance.

As Nepal's municipalities urbanize, they have the option to follow either the business-as-usual pathway of haphazard and environmentally damaging growth or to shift to a green growth development trajectory. The green growth pathway has the three components of environmental sustainability, economic growth and poverty reduction:

Environmental sustainability
Urban growth and prosperity should be based on the sustainable use of natural resources. Nepal's new municipalities have the opportunity to avoid unplanned urbanization and instead use existing tools and knowledge to better plan their development and their use of natural resources. This is very important for Nepal, which is situated in a vulnerable mountain ecosystem and is very prone to earthquakes, floods, landslides and other natural disasters and the impacts of climate change. These factors and the impacts of large scale human settlements and widespread migration are key factors in Nepal's development trajectory. The current high rate of urbanization is leading to large-scale environmental degradation, which has high costs and undermines urban resilience. In addition, compact, coordinated and connected urbanization is challenging to achieve in Nepal because of the limited availability of land across hill and mountain areas.

Economic growth
Sustainable economic growth needs sustained and planned investment. Urban areas not only need to aim for sustainable economic growth by generating economic activity, but also need to focus on strengthening their financial resources. Municipal finance is one area that needs further attention in the context of financing urban infrastructure improvements. There are many challenges for developing the infrastructure of Nepal's municipalities, which primarily rely on the state and central governments for their funding:

- The devolution of power: The legal and policy barriers to municipalities accessing other sources of financing.
- Creditworthiness: Most urban areas lack creditworthiness to raise debt in national and international markets.
- Access to international finance: Nepal's urban areas currently have limited access to international financing.
- Own sources of revenue: Municipal bodies are responsible for providing basic public services including street lighting, water, sanitation and other services, but have limited capacity to generate funds to pay for them.
- Valuation of assets: Municipal governments are unsure how to manage and optimize increased asset values through infrastructure investments.
- Capacity building: The limited capacity and awareness of municipal bodies to design and implement revenue generation and integration tools.
- Earthquake damage: The basic services infrastructure of the areas covered by the seven municipalities was badly damaged by the April–May 2015 earthquakes.

The adoption of a green growth pathway will support innovation in municipal services, technologies and systems, especially for municipalities that are embarking on the urbanization process.

Poverty reduction
As cities develop, inclusive green urban growth becomes a vital component for achieving inclusive, sustainable and efficient urbanization. Social inclusion is an important aspect of the current municipality structure in Nepal and one of the elected positions in municipalities is for a person from a disadvantaged group. Gender equality is promoted in municipal bodies including by the stipulation in the Local Level Electoral Act (2017) that either the mayor or deputy mayor is a woman. In pursuing green growth Nepal's municipalities should promote and facilitate resilient livelihoods and an improved quality of life.

2.3 International Policy Drivers

Two major international policy instruments are particularly relevant for the promotion of green urban development in Nepal:

Nationally Determined Contributions — TThe following Nationally Determined Contributions (NDCs) that Nepal submitted to the United Nations Framework Convention on Climate Change (UNFCCC) under the Paris Agreement (2016) emphasize sustainable and green urbanization:

- "Promote economic development through low carbon emissions with a focus on (i) energy, (ii) agriculture, (iii) forests, (iv) industry, (v) human settlements and waste, (vi) transport and (vii) commercial sectors."
- "Maintain 40 per cent of the total area of the country under forest cover."

Sustainable Development Goals – SDG 11 is to "Make cities and human settlements inclusive, safe, resilient and sustainable." The following SDG targets are most relevant to the development of Nepal's municipalities:

- Target 11.3: "By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries."
- Target 11.B: "By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels."

3. Basic Information

3.1 Location, Formation and Administrative Sub-Divisions l

Dakshinkali Municipality is located in the south of Kathmandu District in Province 3 within the Kathmandu Valley (Figure 3). It has an area of 42.7 km2 and lies about 19 km south of Kathmandu city. The municipality was formed in December 2014 by amalgamating six village development committees (VDCs) — Chalnakhel, Chhaimale, Dakshinkali, Setidevi, Sheshnarayan and Talkududechour VDCs. The municipality is divided into nine wards as shown in Figure 4 and Table 2).

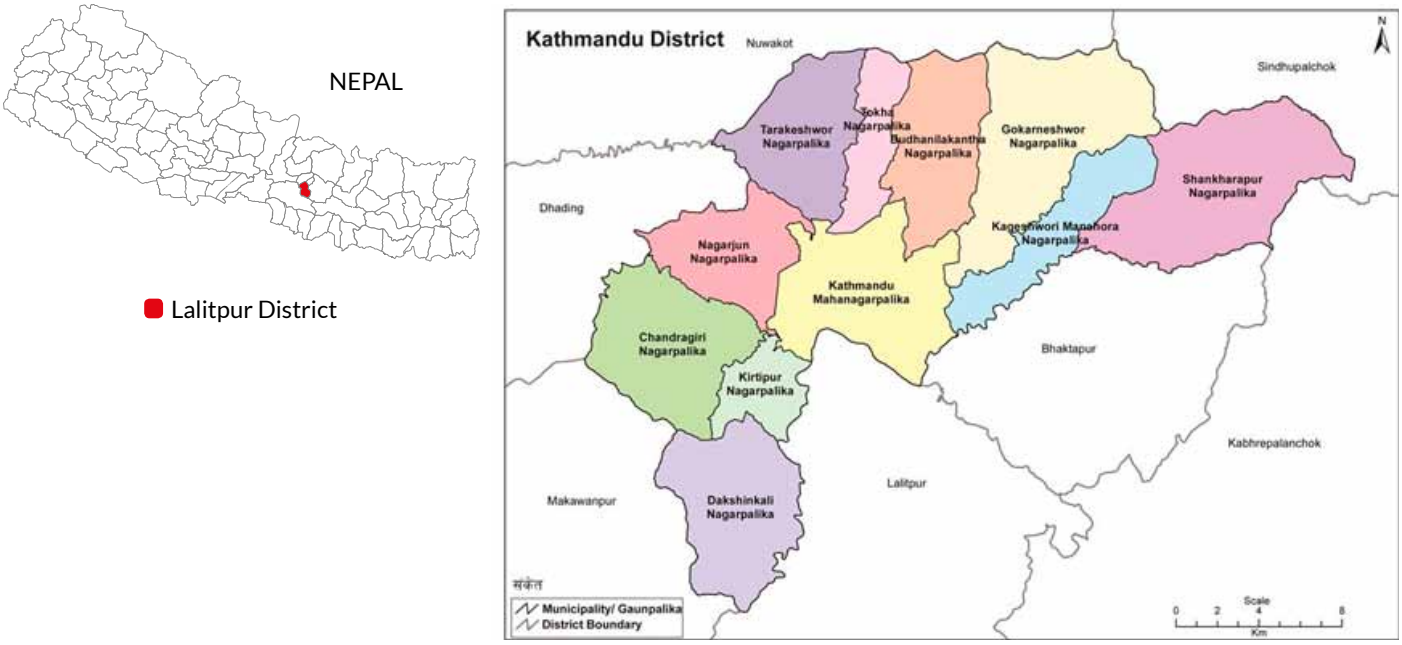


Figure 3: Location of Dakshinkali Municipality
Source: CDNDoGM 2016/17

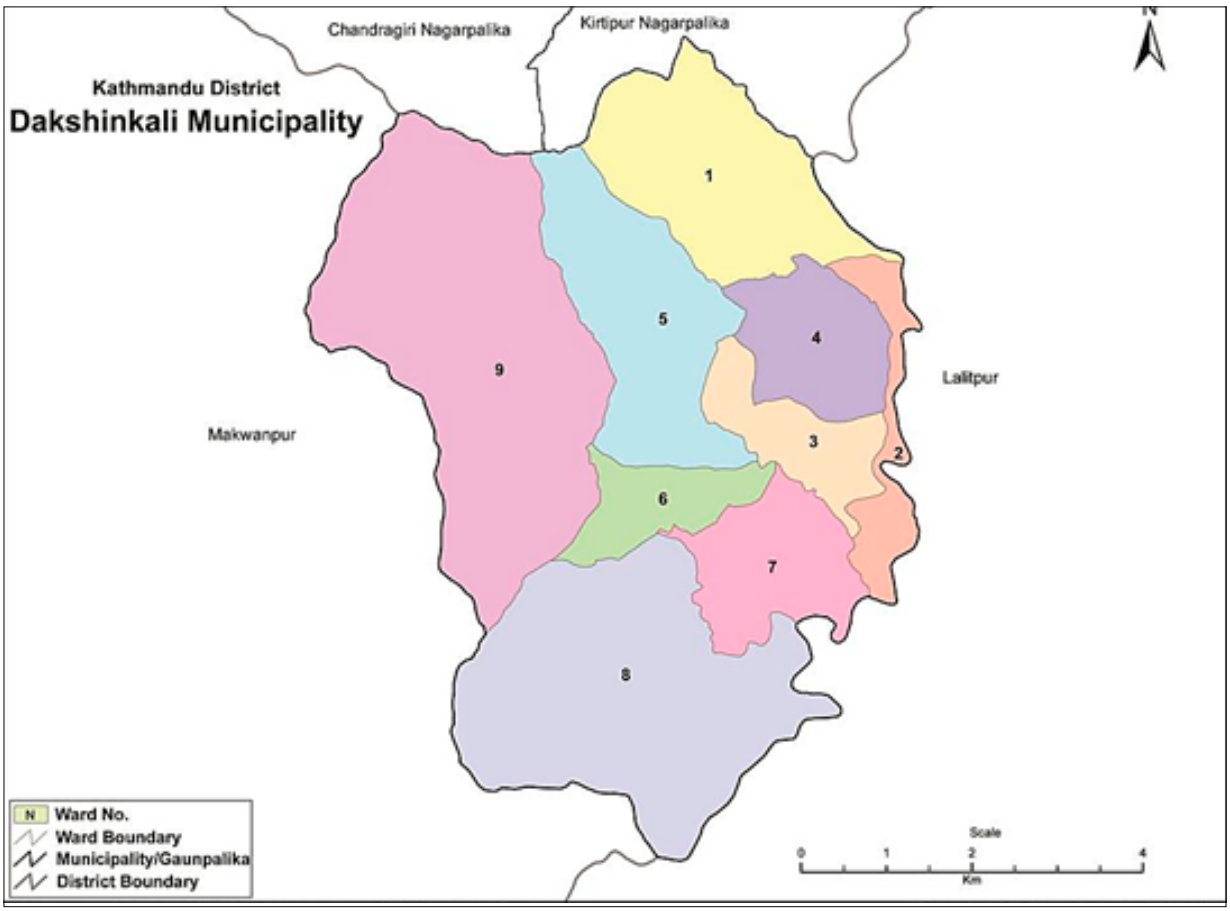


Figure 4: Wards of Dakshinkali Municipality
Source: CDNDoGM 2016/17)

Table 2: Erstwhile VDCs, current wards and population data – Belkotgadhi Municipality

Erstwhile VDCs	Municipality ward no.	Area (km2)	Population (2011)	Population density (persons per km2)
Chalnakhel*	1	5.25	3,861	735.70
Chalnakhel*, Setidevi*	2	1.53	1,557	1,019.09
Setidevi*	3	1.99	1,773	889.13
	4	2.60	1,422	546.09
Sheshnarayan	5	5.11	3,855	754.78
Dakshinkali	6	1.71	3,248	1,901.18
	7	2.89	1,507	520.57
Chhaimale	8	9.71	4,216	434.07
Talkududechour	9	11.88	2,858	240.54
Total		**42.68**	**24,297**	**569.29**

source: CDNDoGM (2016/17) for area; CBS 2012 for population). Partly.*

3.2 Demography

The following data is almost all derived from the 1991, 2001 and 2011 national population and housing censuses (CBS 1992, 2002, 2012).

Population growth and trends – In 1991, the population of the current municipal area (i.e. the population of the 6 erstwhile VDCs), stood at 21,295. Between 1991 and 2011 the population increased by 3,002 to reach 24,297 representing an annual average growth rate of 0.66% (Figure 5). The highest annual population growth rate in the past two decades (about 2%) occurred in Chalnakhel followed by Dakshinkali.

If it grows at an annual rate of 1%, the population of Dakshinkali Municipality will reach 30,000 by 2031, which is slightly above the current growth rate (Figure 5).

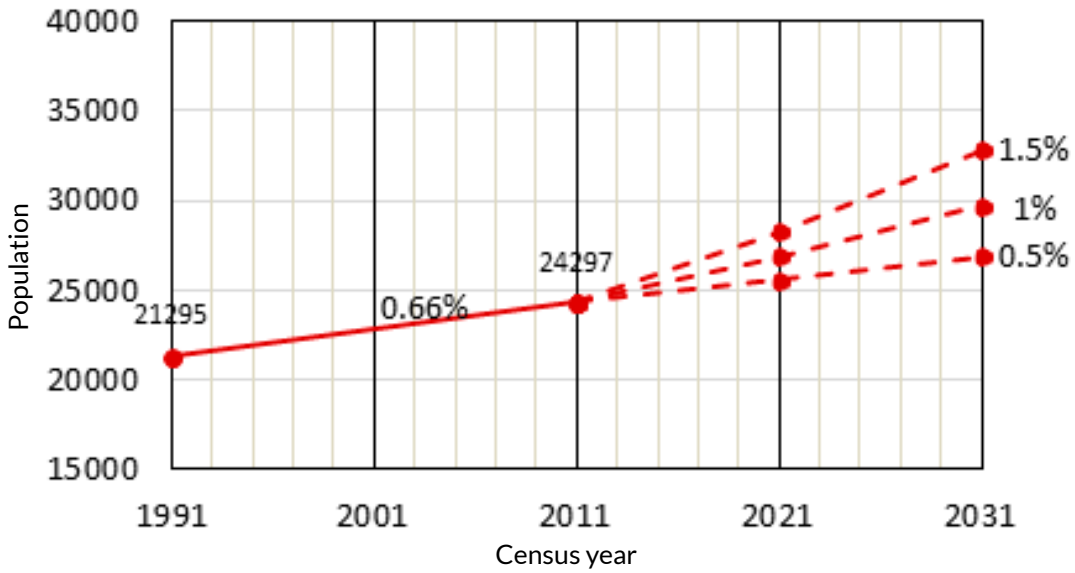


Figure 5: Population growth projection beyond 2011 – Dakshinkali Municipality
Source: CBS 1992, 2002, 2012. Note: The 2001 data was not complete for all the erstwhile VDCs

Table 3: Age-wise population – of Dakshinkali Municipality (National Census 2011)

Age group	Total*	Share (%)	Males	Females	Sex ratio M:F
0 to 14	6,000	24.69	3,100	2,900	106.90
15 to 59	16,724	68.83	8,004	8,720	91.79
60 and above	1,573	6.47	769	804	95.65
Total	**24,297**	**100.00**	**11,873**	**12,424**	**95.57**

Sources: CBS 2011

Age – In 2011, economically active population (aged 15–59 years) made up about 69% of the population (Table 3), which is economically advantageous. The female population in the economically active and 60 years and above age groups exceeded the male population.

Caste and ethnicity – It is important to know the caste and ethnic makeup of the municipality as different ethnic groups have different perceptions, stakes and interests. It is important that all groups are fairly represented and provided with opportunities under the principal of social inclusion. In 2011, Tamangs made up the largest proportion of the population (28.2%) followed by Chhetris and Newars at 23.4% each.

Literacy – In 2011, the adult literacy rate in Dakshinkali Municipality was relatively high at 75.19% with 83.8% of adult males and 66.2% of adult females literate.

3.3 Land Use and Urban Growth Patterns

The municipality is made up of cultivated and settled valleys separated by steep mostly forested hillsides. A comparison of municipal land use maps (Figure 7) shows that between 1994 and 2016 the area under cultivation in the municipality increased while the area under forests decreased. Except for market centers, the principal one of which is Pharping, the settlements are mostly scattered across the municipality. New settlements have emerged along the main road but the generally steep topography has prevented the formation of large, dense settlements in most places.

3.4 Market Centers

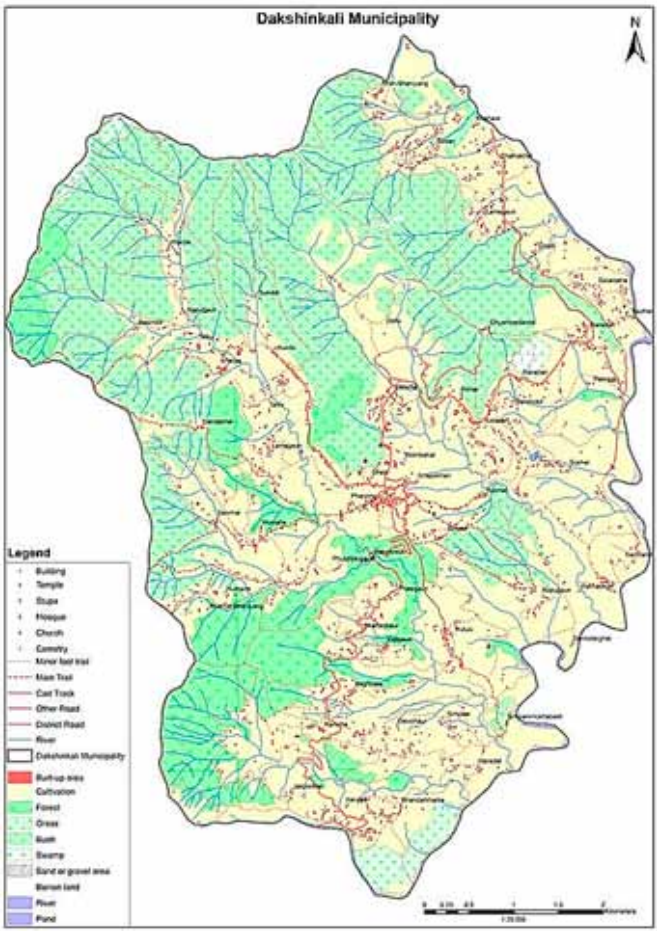
Pharping is a thriving Newari town and the most prominent market center in the municipality. In recent years Pharping has expanded with the construction of several new Buddhist monasteries.

Due to its proximity to Kirtipur and Kathmandu city, Taudaha, which lies on the route to Pharping, is also emerging as a market area.

3.5 Places of Attraction

Dakshinkali Municipality is named after the famous Dakshinkali Temple which is located 22 km from Kathmandu city and is one of the most revered Hindu temples in Nepal. Pharping, is known for ancient Buddhist pilgrimage sites which are visited by many Buddhists from Tibet, Bhutan, and other places. Pharping is a sacred place for Buddhists because it is believed that Guru Padmasambhava attained enlightenment there.

Dakshinkali Municipality is also known for natural attractions such as Taudaha Pond, Pharping Hydropower Station and pond (Nepal's first power station, commissioned in May 1911), and Boson (famous for panoramic views over the Kathmandu Valley.



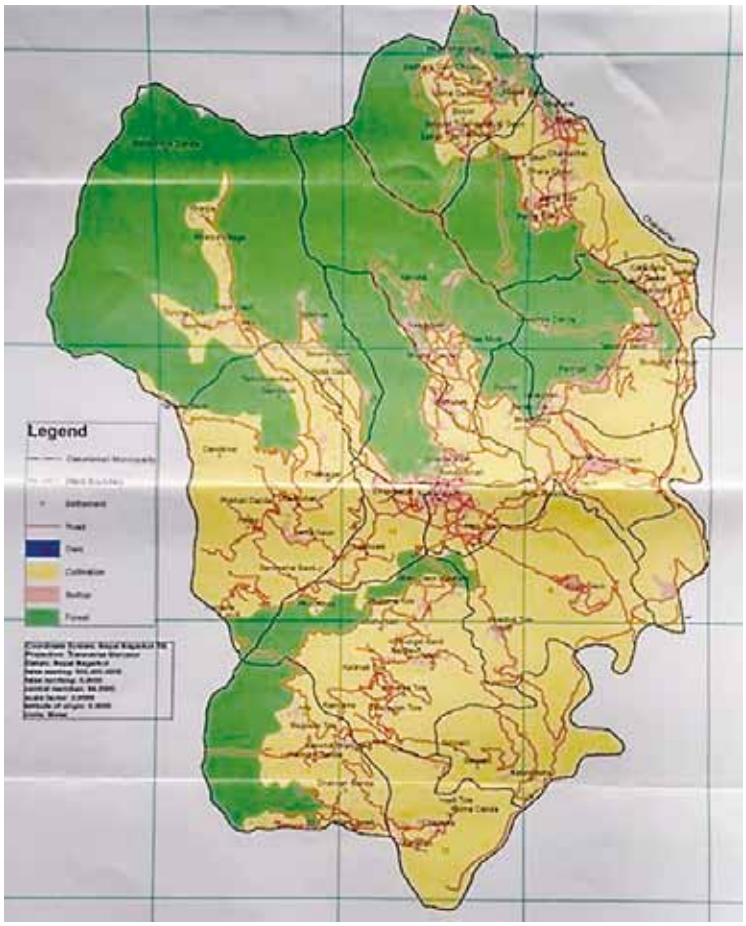


Figure 6: Land use maps of Dakshinkali Municipality, 1994 (Left) and 2016 (Right)
Source: DoS (1994) and Dakshinkali Municipality (2016)

4. Environment and Natural Resources

Taudaha lake

Forests – Forests are the main natural resources of Dakshinkali Municipality. In 2017, forests and bush covered about half of its area (Figure 7).

Ponds – Taudaha Lake is believed to be a remnant pool of the huge lake that once covered much of the Kathmandu Valley. The lake, arguably the only clean water body remaining in the Kathmandu Valley, is a stopover for many migratory bird species including cormorants, ruddy shelducks, serpent eagles and common teal.

Figure 76: Forest map – Dakshinkali Municipality
Source: DoFRS 2017

5. Economy

The main occupation of people in Dakshinkali Municipality is agriculture. However, with rising urbanization and the loss of farmlands, many people are switching from agriculture to non-farm occupations. There are many restaurants and hotels near Dakshinkali temple, targeting pilgrims. There are several brick factories by the Bagmati River from Chalnakhel to Chhaimale.

6. Infrastructure, Facilities and Basic Services

6.1 Housing

Houses are an important asset that indicate their owners' economic status and can be used as a collateral against loans. The 2011 national census (CBS 2012) reported the following:

- About 87% of the municipality's 5,488 households lived in their own houses with the remainder living in rented accommodation.
- About 67% of households lived in buildings with outer walls of mud-bonded bricks or stones while 27.5% lived in houses with outer walls of cement-bonded bricks or stones (27.5%). In areas like Chhaimale and Talkududechour, most households lived in buildings with mud bonded bricks or stones.
- About 78% of households lived in buildings with foundations made of mud-bonded bricks or stones while 15.6% lived in houses with foundations made of cement bonded bricks or stones (15.6%). An increasing number of houses in the Dakshinkali and Sheshnarayan areas have reinforced cement-concrete (RCC) foundations.
- About 44% of households lived in buildings with galvanized iron rooves and about 30% in houses with RCC rooves. About 11% of houses in Chhaimale had thatch rooves.

Note that the 2015 earthquakes caused considerable damage to the many houses in the municipality with outer walls of mud-bonded bricks or stones.

6.2 Roads and Transportation

Dakshinkali Municipality is easily accessible by motorable road from Kathmandu to the north along the Kathmandu–Dakshinkali road (Figure 7, right). The area can be reached from Makwanpur to the southwest along the Pharping–Phakhel–Kulekhani road and from Makwanpur to the south by the Sisneri–Dakshinkali road. The track of the new proposed Fast Track road through to Nijgad in the Tarai runs alongside the Bagmati River on the eastern edge of the municipality.

The municipality has accessible and remote areas. As per the Dakshinkali Municipal Transport Master Plan (Dakshinkali Municipality 2016) the municipality has 105.75 km of roads, most of which is 4m wide. Most of the roads are in a bad condition.

The two main bus parks in the municipality are in Pharping and Dakshinkali. The two main public bus services run from Balkhu on the Kathmandu Ring Road to Pharping and Phakhel and from Balkhu through Pharping to Dakshinkali. Hundreds of jeeps carry passengers through the municipality and on points south via the Phakhel and Dakshinkali–Sisneri roads. As per the 2011 census, 1,103 households owned motorcycles and 108 owned four-wheel vehicles

Although public transport is available along the two major roads, there are limited public transport options in the rest of the municipality. A few jeeps operate along a few routes, but services are irregular and are subject to favorable weather and road conditions.

6.3 Other Services

The following data is from the 2011 national census (CBS 2012).

Sources of drinking water – In 2011, Dakshinkali Municipality was relatively well off as compared to neighboring areas municipalities in terms of piped water supplies. About 85% of households used taps or piped water as their main source of drinking water. The supply of piped water was, however, relatively poor in Chalnakhel (about 58%), with 26% of people relying on open wells and 14% on water spouts. In the relatively remote Chhaimale area, taps and piped water served as the main source of drinking water for about 72% of households.

Cooking fuel – About two-thirds of households relied on firewood for cooking. Just over 30% of households used LPG with the use highest in Sheshnarayan at about 55%.

In the relatively urbanized areas such as Dakshinkali and Setidevi, LPG is being increasingly used for cooking while in Chhaimale and Talkududechour, 92% of households used firewood as their primary cooking fuel.

Lighting — In 2011, 95% of Dakshinkali Municipality households used electricity for lighting.

Toilets – In 2011, 15% of households reported having no toilet facilities of their own. The situation was worst in Chhaimale and Talkududechour where 41.5% and 30% of households did not have their own toilet facilities. This poses a serious challenge to the municipal office which aims to achieve an open defecation free (ODF) municipality.

Solid waste management – Almost all Kathmandu Valley municipal governments including Dakshinkali, send their solid waste to the dumping site at Sisdol of Okharpauwa in Nuwakot district, about 27 km away from Kathmandu. However, this site only has the capacity to handle this waste for about another two years.

Dakshinkali Municipality is an urbanizing area which implies an increasing volume of solid waste. It is high time for the municipality to find a sustainable way of managing its solid waste.

Wastewater management – The status of fecal sludge management in Dakshinkali Municipality in its more urbanized areas is no different from other parts of Kathmandu Valley. About 70% of households in the Kathmandu Valley dispose of their excreta directly into sewer lines (HPCIDBC 2011). Due to the lack of functional wastewater treatment facilities, almost all sewerage ends up in rivers untreated. Although the remaining 30% of households use onsite systems (pit latrines and septic tanks), which are more environmentally friendly, the sludge collected over time is also usually directly or indirectly discharged into rivers. Thus, regardless of how fecal sludge is handled or disposed at the household level, rivers continue to be on the receiving end.

7. Policy, Regulation and Planning

Local Level Governance Act – The grounds for the functioning of local governments (municipalities and rural municipalities [gaunpalika]) has been established by the promulgation of the Local Level Governance Act, 2017. The act, formulated in accordance with the Constitution of Nepal, 2015, grants local governments significant legislative, executive and judicial rights. The act gives local legislatures the power to formulate local laws in line with federal level legislation, while local judiciaries can decide cases related to irrigation, daily wages, pastures and other issues.

The act gives local governments the authority to manage teachers, staff and education up to the basic level (Grade 8) and to oversee basic health care. They can set up their own police forces, issue land ownership certificates, collect revenue on property, and register births, deaths and marriages. They can also levy taxes on house rent, entertainment, property, and tourism in compliance with the tax laws of the Federal and provincial governments.

Municipal policies – Dakshinkali Municipality had prepared the following policies prior to the enactment of the Local Level Governance Act:

- Staff Administration Rules 2074 BS (2017)
- Municipality Municipal Executive (Work Division) Rules, 2074 BS (2017/18)
- Municipality Municipal Executive (Work Performance) Rules, 2074 BS (2017/18).

Major programs – Dakshinkali Municipality is one of the 191 municipalities where the Local Governance and Community Development Programme (LGCDP) 2 is being implemented. Executed by the Ministry of Federal Affairs and General Administration (MoFAGA), LGCDP is a national program that empowers citizens to engage with local governments and increases the capacity of local governments to manage resources and deliver basic services in an inclusive and equitable way besides strengthening the institutional framework for decentralization, devolution and community development.

Dakshinkali Municipality is preparing to implement the Environment-friendly Local Governance Programme (EFLGP) and the Child-friendly Local Governance Programme (CFLGP), which were designed by the erstwhile Ministry of Federal Affairs and Local Government (MoFALD).

8. Municipal Institutions and Capacity

8.1 Organizational Setup

TThe previous VDC-wise setup has become redundant following state restructuring under the new federal system. The organizational structure of the municipal office consists of the following sections:

- Administration Section
- Account Section
- Internal Audit Section
- Environment and Waste Management Section
- Revenue Section
- Social Development Section
- Building Construction and Urban Planning Section
- Planning and Urban Infrastructure Development Section.

Note that the first local government elections (including municipality elections) under the new federal constitution were held in 2017. The municipality's website is at http://www.dakshinkalimun.gov.np/en

8.2 Technical and Physical Capacity

Dakshinkali Municipality operates from rented premises in Pharping. However, these premises do not have adequate space to accommodate the municipality's staff. And the availability of technical human resources in the Municipal Office is far too little to service the growing workload. At the time of the assessment the municipality had three engineers, one environment engineer and three sub-engineers.

Dakshinkali Municipality office, Pharping

9. Municipal Finances and Revenue

A comparative analysis of the municipality's sources of estimated income between fiscal years 2071/72–2073/74 (2014/15—2016/17) shows the predominance of external source of income (Table 6).

The trend of municipal recurrent expenditure increased from NPR 15.8 million in 2071/72 (2014/15) to NPR 20 million in 2073/74 (2016/17) (Table 5). In FY 2073/74, the capital expenditure is expected to be 2.75 times the size of recurrent expenditure.

Table 4: Breakdown of revenue (FYs 2071/72–2073/74 BS in Nepali rupees)

	Sources of income	Actual income (FY 2071/72 BS, Mangsir end)*	Income (FY 2072/73)	Estimated income (FY 2073/74)
1	**Internal sources**			
1.1	Local taxes			
	Land revenue and land taxes	1,176,395	2,500,000	1,265,100
1.2	Fees			
	Building permits		650,000	70,000
	Other recommendations	1,695,926		1,800,000
1.3	Revenue from sales:			
	Bidding documents		2,000	2,000
	Penalty	9,250	10,000	15,000
	Others		1,900,000	2,000,000
	Total of (1)	2,881,571	5,062,000	5,152,100
2	**Revenue from district dev. committee (DDC) and shared revenue**			
	Resource utilization taxes (shared)		1,200,000	1,300,000
	Land and property registration		1,000,000	1,200,000
	Total of (2)		2,200,000	2,500,000
3	**External sources**			
3.1	Unconditional grants		4,600,000	7,000,000
3.2	Capital grant from Government of Nepal		8,743,000	9,000,000
3.3	Conditional grants			
	Capital grants from Government of Nepal		28,400,000	30,000,000
	LGCDP		4,446,000	5,000,000
	Social security allowances		11,510,640	18,000,000
	Total of (3)		**57,699,640**	**69,000,000**
	Grand total	**2,881,571**	**64,961,640**	**76,652,100**

Data source: Dakshinkali Municipality Budget, Policy and Program, FY 2072/73, FY 2073/74. NA = not available.

Table 5: Dakshinkali Municipality expenditure (FY 2071/72 BS – FY 2073/74, in NPR)

Type of expenditure	FY 2071/72 (revised)	FY 2072/73 (revised)	FY 2073/74 (projected)
Recurrent	15,804,000	18,865,500	20,000,000
Capital	NA	NA	55,000,000
Total			**75,000,000**

Data source: Dakshinkali Municipality Budget, Policy and Program, FY 2072/73, FY 2073/74. NA = not available.

10. Municipal Stakeholders and Groups

Dakshinkali Municipality is home to many NGOs, community-based organizations (CBOs) and cooperatives. Table 6 lists potential key stakeholders for the Green Municipal Development Program.

Table 6: Dakshinkali Municipality – potential GMDP stakeholders

Type	Stakeholders
Government organizations	Federal level: Ministry of Federal Affairs and General Administration, Ministry of Forests and Environment, Ministry of Urban Development Provincial level: Province 3 government (under formation) Local level: Dakshinkali Municipality, Lalitpur District Coordination Committee
Business community	Individual entrepreneurs, cooperatives
NGOs (field of engagement)	PRR (social), Gosan Club (social), New Sunrise (social), Lotus Dharma (social), CIUD (WASH), WESD (social), KRMF (social), Dakshinkali Mahila Sanjal (Social)
CBOs	Ward civic forums

Source: Dakshinkali Municipality Office and focus group discussions

PART 3: SECTORAL, POLICY AND PROJECT FINDINGS

11. Priority Sectors and Strategic Themes

The strategy of Dakshinkali Municipality is to guide development on the basis of its potentials and competitive advantages. The municipality's advantages lie in its proximity to the capital city of Kathmandu and Makwanpur, the presence of religious sites revered by Hindus and Buddhists, natural resources such as water and forests, and the production of high quality agricultural produce. Tourism and enterprises development could be viable priority sectors for the municipality as reflected in the municipal office's priorities and in the view of the focus group discussion participants.

11.1 Tourism

DBesides religious tourism, Dakshinkali Municipality also has potential for activity-based tourism including hiking and spiritual activities. There are several exotic locations within the municipality which remain to be use including Boson hill, which is much visited by domestic visitors after the establishment of a hotel there.

There is also potential to promote heritage-based tourism in Pharping old town, which has a rich cultural history. Heritage-based tourism should be promoted for both doemstic and foreign scholars, researchers, students and tourists. Tourism has a potential to not only contribute towards the preservation and conservation of local heritage and practices but also to generate economic opportunities for locals.

Chhaimale is more remote and less developed than the more urbanized parts of the municipality. The indigenous people of Chhaimale – Tamangs – lag behind socioeconomically. Chhaimale offers a different flavor of tourism. Home-stay programs in Chhaimale and other less served areas would harness the tourism potential of the areas and promote the socioeconomic development of marginalized social groups. Tourism-promoting activities linked with sanitation and hygiene would both develop local people's entrepreneurship skills and improve living standard and attitudes.

11.2 Enterprise Development

Dakshinkali Municipality can supply its produce easily to the large neighboring markets in Kathmandu, Kirtipur, Lalitpur and Makwanpur. Dakshinkali specializes in producing Nepali hog plum (lapsi) and Asian pear (nashpati). Several products can be made from Nepali hog plum. Besides, most of the municiaplity's area is rural with scope for dairy production and livestock and herbs farming.

A number of bottled water industries have recently begun production in the municipality, taking advantage of local natural springs. The large forest resources provide scope for timber-based industries. Recently the municipal office invited prominent business leaders of the country to study the feasibility of establishing appropriate industries in the municipality in line with the municipal development campaign of 'One Ward One Industry'.

12. Policy and Planning Recommendations

Dakshinkali Municipality needs to invest in soft initiatives such as plans and policies, as well as hard initiatives such as projects. It is in the process of preparing several municipal plans, which provide an opportunity to integrate green growth concept and principles into the municipality's development pathway. A list of existing and to-be-prepared municipal plans are presented in Table 10.

Technical and logistic support to municipal staff – As a relatively new municipality with limited human resources, Dakshinkali Municipality needs technical and logistical support. Given the rapid rate of urban growth in the area, the availability of technical human resource far outweighs the work load. The technical and logistic support needed by the municipality, at least in the short run, is as follows:

- **Supplementary technical human resources:** Although the municipal office plans to create additional positions for technical human resources, external support in the form of short or mid-term engineering or planning staff would go a long way to build the municipality's capacity for sustainable urbanization based on green growth principles. As engineers are not usually trained to address urbanization issues, the municipality's technical team should have an urban planner.

- **Trainings and exposure visits for the mayoral team on urban management:** The mayor and other elected representatives are not necessarily skilled as managers but need managerial skills to carry out their jobs. They also need to keep updated about current urban challenges and practices to be able to address them. Likewise, the municipality's chief administrative officer (formerly executive officers) have important roles as they are advisors to the mayor, and as urban area managers.

- **Trainings and exposure visits for municipal staff:** Municipal staff need to update their skills and knowledge from time to time to learn about ways to address emerging issues – particularly about sustainable urbanization and green growth.

- **ICT support:** Improved service delivery through information and communication technology (ICT)-based applications including interconnectivity between municipal office and ward offices would promote time-saving and environment-friendly ways of doing business and managing urban areas. An IT-based platform could be created whereby municipal officials could respond to problems posted online or reported through mobile apps by residents.

Table 7: Municipal plans and policies needed by Dakshinkali Municipality

Plans	Objectives	Components
(1) Comprehensive Town Development Plan	To realize the municipal vision and priorities by promoting infrastructure development that proceeds with green growth potentials and concerns, and to promote planned urbanization.	a. Baseline mapping b. Twenty-year perspective plan guided by structural land use plan considering the trend of urban growth and land use change c. A Multi-sector Investment Plan of short to mid-term infrastructure and socio-economic projects (5–7 years) d. Measures to integrate the following companion plans that will be prepared separately: i. Risk sensitive land use plan ii. Municipal transport master plan iii. Tourism master plan iv. Environment preservation master plan including natural resource management plan v. Municipal finance plan
(2) Risk sensitive land use plan	To ensure safe housing while promoting local architecture; to ensure safety from floods, landslides, and climatic risks; and to prevent river pollution	a. Multi-hazard risk assessment (including climate risks) and zoning b. Slope and watershed analysis c. Byelaws on setbacks from rivers and streams
(3) Building byelaws	To control population density, ensure space for mobility, and preserve traditional architecture	a. Setback, ground coverage, height, and floor area ratio b. Guidelines for buildings in traditional settlements of Lubhu and Siddhipur
(4) Municipal transport master plan	To ensure efficient and effective mobility within the municipality and to and from neighboring areas	a. Twenty-year road construction and connectivity plan b. Integrated land use c. Transport options d. Traffic management including road safety e. Parking management
(5) Tourism master plan	To harness the municipality's tourism potential, attract private investment and address poverty in underserved areas (e.g., through homestay programs)	a. List potential investment projects b. Identify sites, activities and costs for homestay programs, ecotourism and other community-based tourism programs c. Map tourism potential areas and activities d. Market and promote the area's tourist attractions
(6) Environment protection master plan including natural resource management plan	To protect environmentally sensitive areas and promote environment-friendly practices	a. An inventory of natural resources including forests and public lands b. An inventory of flora and fauna c. Mapping of environmentally sensitive areas d. The zoning of natural resources and land e. The management of river mining f. Solid waste management g. Landslide and soil erosion prevention and reduction h. The prevention of air, water, soil and noise pollution i. The management of urban parks and recreational areas and activities
(7) Municipal finance plan	To improve and increase revenue collection, explore new avenues for revenue generation and optimize investment and expenditures ensuring value for money	a. Long-term planning and budgeting b. Review tax rates and service fees c. Identify revenue sources d. A procurement plan e. Asset management f. A GIS-based information system documenting firms, businesses and other tax paying entities in the municipality g. A GIS-based land information system (with data on land ownership, area, plot number and size, land price and location)

13. Ideas for Projects

Identification of infrastructure projects for the Green Municipal Development Program is made on the basis of their worth from the viewpoint of economic, social and environmental concerns. Potential project profiles were developed by building on a list of projects discussed with the mayoral team (see Annexes 2 and 4). The focus group discussions with local NGO activists, community leaders, and business persons helped to in considering additional dimensions to make these project concepts more socio-economically attractive and environmentally responsible. In discussions with local stakeholders the project identified three types of projects that would benefit the municipality (see Annex 4).

Project 1. Strengthen the urban economy by promoting tourism

Description: Tourism can be a tool for the overall economic development of the municipality and for targeted marginalized areas. Large investments in hotels, resorts and other recreational activities would generate revenue for the municipality but would not automatically translate into benefits for local people. Marginalized groups may not benefit from such initiatives as their power to negotiate is often weak. Targeted programs such as homestay programs coupled with local infrastructure development would build sustainable development at a relatively low cost.

Objective: Create and strengthen livelihood options through the promotion of place and activity-based tourism.

Objective: Improve water supply and sanitation status in tourism-potential areas.

Activities

1. Promote homestay programs, eco-tourism, and agro-tourism in appropriate areas focusing on marginalized communities and areas and run awareness programs on hospitality and sanitation.
2. Develop trekking routes with the provision of basic services including safe drinking water, public toilets, teashops and eateries under the public-private partnership modality.
3. Conserve traditional buildings, monuments and ponds.
4. Promote traditional cultural activities in Pharping and other traditional settlements.
5. Promote educational tours and heritage walks.
6. Promote local products (food, souvenirs) by mobilizing women and marginalized groups.
7. Mobilize local youth to promote tourism and entrepreneurship in partnership with local cooperatives.

Project 2. The promotion of agro-enterprises

Description: Dakshinkali is known for its production of Nepali plum hog (lapsi) and Asian pears (nashpati), from which several types of saleable products are made. There is the potential to establish small-scale enterprises to process these fruits and other agro-products, which may not require heavy investments or skilled human resources.

Objective: Promote socio-economically inclusive enterprises based on local agro-products.

Activities

1. Establish an integrated market with agro-processing and cold storage facilities.
2. Strengthen the markets for local products by establishing dedicated outlets in and outside the municipality.
3. Support energy-efficient and eco-friendly technological improvement in agro production and processing.
4. Support agro production, processing and business training opportunities.
5. Promote activity-based tourism by engaging visitors in farming and produce processing.
6. Carry out research to identify new marketable agro-products

Project 3. Integrated solid waste management

Description: BDescription: The dumping of solid waste in landfill sites has negative environmental consequences. Transporting it to faraway locations expends fuel and is not sustainable. It is best to minimize the use of waste disposal in landfill sites and to decrease the volume of solid waste by converting it into manure and energy alongside the extraction of recyclable materials (see Box 3 for an example from Nepal).

Objective: Manage solid waste in a sustainable and environment-friendly way while turning waste into useful resources.

Activities

1. Build a recycling center with a material recovery facility.
2. Build a large-scale organic waste composting plant that produces organic manure.
3. Improve the waste collection system by collecting and processing different kinds of waste separately.
4. Support for waste separation at source.
5. Run awareness campaigns through NGOs on household solid waste management.
6. Train and support farmers on the use of organic manure.
7. Train and support waste collectors on health and hygiene.
8. Integrate waste collectors' activities into the overall solid waste management process.

Project 4: Integrated waste water management

Description: Fecal sludge management is an emerging urban issue. At present, septic tanks are the only active component of fecal sludge management in the Kathmandu Valley. A conceptual wastewater master plan for the Valley encourages the large-scale adoption of onsite systems such as septic tanks (ADB 2010). However, the construction of septic tanks entails is household based with no economies of scale and most of them are not properly designed or constructed. The need is to opt for both short-run (e.g., septic tanks) and long-run options (wastewater treatment plant). Due to the ever-increasing volume of wastewater in the municipality due to rapid population growth, there is a need to scope a wastewater treatment plant that treats wastewater and produces biogas and compost fertilizer (see Box 3 for an example from Nepal).

Objective: Manage fecal sludge at household and municipality levels in environmentally friendly and integrated ways.

Activities

1. Build a wastewater treatment plant with a biogas reactor.
2. Provide technical support for the design and construction of septic tanks in small and remote housing areas via a municipal help-desk.
3. Integrate commercial septic tank cleaning businesses into municipal fecal sludge management.
4. Run awareness programs on the proper design and construction of septic tanks.

Box 3: Examples of associated good practices from Nepal

Wastewater treatment – Nepal's first large-scale community-based wastewater treatment plant and biogas reactor has recently been set up at Shreekhandapur in Dhulikhel Municipality. It treats the wastewater of 200 households and produces biogas for cooking for 60 families. Solid waste is separated and sent to two biogas reactors. Liquid waste is sent to reed bed treatment plants and the digested sludge can be used as compost fertilizer.

Waste into energy – Kathmandu Metropolitan City has launched a pilot project to convert waste into energy with a sample production of 14 KWs of electricity from a biomethanation plant at Teku, Kathmandu. The Alternative Energy Promotion Centre has also initiated large scale biogas projects including one in Bhairahawa with a capacity of 3,700 cubic meters that produces one large tanker of LPG per day. This conversion of waste to energy could be replicated in other parts of the country.

14. Conclusions

Dakshinkali Municipality is known for its important Hindu and Buddhist religious sites, which can be leveraged for promoting religious tourism. Dakshinkali also has plenty of natural attractions and scenic spots. Its proximity to the large urban areas of the Kathmandu Valley mean that it is well positioned to attract domestic and foreign visitors. The same advantage can also be leveraged to promote agro-based industries for which the municipality has a competitive advantage.

This report presents a situation analysis of Dakshinkali Municipality based on secondary information and discussions with the mayoral team and other local stakeholders. Several potential projects have been identified based on discussions and consultations with the mayoral team. Additional inputs came from discussions with local stakeholders that explored additional dimensions to make the project concepts more socioeconomically attractive and environmentally responsible. A list of recommendations was also prepared on planning and policy making.

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Annex 1 – Research Questions

Note: Green growth is defined as a model of economic growth that targets key aspects of economic performance including poverty reduction, job creation, social inclusion and environmental sustainability.

Annex 1.1 Meeting with the mayor and his or her team

1. You lead a new municipality. What is your vision for the municipality, and the priorities for your tenure? What are the technical (e.g., staff) and physical barriers (e.g., office space) faced by your office?

2. In terms of infrastructure development, how do you evaluate the status of the municipality? Where do your priorities lie and why?

3. Although infrastructure development generally tops the list of municipal priorities (and this is because the majority of public demands are related to infrastructure), there are now equally important concerns about economic development, social inclusion and environmental sustainability.

3.1 What are the economic potentials in the municipality, and to what extent have these been harnessed? What are the challenges?

3.2 Socially and economically diverse groups live in the municipality. How does such diversity reflect in terms of public demands you receive, and how do you (plan to) ensure social inclusion in the planning and delivery of municipal services?

3.3 Infrastructure development often takes place at the cost of environmental losses. To what extent have you been successful in balancing the use of natural resources while implementing infrastructure projects? What are the key challenges?

4. The Green Municipality Development Program (GMDP) aims to promote green growth. How would you define the scope of GMDP in this municipality? What should be the priority projects?

5. Would you share your top 5 project ideas for your tenure in terms of priority? Why are these the priorities?

Annex 1.2 Focus group discussion with business community/private sector

1. Please explain your work and engagement in this municipality.

2. What are the business and economic opportunities you see in the municipality? What are the challenges or barriers?

3. What are the opportunities for public-private partnerships, and what has been the response of the municipality and government agencies to the possibility of partnering with your organization?

4. There are limited examples where the private sector works on green growth. How do you plan to change this? What related support do you expect from the municipality?

5. What are your key projects and initiatives for the next 5 years with or without collaboration with the municipalities?

6. The Green Municipality Development Program (GMDP) promotes green growth. How would you define the scope of the program in this municipality? What should be priority projects?

Annex 1.3: Focus group discussion with NGO and CBO leaders

1. Please explain your work and engagement in this municipality.

2. What are the major social development gaps in this municipality? What were some past initiatives to address them, and to what extent were they successful?

3. Do you think the existing (infrastructure) projects have helped to reduce social disparities (including economic disparities)? Please give examples of successful projects as well as failures.

4. How do you judge the role of the municipality in promoting social inclusion in the municipality? What do you expect from the municipality?

5. What are your key projects and initiatives for the next 5 years with or without collaboration with the municipalities?

6. The Green Municipality Development Program (GMDP) promotes green growth. How would you define the scope of GMDP in this municipality from the perspective of working with the NGO and CBO sector? What should be priority projects?

Annex 1.4 Focus group discussion with environmental organizations and activists

1. Please explain your work and engagement in this municipality.

2. What are the major environmental problems and issues in this municipality? What are the past initiatives to address them, and to what extent have these been successful?

3. Do you think that existing infrastructure projects have been effective in taking care of the environment? Can you give examples of successful projects as well as failures?

4. How do you judge the role of the municipality in promoting environmental sustainability in the municipality? What related support for this do you expect from the municipality?

5. What are your key projects and initiatives for the next 5 years with or without collaboration with the municipalities?

6. Have any of your environment concerns been mainstreamed into the municipality's planning? Where do you see the opportunities to do this?

7. The Green Municipality Development Program (GMDP) promotes green growth. How would you define the scope of GMDP in this municipality from the perspective of working with environmental organizations and communities in this municipality? What should be priority projects?

Annex 2 – Minutes of Meetings with Mayoral Team (22 October 2017)

आज मिति १४।१०।२०७४ गते आउतकारको दिन धरान नगर
पालिकाको नगर उप-प्रमुख श्री वसन्त तमाङ ङोल्ले
उपस्थितिमा, तपसिल बमोजिमको विषयहरुमा छलफल
गरियो ।

उपस्थिति :

विशेष उपस्थिति : नगरप्रमुख श्री मोहन बहोरा
नगर उपप्रमुख श्री वसन्त तमाङ ङोल्ले
कार्यकारी अधिकृत सुशीला पौडेल ढकाल
लेखा अधिकृत विष्णु बराल के.सी.
इन्जीनियर मनोज बुढाथोकी
परामर्शदाता कीर्ति कुसुम जोशी ९८४३१२००६२

छलफलका विषयहरु

(१) यस नगरपालिकासँग हरित नगरपालिकाको उपमा दिइए
जाँचको लागि प्रस्ताव राख्ने खोजी, संभावनाको अध्ययन गर्ने
(२) संभावनाको खोजीमा महिला तथा युवाहरुको रोजगारको
संभावनाको अध्ययन गर्ने ।
(४) औद्योगिक संभावनाहरुको खोजी गर्ने
(३) आन्तरिक एवं बाह्य पर्यटन विकासको लागी संभावनाको
खोजी गर्ने ।

Annex 3 – Participants in Focus Group Discussions (24 October 2017)

Green Municipal Development Program

FGD with Business Community/ Private Sector

Date: Oct 24, 2017

Venue: Dakchinkali Municipality

SN.	Name of the Participants	Designation	Organizations / Firms	Phone No.	Email address	Signature
1.	Sudhimma Lama	Business Management		9851985511		
2.	Jayendra Lama	Business		9841156219		
3.	Raghuwar Nepal	Vet. Technician	Mitra Saving & credit co-op	9851239248	raghunepal@gmail.com	
4.	Biroda Khadka	Factory incharge	Himalayan Springwater	9841541983		
5.	Rajesh Tamang	Chairman	Seerapath Group.	9841616591	rajwaiba007@gmail.com	
6.						
7.						

Attendance Sheet

Green Municipal Development Program

FGD with NGO/CBO Leaders and Environmental Organizations/Activists

Date: Oct 24, 2017

Venue: Dakshinkali Municipality

SN.	Name of the Participants	Designation	Organizations / Firms	Phone No.	Email address	Signature
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Attendance Sheet

Annex 4 – Project Ideas From Municipal Consultations (2017)

Project Ideas	Remarks
1. Industries	One ward, one industry; Agro-industries based on major local produce of Nepali hog plum (lapsi) and Asian pear (nashpati)
2. Employment generating projects	Target women and youth
3. Tourism promotion	Cable cars, hotels and homestay facilities

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This report is one of a set of seven situation analyses of the Nepalese municipalities of Belkotgadhi, Dakshinkali, Mahalaxmi, Melamchi, Namobuddha, Palungtar and Thaha.

All seven reports are available at www.gggi.org/country/nepal/