

Sitganga Municipality Office of the Municipal Executive

Province No-5, Arghakhanchi

Municipality Transport Master Plan (MTMP)



Volume- I-Main Report (Final)

Sharp Research Centre Pvt. Ltd.
Anamnagar, Kathmandu

Sitganga Municipality

Office of the Municipal Executive

Province No-5, Argakhachi district

This document is the draft report prepared for the project, "Municipality Transport Master Plan (MTMP)" undertaken by Sitganga Municipality Office, Argakhachi district. This document has been prepared by Sharp Research Centre Pvt. Ltd. for Sitganga Municipality Office of the Municipal Executive, Argakhachi district. The opinions, findings and conclusions expressed herein are those of the Consultant and do not necessarily reflect those of the Municipality.

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The job was entrusted to the Sharp Research Centre Pvt. Ltd, Anamnagar, Kathmandu. This report is prepared and submitted as Draft report.

The consultants' team would like to express its appreciation to the officials from Sitganga Municipality. We are highly grateful for their help and co-operation. We are very grateful to the Chairperson, Vice Chairperson and Chief Administrative Officer and other personnel's of the Municipality and local peoples who directly and indirectly contributed during this study and field survey.

Finally, the project team would like to express thanks to all staffs and colleagues for their anxious support for this study.

Declaration Letter

We hereby declare that we have conducted the study for Municipal Transport Master Plan (MTMP) of Sitganga Municipality professionally using the then MoFALD guideline and other acceptable standard methodologies. To the best of our knowledge, the findings of our study are correct. The Municipality Transport Master Plan has been prepared as per standard engineering tools, norms and practices. The visionary city development has been finalized on the basis of the discussion with the stakeholders. We would like to assure you that the MTMP is reliable, practicable and adequate to the overall development of Municipality transport system. We shall be accountable for any misleading information in any part of this report in respective area of study.

Executive Summary

Sitganga Municipality is located in Argakhachi district, Province No. 1. It was established merging the then seven VDCs viz. This Municipality was established by merging then seven Village Development Committees (VDCs) i.e. Sitapur, Subarnakhal, Thada, Simalpani, Siddhara, Jukena and Jaluke and currently divided into 14 wards.

Total area of this Municipality is 610.46 square kilometers with total population of 43,373 from some 9,201 households. As mentioned in the table, ward wise, Ward No. 11 holds the largest area i.e. 117.82 sq. km. followed by Ward No. 10 and so on whereas Ward No. 4 holds the smallest size of 18.53 sq. km.

The topography of this local boundary consists of several undulations having peaks, hills, inner valleys, plain fertile lands with extensive forest cover. This municipality retains a diverse climatic variations ranging from tropical to temperate climate and elevates considerably up to the range of 1,600 m. The main economic activity of this Municipality is agriculture and livestock, whereas people follow other chores as well for their sustenance.

This Municipality has no air transport service to complement the surface transport facilities. Inner mobility and other development activities fully depend on expansion of road network within the district. The Municipality has limited number of all-weather transport facilities because most of the municipal roads are earthen in nature and requires lots of adventure during the rainy season to shuttle from one place to another.

Sitganga Municipal inventory has identified 236 municipal roads with total length of 773.16 Km in which 752.89km (97.38%) fall under earthen category, 17.8 km (2.30%) gravel, and 0.24 km black top and 2.22 Km as new track. Likewise among four different classes, 6 roads fall under Class "A", 16 roads under Class "B", 32 roads under Class "C" and 189 roads under Class "D" where Class A, Class B, Class C and Class D constitutes 180.42km, 144.87 km, 166.16 km and 281.71 km respectively.

Likewise, 42 roads have been recommended as prioritized roads that include 6 from Class A and 16 each from Class B, 15 from Class C and 5 from Class D. Based on investment plan, all MTMP roads will be maintained over five year period. 332.36 Km MTMP roads will be improved and prepared for gravel road standard including widening and maintaining longitudinal and cross drainage system. This intervention ensures to bring into all-weather road for maintainable stage. 3.15 Km new track will be opened and be brought into vehicle pliable condition (full design width and side drain construction) during the MTMP period as projected budget. Additional length could have chance of upgrading if additional fund is available during this MTMP period. During the MTMP period, NPR 398.72 Million will be invested for construction while NPR 170.88 Million on maintenance.

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Chapter - 1: Introduction

1.1 Background

The Constitution of Nepal has envisioned Federal Democratic Republicanism as the essence of its governance system. Rights of the local government have been enlisted on Annex -8 of the constitution. Local Government Operation Act 2074 elaborates and specifies those rights to be exercised by the local government. Article 11, Sub-Articles 2(G) and (K) specify the rights of the local government to devise and implement policies and plans regarding roads, transportation and other relevant development projects directly concerned with the local level.

As a local government, Sitganga Municipality had allocated fund, endorsed by the Village Assembly, for the preparation of Municipal Transport Master Plan. Therefore, this report is the product of an extensive field study and study of relevant documents, interactions with the villagers, people representatives and stakeholders in the Municipality and ward levels for the preparation of Municipal Transport Master Plan (MTMP).

Physical infrastructure development has been extremely sluggish esp. in rural level in Nepal since long due to extended political turmoil and transition. Development of transportation infrastructure is one of the most essential groundwork for opening other avenues of development. Proper development of transportation system opens accessibility of the people to larger markets, service centers and overall economic sectors. Development of roads also leads to the development of urban centers with amenities like hospitals, schools, markets, services etc. Roads establish significant linkages with the large neighboring cities with vibrancy of economy, human activities and transactions. This sort of linkage is a key for the development of rural areas. Therefore, development of transportation basically through the development of road linkages is a fundamental necessity of this Municipality. It has prioritized the development of sustainable Municipal Transport Master Plan which is expected to address the need of opening an easy access to people's mobility in particular and inception of avenues of all kinds of development in general.

Chiefly this MTMP aims to assess the present status of roads and transportation within the Municipality through extensive field survey and inventorying the details of existing roads and transport situation. The study has also unfolded the problems and genuine necessities on road and transportation along with the recommendation of key interventions to be made for the sustainable development of road and transportation network. Planning approach adopted by the consultant is fundamentally bottom up and participatory. Study and analysis of existing road status and need assessment have been the basis for this overall planning.

MTMP is a long-term visionary plan which aims to systematize the road and transport development processes in the Municipality. It identifies the roads and creates a complete inventory of the roads. It categorizes the roads into four classes A, B, C, and D according to their importance. It prioritizes the interventions and allocates the estimated budget for the necessary interventions. Above all, it systematizes the process of road and transportation development according to the need of the Municipality. The consultant has followed all the prevailing norms and standards for the planning. It is based on the Approach Manual prepared by DOLIDAR and MTMP guidelines prepared by the then MoFALD. It has determined the Municipal Road Core Network as practical in planning process of DTMP and has identified the key linkages with other road network. A complete road network has been identified to make a basis for future development of roads which primarily helps to develop the transport access to all the settlements in the Municipality meeting the national standard of nominal duration to reach the core road network or all weather roads.

1.2 Objective

The key objective of this project is to prepare Municipality Transport Master Plan which would be a road map for the systematic development of road network and transportation in the Municipality. Other specific objectives pertaining to the key objective are:

- identify all the existing roads
- analyze the current accessibility situation
- determine Municipality Roads Core Network
- develop indicative Development Potential Map
- prepare Municipality Road Inventory Map
- Collection of demands for new roads and necessary interventions
- ➤ Road categorization through standard scoring method
- Road Nomenclature
- Preparation of Perspective Plan of Interventions of Services and Facilities
- Recommendation of fund management
- Finalization of financial Implementation Plan of Prioritized Roads for the MTMP period (Year wide Budget Distribution)

1.3 Scope of the Work

The scope of the consulting service includes:

- Preliminary presentation of overall planning process in the Municipality level
- Assist the formation of Municipality Roads Coordination Committee (MRCC)
- Field survey and data collection in ward levels

- Collection of demands
- O-D Survey
- GIS work for the finalization of all sorts of maps
 - Preparation of Indicative Municipality Development Potential Map
 - Preparation of Municipality Road Inventory Map
 - Preparation of Base Map
- Study of all relevant secondary data and information including previous MTMP (If any)
- Prepare field report
- Road classification coding and nomenclature
- Categorization of roads according to standard criteria
- Collect feedback and necessary corrections from the stakeholders Prepare the final report of MTMP
- Recommend for the approval from the village Assembly for the implementation

1.4 Limitation

This transport master plan is limited within the territory of the Municipality. Since the data collected for the planning were based on the information provided by the villagers in the ward levels, they may have supplied limited information. Although Enumerators have attempted their best to reach all the roads for the necessary data, there are chances of missing the data to some extent. Misnaming of the road may occur due to the pronunciation error or hearing problem by the respondent as well as enumerators. Chances of error may occur during data entry and tabulation. The scale used to work on GIS is also likely to generate some errors. Though such limitation and errors are obvious, attempts have been made to minimize such errors taking precautions in the error prone areas.

1.5 Approach and Methodology

The consultant has gone through the general procedures well defined in the ToR for the completion of the project. Participatory Rural Appraisal approach has been the core of the planning approach. A preliminary presentation was made in the Municipality among the village executive members, related officials, line agencies members and stakeholders for the clarification of how MTMP is prepared consulting the villagers, ward chairman and members for the collection of data on roads and transportation status as mentioned in the ToR. After the completion of the ward level meeting and field survey, O-D survey, demand collection, field data were organized to finalize IDPM, Municipality Inventory Map of Road Network and base map. On the basis of the IDPM and other maps and data MTMP draft report was prepared. Furthermore, the draft report was sent to the Municipality for the necessary correction and feedbacks. After incorporating the correction and feedback, the final report was prepared for the approval from the village assembly for the implementation.

Field survey and data collection were done to study the existing accessibility condition of the villagers and analyze the necessary interventions to be made in the future. Demand survey was done to assess the existing condition and future necessity of road extension and transport infrastructure. Participatory bottom-up approach was ensured in the overall planning process. Integrated Rural Accessibility Planning (IRAP) has been the foundational concept of overall planning which emphasizes on improving the accessibility condition of all the settlements in the Municipality.

1.5.1 General Methodological Overview

S. N.	Task Description	Activities	Outcomes
1.	Preliminary Presentation on Sitganga Municipality	Expert team conducted initial presentation among the village executive members and all related stakeholders	Stakeholders sensitized
2.	Study of secondary resources on roads and transportation related to the Municipality	Study and review of all relevant laws, by-laws, best practices, norms and standard of planning Review of previous MTMP (if any)	Expert team got familiarized with existing information regarding Municipality Transport Infrastructures and previous efforts for the development
3.	Ward level meeting	Participatory Rural Appraisal method adopted during ward level meetings in all wards for data collection demand survey; 0-0 survey traffic count-survey and all other necessary information	Primary data collected from the ward level formed strong ground for the necessary interventions to be made in the future
4.	Data Management and analysis	Data obtained from the field were tabulated; GIS work done to develop base map, IDPM, inventory map and other maps; and nomenclature, coding and grading of roads	Data organized and maps prepared
5.	IDPM and MRIM Preparation	As the part and product of data management, Indicative Development potential Map(IDPM) and a complete Municipality Road Inventory Map (MRIM) was prepared	IDPM and RMRIM developed
6.	Perspective Plan	After identification and preparation of the existing status of all the roads IDPM and MRIM	Perspective plan helped to prioritize and systematize the

S. N.	Task Description	Activities	Outcomes		
		were prepared and prioritization of key interventions finalized Finalize the required interventions	planning process		
7.	MTMP Preparation	After analysis of all the existing infrastructures 5 years MTMP was prepared Implementation plan prepared Fund availability and access to funds recommended	MTMP was prepared		
8.	Approval	After all necessary correction and feedbacks, final report of the MTMP was submitted to village assembly for the approval and implementation	MTMP was approved from the village assembly ensuring the ownership of the villagers		

1.5.2 Comprehensive Task Description

1.5.2.1 Municipal Level Initial Presentation

Expert team conducted a day-long presentation and workshop to clarify the village executive members and stakeholders about the holistic process of preparing MTMP.

1.5.2.2 Ward Level Meeting for Primary Data Collection

Enumerators and surveyors were deployed in each ward for the required interactions with the villagers and for the collection of all necessary data on the existing condition of roads from the ground level at respective wards.

1.5.3 Data Collection

1.5.3.1 Primary Data

During the ward level meeting and after surveyors were deployed to collect all the necessary data viz. Road name, condition, length. Similarly, traffic count survey and O-D survey were conducted. All other relevant information was collected to prepare base map and IDPM which formed a groundwork for overall planning.

1.5.3.2 Secondary Data

The following documents and sources were reviewed for the important data as the secondary data and information.

- 1. The constitution of Nepal.
- 2. Local Government Operation Act 2074.
- 3. DOLIDAR's Approach Manual
- 4. Nepal Rural Road Standard
- 5. Nepal Urban Road Standard

- 6. Municipal Profile
- 7. Demographic Data from CBS
- 8. Previous MTMP (if any)
- 9. Relevant Plans and policies (Federal Provincial, Local)
- 10. SDGs
- 11. Yearly Plans, Policies and Programs of the Municipality
- 12. RMTMP/MTMP of adjoining Municipalities or Rural Municipalities
- 13. Annual reports and policies of line agencies
- 14. Land use plan and policy
- 15. Agricultural Plan and Policy
- 16. Traffic data (if available)
- 17. All other relevant documents
- 18. Maps:
 - Topographical maps of 1:25,000 scale
 - Municipality administrative map
 - Arial Photographs
 - Municipality trail map
 - National Highways, SRN maps
 - Land use map
 - Other thematic maps

Data Sources

- Office of the Sitganga Municipality
- District Coordination Committee
- Government Line Agencies
- All related Sect oral Offices (Agriculture, Education, Irrigation, Forest, etc.)
- Chamber of Commerce
- Road Division Office
- Local and National NGOs and INGOs
- Department of Survey
- National Planning Commission
- Provincial Planning Commission

1.5.4 Data Analysis

After collecting the necessary data, analysis was done to assess the existing condition of accessibility. It revealed the demands for the improvement as well as sustainable development of all transport infrastructure basically roads. Human settlement patterns, core road network and lack of roads are identified for the planning process. Analysis was done adopting the proven techniques, norms and standards.

1.5.5 Base Map with Indicative Development Potential Map

- 1. Base map is the foundation for all kinds of planning. Therefore base map was prepared with following information.
 - Geo-political boundaries
 - Land use or Land cover
 - National Highways and Strategic Road Network
 - District Road Network
 - Bridges
 - Important historical, religious, natural landmarks
 - Water bodies, Watershed
 - Elevation, aspect
 - Major settlement, all settlement, urban centers, industrial areas
 - Major touristic locations
- 2. Future development potential zones include: (IDPM)
 - Areas with extensive agriculture and future expansion
 - Areas with forest and future expansion
 - Areas with business activities or marketplace
 - Areas with touristic importance
 - Areas with industry and future expansion
 - Watershed areas
 - Potential service sector expansion areas
 - Areas with open space, recreation, stadium, parks, etc.
 - Disaster prone area

IDPM was prepared based on the base map. IDPM indicates the future expansion areas where management of proper transportation system may become urgent according to the nature of the potential zones and volume of anticipated traffic after future expansion.

1.5.6 Preparation of MRIM (Municipal Road Inventory Map)

MRIM include a complete plotting of the roads within the municipality on the basis of the data collected from the ward levels. This map includes all the linkages with bridges and trails. It is a complete coverage of all the existing roads or like a profile of the roads or road networks. The roads are classified, codified, named and indicated on the map according to the above features with separate index.

1.5.7 Perspective Plan

Perspective plan covers the nature of the key interventions to be made upon the roads in the future in accordance to their importance and necessity. This plan is based on the data collected from the grassroots level. As a local government Municipality itself determines the requirements and demands from the ward levels and necessary interventions are recommended in accordance to the demands and necessity of the local people. Such required interventions are based on criteria 'B' of the approach Manual. This perspective plan is finalized after being approved by the Municipality.

1.5.8 Preparation of MTMP

After finalization of fundamental components like base-map, IDPM and perspective plan MTMP is prepared based on these components. MTMP rests on the following interventions types in one way or other. They are:

- New construction
- Upgrading
- Rehabilitation
- Recurrent Maintenance
- Periodic Maintenance

The consultant has prioritized the above interventions on the basis of interaction with the villagers and the necessity of the place and time. Availability of fund for the execution of the projects have been analyzed and five years projected financial plan devised. Target for the year and types of interventions have been finalized accordingly.

After that report will be submitted for the approval from the village assembly.

Chapter- 2: Review of Existing Infrastructure Situation

2.1 General Overview

Municipal and ward level surveys have revealed that the overall transport infrastructure, primarily road network appears to be in fairly weak condition in this Sitganga Municipality. Geographically Sitganga Municipality is the largest Municipality scattered in the area of 610.43 sq. km covering both hilly and plain areas. Despite being located in geographically accessible region, this Municipality lags far behind in terms of road infrastructures chiefly due to inferior road quality characterized by muddy and dusty features.

Gorusinge-Sandikharka Road (Feeder Road) is the life line road of this Municipality because all major strategic roads traverse through this particular road covering majority of the wards of this Municipality. Some of the strategic roads of this Municipality include: 1. Sitapur-Subarnakhal-Mandre-Netapokhara Road (30 km); 2. Thada-Amrai-Jukena-Jaluke-Lamatal-Bhalubang (48km); 3. Chakla-Borhakhar-Pakuri-Dhankhola Road (36km) and 4. Bhedamare-Simalpani- Pawara Bikram-Jitpur Road (20 km)

Out of the above mentioned roads, the first road will connect up to the border of Palpa district passing through Padini Municipality of Argakhachi district. This road also intersects the Saljhandi- Dhorpatan road. Likewise the second road links remote quarters of this Municipality and finally ends at Lamatal, quite close to Bhalubang bazar. The Bhalubang serves as the neartest market point to the people of Lamatal and its nearby vicinity. Likewise the Bhedamare road ends at Jitpur, one of the settlements of Kapilvastu district. This particular road retains high potentiality to be developed as an alternate fast track to Terai from this RM after upgrade of the same. Similarly, one of the agricultural roads passes through the downhill of wards 1, 2, 3 and 13 with its alignment parallel to the Badganga River. This road will also serve as the reliable source of construction material (gavel, boulder, and sand) especially for wards 1,2,3,4, 12 and 13 of Sitganga Municipality. It is also important from religious tourism point of view as this road connects to the holy premises of Bagra Baje where hundreds of sacrifices take place every year and is believed to be the second largest destination popular for animal sacrifices after Supa Deurali Temple in the whole district.

Bhedamare- Simalpani- Pawara Bikram-Jitpur Road and Sitapur-Subarnakhal-Netapokhara roads are relatively more stable roads among the major roads of this Municipality due to following characteristics: southward facing slope of both of the roads; prevalence of gravel/boulder mixed soil type in the Subarnakhal Road (facilitate road operations in all seasons); the Bhedamare road chiefly follows the ridge alignment with minimal cross drainages along its alignment.

Most of the roads in this Municipality do not have basic road furniture and also lack basic structural components like culverts, cross structures (cause ways), check dams, chutes, side drains and the like so as to retain environment friendly physiognomies of the road. The slope cutting of the roads are basically done through heavy equipment viz. dozers and excavators without proper management of the slopes. No balance of cut and fill was observed in the construction practices posing high risk of landslides and soil erosion in different road sections of the municipal roads. Provision of check dams, chutes, bioengineering etc. play vital role for mass balance which ultimately help complying with green road technology essential to be introduced in the municipal level road construction measures. All of these facts indicate that the overall development of road transportation is at the elementary stage in Sitganga Municipality that requires proper interventions along with prioritized and meaningful investment.

2.2 Agriculture and livestock

Agriculture sector is the most potential sector in this Municipality from the aspect of long term prosperity. The provision of irrigation, scientific technology, fertilizer, seeds and efficient storage system along with good market system will all help consume thousands of youthful human resources in these sectors assuring best utilization of the existing barren lands. Moreover, cash generating activities like Chicken farming/hatchery, goat keeping, buffalo rearing, bee-keeping, off-seasonal vegetable production, horticulture, herb production, collection and processing, are some of the prospective areas in line with agriculture and livestock.

2.3 Forestry (linked) ventures

Since the forest coverage is almost four fifth of the entire area, these is high scope of forest based economic ventures in this Municipality that include inception of activities like horticulture, herbal productions, agro forestry as components of scientific forest management. There is also high prospect in shifting shrubs and other forest areas into productive sector. After conducting the feasibilities part of forest could be developed as pocket areas of *Amala, Chiraito, Ganegurji Dalchini Harro Barro, Paanch Aule, Kaljiro, Kurilo, Dardare, Pipla, Balajor* and so.

2.4 Industry

Industries based on locally available resources will lead to employment generation at one hand and export based growth at the other hand. There is high potentiality of agriculture, livestock and forestry based industries in this Municipality that include production to processing related ventures. Likewise many foundation pillars in the name of temples and shrines, lakes and water falls, along with natural scene sceneries are in place to develop tourism as another lucrative industry. The development of good transport facilities, qualitative accommodations including provision of homestay services (with basic facilities) will all contribute in the rapid growth of this sector. Within tourism industry, this municipality could be a trade mark in terms of religious tourism. The ward wise potentiality of industrial sector other than tourism is as follow is as following

2.5 Existing Transportation Infrastructure Situation

Padini Municipality of Argakhachi district and some area of Palpa district lies to the east whereas Dang and Pyuthan lie to the west. Bhumikasthan and Sandhikarka Municipalities of Argakhachi district lie towards the north and some areas of Rupandehi, Kapilbastu and Dang district lie towards the southern border of this Municipality. This municipality is circumscribed by the east west highway towards the southern and western border and traverse through Gorusinge-Sandikharka road from the south to the north. The Saljhandi-Dhorpatan road is also intersected by Sitapur- Mainapokhar road and retain high potential of future development.

Geographically this Municipality is extended in 610.43 sq. km area where a huge chunk of the land is sloped towards the south with sufficient cultivable land as well as plain Chure Bhavar areas. The Chure region scales gradually from the south toward the north and culminates at the range of 1500m of Mahabharat. Weak geology, excessive practice of terrace farming, deforestation, haphazard collection of construction materials from the rivers and natural quarries, forest fire etc. lead towards floods, landslides and other kinds of natural hazards.

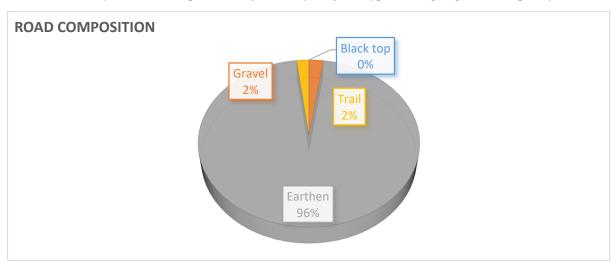


Figure 1: Composition of road by surface type in Sitganga Municipality

Source: Field Survey

The field survey indicates that a total of 773.74 km of road serves the entire population of this Municipality in which the share of black top road is almost negligible. The share of gravel road stands to be 2.27% followed by 95.73% earthen roads. The portion of new trail opening in the total road portfolio remains 1.95%. The condition of gravel road is not satisfactory at all. They have been primarily affected by poor water drainage. Similarly, the earthen roads come under operations only during the fair weather and difficult to pass through due to deep muddy reels, and excessive slippery.

The earthen roads pass through all of the wards of this Municipality but together. For the purpose of MTMP, the entire roads of Sitganga Municipality have been classified into four categories viz. Class 'A', Class 'B', Class 'C' and Class 'D'. In total 187.6 km of the road stretch falls under Class "A" as per the field survey while Class "B" holds 262.08 km; Class "C" 125.76 km and the share of Class "D" road is 198.30 km in the total road length portfolio.

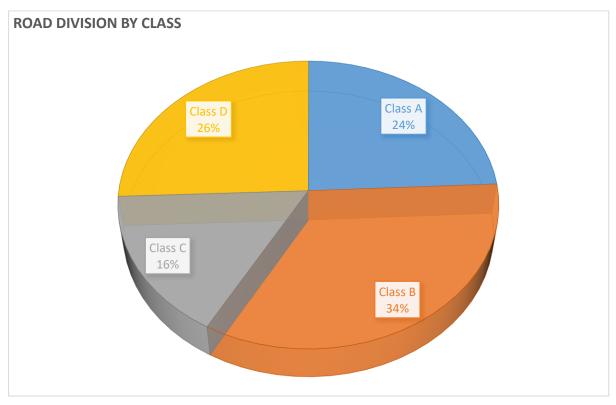


Figure 2: Table Road division by class in Sitganga Municipality

Source: Field Survey

Class "A" Road: Class "A" roads pass through all of the wards of Sitganga Municipality except Ward. No. 9. Ward no. 10 holds the longest road stretch among Class "A" road i.e. 37.52 km followed by Ward. No. 14 (28.97 km) and so on. Ward. No. 2 holds the shortest stretch of 5.59 km length among Class "A" road category. In total, 15.2 km gravel and 172.4 km earthen road constitutes the total portfolio of Class "A" road i.e. 187.6 km.

Class "B" Road: Class "B" roads pass through all of the wards of this Municipality. The longest road span has been recorded in Ward No. 9 (35.12km) followed by Ward. No. 11(25.93) and so on. The shortest road length has been recorded in Ward No. 13 with 10.89 km road length within Class B category. In total, 15.2 km gravel and 172.4 km earthen road constitutes the total portfolio of Class "A" road i.e. 187.6 km. The entire length of Class "B" roads fall under earthen category.

Class "C" Road: Class "C" roads pass through all of the wards of this Municipality except Ward No. 6 and 10. Ward no. 4 holds the longest stretch among Class "C" road with 16.09 km followed by Ward. No. 5 (12.64 km) and so on. Ward no. The shortest span has been recorded in Ward no. 13 with a total of 4.00km road length. In total some 125.76 km has been recorded as Class "C" roads in this Municipality out of which 1.63 km falls under gravel road and 124.13 km under earthen category.

Class "D" Road: Class "D" roads pass through all of the wards of Sitganga Municipality. The longest stretch has been recorded in Ward No. 6 (26.21km) followed by Ward No. 4 (25.43 km). The shortest of all in this category has been recorded in Ward. No 14 with 3.87 km road length. In the total road length of 198.3 km in this category, the share of black top road, gravel road and earthen road are 0.25 km, 17.6km and 740.77 km respectively. Another 15.13 km has been recorded as new track construction.

2.6 Visionary City Development Plan

Sitganga Municipality has prepared a long term Comprehensive Development Plan (CDP) which has chiefly focused on the physical infrastructures. The annual plan and programs of fiscal year 2075/2076 envisions optimum utilization of natural as well as human capitals and foresee partnership amongst different stakeholders including the municipal staff and bodies, local people, national and international non-government organizations, central and provincial government agencies to materialize its long term vision of prosperous and beautiful Signage. The CDP emphasizes basically on agriculture, livestock, agro based industry, commerce and tourism (religious and others) sectors to attain its long term vision as mentioned earlier. The Municipality cannot ignore its basic social services like health and education as well to achieve its long term goal. However, development of road and transportation sector is the foremost condition to attain its long term vision and goals. The long term vision of this Municipality has been summarized as following:

2.6.1 Major Plans, Policies and Programs in terms of visionary city development

The Comprehensive Master Plan, in short, is a long term development vision, that will help develop strategic guideline on the basis of which the Municipality could foresee its tentative outlook by 2033. This CDP envisions the ultimate use of human capital as it is the only

resource that integrates the other resources like natural resources, capital resources and the human resources itself and intends to reflect the concepts, target and the objective of Signage Municipality. Like other Municipalities and Rural Municipalities of the country, this Municipality is also backward in terms of development of physical infrastructure and has given due priority in these aspects. The long term prosperity of this Municipality has been linked in the foundation footings of modern and scientific agriculture and development as well as promotion tourism destinations.

2.6.2 Transportation Sectors

Policies and programs set for the fiscal-year 2075/076 have taken the agenda of upgrading the existing roads that connect the Municipality Centre with all of its ward centers; connection of Municipality Centre with strategic roads like National highway or Feeder roads. Similarly, emphasis was also given for upgrade of those roads that connect ward centers with the Municipality Centre. This Municipality is committed to join major settlements in its territory with reliable road network within 5 years' time and it intends to develop Signage into a smart Municipality with quality infrastructures in the next 15 years. The Municipality has also made a strategy to negotiate with the transport entrepreneurs to run public transport services from its Centre to different wards connecting basic services like health posts, schools and market centers. It is also in the process to develop a mechanism of rapid responses to release the blockade in the main roads during rainy season so that those roads could be developed into all-weather roads. Preparation of MTMP is also one of the key steps taken by the Municipality to move ahead sustainably for the sake of road and transportation development. The key objectives taken by the long term plans include:

- Upgrade of all the major roads in the Municipality into safe and smooth all weather roads
- Increase an easy access of the Municipality in National Highway Network so that access to large cities will be ensured
- Install and maintain basic road furniture in the prioritized roads
- Explore possibilities of mutual cooperation and partnership with private sectors in order to ensure safe, economic and reliable transport services and overall management of public transportation in an efficient manner
- Conduct feasibility studies to check the viability of other modes of alternative transportation like rope ways/cable cars, and air shuttle during emergencies
- Establish a mechanism that ensures routine maintenance keep continued
- Make transportation system easy, safe and smooth from all aspects
- Opening of new tracks, construction of culverts and bridges etc. as per the need

The provision of Planning Norms and Standard 2015 developed by Urban Development and Building Construction Department indicates that 90 per cent of households in the municipality level should have reach over motor able road within access of 2 km periphery which stands at 1.99 while calculating in per 1000 population basis. Likewise, some 3.02 km stretch of road has been recorded in the area of 1 sq. km. in this Municipality. Both of these statistics indicate the compliance/fulfilment of the minimum thresh hold level. Despite this very fact, it's pity mentioning that the condition of most of the roads are quite pathetic and weak in terms of service quality. The proper maintenance, upgrading and linkage of current roads to the network of road are the only ways forward to attaining easy, secure and reliable road transportation services in the long term plan of next 15 years while the short term plan needs to focus on the completion of maximum no. of all-weather roads. Hence, the development of Municipal Road Master Plan will be the key in order to prioritize, improvise and upgrade the roads as per the MTMP guideline.

2.6.3 Land Use Pattern

Regarding Visionary City Development Plan study of existing settlement pattern and future expansion is necessary. As per the present land cover status arable land covers just 12.90% while forest area covers as high as 79.44%. Likewise, settlement area- 0.48%, water cover area 1.59%, steep ridges and gorges -0.21%, barren land -0.13% and sand occupied area- 5% percent while the rest 0.25% constitute other areas which are insignificant in terms of percentage.

Table No. 1: *Table Existing Land use Status of Sitganga Municipality*

Landuse	Percentage
Arable land	12.90%
Settlement/residential area	0.48%
Water bodies or water cover area	1.59%
Forest area	79.44%
Barren land	0.13%
Sand occupied land	5.00%
Steep terrain and gorges	0.21%
Other areas	0.25%
Grand Total	100.00%

Source: Annual Development Plan (Sitganga Municipality)

- ➤ 2.4.3 Market centers/village centers
- People visit the following village centers/market centers to purchase normal household commodities and they also travel up to Butwol, Bhairahawa or nearby Indian border markets for especial or huge purchase. The following bazars /market centers are normally visited for the local level purchase viz. Lahure Bazar, Subarnakhal, Mandre, Halde, Sitapur, Kotdanda, Thada Daha Chetra Bazar, Amrai Bazar, Chakla Bazar, Lahape Bazar, and Pattharkot Bazar.

2.6.4 Prospective areas for future settlement

Similarly, Supa Deurali Mandir, Rawan Ko Sankha, Bagra ka Baje, Rani Cave (Odar), Thada Daha, Damaru Daha, Band Ganga Dham, Magarakot Mandir, Siddheswor Bhagwati Mandir, Narpani to Kalikathi range of Mahabharat (Shrinkhala), Khumchikot Durbar are some of the touristic destinations.

Hindu festivals like Dashain, Tihar, Teej, Holi, Ram Nawami, Chaite Dashain, Nag Panchami, Mata Tirtha Ausi, Kushe Aunshi, New Year, Maghe Sangranti etc are celebrated in this Municipality whereas the scope of traditional institutions like Guthi and modern youth clubs remain significant not only in terms of protecting and documenting their intangible religious and cultural heritages but also in terms of maintaining religious harmony by mutually exploring and marking different feasts and festivals in order to promote tourism holistically. The local clubs from different wards can also promote homestay in their respective areas keeping their unique identity in their food, lifestyle, costumes/attires etc. The formation of cultural committees in their respective areas along with advertisement and promotion of major touristic destinations of this particular Municipality are some of the fundamental activities to be undertaken immediately.

The orientation to the local indigenous community about the inception of home stay facilities in their respective communities, preparation of Master Tourism Plan for the development of Sitganga Municipality, Marketing and promotion of major annual activities held in different religious/cultural destinations within the Municipality through calendar publications, and display of various *jhakis* during major national festivals are some of the fundamental activities for tourism promotion in the municipality while ward wise specific tourism activities include:

Ward No.	Proposed tourism promotional activities	Cultural heritages
1	Conservation and infrastructure development in Rani Odhar (cave) area, erection of view tower in Mahabharat range	Saraye nach, Bagra Baje Maekaat ward no.1

Ward No.	Proposed tourism promotional activities	Cultural heritages
2	Infrastructure development of Supa Deurali, Rawan Sangkha, Samartirtha, and infrastructure development of Kalikathan Mai Mandir located in Jhirra	Saraye jatra, daily pooja in supa Deurali
3	Develop Kasyap Cave as cente of attraction for tourism development, Develop Bandanda Gufa as centre of attraction for tourism development, Develop Damaru Daha as attractive tourist detinations, construction of view tower and park in pot, Infrastructure development of Badegatham area	
4	Provision of three phase lines, Development of wooden poles free wards	
5	Infrastructure development of Karapu Mandir, Kalika Malika and construction of Mandir of, Construction of Temple of Jhakri, Jhakreni mandir, Infrastructur /Developmnt of	Worship of Shakti Mata in ward no.5
6	Physical infrastructure development of Bhulya Bungchi Khola	
7	Popular Aairawati Tirtha(Holy place), Development of infrastructure in the birthplace of Yogi Patanjali, Development of Magarakot Mandir,	View of Bar ko bot in Lamatal, Magarkot mandir
8	Conservation of Barah Daha, Development of Satya Mahadev Cave and promote tourists, Developemt of Laurikot	
9	Provision of boating in Rapti, Development of Branch Mandir of Satmara	Visit of Baraha Chetra
10	Management of Bungchi Khola Pahiro and Bajeko Than, Infrastrucutre to develop Tara Jhakri	
12	Development of Khumchikot Sibalaya	
13	Develop Bhangalo, Kirtipur, Musiyaan aadh, Chidiya Chaur, Rani Odhar as destinations with potential tourism,	Deusi Vailo, Saraya nach, holi,
14	Develop Dumilla Ram ban and Surya odhar as major touristic destinations, Develop Baurako danda, Chahare Khola and work on cultural tourism	Development as Picnic spot, Watch Saraya nach during Dashain, retain native architecture with safe construction practices and promote the same to attract tourist

The roads linking these tourism destinations need to be improved and upgraded first to promote tourism because reliable and efficient access to those destinations are the first and the foremost conditions so far for the promotion of tourism industry within the Municipality.

2.7 Constraints in the Implementation of MTMP

Road network is believed to be the lifeline of infrastructure. The doors of other physical as well as social development possibilities are unlocked through the proper development of roads and transportation. Since the existing condition of roads in the Municipality is very poor, large portion of budget is required to address the problem of road upgrade and maintenance. This budgetary problem is surely a major obstacle for the timely implementation of the MTMP. Besides this other constraints are:

- Problem of connecting the sparse settlements with roads which is expensive
- Rugged topography with steep slope
- Landslides and soil erosion
- Finalization of standard RoW from the base level is problematic
- Lack of technology
- ➤ Lengthy procurement process for hiring construction work
- Lack of qualified manpower and labor force
- Lack of smooth supply of construction materials
- > Fuel and energy crisis
- Lack of stable working environment

Chapter - 3: Indicative Development Potential Map (IDPM)

3.1 Municipal Profile

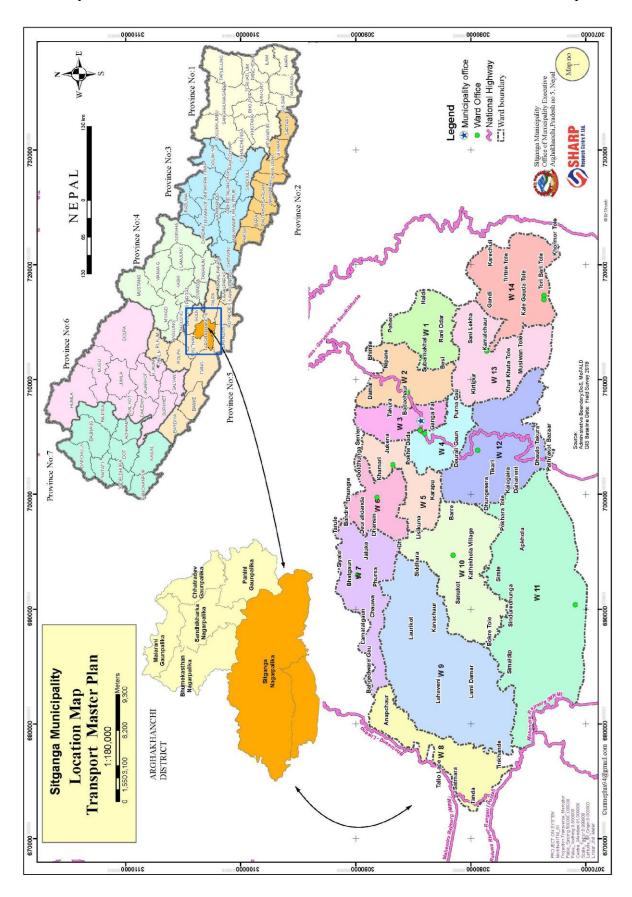
Sitganga Municipality, geographically, is the largest Municipality located in Argakhachi district of Province 5 which is spread in the area of 610.46 sq. km. This Municipality was established by merging then seven Village Development Committees (VDCs) i.e. Sitapur, Subarnakhal, Thada, Simalpani, Siddhara, Jukena and Jaluke. The formation of this Municipality along with the new composition of wards, population and area has been shown in the table below:

Table No. 2: Table Sitganga Municipality with its respective wards, population and area

SN	Former VDCs and wards	Newly formed Municipal Wards	Population	Area in sq. km.	Remarks
1	Subarnakhal (1-9)	Ward No. 1	2833	29.47	Ward. no. 1 of Sitganga Municipality
2	Sitapur (1-9)	Ward. No. 2	3836	31.85	Ward. no. 2 of Sitganga Municipality
3	Thada (1,2,7,8,9)	Ward No. 3	2492	23.87	Ward. no. 3 of Sitganga Municipality
4	Thada (3,4 and 6)	Ward. No. 4	3617	18.53	Ward. no. 4 of Sitganga Municipality
5	Jukena (1-5)	Ward No. 5	3157	27.8	Ward. no. 5 of Sitganga Municipality
6	Jukena (6-9)	Ward No. 6	3490	24.8	Ward. no. 6 of Sitganga Municipality
7	Jaluke(1-4, 7-9)	Ward No. 7	3086	41.83	Ward. no. 7 of Sitganga Municipality
8	Jaluke(5,6)	Ward No. 8	3056	40.01	Ward. no. 8 of Sitganga Municipality
9	Siddhara (1,7,8)	Ward No. 9	3082	117.82	Ward. no. 9 of Sitganga Municipality
10	Siddhara (2-4,9)	Ward No. 10	2719	66.52	Ward. no. 10 of Sitganga Municipality
11	Siddhara (5,6)	Ward No. 11	2883	23.23	Ward. no. 11 of Sitganga Municipality
12	Thada (5)	Ward No. 12	3012	64.78	Ward. no. 12 of Sitganga Municipality
13	Simalpani (3,4,6,7,8,9)	Ward No. 13	2597	50.1	Ward. no. 13 of Sitganga Municipality
14	Simalpani(1,2,5)	Ward No. 14	3513	49.87	Ward. no. 14 of Sitganga Municipality
	Tota		43373	610.48	

Source: MoFALD web portal

As mentioned in the table, wardwise, Ward No. 11 holds the largest area i.e. 117.82 sq. km. followed by Ward No. 10 and so on whereas Ward No. 4 holds the smallest size of 18.53 sq. km.



3.2 Demographic Status

Likewise, population wise Ward No. 2 dominates all of the wards by some 3836 population followed by Ward No. 4 (3617) and Ward No. 14 (3513) respectively while the least has been recorded in Ward. No. 3 with a total of 2492 populace. The total population of this Municipality has been recorded as 43373 where male to female ratio stands at 0.85.

The Population density per square kilometer is calculated as 71.04 and average house hold size as 3.94 persons.

The pathetic state of physical infrastructure for e.g. weak road networks, unemployment, dearth of social and other basic services, slow economic activities, etc. result into the meagre growth of rate of population of Sitganga Municipality. However, lack of social awareness, reluctance towards family planning, preference to male child etc. contribute to the growth of population in this newly established Municipality at least up to some years in the near future contributing to the negative growth in terms of population size. The population of this Municipality was calculated as 44672 in the year 2001 and it appears to be 43373 in the year 2011 and again 42482 in the year 2018 following the negative average growth rate of -0.3%. It has been projected to reach 40034 in 2038 (nearly after 20 years) as shown in the table below.

Table No. 3: Table Population projection of Sitganga Municipality for the Next 15 year period

Year (AD)	2001	2011	2018	2023	2028	2033	2038	Avg. growth rate
Projected population	44672	43373	42482	41856	41240	40633	40034	-0.3%

Source: Draft CMP of Sitganga Municipality 2019

The poor state of infrastructure for e.g. road, electricity, water supply, health, etc. along with unemployment, poor quality of basic services health and education has equally led to the negative growth rate of population in this Municipality. As a result the population of this Municipality has decreased from 2011 to till date. Considering the same this trend of population downfall from 2001 to 2018, the population decrease will follow the growth rate of -0.3%. Thus the projected population after 15 years is expected to be 40633 in 2033 and 40034 in 2038 as shown in table below.

This trend of negative population growth rate is more vocal in many—remote quarters of Nepal at present. Road network development planning should be compatible with serving this population and their mobility from settlements to several destinations. Integrated urban/or settlement plans will be highly appropriate to minimize the cost of road construction which is often necessary in the areas where population is too low.

3.2.1 Age wide Distribution of Population

According to national census 2011, the highest number of population lies between the age group 10-14 with population of 6526 followed by age categories 5-9 and 0-4 respectively with 6015 and 5147 populations. These three age categories together constitute more than one third of the entire population constitution of 43373. The age group of 70-74 constitutes the least populations of 685 followed by above 75 category with 851 people.

Considering the economically most active populace i.e. within the age group of 15-59 years, the total percentage of the population is calculated as 50.5%. Within the less economically active populace, the percentage in the age group 0-14 category has been recorded as 40.7% whereas 60 above category has been recorded as 8.677%. Secondly, the table below also shows that number of less active population has remained significant in this RM which indicates that the degree of mobility being higher in comparison to dependent or passive population. This age wide data keeps high significance in road and transportation planning like other planning.

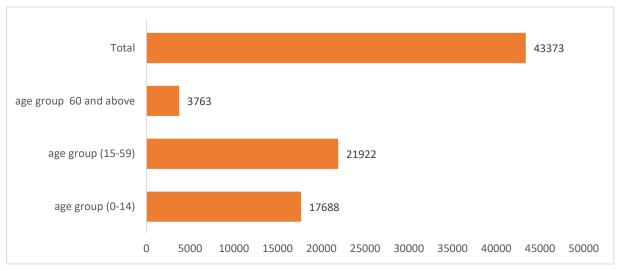


Figure 3: Population distribution in terms of contribution in economy

Source: CBS 2011

3.2.2 Caste/Ethnicity

Out of the total population constitution of Signage Municipality, Magar dominates the others in terms of caste with a total of 13932 populace (32%) followed by Hill Brahmin 9774 (23%) and Chhetree 7571 (17%) respectively. Together Kami, Sarki and Damai/Dholi constitute the entire Dalit populace which is recorded as 8673 (20%). Among these three Dalit communities, Kami alone holds the majority over the two others by 55.5%. The other dominant caste in the Municipality include Kumal, Gharti/Bhujel, Gurung, Newar and others as mentioned in the figure below. Some typical caste people like Badi and Gaine also exist in this Municipality.

Ethnicity wide, in the total population constitution, the percentage of Mangolian community has been recorded close to 40% against 60% of their Aryan counterparts. Ward no. 1,7,8,9,10,11,13 and 14 are purely dominated by Magar community while wards 2, 3, 4, and 5 are entirely dominated by Aryan people with huge presence of Hill- Brahmin, Chhetree and Dalit populace. Ethnic composition also affects the mobility of people. Past history shows that indigenous population have lesser mobility in comparison to other ethnic groups.

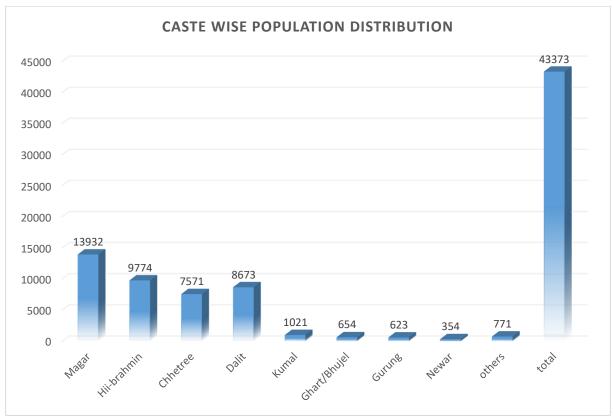


Figure 4: Caste wise population distribution in Sitganga Municipality

Source: CBS 2011

3.2.3 Language Spoken

In terms of spoken language, majority of the people from this Municipality speak the national language i.e. Nepali language the percentage of which is calculated above 90%. Magar language is the second highest speaking language within the Municipality which is spoken by some 6% Magar. The other languages spoken in the municipality include Gurung, Newar, Tharu and so.

3.2.4 Religious Composition

Hindus dominates the others in this Municipality in terms of total population size Bouddhist are the second largest religious group followed by Christianity which stands as the third largest religious group.

3.2.5 Differently able (disable) population

In the total population constitution of 43373, only some 2.7% of the entire population have been reported to have sustained some kind of disability. Among the total disable populace, some 42% sustain physical disability; 15% sustain blindness or low vision associated disability, 13.5% sustain hearing impaired syndromes, 12% sustain speech related disability; and 6% sustain mental related disability while the rest sustain combined of one or many disabilities.

Table No. 4: Table Status of disability among the populace of Sitganga Municipality

	Total population		Population having disability of							
Municipal Wards		Population without disability	Physical	Blindness/ low vision	Deaf / hard to hearing	Deaf – blind	Speech problem	Mental disable	Intellectual disable	Multiple disable
Jukena (5 and 6 wards)	6,647	6,413	94	40	25	5	30	15	11	14
Jaluke (7 and 8 wards)	6,142	5,997	57	35	22	4	6	4	3	14
Siddhara (9, 10 and 11)	8,684	8,432	116	39	42	0	27	13	2	13
Simalpani(13 and 14)	6,110	5,898	97	21	33	4	21	14	6	16
Sitapur(2)	3,836	3,725	44	16	15	0	16	3	12	5
Subarnakhal (1)	2,833	2,765	23	10	7	1	15	7	2	3
Thada (3,4 and 12)	9,121	8,945	72	19	18	5	34	20	5	3
Total	43,373	42,175	503	180	162	19	149	76	41	68

Source: CBS 2011

3.3 Basic Services

3.3.1 Education

According to census 2011, out of 38226 populace above 5 years age, some 26988 can read and write, another 1014 can read only while next 10150 can neither read nor write as shown in the table below. Ward wise, ward no. 1 constitutes the highest literacy rate of 79.10% whereas the combined of ward no. 7 and 8 has been recorded the wards with lowest literacy rate of 66.25%.

Table No. 5: Literacy Status among the population of Sitganga Municipality

Wards of Sitganga Municipality	Population aged 5 years & above	Population who			Literacy	Literacy
		Can read & write	Can read only	Can't read & write	not stated	rate
5 and 6 (Former Jukena VDC)	5,904	4,069	225	1,568	42	68.92
7 and 8 (Former Jaluke VDC)	5,342	3,539	157	1,637	9	66.25
9,10, and 11 (Former Siddhara VDC)	7,538	5,221	150	2,165	2	69.26
13 and 14 (Former Simalpani VDC)	5,388	3,721	144	1,515	8	69.06
2 (Former Sitapur VDC)	3,387	2,524	64	798	1	74.52
1 (Former Subarnakhal VDC)	2,512	1,987	64	458	3	79.10
3,4 and 12 (Former Thada VDC)	8,155	5,927	210	2,009	9	72.68
Total	38,226	26,988	1,014	10,150	74	71.42

Source: CBS 2011

There are 104 Child Development Centers, 4 Higher Secondary Schools up to +2 level, 8 secondary level schools (up to class 10), and 96 basic schools(up to class 8). In total there are only 6 institutional schools (boarding schools) as compared to 212 community ones. Out of 212 community educational setups 104 function as child development centers.

Several technical courses are being planned to be introduced in the local high schools of Sitganga Municipality for e.g. Janaajagriti Higher School is planning to introduce Agriculture, Veterinary and Computer courses and intends to develop itself into a technical school. The remaining plans of promotion and upgrade is as follows:

Table No. 6: Proposed plans of extension and promotion of educational set ups in Sitganga Municipality

SN	Name of High School	Proposed Courses in future
1	Jajagriti High School	Agriculture, Veterinary, Computer Applications
2	Pravakar High School	Forestry
3	Vawiswar Multiple Campus	Residential Master's College
4	Saraswati High School, Badachaur	Bachelor Level College
5	One of the basic schools of ward no.7	Upgrade into high school (no high school in this ward)
6	One of the basic schools of ward no.9	Upgrade into high school (no high school in this ward)
7	One of the basic schools of ward no.11	Upgrade into high school (no high school in this ward)
8	One of the basic schools of ward no.13	Upgrade into high school (no high school in this ward)

Source: Draft CDP

Technical subjects like Agriculture, Forestry, Computer applications have been proposed in some of the high schools a mentioned above. The government schools are also equipped with the Library as well as E-Library in this Municipality but need to be upgraded and improved. Improvement has been seen in rate of students' enrollment especially girl child enrollment. Despite all these, lack of competent and proficient teachers, poor quality of drinking water and sanitation facilities, unsafe buildings, lack of sports and other educational support, lack of female friendly toilets, poor condition (muddy/dusty) of the school roads are some of the commonly observed problems in this Municipality.

Table No. 7: Status of Basic Education infrastructure in Sitganga Municipality

SN	Level of schools	Community	Institutional	Total
1	Child Development Centre	104		218
2	Basic Level Schools(1-2)	1	6	
3	Basic Level School (1-3)	36	6	
4	Basic Level School (1-5)	44		

SN	Level of schools	Community	Institutional	Total
5	Basic level School (1-7)	2		
6	Basic Level School(1-8)	13		
7	Secondary level (1-10)	8		
8	Higher Secondary Level (1-12)	2		
9	Higher Secondary Level (6-12)	2		
	Total	212	6	218

Source: Annual development plan (Sitganga Municipality)

3.3.2 Health Services

Thada Primary Health center has been proposed to upgrade into a fully equipped 15 bed (at least) hospital to cater to its populace. Fundamental diagnostic instruments have been proposed in Thada and Siddhara Hospitals for e.g. Video X-ray, Endoscopy, ECG, and ECHO services with provision of Radiologist. The building construction of Padme Health Center and operation of Gaon/Ghar Clinic in Harre Barre of Ward no. 10 are some of the major activities proposed to improve the health sector of this Municipality.

At present, people need to visit Butwol/Bhairahawa for the treatment of infirmities/ailments and they are also travel up to Bharatpur or Kathmandu in cases of serious nature health complications. In general, primary health services is provided by the health posts situated in the ward level of this Municipality. The health centers cater core services in the issues of family planning, reproductive health, viral fever, diarrhoe, normal eye and skin related diseases and all whereas few centers are in place to provide general services to TB and Leprosy. Some of the health posts are also equipped with basic lab facilities and regulated by Health Assistant under whom a number of CMAs are in place. There are also some Birthing Centers and dozens of vaccination centers in this Municipality. Sitganga Municipality has also made health plans to ensure efficient, affordable and quality health services to its people. It is also in the planning process to provide special grants and subsidies to the chronic patients from the ultra-poor communities.

Majority of the populace of this RM lack reliable piped water services and are forced to consume drinking from other sources like tube wells, hand pumps, covered/uncovered wells and rivers too. No further purification of such water is in practice posing high risk of arsenic contamination among the water users in the Wards located in southern and western plain areas of Terai. The water quality test should be made mandatory in case of community water supply

schemes. The Municipality need to focus upon other activities like rain water harvesting, cleaning of sources of water, and extensive lab testing of drinking water from various wards to minimize water borne diseases in the long run. Similarly, proper response mechanism against snake bites shall be established in the existing health facilities. Provision of ambulances, 24 hour health services, proper lab facilities including services of cold chain with energy back up, sufficient no. of quality health professionals, efficient response mechanism in emergency cases, proper water supply and sanitation services in the health centers and provision of basic surgery kits and tools are some of the major shortcomings observed particularly in the health sector. Awareness campaigns against various transmissible diseases, and mobilizing the populace towards Yoga, Pranayama and other physical/mental exercises will have positive implications in the long run and they should be promoted. Likewise, promotion of indigenous Herbal or Ayurveda treatment, Homeopathic treatment etc. should be given due emphasis so as to enhance health tourism in the long run.

3.3.3 Shelter

Ownership of housing units

Amongst 9201 HHs, 96.14% stay in their own private housing units while about 3% stay in rental houses and the rest falls under institutional categories and others. The rental status is more vocal in Thada/ the Municipality center where normally government and private office staff, teachers, bankers, security personnel and some businessmen are found in rental status.

Table No. 8: *Table Households by ownership of house/housing unit in use*

Municipality	Total	Ownership of house/housing unit				
wards	Total	Owned	Rented	Institutional	Others	
Jukena (5 and 6 wards)	1,435	1,390	32	1	12	
Jaluke(7 and 8 wards)	1,242	1,224	14	1	3	
Siddhara(9,10 and 11 wards)	1,665	1,614	36	12	3	
Simalpani (13 and 14)	1,284	1,244	28	1	11	
Sitapur (2)	877	839	26	1	11	
Subarnakhal (1)	617	605	7	0	5	

Municipality	Total	Ownership of house/housing unit			
wards	Total	Owned	Rented	Institutional	Others
Thada (3,4 and 12)	2,081	1,930	129	6	16
Total	9,201	8,846	272	22	61

Source: CBS 2011

Housing units by type of construction technology

According to Census 2011, out of total housing units of this Sitganga Municipality, 77% of the housing units have been constructed by mud mortar; 3% by cement mortar; 16% by wooden pillar, another 3% by bamboo and remaining 1% constitute other construction technologies not mentioned so far. Similarly, for roofing purpose, out of the total of 9201 housing units, 5358 (58.23%) have used thatch/straw for roofing purpose. Similarly, CGI Sheet- 3436 (37.34%); RCC 181 (1.96%), Tile /slates- 129(1.40%) and the rest 1% have used other sources like wooden planks and others for roofing as mentioned in the figure below. The smooth access over locally available construction resources like slate, boulders/ aggregate, wood, bamboo etc. are likely to impact positively in the cost of construction material which is possible only after proper and reliable road services across the Municipality.

Figure 5: Distribution of households by the type of construction of outer wall

Source: CBS 2011

Housing units by types of roof 6000 5000 no. of housing units 4000 3000 2000 1000 0 Thatch/stra GI sheet Tile/Slate RCC Wood others planks Series1 5358 3436 129 181 41 56

Figure 6: Distribution of housing units by roof types in Sitganga Municipality

Source: CBS 2011

Proposed building/shelter units

Following are the proposed major construction works within the Municipality from the government sectors. Chiefly office buildings, school buildings, health service providing buildings, community buildings, buildings for security personnel (police) have been proposed. Except three wards, every ward from 1-11 have proposed some kind of building construction in their respective areas. Ward no. 1,2,7,8 and 9 have relatively more building construction related works as compared to other wards. Hence, the roads linking the area of these facilities require proper attention in order to complete these proposed construction projects in due time and budget.

Table No. 9: Table Proposed building construction works in Sitganga Municipality

Ward No.	Proposed construction works		
1	School building of Mahendra Ni. Ma. Vi., School building of Mandre Ma Vi, School building of Ghartisara Adharbhut Vidhyalaya		
2	Building of Ward Office, Building of Women Cooperative, Community Building, Training hall of Health post, School building of Saraswati Ma.Vi.		
3	Community building with capacity of 500 people		
4	Building of children home, Community Meeting Centre		
5	Ward office building, building of all schools in the ward		
6	Shiva Daha Ma.Vi building, Nilkantha Adharbhut Vi building, Ward Office building		

Ward No.	Proposed construction works
7	Entertainment/Recreational Building for senior citizens, Community building, Building of Community Health Unit, Agriculture and Livestock Office Building, Ward office building, Ward level building (police), Cooperative building, Vaccination Centre building
8	Ward Office building, Health Post building, Police Post Building, Community Assembly Building
9	Integrated settlement, Building construction in schools without building, Distribution of CGI sheets in poor settlements, Shelter for Poor, Minority and Dalits
10	Community Building, Ward Office Building, Integrated Settlement,
11	Dharmasala, Old age home, Women Community Building

Source: Draft CMP 2019

3.3.4 Drinking water

Sources of drinking water

The majority (61%) of the households rely on piped water or tap water for drinking purpose in Sitganga Municipality. Likewise, 16% rely on uncovered well, 10% - spout water, 6% - river/stream, 2% -covered well, 1% - tubewell/ hand pump and remaining 1% rely on other sources not mentioned as shown in the figure below.

Division of dwelling units by source of drinking water

| piped water/tap water |
| tube well/hand pump |
| covered well |
| uncovered well |
| spout water |
| river/stream |
| others/not stated

Figure 7: Division of dwelling units by their source of drinking water

Source: CBS 2011

 Table No. 10: Table proposed drinking water supply schemes in Sitganga Municipality

Ward No.	Proposed drinking water schemes
1	Ghat Khola Sundu Drinking Water Supply Scheme, Karamdip Ghartisara Drinking Water Supply Scheme, Subarnakhal Drinking Water Scheme, Ghat Khola Haldi Water Supply Scheme
2	Kasedhura Lifting B.K tole Drinking Water Supply scheme, Jhirarra Thum Drinking Water Supply Scheme, Supa Badachaur Drinking Water Supply Scheme, Maskebari Adhikari Tole Drinking Water Supply Scheme, Jurethum Nipane Patal Tole drinking Water Supply Scheme
3	Thada Drinking Water Supply Scheme, Chang Change Padme Drinking Water Supply Scheme
4	Beurepata, Kahl, Okhaldhunga Drinking Water Supply Scheme, Ripada Tole Kuwa Nirman, Ratamata Sahutola Padhera Nirman
5	Upgrade of water supply schemes under operations, Hande Dhanukharka Water Supply Scheme
6	Kalleri Khamari Fursamata-Bokse Drinking Water Supply Scheme, Shivadaha Drinking Water Supply Scheme, Kamalkot Dangsing Water Supply Scheme, Dhawa Lifting Drinking Water Supply Scheme
7	Juwakot Jaluke Drinking Water Supply Scheme
8	
9	Damara Palase Drinking Water Supply Scheme
10	Mathillo Samkot Drinking Water Supply Scheme, Liskuna Drinking Water Supply Scheme,
11	Khayarbhatti Drinking Water Supply Scheme, Chandeneta Beldamar Drinking Water Supply Scheme, Mul Drinking Water Supply Scheme, Dabota drinking Water Supply Scheme, Fodi DrinkingWater Supply Scheme, Bhaisthari Drinking Water Supply Scheme, Lungri Drinking Water Supply Scheme, Aanp Khola Drinking Water Supply Scheme, Mauwabari Dhungesera Drinking Water Supply Scheme
12	Nipane Kothiha Maidan Jaluke Drinking Water Supply Scheme, Rajiya MulKhola Lifting Drinking Water Supply Scheme, Khumchikot Lifting Drinking Water Supply Scheme, Ghaseni Ratamata Drinking Water Supply Scheme, Kotiya Maidan Jokhle Gairha Parepani Drinking Water Supply Scheme, Aapsete Haduha Bandre Lifting Drinking Water Supply Scheme, Ranibase Muhan Dholetakura Drinking Water Supply Scheme, Rani Pattharkot Drinking Water Supply Scheme, Chade Dekhi Thulo Harre Samma

Ward No.	Proposed drinking water schemes
	Drinking Water Supply Scheme, Harre Gaudamukh Drinking Water Supply Scheme
13	Sanolek Drinking Water Supply Scheme, Kirtipur Drinking Water Supply Scheme, Jaubari Drinking Water Supply Scheme, NetaKharka Drinking Water Supply Scheme, Doduwa DrinkingWater Supply Scheme, Kalleri Drinking Water Supply Scheme, Gobrepani Drinking Water Supply Scheme, Simalpani Drinking Water Supply Scheme, KhutKhute Drinking Water Supply Scheme, Dhad Chidi Tarike Mailafaant Drinking Water Supply Scheme, Pate Drinking Water Supply Scheme, Bhalamani Drinking Water Supply Scheme
14	Karechuli Drinking Water Supply Scheme, Gandi Drinking water Supply Scheme, Khormare Toribari Drinking Water Supply Scheme, Dawa Sikha Khola Drinking Water Supply Scheme, Bauri Drinking Water Supply Scheme, Kamerapani Toribari Drinking Water Supply Scheme, Adharpata Drinking Water Supply , BhaluKhola Drinking water Supply Scheme

Source: Draft CMP 2019

As shown in the table above, majority of the drinking water supply schemes have been proposed in Wards 11, 12, and 13 while moderately few have been proposed in ward 2 and 14. The nominal number of water supply schemes have been proposed in rest of the wards. Thus, smooth road transportation services will be vital one for the efficient supply of construction materials that helps complete the projects on time.

3.3.5 Energy

Sources of cooking energy

Out of the total households in Sitganga Municipality, 97.85% rely on firewood for cooking purpose. The remaining sources of cooking energy include dried dung cakes, LP-gas, Biogas, kerosene and others among which the share of LP gas alone stands more than 1% of the total sources followed by kerosene and baked dung cakes respectively. However, along the development in the road services in the past few years, the users of LP gas are gradually increasing and expected to increase further rapidly in near future.

Sources of light

Solar bulbs, electricity and kerosene have been recorded as the major sources of energy for lighting bulbs in Sitganga Municipality where contribution of each of these three sources in household level have been recorded as 27%, 28% and 29% respectively. Remaining 16% of the households use other sources besides these. However, the contribution of solar and electricity will be high in the future due to cost factors and ease factors too. The remaining sources include bio gas, firewood and so.

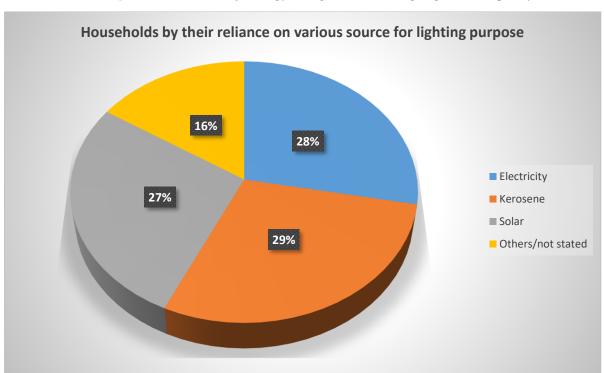


Figure 8: Sources of energy to light bulb in Sitganga Municipality

Source: CBS 2011

Table No. 11: proposed energy related schemes in Sitganga Municipality

Ward No.	Proposed energy related schemes
1	Extension of Halde Transmission Line, Extension of Subarnakhal Transmission Line
2	Replacement of wooden poles by Metal ones, Installation of additional transformers as required, provision of three phase lines in prior electric lines
3	Installation of Street lamps/lights
4	Provision of three phase lines, Development of wooden poles free wards
5	Expansion of electricity lines in households (in those without electric connection)
6	Expansion of electricity line from Deurali to Thuldhunga, Expansion of electricity in Sana Dhungre, Kalleri, Bonse Chaur
7	Management of electricity lines as per the need
9	Expansion of electricity lines in households (in those without electric connection)
11	Extension of electric lines through out the ward
13	Extention of electricity line in Musiyan, Majhfant Dhad
14	Construction of Micro-hydropower project, development of bio gas

Source: Draft CMP 2019

The major activities in terms of energy/electricity has been mentioned in the table above where most of the projects remain as extension of transmission lines and distribution of the same up to the household level deprive of this services. However, ward no. 14 has some unique projects of regarding installation of alternative energy. The transportation of turbines and other necessary accessories demand good quality road services which cannot be completed in timely basis amidst poor road situation.

3.3.6 Sanitation

Status of toilet/sanitation

As per census 2011, still some 4519 (49%) of the entire households of this Municipality lack toilet facilities in their dwelling units. However, significant changes have occurred in terms of hygiene and sanitation in recent years. Only some 22% of the total housing units have access of water in their toilets. This is also referred to as flush toilets. Next 28% have ordinary toilets without flushing provision as whom in the table below. Despite above facts and figures, the situation have changed significantly (according to the recent field visit). The table below shows the status of sanitation in detail.

Table No. 12: Table Status of sanitation in Sitganga Municipality

Municipality would	Total	Households without	Households with toilet facility of		Toilet facility
Municipality wards	households	toilet facility	Flush toilet	Ordinary toilet	not stated
Jukena (5 and 6 wards)	1,435	332	242	861	0
Jaluke(7 and 8 wards)	1,242	573	147	513	9
Siddhara(9,10 and 11 wards)	1,665	1,329	92	237	7
Simalpani (13 and 14)	1,284	697	172	409	6
Sitapur (2)	877	264	548	63	2
Subarnakhal (1)	617	258	133	224	2
Thada (3,4 and 12)	2,081	1,066	694	308	13
Total	9,201	4,519	2,028	2,615	39 arce: CB 2011

Source: CB 2011

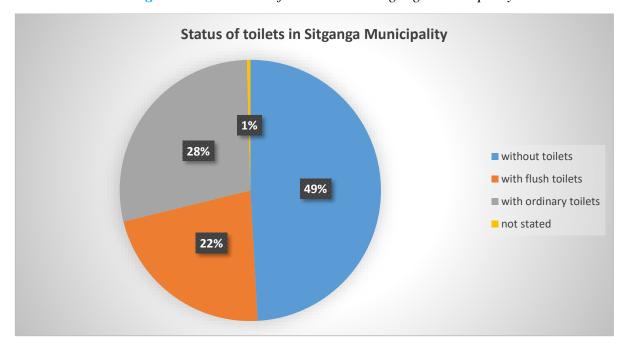


Figure 9: Condition of sanitation in Sitganga Municipality

Source: CBS 2011

3.4 Rivers, water bodies

Few rivers flow through this Municipality facilitating the natural drainage of water.

The major rivers include Rapti River, Sit Khola, Band Ganga River, Mandre Khola, Gudrung Khola, Raangsing Khola, Vangala Khola, Lungri Khola, Khormor Khola, Chor Khola, Surai Khola, Sukbel Bahabel Khola are some of the major rivers and streams flowing in the territory of this Municipality. In the same way different lakes and ponds and closed water bodies could be find in these wards that include Thada Daha, Damaru Daha, Nwar Pokhari, Sana Daha, Shiva Daha, Lama Tal, etc which could be developed as tourism destinations in future. Following are the streams and brooks in this Municipality

Table No. 13: *Table Streams flowing through Sitganga Municipality*

Ward No.	Name of the Streams
1	Jaluke Khola, Titaure Khola, Chisapani Khola,
3	Dhad khola
8	Siling Khola, Thad Khola
9	Dho Khola, Dhan Khola
10	Bhalu Khola, Kathe Khola
11	Aanp Khola, Shera Khola
12	Hile Khola
13	Sukali Khola

Source: Field Study 2018/2019

3.5 Traffic Volume Study

Generally, traffic volume study is done to establish a relative importance of any road. This will help to decide the priority of improvement and expansion of road and to allocate fund accordingly. This will also guide to make analysis of traffic pattern. Inventory of road traffic physical features was done with the use of GPS. Also, manual vehicle counting method was carried out as a part of traffic volume survey. By this method traffic volume as well as vehicle classification was held properly.

Walking constitutes an important mode of transport in rural areas. Besides walking, most of the people use cycle as another best options mainly due to less availability and costly public vehicle but bicycles have not been taken into consideration for counting.

3.5.1 Traffic Vehicle Count

The traffic vehicle count was done at the following stations which are listed in Table below. In all of these vehicle counting points, motorcycles have been recorded as the dominant vehicles among others. The summary of the survey is given through the figures as mentioned below.

Table No. 14: Table Vehicle Count Stations

SN	Count station name	Location	Name of road Linkage
1	Amrai	Ward no. 4 of Sitganga Municipality	Amrai-Jukena Road (7km) (Passing through Sano Daha, Pokhe Danda, Sitkhola)
2	Bhedamare	Ward no. 4 of Sitganga Municipality	Bhedamare-Simalpani (12km) (Passing through Jashrame, Purana Gaon etc)
3	Bikram	Ward no. 14 of Sitganga Municipality	Bikram-Gundhi (14km) Passing through Mundri Tam,Gobre Pani Simal Pani etc
4	Bharlawas	Ward no.13 of Sitganga Municipality	Bharlawas-Musiyan (25 km)Passing through settlements like Bhadelepani, Bhalasikhra etc.
5	Lauri	Ward No. 9 of Sitganga Municipality	Lauri-Chakla
6	Rajuwas	Ward no.1	Rajuwas-Subarnakhal-Mandre -(Neta) 25 km

The result of traffic survey held in Amrai point, Ward No. 3, along the route of Amari-Jukena road of Sitganga Municipality is as following – Motorcycle -16 (57%), Tractor- 7 (25%), Truck- 1 (4%), Jeep/car 2- (7%), and Bus- 2 (7%). Head counting of passer by through this route has not been included in this traffic survey.

SUMMARY OF VEHICLE COMPOSITION

Truck
4%

Tractor
25%

Motorcycle
57%

Figure 10: Types of vehicle observed along Amrai-Jukena Route

Source: Field Traffic Survey 2019

Similarly, the result of traffic survey held in Bhedamare point, Ward No. 4, along the route of Bhedamare-Simalpani road of Sitganga Municipality is as following – Motorcycle -19 (61%), Tractor- 4 (13%), Truck- 3 (10%), Jeep/car 3- (10%), and Bus- 2 (6%) as shown in the figure below. Head counting of people passing through this route has not been included in this traffic survey.

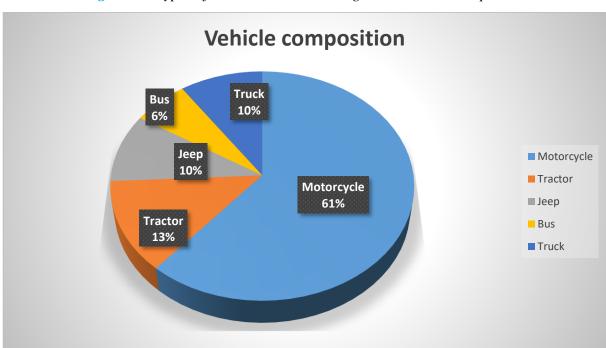


Figure 11: Types of vehicle observed along Bhedamare-Simalpani Route

Source: Field Traffic Survey 2019

Likewise, the result of traffic survey held in one of the points i.e. Bikram, Ward No. 14, along the route of Bikram-Gundhi road of Sitganga Municipality is as following – Motorcycle -10 (59%), Tractor- 3 (17%), Truck- 2 (12%), Jeep/car 2- (12%), as shown in the figure below. Head counting of passer by through this route has not been included in this traffic survey.

VEHICLE COMPOSITION Truck Jeep 12% Motorcycle Tractor 59% 17%

Figure 12: Types of vehicle observed along Bikram-Gundhi Route

Source: Field Traffic Survey 2019

In the same way, the result of traffic survey held in one of the points i.e. Bharlawas, Ward No. 13, along the route of Bharlawas-Musiyan road of Sitganga Municipality is as following – Motorcycle -8 (44%), Tractor- 6 (33%), Jeep/car 2- (11%), Truck- 1 (6%), and Bus-1 (6%), as shown in the figure below. In this point also, the head counting of passerby through this route has not been included in this traffic survey.

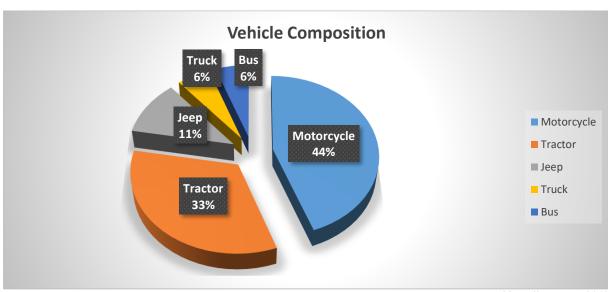


Figure 13: Types of vehicle observed along Bharlawas-Musiyan Route

Source: Field Traffic Survey 2019

Similarly, the result of traffic survey held in Lauri, Ward No. 9, along the route of Lauri-Chakla road of Sitganga Municipality is as following – Motorcycle -13 (56%), Tractor- 5 (22%), Truck- 2 (9%), Jeep/car 2- (9%), and Bus- 1 (4%). Head counting of passerby through this route has not been included in this traffic survey.

Vehicle Composition Motorcycle 9% Tractor 56% ■ Jeep Truck Bus

Figure 14: Types of vehicle observed along Lauri-Chakla Route

Source: Field Traffic Survey 2019

The result of traffic survey held in Rajuwas point, Ward No. 1, along the route of Rajuwas-Mandre road of Sitganga Municipality is as following – Motorcycle -20 (63%), Tractor- 2 (6%), Truck- 6 (19%), Jeep 2- (6%), and Bus- 2 (6%). Head counting of passerby through this route has not been included in this traffic survey.

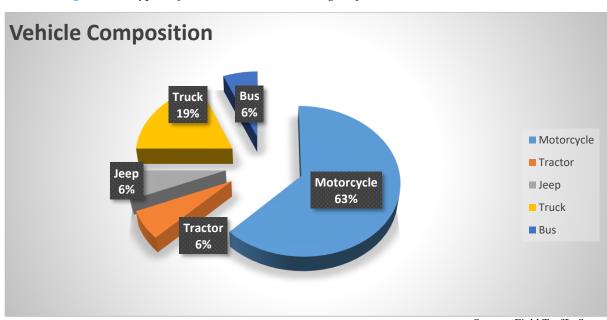


Figure 15: Types of vehicle observed along Rajuwas-Subarnakhal-Mandre Route

Source: Field Traffic Survey

3.5.2 Vehicle Types

Among the types of vehicle, the Indian brands have dominated in terms of motorbikes, bus, jeep (Bolero/TATA), trucks/mini trucks and tractors for passenger and goods transportation. Some of the transportation routes from the observations are: Bikram-Pawar-Basri-Chedu; Kharvatti-Kapilvastu; Buddhi-Mautabari; Cheda-Amrai, etc.

3.6 Origin and Destination Survey

The main purpose of transportation is to connect farm land, market centers and other service centers. Among the total respondents of 50 respondents of Origin and Destination Survey, 15 (30 %) reported agricultural chores as the primary reason of using roads followed by 13 (26%) respondents who mentioned that they chiefly travel for education purposes. Similarly, 9 (18%) respondents reported to have used roads to acquire health related services. Likewise, next 7 (14%) respondents reported that they regularly travel to go to office or seek other livelihood opportunities and remaining 6 (12%) respondents happened to use road for marketing, business and other recreational purposes.

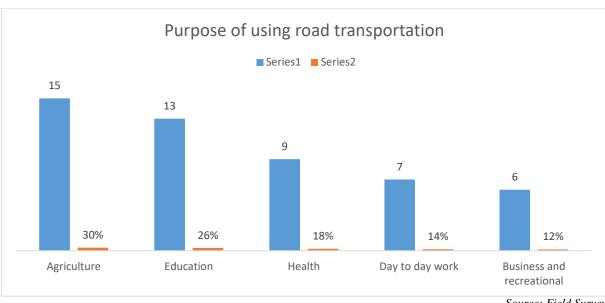


Figure 16: Purpose of using road transportations in various wards of Sitgaganga Municipality

Source: Field Survey

From the origin and destination survey, the following places have been found to be some of the major destinations.

- 1. Amrai/Chakla/Bhedamare
- 2. Subarnakhal/Mandre
- 3. Simalpani
- 4. Jukena

Table No. 15: Similarly, the following routes are in demand in Sitganga Municipality.

Ward No.	Demanded road routes in Sitganga Municipality
1	Rajuwas-Subarnakhal-Mandre-Halde Padini RM route, Mandre-Pabra route
2	Budhi Chaur-Jhirarra- Simalchaur route, Kotdanda-Subarnakhal route, Bada Chaur-sikhra Khandula-Pakhere-sengleng route
3	Sitapur-Kailase-Padme-Jukena-Lamatal route, Bar bote-Padme-Khipdi route, Municipality building-Sahutola Ganga Khola route
5	Bhawin-Galda route, Galdi-Dhanchaur-Karapu route, Bhumikasthan-Pokhari route, Sallako rukh-Kalimati Bhanjyang Khola route
7	Thada-Bokse route, Chauba-Rangkas, Kanachaur-Damarbesi-Lamatal route, Thada-Khanje Pani Sadak route
8	Lahape-Bhalubang Road route
9	Siling Khola-Chidi Chaur-Lape Road route
10	Samkot-Banke-Dhodeni-Batule-Chakla Road route
11	Chakla-Harre-Dhodeni-Samkot route, Chakla-Batule-Dore route, Banke-Dhodeni-Imiliya-Khayarmadhi route, Dobara-Chape Neta-Chawadip route, Ranikuwa-Mauwabari-Khayarbhatti, Suragadh-Dobara route
12	Hilekhola-Rajiya-Dohore route, Ghoseni-Maidan-Durbare route
13	Simalpani-Gaurepani route, Patle-Kalleri-Kurme Simlar-Asare Talla Khanna route, Kaskharka-PatalePani-Neta Kharka route
14	Gauda-Tariwari-Khormare route, Pawara-Othar-Pata Kaule-Simalpani route, Khormare-Karechuli route, Simalpani-Musiyan route, Sukaura-Kalegauda route, Gundhi-Simalpani route, Karechuli-Bharatapura-Neta Pokhara route

3.7 Mode choice

People choose the mode of transportation as per their convenience and their requirement. Different factors affect the mode choice. Being one of the largest Municipalities close to Terai having moderate climate, it retains high scope of urbanization in future resulting into relatively high number of traffic mostly private vehicles. In most of cases, people have preferred walking for reaching market center within wards. Use of modes of public transport like bus and jeep have been used for shuttling purpose from one destination to the other. Motorbikes are the dominant form of transportation in each of the road of this Municipality. Comparatively high number of tractors were found to be used for the purpose of transportation of day to day commodities, construction material and agricultural goods from the production area and market center. Different factors affect the mode choice. Some of them are:

➤ Household characteristics

- > Zone characteristics
- Residential density, rate of urbanization
- Accessibility
- Vehicle ownership
- Quality of local public transit
- Purpose of travel, nature of work
- > Travel time, cost and distance

3.8 Active and Passive Transport User

Active transport (also called Non-motorized transport, NMT and human powered transport) refers to walking, cycling, and variants such as wheelchair, scooter and handcart use. It includes both utilitarian and recreational travel activity, plus stationary uses of pedestrian environments such as standing on sidewalks and sitting at bus stops. The sample household survey shows that nearly 90% of the daily trips are done via active mode of transport. Active mode of transport is beneficial in many aspects: this mode can be used by people of any age group irrespective of gender and economic status, it consumes human energy and does not depend on fossil fuel, and it is environment friendly and provides many health benefits to the user.

Motorcycle is used in nearly 60% of the trips and public vehicles in nearly 10% of the trips. 1 motorcycle is owned by every 75/80 people. This leaves the remaining 20/25 people (in every 100 people) without any vehicle. Without proper access to public vehicles, they are left out with no option but to walk or opt for public facilities. Thus, nearly 75% of the trips are made either on foot or via public transportation within the municipal wards.

3.9 Alternative transportation feasibility

There are many ways to measure transportation system feasibility, each reflecting particular perspectives concerning who, what, where, how, when and why. Different methods favor different types of transport users and modes, different land use patterns, and different solutions to transport problems in the Municipality. Some transportation system may be economic and some may be non-economic and non-beneficial to the users and authorities. However, we do not see any transportation system feasible other than roadway transportation for the present situation in this Municipality until next five years. However, along the harnessing of suffice energy within the country, some other potential mode of transportation like rope way, cable car could be explored. Construction of heli-pads will also facilitate religious tourism in the long run for qualitative tourism.

3.10 Parking Space

Parking space is one of the major components of transport management. Unlike in urban areas human activities and traffic intensity is not that congested in this Municipality. Therefore, parking space has yet not been a serious problem so far. However systematic parking spaces and bus bays will be necessary for future expansion zones.

3.11 Bus parks and Bus terminals

As in the case of parking space there are no systematically planned bus terminal as well as bus parks in the Municipality but necessity of both has been felt strongly. Likewise, where there is possibility of road transport services some stop over, resting sheds, and public toilets need to be constructed. At least one Helipad in each ward is required for the emergency cases. The main roads should be accompanied by at least a cycle lane and foot path.

Proposed area for bus parks and bus terminals and traffic units are as following:

Table No. 16: Proposed area for bus parks and bus terminals and traffic units

Ward No.	Proposed areas for bus park and bus terminals	Proposed traffic units
1	Mandre Dhara Chaupari, Subarnakhaal	
2	Sitkhola Faant	Badachaur, Dhar chaur (traffic units)
3	Sitganga, Karapu	
4	Ratmata, Bhumikashtan	
5	Deurali, Sana Dhunge	
6	Lamatal, Jaluke, Timle	Jaluke traffic unit
7	Lahape	
8	Sisne, Lauri	Vakkuchowk traffic unit
9	Dhodeni Kol, Khayarbhatti	
10	Pawara Gathethari, Karechuli Raina Devi Mandir, Karechuli Baraju Mandir	Bikram Gauda traffic unit

Source: Field Survey

Similarly, following are the proposed bus stop (yatru pratikchyalaya) of various roads across Sitganga Municipality.

Ward No.	Proposed areas for bus stop along the roads of Sitganaga Municipality	Proposed areas for public toilets along the roads of Sitganga Municipality
1	Subarnakhaal Chaupari, Archal, Ghartisara, Haldesara	
2	Gairikhet, Badachaur Malika, Kamere	Badachaur, Jhirra, Rajuwas,

Ward No.	Proposed areas for bus stop along the roads of Sitganaga Municipality	Proposed areas for public toilets along the roads of Sitganga Municipality
	danda, Sorkhola, Sikhra, Rajuwas, Pidalne, Ganga Chaupari, Way to Khasaraha point	GangaKhola, Juke Khola, Near bridge towards Sikhra
3	Bazartole,Point to Khasrakha Khatribari, Waypoint to Kalikamai Mandir, Barbot	
4	Near Sit Khola, Thula Pokhara Pokhari, Kalimati Khola, Besari Pipal	Ratamata, Bhumikasthan, Galda, Pagheri Khola, Malika mandir
5	Jaluke, Damabesi, Infront of Lamatal bridge, Fursa, Baghe Damar, Kalleri, Sahaneta, Sikhabagar, Magrekot, Khanyupani, Juwakot(in front of school), Airawati	Jaluko, Kalleri, Lamatal, Damarbesi, Syala, Hade, Swami Neta, Suba Neta
6	Lahape, Satmara, Bodi Damar, Aanp Chaur, Belaute	Lahape, Milanchowk, Tinkhanne, Satmara, Bodidamar, Ghotwe Khola, Nahal Tole
7	Pakuri, Lami Damar, Thada Khola, Deurali, Gottake, Rangsing, Naya wasti, Sisne, Siling Khola	Pakuri, Lamidamar, Lauri, Thada Khola, Sisne, Deurali,Gothake, Raga Kate, Siling Khola
8	Simalpani, Thaplebari, Kalleri Dwarika Pokhara, Musiyan Chaubari, Cheda, Sanilek, Chatiyan Rukh, Patale pani	Cheda, Deurali, Janajyoti, Musiwan, Rikate
9	Gothghari, Karechuli Raimana Dando, Cheda, Chatipan, Bikram Bidhyala	Sahid Smriti, Chatiyan, Badheni, Pawara Ma vi, Sukhaura, Cheda, Galdi beldande,Devisthan, Bikram, Karechuli Raimane

3.12 Bridges/Culverts

Bridges, suspension bridges and culverts are most essential components of road and trail transport. Any road is absolutely incomplete without bridges/cross drainages in the country like Nepal where we encounter rivers and brooks in every few kilometers. However, as compared to other hilly areas, the roads along this municipality passes through small streams and rivers. Thus, instead of big bridges even small culverts and cause ways also work substantially

3.13 Drainage System

Good drainage system is an internal part of road management. Often hilly areas in the Municipality provide natural drainage of water but if it is not installed and maintained according to the standard specifications, chances of massive soil erosion and even landslides are extremely high. Similarly, lack of drainage triggers damages in the roads increasing the

cost of maintenance. Such unsustainable development leads to environmental destruction and regular obstacles during vehicular movement. Almost all of the roads in the municipality except the feeder road lack side drains. Therefore, construction and maintenance of drainage is equally important as the construction and maintenance of roads.

3.14 Road Furniture

Different sorts of objects which are installed in several places of a road to improve smoothness of travel and ensure safety are collectively called road furniture. They include objects like street light, lane signs, zebra crossing, all kinds of traffic signals, milestones, traffic barriers, bus stands, and passenger's lot etc. These objects enhance the aesthetic dimension of the roads in one hand and improve the safety of travel on the other. They equally provide comfort to pedestrian and control and regulate the traffic. Even very basic road furniture is seem to be missing in most of the roads in this Municipality. Therefore, installing road furniture after the completion of major construction is essential.



Indicative Development Potential Map (IDPM)

Developing IDPM is a process of mapping potential developing zones where future growth of services and human activities are likely to increase. According to the nature of the zones and their growth trends, future forecast of transport mechanism can be judged or estimated. This chapter has provided sufficient clues of the zones which are potential from future development prospect and strategically located. Basically, those zones include market centers, agriculture areas, historical and religious areas and so. Indicative Development Potential Map has been attached in Volume-II on the basis of the information on this chapter.

Chapter - 4: Municipality Inventory Map of Road Network

Existing road inventory map has been prepared on the basis of ward wise road survey for the verification of existing roads on GIS for the preparation of maps. Municipal road inventory forms were used to collect the information during road condition survey. The survey was carried out from one nodal point to another in each road collecting information on road type, surface condition, road width, drainage structures, road condition, linkages established by the road. On the basis of these information MRIM (Municipal Road Inventory Map) has been prepared.

4.1 Municipal Roads

Summary of road class A

These roads are major transport corridors within the municipal territory. These roads are assumed to have higher traffic and they connect major settlements or market areas within the municipality. Functionally these roads carry the traffic from major settlements, tourist areas to the SRN linkages. As per the available RoW, topography and land use pattern, typical cross section may be selected as shown in figure below. Minimum Row for this class of road has been set to 15m. It is highly recommended to have separate segment for pedestrian and cycle track. At the same time, these roads need to have adequate median strip to segregate vehicles coming from different directions.

There are altogether 6 municipal roads that lie in road class A.

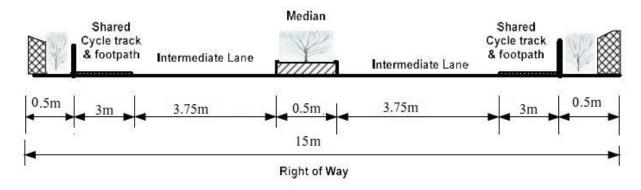


Figure 17: Typical Cross Section of Road class "A"

 Table No. 17: Summary of Road Class "A"

	General Inform		Road Length, Km Road Condition, Km							S 41		
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02A001	A001_Amarai Jukena Deurali Airawati Road (Patanjali Marga)	1286	4,5,6,7	4.61	-	0	18.09	0.08	18.17	-	18.09	Amrai-Jakena- Deurali-Airawati
551M02A002	A002_Chakla-Khumchikot- Harre-Pakhuri- Dhankhola	688	9,10,12	4.64	-	0	33.266	0.14	33.41	-	33.27	Chakla- Khumchikot-Harre- Pkhuri-Dhankhola
551M02A003	A003_Gabdawa - Khayar bhatti - Phorsal - Suparineta -kathekhola - Harre (Taratej- Sahidsmriti marga)	185	10, 11	4.00	-	0	13.29		13.29	-	13.29	Gabdawa - Khayar bhatti - Phorsal - Suparineta - Kathekhola- Harre
551M02A004	A004_Pipra - Pawara - Simlpani - Bhedemare - Harre -Shilling khola- Satmara(Krishna sen ichhuk marga)	2475	14,13,4,12,10,9,8		-	6.067	58.642	-	64.71	6.07	58.64	Pipra - Pawara - Simlpani - Bhedemare - Harre - Shilling khola- Satmara
551M02A005	A005_Sitapur-Rajubas Suvanakhal Gharthiswara- Mandre hudai Neta Pokhara (Yagyamin lila Marga)	689	1,2	5.00			19.28		19.28	-	19.28	Sitapur-Rajubas Suvanakhal Gharthiswara- Mandre hudai Neta Pokhara
551M02A006	A006_Dhanchaur-Deurali- Lamatal-Lahpe-Bhalubang	1563	6,7	4.00			31.56		31.56	-	31.56	Dhanchaur-Deurali Lamataal -Lahpe- Bhalubang

Summary of road class B

These roads serve for the purpose of collectors from relatively small settlements and having less traffic flow. The RoW for such class of roads is minimum of 10m. The typical cross section of such roads is shown in figure below. These roads serve as linkage to class "A" roads. These roads have been categorized based on public demand as well as keeping in view the future need of municipality. These roads will be served by smaller public transport modes.

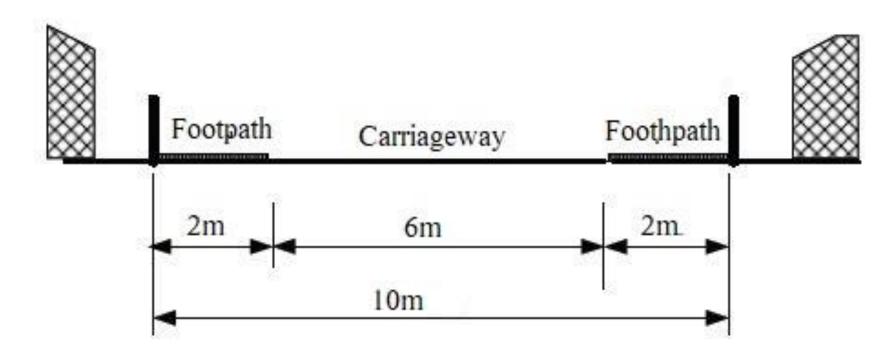


Figure 18: Typical Cross Section of Road class "B"

There are altogether 16 municipal roads which lie in road class B.

Table No. 18: Summary of Road class "B"

	General Information				Road Length, Km Road Condition, Km						ndition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	вт	GR	ER	Trail	Total	All weather	Fair Weather	Settlement
551M02B001	B001_Dhodare - Purkishilli Ghumaure - Thado khola - Lamidamar	286	8,9	4.00			9.63		9.63	-	9.63	Dhodare - Purkishilli Ghumaure - Thado khola - Lamidamar
551M02B002	B002_Lamataal - sitalpati- chidichaur-nangal	264	7,9,10	4.00			13.04		13.04	-	13.04	Lamataal - Sitalpati- Chidichaur-Nangal
551M02B003	B003_Nangal - Bokre tole- Chhhabineta tole - Dobata	132	10,11	4.00			13.66		13.66	-	13.66	Nangal - Bokre tole- Chhhabineta tole - Dobata
551M02B004	B004_Ranikuwa - Mauwabari - Khairabhatti - Banakasa Basa motor road	191	10,11	0.00			0.00		-	-	-	Ranikuwa - Mauwabari - Khairabhatti - Banakasa Basa motor road
551M02B005	B005_Harre - Pokhara tole- Kalgaira-dhaireni- ranikuda- Pathrakot bazaar	429	10,11	4.00			18.06		18.06	-	18.06	Harre - Pokhara tole- Kalgaira- dhaireni- ranikuda- Pathrakot bazaar
551M02B006	B006_Harre - Kapurkot- Galdha	531	5,10	4.00			14.42		14.42	-	14.42	Harre - Kapurkot- Galdha
551M02B007	B007_Damar Besi-Phursa- Ratamata-dihi	277	7	4.00			5.92		5.92	-	5.92	Damar Besi-Phursa- Ratamata-dihi
551M02B008	B008_Deurali - Thula Dhongre - Bangasagar - Chaida Ghat - Pyuthan motor road	131	14	4.00			3.418		3.42	-	3.42	Deurali - Thula Dhongre - Bangasagar - Chaida Ghat
551M02B009	B009_Barabot - Kamle khola -	156	4	4.00			2.82			-	2.82	Barabot - Kamle

	General Information									Road Co	ndition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	вт	GR	ER	Trail	Total	All weather	Fair Weather	Settlement
	Pokhe danda Swamika Sita Khola motor road								2.82			khola - Pokhe danda Swamika Sita Khola
551M02B010	B010_Simalpani -Gandhi - Mudribas - Pawara	321	12	5.00		9. 14	0.00		9.14	9.14	-	Simalpani -Gandhi - Mudribas - Pawara
551M02B011	B011_Gaura secondary school - Supadeuralli - Aryal Tole - Naya basti - Pokhari - Pahera - Rojiya Pokhari motor road	143	12	4.00			1.24		1.24	-	1.24	Gaura secondary school - Supadeuralli - Aryal Tole - Naya basti - Pokhari - Pahera - Rojiya Pokhari
551M02B012	B012_Dhaseni - Ratamata - Maidan - Dhole Takura - Darbare motor road	417	12	4.00			10.85		10.85	-	10.85	Dhaseni - Ratamata - Maidan - Dhole Takura - Darbare
551M02B013	B013_sitapur- Kodanda-Badganga- besi-salyan danda	517	2,13	4.00			9.27		9.27	-	9.27	sitapur- Kodanda- Badganga- besi- salyan danda
551M02B014	B014_Sitapur - Dodkatta- Dhara- Nipane-Mulabari- Paiyapata- Paire- Dhatibang	373	2	4.00			7.87		7.87	-	7.87	Sitapur - Dodkatta- Dhara-Nipane- Mulabari- Paiyapata- Paire- Dhatibang
551M02B015	B015_Simalpani -Gandhi - Mudribas - Pawara	581	14	4.00			14.39		14.39	-	14.39	Simalpani -Gandhi - Mudribas - Pawara
551M02B016	B016_Karechuli balaju mandir- karechuli danda-Keurepani- Mahendra Highway	279	14	4.00			11.15		11.15	-	11.15	Karechuli balaju mandir-karechuli danda-Keurepani-

Summary of road class C

These types of urban roads are for the purpose of residential access. Residential streets are designed for lower traffic volumes for especially private transport. Therefore, RoW for this class is designed for single lane pavement. Minimum RoW for such class of roads is allocated as 8m. Typical cross section of such roads is shown below. There are altogether 32 municipal roads which lie in road class C.

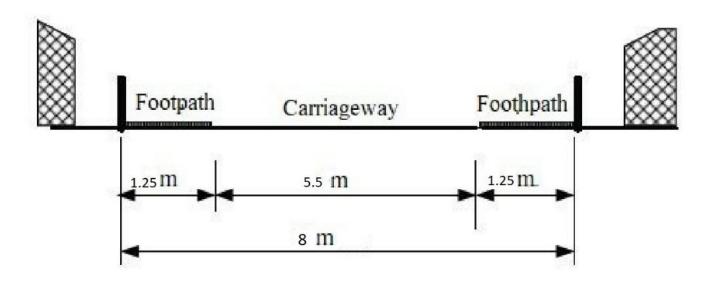


Figure 19: Typical Cross Section of Road class "C"

Table No. 19: Summary of Road class "C"

	General Information	n				Roa	ad Length	ı, Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02C001	C001_Rangakate - Nayabasti - Kharghat motor road	179	9	5.00			4.2403		4.24	-	4.24	Rangakate - Nayabasti - Kharghat
551M02C002	C002_Sitalpati -Palase- Apchaur	69	8,9	5.00			10.129		10.13	-	10.13	Sitalpati -Palase- Apchaur
551M02C003	C003_Siyala- Naumure	239	7	5.00			6.1133		6.11	-	6.11	Siyala- Naumure
551M02C004	C004_Deurali-Bandre- Tarule	144	7	5.00			2.9168		2.92	-	2.92	Deurali-Bandre- Tarule
551M02C005	C005_Pyuthani danda- Kalleri-Simle-Chisapani- Bebade	267	7,6	4.79			7.325		7.32	-	7.32	Pyuthani danda- Kalleri-Simle- Chisapani-Bebade
551M02C006	C006_Shivadaha - Sana Dhongre - Majhi Damar	79	6	4.00			2.1575		2.16	-	2.16	Shivadaha - Sana Dhongre - Majhi Damar
551M02C007	C007_Malika - Dasekharka - Dhanchaur motor road	152	5,4	4.00			7.7904		7.79	-	7.79	Malika - Dasekharka - Dhanchaur
551M02C008	C008_Chhahare kaseri - Sidhhara	183	9,10	4.72			8.7269		8.73	-	8.73	Chhahare kaseri - Sidhhara
551M02C009	C009_Siddhara - Nepane- Dihi motor road	81	10	5.00			4.8742		4.87	-	4.87	Siddhara - Nepane- Dihi
551M02C010	C010_Aarichaur - Hattidunga-Chakla - Hattidunga-Chakla	164	10,12	4.60			7.1972		7.20	-	7.20	Aarichaur - Hattidunga-chakla - Hattidunga-Chakla
551M02C011	C011_Deuralithan	121	11	0.00					-	-	-	DeuralithanSindure

		Ro	ad Lengtl	ı, Km		Road Cond	lition, Km					
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Sindure dhunga - Phorsalkhet-Apkhola- Majhkharka											dhunga - Phorsalkhet- Apkhola-Majhkharka
551M02C012	C012_Simaldip- Sinduredhunga	15	11	4.00			4.8807		4.88	-	4.88	Simaldip- Sinduredhunga
551M02C013	C013_Ranagai - Mauwabari - Lungri - Aapkhola - Dussi motor road	117	11	4.00			6.2688		6.27	-	6.27	Ranagai - Mauwabari - Lungri - Aapkhola - Dussi
551M02C014	C014_Deurali - Nipane - Damar - Dhunge - Sera motor road	106	12	4.00			4.6405		4.64	-	4.64	Deurali - Nipane - Damar - Dhunge - Sera
551M02C015	C015_Barabot - Ratamata -Khal - Kolksare -Galda motor road	430	4,5	4.00			5.8581		5.86	-	5.86	Barabot - Ratamata - Khal - Kolksare - Galda
551M02C016	C016_Ratamata-Galdha - Bhabin-Seudeni-Chakla	205	4,5				6.9187		6.92	-	6.92	Ratamata-Galdha - Bhabin-Seudeni- Chakla
551M02C017	C017_Baiska tree - Bhotu dhunge bridge - Jhapang River - Kalimati krishi road	169	5	4.00			3.9684		3.97	-	3.97	Baiska tree - Bhotu dhunge bridge - Jhapang River - Kalimati
551M02C018	C018_Bhumikasthan - Pokhari -Jhakri Jhakrini - Sengelen(Bhumika nagarpalika sthan ward no. 10)	198	3,5	4.00			6.6048		6.60	-	6.60	Bhumikasthan - Pokhari -Jhakri Jhakrini - Sengelen
551M02C019	C019_Barbot - Khandua - Padme - Pokhar danda	239	3	4.00			8.689		8.69	-	8.69	Barbot - Khandua - Padme - Pokhar

	General Informatio			Roa	ad Lengtl	ı, Km		Road Cond	lition, Km			
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	motor road											danda
551M02C020	C020_Kalimati-padme- sitapur-Kailase - Padme - Khibdi motor road	147	3,5	5.00			4.9528		4.95	-	4.95	Kalimati-padme- sitapur-Kailase - Padme - Khibdi
551M02C021	C021_Sitapur - sitkhola sabdaha - Kailaro	137	2,3	4.00			2.7391		2.74	-	2.74	Sitapur - sitkhola sabdaha - Kailaro
551M02C022	C022_Bhuwanpata pul - Suppa kasyap gufa - Suppa deurali - Falaa chaur - Kharyan - Chamar - Todke	85	2	5.00			1.2056		1.21	-	1.21	Bhuwanpata pul - Suppa kasyap gufa - Suppa deurali - Falaa chaur - Kharyan - Chamar - Todke
551M02C023	C023_Jaluke khola- Sabdu-Karmadip- Dhartiswara Sadak	96	1,2	4.54			5.3484		5.35	-	5.35	Jaluke khola- Sabdu- Karmadip- Dhartiswara Sadak
551M02C024	C024_Bahunkarka - Gangafaat Krishi road	91	4,10	4.55			5.9542		5.95	-	5.95	Bahunkarka - Gangafaat
551M02C025	C025_Subarnakhal-Badar khola- Kalleri -Bokhar	108	1,13	4.19			6.72	2.00	8.72	-	6.72	Subarnakhal-Badar khola- Kalleri - Bokhar
551M02C026	C026_Majhgaun-Milan chowk-Chandithanmandir danda tole	127	1	5.00			0.7982		0.80	-	0.80	Majhgaun-Milan chowk- Chandithanmandir danda tole
551M02C027	C028_Subarnakhal- Majhgaun-Milan chowk- Mandre-Chaupari-Milan Chowk	383	1	4.87			6.8799		6.88	-	6.88	Subarnakhal- Majhgaun-Milan chowk-Mandre- Chaupari-Milan Chowk

	General Informatio			Ro	ad Lengtl	h, Km		Road Cond	lition, Km			
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02C028	C028_Maineri-Mandre- Bagra Sadak	162	1	5.00			2.4373		2.44	-	2.44	Maineri-Mandre- Bagra
551M02C029	C029_Mandre Maidan Thok- Jadi Kharka- Malarani- Pipalneta- Bahundi- Bajra mandir road	247	1	4.00			3.5682		3.57	-	3.57	Mandre Maidan Thok- Jadi Kharka- Malarani- Pipalneta- Bahundi- Bajra mandir
551M02C030	C030_Bikram- Khormor - Toribari - Salajandi highway jodne motor road	64	14	5.00			1.0973		1.10	-	1.10	Bikram- Khormor - Toribari - Salajandi highway
551M02C031	C031_Karechuli-Dhungri khola gaun	53	14	4.00			8.601		8.60	-	8.60	Karechuli-Dhungri khola gaun
551M02C032	C032_Bharlabas - Musichan Dhab motor road	94	13	4.00			4.5564		4.56	-	4.56	Bharlabas - Musichan Dhab

Summary of road class D

These types of urban roads have access to settlement level connected to class C roads. Residential streets are designed for comparatively lower traffic volumes for especially private transport. Right of Way (RoW) for this class is designed for single lane pavement. Minimum RoW for such class of roads is allocated as 6 m. Altogether 182 roads fall under this category.

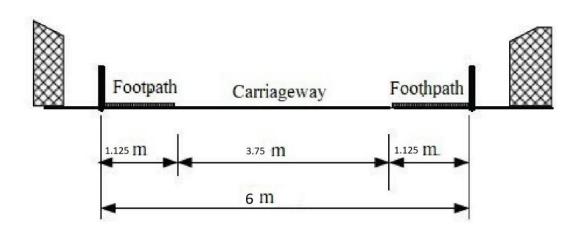


Figure 20: Typical Cross Section of Road class "D"

Table No. 20: Summary of Road class "D"

	General Information						d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D001	D001_Satmara krishi road		8	5.50		0.764			0.76	0.76	-	Satmara
551M02D002	D002_Milanchowk bata purba jane bato		8	5.00			0.907		0.91	-	0.91	Milanchowk
551M02D003	D003_Tinkhande Jholunge pul - Charinge motor road		8	5.52		0.204	2.464		2.67	0.20	2.46	Tinkhande Jholunge pul - Charinge
551M02D004	D004_Gothki - Mithiaap motor road		9				0.901		0.90	-	0.90	Gothki - Mithiaap

	General Information							Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D005	D005_Dhankhola - Bhakkuchowk - Jabune motor road		11	5.00			1.354		1.35	-	1.35	Dhankhola - Bhakkuchowk - Jabune
551M02D006	D006_Chatteban to Bandre - Raktari Badhidamar ringroad		8						-	-	-	Chatteban to Bandre - Raktari Badhidamar
551M02D007	D007_Baghdwar motor road		7	5.50			0.484		0.48	-	0.48	Baghdwar
551M02D008	D008_LahaveniLamid amar - Baraha daha motor road		9	5.00			1.163		1.16	-	1.16	LahaveniLamidamar - Baraha daha
551M02D009	D009_Kartike - Lauri motor road		9	5.00			3.541		3.54	-	3.54	Kartike - Lauri
551M02D010	D010_Kanachaur- Chidi chaur		8,9	5.00			14.800		14.80	-	14.80	Kanachaur-Chidi chaur
551M02D011	D011_Lakurikot sadak		9	5.00			3.868		3.87	-	3.87	Lakurikot
551M02D012	D012_Asare - Bisvure - Baravure motor road		9						-	-	-	Asare - Bisvure - Baravure
551M02D013	D013_Sittalpati - Dhokhola - Barseni motor road		9						-	-	-	Sittalpati - Dhokhola - Barseni
551M02D014	D014_Ratamata- Naumure-Airawat		7						-	-	-	Ratamata-Naumure- Airawat
551M02D015	D015_Swamineta - Chidi - Sankash motor		7	5.00			1.761		1.76	-	1.76	Swamineta - Chidi - Sankash

General Information						Roa	d Length, l	Km	Road Cond	lition, Km		
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	road											
551M02D016	D016_Lamatol Dhikamathi ko motor bato		7	5.00			0.669		0.67	-	0.67	Lamatol Dhikamathi k
551M02D017	D017_Lamatal Gaun Ring Road		7				1.512		1.51	-	1.51	Lamatal Gaun
551M02D018	D018_Jaluke - Batako - Chaupari motor road		7	5.50			1.921		1.92	-	1.92	Jaluke - Batako - Chaupari
551M02D019	D019_Swamineta - Kalleri motor road		7						-	-	-	Swamineta - Kalleri
551M02D020	D020_Dhunge danda - Damar - Takura motor bato		7						-	-	-	Dhunge danda - Damar - Takura
551M02D021	D021_Khaniyapani road		7	5.00			2.234		2.23	-	2.23	Khaniyapani
551M02D022	D022_Kalleri- Amelichaur- Pakhachaur-sadak		7	5.00			1.885		1.89	-	1.89	Kalleri-Amelichaur- Pakhachaur
551M02D023	D023_Talla bahule - Upalla bahule - Sera - Damar besi - Khaireni - Chahare motro road		7						-	-	-	Talla bahule - Upalla Bahule - Sera - Damar besi - Khaireni - Chahare

General Information						Roa	d Length, l	Km	Road Cond	lition, Km		
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D024	D024_Oripari paani - kot - Swamineta motor road		7	5.50			2.185		2.19	-	2.19	Oripari paani - kot - Swamineta
551M02D025	D025_Kalleri - Swamineta - Dandabari - Aamilechaur - Pakhachaur motor road		7						-	-	-	Kalleri - Swamineta - Dandabari - Aamilechaur - Pakhachaur
551M02D026	D026_Nuwakot - Pokhari danda - Jabunne Pokhari motor bato		7	5.00			5.905		5.91	-	5.91	Nuwakot - Pokhari danda - Jabunne Pokhari
551M02D027	D027_Jaluke - Dangal danda - Vada gaun - View tower motor road		7						-	-	-	Jaluke - Dangal danda - Vada gaun - View tower
551M02D028	D028_Jwakot- Pokhardanda sadak- Saligram ko Chaupari - Siyala motor bato		7				1.564		1.56	-	1.56	Jwakot-Pokhardanda -Saligram ko Chaupari - Siyala
551M02D029	D029_Shivadaha - Koibang motor road		7	5.00			0.789		0.79	-	0.79	Shivadaha - Koibang
551M02D030	D030_Jhate - Aapkhola motor road		11	5.00			2.010		2.01	-	2.01	Jhate - Aapkhola

General Information						Roa	d Length, l	Km	Road Cond	lition, Km		
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D031	D031_Shivadatta - Dhungepani motor road		6	5.00			0.477		0.48	-	0.48	Shivadatta - Dhungepani
551M02D032	D032_Tallo Sidhara - Sakeni - Kanachaur motor road		9						-	-	-	Tallo Sidhara - Sakeni - Kanachaur
551M02D033	D033_Charikattare - Budapadhera motor road		9	5.00			0.357		0.36	-	0.36	Charikattare - Budapadhera
551M02D034	D034_Tallo Chahare motor road		9						-	-	-	Tallo Chahare
551M02D035	D035_Gabade - Chakhola - Bhalukhola - Kathekhola		10						-	-	-	Gabade - Chakhola - Bhalukhola - Kathekhola
551M02D036	D036_Phedi - Tadhaka Chaap - Khalaka Pokhara motor road		10						-	-	-	Phedi - Tadhaka Chaap - Khalaka Pokhara
551M02D037	D037_Harre hulak office sadak		10	5.00			0.531		0.53	-	0.53	Harre
551M02D038	D038_Harre ringroad		10				0.449		0.45	-	0.45	Harre
551M02D039	D039_Kayureni - Avari chaur		12						-	-	-	Kayureni - Avari chaur
551M02D040	D040_Phedi -Thapa ko pata		10						-	-	-	Phedi -Thapa ko pata

		Roa	d Length, l	Km	Road Condition, Km							
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D041	D041_Chapaka pata - Rakse Bahune moto road		10	5.00			5.598		5.60	-	5.60	Chapaka pata - Rakse Bahune
551M02D042	D042_Barre -Padhera chaur motor road		10				1.297		1.30	-	1.30	Barre -Padhera chaur
551M02D043	D043_Naha - Palla - Unnaye batule motor		10	5.00			7.230		7.23	-	7.23	Naha - Palla - Unnaye batule
551M02D044	D044_Dhunga Falne - Gauri Kunda motor road		4				0.227		0.23	-	0.23	Dhunga Falne - Gauri Kunda
551M02D045	D045_Khumchikot - Shivalaya motor road		12				3.987		3.99	-	3.99	Khumchikot - Shivalaya
551M02D046	D046_Nepane - Makaipate - Sani Kharka Krishi Road		12						-	-	-	Nepane - Makaipate - Sani Kharka
551M02D047	D047_Maidan - Jorule - Gaira krishi road		12	5.00			0.788		0.79	-	0.79	Maidan - Jorule - Gaira
551M02D048	D048_Sera Kalika Mandir - Jhuse danda motor road		11						-	-	-	Sera Kalika Mandir - Jhuse danda
551M02D049	D049_Deurali danda - Sera Khola - Duvar - Chakla motor road		11	5.00			1.133		1.13	-	1.13	Deurali danda - Sera Khola - Duvar - Chakla
551M02D050	D050_Jhate - Aapkhola motor road		11	5.00			1.375		1.37	-	1.37	Jhate - Aapkhola
551M02D051	D051_Tarai gaun- jalugai sadak		12				1.940		1.94	-	1.94	Tarai gaun-jalugai

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D052	D052_Pirapani sadak		12				0.890		0.89	-	0.89	Pirapani
551M02D053	D053_Kalika madir- Bhangala tole		12	5.50			1.295		1.30	-	1.30	Kalika madir- Bhangala
551M02D054	D054_Dohote gaun sadak		12	5.00			1.194		1.19	-	1.19	Dohote gaun
551M02D055	D055_Kukurgade - Daha - Aapmoti krishi road		12				1.403		1.40	-	1.40	Kukurgade - Daha - Aapmoti
551M02D056	D056_Kudule- Thanchauki sadak		12	5.00			1.781		1.78	-	1.78	Kudule-Thanchauki sadak
551M02D057	D057_Rajiya danda sadak		12				0.531		0.53	-	0.53	Rajiya danda
551M02D058	D058_Rajiya gaun sadak		12	5.00			0.756		0.76	-	0.76	Rajiya gaun
551M02D059	D059_Jasrame-Rajiya		4,12						-	-	-	Jasrame-Rajiya
551M02D060	D060_Dhaseni Deurali motor road		12						-	-	-	Dhaseni Deurali
551M02D061	D061_Rata mata - Thamkot - Sitalpati- Bajagara (krishi road)		4	5.00			3.569		3.57	-	3.57	Rata mata - Thamkot - Sitalpati- Bajagara
551M02D062	D062_Shitalpati - Dhekka fore - Saune - Bhabini krishi road		4						-	-	-	Shitalpati - Dhekka fore - Saune - Bhabini
551M02D063	D063_Thamkot gaun sadak		4	5.50			0.366		0.37	-	0.37	Thamkot gaun
551M02D064	D064_Sana daha -		4				2.361		2.36	-	2.36	Sana daha - Gaira

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Gaira kharka - Paani pata - Nepali tole - Okhaldhunga solti marg											kharka - Paani pata - Nepali tole - Okhaldhunga solti
551M02D065	D065_Aamrai - Gurjithum - Phapareni motor road		4	5.00			0.793		0.79	-	0.79	Aamrai - Gurjithum - Phapareni
551M02D066	D066_Sahutol - Gangakhola motor road (krishi road)		4				1.069		1.07	-	1.07	Sahutol - Gangakhola
551M02D067	D067_Amarai Tallo Ghumti - Jhakareni - Upallo ganga Fewi krishi firm motor road		4				0.590		0.59	-	0.59	D067_Amarai Tallo Ghumti - Jhakareni - Upallo ganga Fewi krishi farm
551M02D068	D068_Thula Padhera - Maina danda - Dharam paani - Gangakhola		4				1.166		1.17	-	1.17	Thula Padhera - Maina danda - Dharam paani - Gangakhola
551M02D069	D069_Tatiya bazar - Tundikhel - Barbot		4	5.50			0.679		0.68	-	0.68	Tatiya bazar - Tundikhel - Barbot
551M02D070	D070_Bosse dhunga - Telephone tower - Khanepani tanki motor road		4	5.00			0.579		0.58	-	0.58	Bosse dhunga - Telephone tower - Khanepani tanki
551M02D071	D071_Amarai - Tallo bazar - Chagbaas - Gorathum motor road		4				0.292		0.29	-	0.29	Amarai - Tallo bazar - Chagbaas - Gorathum
551M02D072	D072_Badachour- Kailase-Padme-		3,4				1.435		1.44	-	1.44	Badachour-Kailase- Padme-Jukena

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Jukena hudai Pyuthan											
551M02D073	D073_Kalimati- Phanel ko rukh sadak		3	5.50			0.331		0.33	-	0.33	Kalimati-Phanel ko rukh
551M02D074	D074_Paari ma.bi - Khime Danda motor road		5	5.00			1.660		1.66	-	1.66	Paari ma.bi - Khime Danda
551M02D075	D075_Hari ma b- Dotekharka-Tharpaila		5	5.50			1.152		1.15	-	1.15	Hari ma b- Dotekharka- Tharpaila
551M02D076	D076_Khanepani- Dhuncahur		5	5.50			0.486		0.49	-	0.49	Khanepani- Dhuncahur
551M02D077	D077_Majhgaun dhara jane bato		5	5.50			0.536		0.54	-	0.54	Majhgaun dhara
551M02D078	D078_Dhanchaur jane bato		5				0.904		0.90	-	0.90	Dhanchaur
551M02D079	D079_Phalate Cheda - Bhala Kharka motor road		5	5.00			1.209		1.21	-	1.21	Phalate Cheda - Bhala Kharka
551M02D080	D080_Kalimati - Chaap dhanda (New track)		5						-	-	-	Kalimati - Chaap dhanda
551M02D081	D081_Ratamata- Kalimati-Padme- Sitapur		5	5.50			0.467		0.47	-	0.47	Ratamata-Kalimati- Padme- Sitapur
551M02D082	D082_Ghaiya bari- Dosekharka agricultural road		5	5.50			1.245		1.24	-	1.24	Ghaiya bari- Dosekharka

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D083	D083_Malika- Dosekharka		5	5.50			1.278		1.28	-	1.28	Malika- Dosekharka
551M02D084	D084_Bhumikasthan - Tusare motor road		5	5.00			1.633		1.63	-	1.63	Bhumikasthan - Tusare
551M02D085	D085_Lamo chaupari-Deurali-		6	5.50			0.752		0.75	-	0.75	Lamo chaupari- Deurali
551M02D086	D086_Gyan deep - Batase Road		5	5.50			0.658		0.66	-	0.66	Gyan deep -Batase
551M02D087	D087_Mulabari - Sana Kalleri motor Road		5	5.00			1.238		1.24	-	1.24	Mulabari - Sana Kalleri
551M02D088	D088_Bagar - Damaar - Lamakhet krishi road		5	5.00			1.959		1.96	-	1.96	Bagar - Damaar - Lamakhet
551M02D089	D089_Supa-Patal Tole-Nipane		2	5.50			2.377		2.38	-	2.38	Supa-Patal Tole- Nipane
551M02D090	D090_Aatari - Gera Kharka - Khamari motor road		5	5.50			0.520		0.52	-	0.52	Aatari - Gera Kharka - Khamari
551M02D091	D091_Pratichyalaye - Kalleri - Gobang - Khamari - Badare motor road		6				1.428		1.43	-	1.43	Pratichyalaye - Kalleri - Gobang - Khamari - Badare
551M02D092	D092_Anpbot- Kalam kot - Khamari - Gaira kharka		5,6				0.870		0.87	-	0.87	Anpbot- Kalam kot - Khamari - Gaira kharka
551M02D093	D093_Praktiksyala-		6	5.50			1.980		1.98	-	1.98	Praktiksyala-Kalleri-

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Kalleri-Kamalkot											Kamalkot
551M02D094	D094_Praktiksyala- Kalleri raod		5				0.397		0.40	-	0.40	Praktiksyala-Kalleri
551M02D095	D095_Bhanbhane - Galdung - Khamari motor road		5,6	5.00			4.290		4.29	-	4.29	Bhanbhane - Galdung - Khamari
551M02D096	D096_Anpbot- Kalam kot - Khamari - Gaira kharka		6	5.00			4.791		4.79	-	4.79	Anpbot- Kalam kot - Khamari - Gaira kharka
551M02D097	D097_Anpbote - Bokse chaur motor road		6	5.00			5.485		5.49	-	5.49	Anpbote - Bokse chaur
551M02D098	D098_Phursamara - Deurali - Kalamkot motor road		6	5.00			1.743		1.74	-	1.74	Phursamara - Deurali - Kalamkot
551M02D099	D099_khamari- Boksechaur- Damar besi		6	5.50			0.661		0.66	-	0.66	khamari-Boksechaur- Damar besi
551M02D100	D100_Kalika Malika mandir sadak		5	5.50			0.562		0.56	-	0.56	Kalika Malika
551M02D101	D101_Kohol-Bakhre- Kapabutta-Kartike- Damar		2,3				5.661		5.66	-	5.66	Kohol-Bakhre- Kapabutta-Kartike- Damar
551M02D102	D102_Pokhe danda - Bhusleghat - Pakhere - Sengalen motor road		3	5.00			1.194		1.19	-	1.19	Pokhe danda - Bhusleghat - Pakhere - Sengalen

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D103	D103_Takura Sadak		3	5.50			0.464		0.46	-	0.46	Takura
551M02D104	D104_Ghumti Khola Sadak		2	5.50			0.798		0.80	-	0.80	Ghumti Khola Sadak
551M02D105	D105_Phalachour- Khariyana Khola Sadak		2	5.00			0.468		0.47	-	0.47	Phalachour- Khariyana Khola
551M02D106	D106_Khatri Tole Motor Bato- Dhorbanda-Karnel pata-Jholunge pool		2	5.00			0.281		0.28	-	0.28	Khatri Tole Motor Bato-Dhorbanda- Karnel pata-Jholunge pool
551M02D107	D107_Phalachour- Khariyana Khola Sadak		2	5.00			0.247		0.25	-	0.25	Phalachour- Khariyana Khola
551M02D108	D108_Bhuvan Pata- Supa-Phalachour Sadak		2	5.50			0.719		0.72	-	0.72	Bhuvan Pata-Supa- Phalachour
551M02D109	D109_Dhara - Kaule - Patale tole - Naya gaun motor road		2	5.00			2.135		2.14	-	2.14	Dhara - Kaule - Patale tole - Naya gaun
551M02D110	D110_Upallo Panch Pokhare Sadak		3	5.50			0.579		0.58	-	0.58	Upallo Panch Pokhare
551M02D111	D111_Badachaur- Thulakharka- Chalauja- Subarnakhal (new track)		1,2						-	-	-	Badachaur- Thulakharka- Chalauja- Subarnakhal

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D112	D112_BK Tole- Adhikari Tol Samma Sadak		2				0.275		0.28	-	0.28	BK Tole-Adhikari Tol
551M02D113	D113_Dharmashala- Kalikasthan- Sangam Aa.bi motor road		2	5.00			1.315		1.31	-	1.31	Dharmashala- Kalikasthan- Sangam Aa.bi
551M02D114	D114_Padheri Motor Bato		2	5.50			1.195		1.19	-	1.19	Padheri
551M02D115	D115_Ale Marga		3	5.50			0.303		0.30	-	0.30	Ale Tole
551M02D116	D116_kholte pani sadak		3	5.50	0.242				0.24	0.24	-	kholte pani
551M02D117	D117_Kharseka Baunne motor road		3	5.00			1.389		1.39	-	1.39	Kharseka Baunne
551M02D118	D118_Damaru Daha- Kailase Proposed Road		3	5.50			0.232		0.23	-	0.23	Damaru Daha- Kailase
551M02D119	D119_Purano gaun ringroad		4	5.00			1.362		1.36	-	1.36	Purano gaun
551M02D120	D120_Dhara - Ravan Shankha(maika than)		2	5.00			0.908		0.91	-	0.91	Dhara - Ravan Shankha(maika than)
551M02D121	D121_Bharlabas - Khutkhute - Rikot motor road		13,12						-	-	-	Bharlabas - Khutkhute - Rikot
551M02D122	D122_Deurali - Kritipur tower -		13	5.00			2.986		2.99	-	2.99	Deurali - Kritipur tower - Bolthum

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Bolthum chaur - Rikot motor road											chaur - Rikot
551M02D123	D123_Mushi chan - Majha ko faat - Dhadeni - Pare - Deurali motor road		13	5.00			6.978		6.98	-	6.98	Mushi chan - Majha ko faat - Dhadeni - Pare - Deurali
551M02D124	D124_Kirtipur sadak		13	5.00			0.985		0.98	-	0.98	Kirtipur
551M02D125	D125_Netakharka - Badganga motor road		13				1.832		1.83	-	1.83	Netakharka - Badganga
551M02D126	D126_Kamal chaur - Maithan mandir sadak		13	5.00			0.658		0.66	-	0.66	Kamal chaur - Maithan mandir
551M02D127	D127_Cheda - Bokhar - Saani- Lekh - Badare motor road		13	5.00			4.859		4.86	-	4.86	Cheda - Bokhar - Saani- Lekh - Badare
551M02D128	D128_Balukurantha mandir- Madhuban dham - Mahendra highway jodne motor road		14	5.50			0.643		0.64	-	0.64	Balukurantha mandir- Madhuban dham
551M02D129	D129_Sukhaur - Nepali tole - Kale gaida jodne motor road		14	5.50			1.535		1.54	-	1.54	Sukhaur - Nepali tole - Kale gaida
551M02D130	D130_Wada Karyalaya-Bokram tole		14	5.50			0.352		0.35	-	0.35	Bokram tole
551M02D131	D131_Karechuli ringroad sadak		14	5.00			1.296		1.30	-	1.30	Karechuli

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
551M02D132	D132_Raina devi mandir sadak		14	5.00			1.128		1.13	-	1.13	Raina devi mandir
551M02D133	D133_Karechuli - Pasrbati adharbhut schoo sadak		14				0.293		0.29	-	0.29	Karechuli -Pasrbati
551M02D134	D134_Damarudaha Sadak		3	5.50			0.395		0.40	-	0.40	Damaru daha
551M02D135	D135_Deurali - Chaapdanda motor road		10	5.00			2.268		2.27	-	2.27	Deurali - Chaapdanda
551M02D136	D136_Dharapani- Kalika pra.bi- Bhartapur krishi road		1	5.50			3.508		3.51	-	3.51	Dharapani- Bhartapur
551M02D137	D137_Baghkhor - Lisikuna motor road		10						-	-	-	Baghkhor - Lisikuna
551M02D138	D138_Dhwasepokhar a- Kalika pra.bi- Ghatsukaura krishi road		1	5.00			2.035		2.03	-	2.03	Dhwasepokhara- Kalika pra.bi- Ghatsukaura
551M02D139	D139_Rangakate ringroad		9	5.00			0.688		0.69	-	0.69	Rangakate
551M02D140	D140_Upalli Khanda- Upalla Gaun- Kakri chaur krishi road		1	5.00			2.206		2.21	-	2.21	Upalli Khanda- Upalla Gaun- Kakri chaur
551M02D141	D141_Mandre healthpost road		1	5.50			0.249		0.25	-	0.25	Mandre healthpost
551M02D142	D142_Labdi- Bakheli		1	5.00			2.234		2.23	-	2.23	Labdi- Bakheli

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
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	Chautari krishi road											Chautari
551M02D143	D143_Shabdu-Paire		1				2.982		2.98	-	2.98	Shabdu-Paire
551M02D144	D144_Shabdu- Dhartisara		1	5.00			1.496		1.50	-	1.50	Shabdu-Dhartisara
551M02D145	Chaupara-Kantheri		1	5.50			1.500		1.50	-	1.50	D145_Chaupara- Kantheri Sadak
551M02D146	Chaupari- Bhedabari- Pakrighat		1	5.00			1.115		1.11	-	1.11	D146_Chaupari- Bhedabari- Pakrighat krishi road
551M02D147	D147 _Karechulipakha - Bhatani tole sadak		14				0.727		0.73	-	0.73	Karechulipakha - Bhatani
551M02D148	D148_Jaluke - Saligram ko chaupari - Siyala motor bato		7				2.466		2.47	-	2.47	Jaluke - Saligram ko chaupari - Siyala
551M02D149	D149_Rajmarga bata Ghat jane bato		3				0.459		0.46	-	0.46	
551M02D150	D150_Oli danda- Jhirrathum Majh Gau- Kodanda Sadak		2,3	5.00			2.588		2.59	-	2.59	Oli danda-Jhirrathum Majh Gau-Kodanda
551M02D151	D151_Deurali danda- Dihi		6,7				2.961		2.96	-	2.96	Deurali danda-Dihi
551M02D152	D152_Naya basti ringroad		9				1.075		1.07	-	1.07	Naya basti

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
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551M02D153	D153_Simal paani - Janajyoti Aa.bi - Badare - Dandagaun		13				0.211		0.21	-	0.21	Simal paani - Janajyoti Aa.bi - Badare - Dandagaun
551M02D154	D154_Kareyuli - Batheni - Bikram - Kapilbastu Mahendra highway jodne motor road		14	5.50			0.249		0.25	-	0.25	Kareyuli - Batheni - Bikram
551M02D155	D155_Khaniya paani - Kumbhi gaira - Rata danda - Jaluke - Vadagaun - Naumure - Airabati		7	5.50			1.809		1.81	-	1.81	Khaniya paani - Kumbhi gaira - Rata danda - Jaluke - Vadagaun - Naumure - Airabati
551M02D156	D156_Kanchiroad - Chaupari - Kala siddha mandir motor road		8	5.50		1.629			1.63	1.63	-	Kanchiroad - Chaupari - Kala siddha mandir
551M02D157	D157_Dohore - Kartike - Bahule motor road		10,11				3.537		3.54	-	3.54	Dohore - Kartike - Bahule
551M02D158	D158_Rajiya Pokhar bata Rajmarga jodne sadak		12	5.00			0.742		0.74	-	0.74	Rajiya Pokhar
551M02D159	D159_GalDha - Dhanchaur - Thapakharka - Khane paani mul		5	5.00			2.309		2.31	-	2.31	GalDha - Dhanchaur - Thapakharka - Khane paani mul
551M02D160	D160_GalDha - Dhanchaur -		5	5.00			1.970		1.97	-	1.97	GalDha - Dhanchaur - Thapakharka -

	General Informa	tion				Roa	d Length, l	Km		Road Cond	lition, Km	
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Thapakharka - Khane paani mul											Khane paani mul
551M02D161	D161_Bhumikasthan - Dhanu kharka - Bhulke motor road		5	5.50			3.678		3.68	-	3.68	Bhumikasthan - Dhanu kharka - Bhulke
551M02D162	D162_Kholtepani - Gangakhola motor road (krishi road)		3	5.00			4.679		4.68	-	4.68	Kholtepani - Gangakhola
551M02D163	D163_Nwara Pokhari motor road		3,5	5.00			3.357		3.36	-	3.36	Nwara Pokhari
551M02D164	D164_Okhadhunga - Sital paati - Bajagara krishi road		4	5.00			1.667		1.67	-	1.67	Okhadhunga - Sital paati - Bajagara
551M02D165	D165_Kopchibas - Gorji - lama khet - Bajagara - Bhabin (krishi road)		4	5.00			3.644		3.64	-	3.64	Kopchibas - Gorji - Lama khet - Bajagara - Bhabin
551M02D166	D166_Aamarai (bhattikhola) - Sahu danda - Ratamata motor road		4	5.50			0.980		0.98	-	0.98	Aamarai (bhattikhola) - Sahu danda - Ratamata
551M02D167	D167_Rata Danda Sadak		3,4	5.50			0.566		0.57	-	0.57	Rata Danda
551M02D168	D168_Army gate, Sahutol motor road		3	5.00			0.944		0.94	-	0.94	Army gate, Sahutol
551M02D169	D169_Hitan tole - Netakharka - Salyan dhara - Betane -		13						-	-	-	Hitan tole - Netakharka - Salyan dhara - Betane -

General Information				Road Length, Km				Road Condition, Km				
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Khaskharka motor road											Khaskharka
551M02D170	D170_Jhirrathum Majh Gau-Kodanda Sadak		2	5.50			1.147		1.15	-	1.15	Jhirrathum Majh Gau-Kodanda
551M02D171	D171_Mandre Pokhe danda- Pipalneta- Bahundi motor road		1	5.50			3.005		3.01	-	3.01	Mandre Pokhe danda- Pipalneta- Bahundi
551M02D172	D172_Badachour- Jhirra-Banganga Simalpani Kapilvastu Sadak		2	5.53			6.709		6.71	-	6.71	Badachour-Jhirra- Banganga Simalpani Kapilvastu
551M02D173	D173_Sitalpur bazaar- Kodanda- Subarnakhal		1,2	5.00			2.170		2.17	-	2.17	Sitalpur bazaar- Kodanda- Subarnakhal
551M02D174	D174_Galgade- Phalachour-Siddha Baba Motor Sadak		2	5.50			2.940		2.94	-	2.94	Galgade-Phalachour- Siddha Baba
551M02D175	D175_Ghumti- Damar- Sengelen motor road		2	5.50			2.454		2.45	-	2.45	Ghumti-Damar- Sengelen
551M02D176	D176_Ghumti- Ghorbanda -Sikhra sadak		2				4.421		4.42	-	4.42	Ghumti-Ghorbanda - Sikhra
551M02D177	D177_Badachaur- Sikhra-Dhanchaur		2,3				3.689		3.69	-	3.69	Badachaur-Sikhra- Dhanchaur
551M02D178	D178_Mulabari School to Todki hudai		2				1.069		1.07	-	1.07	Mulabari School to Todki hudai Saune

General Information				Road Length, Km				Road Condition, Km				
Road Code	Road name	HH's	Ward pass	Avg width(m)	Black Topped	Gravel	Earthen	Trail	Total	All weather	Fair Weather	Settlement
	Saune thum Sadak											thum
551M02D179	D179_Mushichan - Dhad - Tarike - Koidanda - Patale paani motor road		13						-	-	-	Mushichan - Dhad - Tarike - Koidanda - Patale paani
551M02D180	D180_kamal chaur - simal pani-bauri tole sadak		13	5.00			1.957		1.96	-	1.96	D180_Kamal chaur - Simal pani-Bauri tole
551M02D181	D181_Cheda - Health post - Simal Paani - Darji tole - Lekhali tole - Sukali khola - Badare motor road		13	4.00			0.547		0.55	-	0.55	Cheda - Health post - Simal Paani - Darji tole - Lekhali tole - Sukali khola - Badare
551M02D182	D182_Kaule - Bakhre - Odar pata - Powera - Bikram - Kapilbastu Mahendra Highway jodne motor road		14	4.00			5.732		5.73		5.73	Kaule - Bakhre - Odar pata - Powera - Bikram

MTMP inventory survey has identified that this Municipality has altogether 773.16 Km municipal roads including foot trails as active and passive transport network. The distribution of road by surface type is 0.25 Km as black top, 17.8 Km as gravel, 752.89 Km as earthen and 2.22 Km stretch as a trail. Most of the roads fall under fair-weather road. The major challenge in transportation sector is to upgrade of fair-weather roads and budgetary management to cover all required intervention. Other relevant figures on road class and ward wise distribution have been shown in the table.

Table No. 21: *General summary according road type (in km)*

Road Types	Km.
Black top	0.25
Gravel	17.80
Earthen	752.89
Trail	2.22
Total	773.16

Table No. 22: Summary according to road class (in km)

Road Category	Black top	Gravel	Earthen	Track	Total
Class A	-	6.07	174.13	0.22	180.42
Class B	-	9.14	135.74	-	144.87
Class C	-	-	164.16	2.00	166.16
Class D	0.24	2.60	278.87	-	281.71
Foot trails					0.00
Total	0.24	17.8	752.89	2.22	773.16

Table No. 23: Ward wise road category status

Ward No.	Class A	Class B	Class C	Class D	SRN	Total
1	12.30	21.54	4.54	19.05	8.07	65.51
2	14.37	14.74	29.90	16.52	3.01	78.54
3	-	13.97	10.18	15.43	6.12	45.69
4	9.19	15.91	22.18	14.46		61.75
5	7.59	18.67	16.48	16.70		59.44
6	10.18	11.03		23.70		44.90
7	18.70	24.40	11.07	43.06	8.46	105.69
8	19.39	14.70	1.63	5.05		40.77

Ward No.	Class A	Class B	Class C	Class D	SRN	Total
9	17.31	35.86	19.04	33.68		105.90
10	20.20	24.94		30.37		75.51
11	31.51	51.34	8.03	6.94	18.62	116.44
12	13.74	21.27	0.74	21.50		57.25
13	6.38	20.01	8.98	26.92		62.29
14	28.09	15.80	7.69	5.97		57.54
New Track	23.64	42.08	14.49	94.37		174.58
Total	185.31	262.12	125.96	184.98	44.30	802.65

Note: This length is including new track demand

4.2 Digital Naming of coding (Road Nomenclature)

Once the roads are finalized, each municipal roads are assigned a road code. Coding of road is done based on the guidelines of DTMP and MTMP. Provision of those guidelines have been slightly modified as per the restructuring of the nation into the federal system.

- First digit (1-7) represents the Province Number. Code 5 Stand for Province No. 5 and similarly for other provinces.
- Second and third digits represent particular district (1-77). Argakhachi district is coded by 51.
- Fourth code M stands for Municipality
- Fifth and sixth digits represents the particular municipality in that district. Shitganga Municipality is coded by 02.
- Seventh code indicates letter A-D for particular Class of road.
- Next three digits (000-999) represents the particular transport linkage.

Table No. 24: Various methods of road classification are as follows:

Criteria	Class A	Class B	Class C	Class D
Purpose	Mobility	Mobility and control access	Access and mobility	Access
Function	Through and long distance movement	Connection berween Class A and C road; also provide mobility to local trips	Connects higher order roads and alternative connection	Connect local trips to higher level roads

Criteria	Class A	Class B	Class C	Class D
	High network coverage	Support through traffic movement of	Access to property	Direct access to property
	Segregated NMT facilities and Bus lay bays	Segregated NMT facilities and Bus lay bays	Segregated NMT facilities	Local NMT movement
	Complete access to public transport	High access public transport	Access limited to public transport	
Maintenance Responsibility	Municipality	Municipality	Municipality and local people	Local people
Speed (kmph)	80-100	60-80	50-60	40-50
Capacity(PCU/ Hr.)	4000-4800	2400-3600	1500-2400	Less than 1500
Access Control	Full control	Partial control	No	No
Public transport services	Mass transit facilities	Mass transit, Local public transport	Access to public transport	No public transportation
Right of way	Minimum 14 m	Minimum 10m	Minimum 8m	Minimum 6m

Here for the classification of road, guideline has been followed i.e. Right of way has been considered for road classification.

4.3 Right of Way for Roads of different Classes

The DTMP/MTMP guideline (former DoLIDAR) has expected roads under category of National Highway (NH), Feeder Roads (FR) and District Roads (DRCN) within the municipality area. The RoW of these roads are considered as per respective Guidelines. i.e. the RoW of National Highways, Feeder Roads and District Roads are 50.0 m, 30.0 m and 20.0 m respectively. The guideline has clearly stated about the setback distance for these roads (having $RoW \ge 20.0$) as 6.0 m on either side. All of these standards shall be applied to the Municipality accordingly.

Table No. 25: Urban Road Class and Features

Road Class	Descriptions	Minimum RoW (m)	Minimum Set-back Distance (m)
NH	National Highways		
FR	Feeder Roads	As prescribed	As Prescribed
DRCN	District Roads		
A	Main Collector	20	6.0
В	Other Collector	10	2.0 &1.5
С	Main Tole Road	8	2.0 & 1.5
D	Other Tole Road	6	2.0 & 1.5

Based on DTMP guideline, the building line or setback shall be maintained 6.0 m for roads having RoW equal to or more than 20.0 m and 2.0 m for other roads. However, Nepal Road Standards-2070 has considered the setback distance at curved section only and that should be sufficient to provide the adequate sight distance. It is silent about the building line.

१४.३१ अब निर्माण हुने सडकको कुनै पिन बाटोको न्यूनतम चौडाई ६ मी. हुनु पर्नेछ र नापी तथा मालपोत कार्यालयहरुलाई सोही बिमिजिमले स्नेस्ता, नक्सा तथा अभिलेखहरुमा बाटो कायम गरी यस व्यवस्थाको कार्यन्वयन गर्न लेखि पठाउनु पर्नेछ। । यस्ता बाटोमा भवन निर्माण स्वीकृत दिंदा केन्द्रबाट कम्तिमा ३ मीटर सडकको क्षेत्राधिकार (RoW) र सडक क्षेत्राधिकार सिमाबाट १.५ मीटर सेट ब्याक छाडेर मात्र निर्माण स्वीकृति दिनु पर्नेछ । तर हिमाली/पहाडी जिल्लाका उपत्यका (valley) एवं समथल भू-भाग देखि बाहेकका भिरालो क्षेत्रमा प्राविधिकरुपमा उक्त ६ मिटर चौडाई कायम गर्न सम्भव नभएमा प्राविधिकको प्रतिवेदनको आधारमा सम्बन्धित स्थानीय निकायको परिषद्को निर्णयबाट ४ मिटरमा नघट्ने गरी निर्धारण गर्ने सक्नेछ।

१४.३६ नगरपालिका क्षेत्रमा सडक सम्बन्धी ऐन लगायत प्रचलित कानूनले तोकेमा सोही अनुसार र सो नभएमा नगर यातायात गुरुयोजनाले निर्धारण गरे अनुरुप सेटब्याक कायम हुनेछ। तर नगरपालिकाले यस्तो सेटब्याक सडक किनारबाट १.५ मिटर भन्दा कम हुने गरी निर्धारण गर्ने छैन।

१४.३८ नयाँ बाटोको घुम्ति वा मोडको न्यूनतम अर्धव्यास बाटोको चौडाई भन्दा २०% ले बढी चौडा भएको हुनु पर्नेछ।

(Source: - Fundamental Guidelines for Settlement Development, Urban Planning and Building Construction - 2072 (2015
AD))

However, according to Fundamental Guidelines for Settlement Development, Urban Planning and Building Construction-2072 (2015 AD), the minimum setback distance for urban roads as

1.5 m on either side. Again, the minimum of Row of roads has set as 6.0 m. i.e. 3.0 m on either side from the centreline. A portion of this guideline has presented herewith.

4.4 Urban Road Classification

Roads under jurisdiction of Municipal authority are referred as urban roads. The classification practices of urban roads basically are guided by the functional hierarchy of roads. In the context of Nepal, Department of Roads (DoR) has classified urban roads as Arterial, Subarterial, Collector and Local/Residential Street in its Urban Road Standard 2068 (draft). The ToR provided for the preparation of MTMP has formulated the class of roads into A, B, C and D.

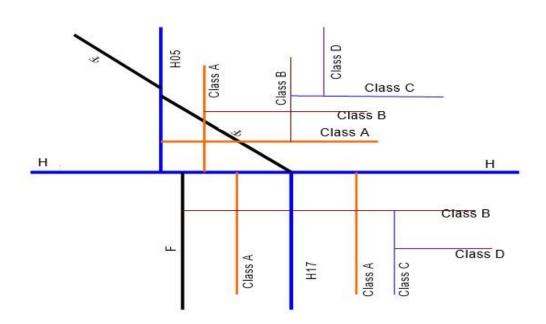


Figure 21: Detail description of Road class

Municipality has a road network hierarchy consisting of National Highways, Feeder Roads, District Roads and Urban Roads of all four classes. The conceptual layout based on the functional hierarchy of the entire road network is shown in Figure 19.

National Highways

Arterial roads in Municipality are taken as the links of National Highways. The technical standards of these roads are taken from the DoR directives for Right of Way (RoW) and other features.

Feeder Roads

Feeder roads are taken as the sub-arterial road in Municipality. The technical standards for this category are taken as mentioned by the DoR road Standard. These roads have relatively higher traffic with through movement of local vehicles.

Class "A" Roads

Class A roads serve as the major collector roads. These roads start either from the Arterial or Sub-Arterial road. These roads are of relatively long distance which connect big market or settlement areas or two or more wards centres within the Municipality.

Class "B" Roads

Class B roads are of secondary type of collector roads. These may serve as the collector to the Class A roads with the relatively lower geometric standard. Intersection and other parameters may be taken as similar as Class A roads.

Class "C" and Class "D" Roads

Class C roads are residential street and they provide access to the private property and small industrial or public place. These roads serve mainly for small/light vehicular movement for low volume intensity. If these roads connect one or more residential blocks then they are taken as Class C. If they collect from or end to the single residential block then they are referred as Class D roads. These serve for internal traffic movement without through traffic movement.

Municipality Road Inventory Map (MRIM) has been attached in Volume II.

Chapter - 5: Perspective Plan of Municipality Transport Network

Municipality Transport Perspective Plan is a visionary plan which aims to improve transport linkages and accessibility to goods and services via different types of trip patterns. Feasibility of air service in the municipality is almost no in use except emergency services through helicopters. If we could find the assurance of fruitful investment return, ropeways are viable in the municipality since hills and hillocks are favorable for ropeways in the future. Water-transportation or navigations are impossible since there are no navigable rivers or waterways in our adverse river profile. Feasibility of railways cannot be denied in this scope.

This means, road transportation is the most primary medium of transportation in the municipality. Therefore, the municipality does not have any alternative except the improvement of road network in a sustainable way. This chapter deals with the prioritization of municipal roads for the necessary interventions to be made in the succeeding years to improve the road network and enhance the accessibility condition of people's mobility. According to Todd Litman, 2003 (Measuring Transportation: Traffic, mobility and accessibility) the following factors determine the patterns of mobility of people from one place to other.

- Density (number of people or jobs per unit of land area) increases the proximity of common destinations, and the number of people who use each mode, increasing demand for walking, cycling and transit.
- 2. Land use mix (locating different types of activities close together, such as shops and schools within or adjacent to residential neighborhoods) reduces the amount of travel required to reach common activities.
- 3. *Non-motorized conditions*. The existence and quality of walking and cycling facilities can have a major effect on accessibility, particularly for non-drivers.
- 4. *Network connectivity* (more roads or paths that connect one geographic area with another) allows more direct travel.

There are many ways to measure transportation system performance, each reflecting particular perspectives concerning who, what, where, how, when and why. Different methods favor different types of transport users and modes, different land use patterns, and different solutions to transport problems. Traffic flow is easiest to measure, but this approach only considers a narrow range of transportation problems and solutions. Mobility is more difficult to measure, since it requires tracking people's travel behavior. It still considers physical movement an end in itself, rather than a means to an end, but expands the range of problems and solutions considered to include alternative modes such as transit, ridesharing, cycling and

walking. Accessibility is the most difficult to measure, because it requires much effort for taking into account of land use, mobility and mobility substitutes, but most accurately reflects the ultimate goal of transportation, and allows widest range of transport problems and solutions to be considered. For example, an accessibility perspective may identify low-cost solutions to transportation problems, such as improving local walkability; encouraging land use mix so common destinations such as stores, schools and parks are located near residential areas; and improving communications services for isolated people and communities (Litman Todd, 2003).

5.1 Procedure for collecting demands from wards

Ward level meeting in every ward or ward cluster is done where information on MTMP are collected. Demand form for each ward are provided which are later on collected after the form are duly filled in given time. As road demand from the settlement level is collected bottom up approach of planning is applied.

5.1.1 Data Analysis and Field Verification of the Roads from Demand Form

Analysis of data regarding the accessibility situation in each settlement, population forecasting for each sector, major road linkages has been done. Similarly, all the roads demanded in demand form are verified in field by the survey team.

5.2 Scoring System for Screening

Development of the scoring criteria and prioritization criteria based on the provided guidelines are prepared and its approval from the municipality and Municipal Road Coordination Committee (MRCC) is accomplished during first workshop meeting.

Transport linkage in an urban area has greater importance for its overall development. The development of road transport linkages to each plot of land or each residential unit is ideal approach for transport planner. Various types of land use pattern require different category of road transport linkage. The development of road linkage requires tremendous amount of public fund at the same time; however, the public authorities doesn't have adequate amount of funding. For better transportation infrastructure development, prioritization approach is only one approach to be adopted for the rational allocation of limited funds for all types covering the whole length. The investment activities are new construction, maintenance and rehabilitation of various categories of road linkage. Conventionally, each construction or maintenance projects are justified on the basis of cost-benefit ratio. This conventional approach disregards the benefit due to non-monetary aspects of the transport projects. Therefore, a multi-criteria approach for the selection of transport linkage is adopted as a justified approach for the project selection.

Transportation services are highly demanded infrastructure for urban as well as rural areas. The objective of the transport linkage is to provide accessibility for the given degree of mobility. Accessibility and mobility requirements are guided by the people's demand for better living standard and economic opportunities. The objectives and importance of individual roads should guide the development of scoring criteria for the project selection for implementation. A term of Reference (ToR) for the preparation of MTMP has formulated the criteria and their respective weights for the evaluation. Consultant has worked out the following weights for the criteria for the prioritization of road links. These scores for the particular criteria are needed to be discussed and approved by MRCC.

Table No. 26: Criteria for Prioritization

S.N.	Criteria	Scoring Unit	Score
1	Link providing service to large settlement areas/population served	Population served/km	20
2	Link providing service to existing, a) Commerce and business b) Market sites (local haat) c) Tourist attraction d) Agro based and cottage industries e) Other obligatory centres decided by Municipality	Discretely based on existence. Each facility is given 20% weightage.	10
3	Link providing service to high potential for agriculture, horticulture and livestock production	Annual transaction in these centres (NPR/Km)	20
4	Link providing service to service centres (Government offices, educational centres, health centres etc.)	Number of population served by these service centres (Person/Km)	15
5	Link providing service to the potential future development sites	Anticipated annual turnover (NPR/Km)	5
6	Potential growth service center	Population served/Km	10
7	Link providing service to the areas recognised by the municipality	Very important-10 Important-5 Less important-1	10
8	Linkages with other transport Linkages	National Highway- 10 Feeder Road- 8 District Road- 6 Neighbouring Municipality/District-4	10
	Total		100

These criteria are described in brief below:

1. Population Served

Population served by the road link is one of the important indicators of prioritization. Higher the population served by the road, higher will be its necessity or importance. Thus, such road needs to be upgraded/maintained/constructed first. Scoring is done relatively. Highest score is assigned for the road link serving highest population and is relatively reduced. Thus, the score for road based on population served lies within zero to full score. The measuring score is termed as Population per km road length.

2. Link providing service to existing market, tourist, commercial and business centres

This criterion decribes road linkage with existing market, tourist attraction, commerce and and agro based cottage industries, market sites (local haat), and other obligatory centres decided by Municipality discretely based on existence. Each facility is given 20% weightage for this criterion.

3. Link providing service to *high potential* for agriculture, horticulture and livestock production Service centers

It is one of the main governing prioritization indicators as it outlines the specific services provided to the locals. The road link may provide access to *high potential* for agriculture, horticulture and livestock production and service centres. A single road link can serve just a single or more function. The proposed road interventions which serves all four facilities has higher importance and given highest score. This facility is measured as annual transaction in these centres (NPR/Km), is given 20% weightage.

4. Link providing service to service centres (Government offices, educational centres, health centres etc.)

Road linkage is directly proportional to how far the road can serve number of population served to have access to government service centers such as educational centers, health centers, government offices etc. Number of population served by these service centres (Person/Km) is measuring indicator for scoring purpose.

5. Link providing service to the potential future development sites (Potential future development sites)

Road is scored based on future development sites of town such as potential town development, land pooling; potential industrial area and or forming ring road to municipality etc. as indicated in the Indicative Development Potential Map of the municipality. The scoring criteria is anticipated annual turnover (NPR/Km).

6. Potential growth service center

Serviceability of the road to the *potential growth* or service centers identified by the municipality and shown in the Indicative Development Potential Map of the municipality, Waste Management Site etc. Population served/Km can be taken as scoring unit.

7. Link providing service to the areas recognised by the municipality (Special Consideration)

Link providing service to the areas recognized by the municipality as areas for special consideration, such as areas inhabited by backward and poor ethnic groups/communities, isolated remote areas, historic sites, religious sites etc. Scoring is done as its importance ranging from 1 to 10.

8. Linkages with other transport linkages

It is also one of the criteria for prioritization. Road linkages reflects the importance of the road in the municipality. Road linking with higher class road will be more important and immediate the intervention required. Road linking with National highways will receive full score. Road linking with feeder road will receive 80% score and road linking with district road will receive 60% score. Similarly, road linking with neighboring district or municipal will receive 40% score and remaining others road will be scored zero.

5.3 Perspective Plan Framework for the RM roads

Perspective plan of the Municipality is the development plan that includes the plan of development of all road's hierarchy within the Municipality. MTMP is short term Municipality Transportation Master Plan generally of 5 years which includes the prioritized road demands whereas perspective plan is a long-term plan which includes the overall road demand of the Municipality.

Perspective plan identifies all the transport infrastructure demands of the Municipality. The proposed road networks and road infrastructure will help to enhance the overall transportation network of the Municipality which will eventually result in increased accessibility and mobility. The visionary development plan i.e. the municipal development plan will help to develop other sectors of the Municipality along with the development of transportation sector. The well facilitated and well-connected road will facilitate safe, comfortable and efficient trips to the road user. Moreover, increase in transportation facility will help to boost the economic development of that particular Municipality which will eventually contribute to overall economic development of the nation.

The first five-year financial plan is prepared based on the assumption that each year budget will increase by 10% from previous year budget. All the roads included in perspective plan along with their score, rank and class are given below:

The framework of the perspective plan of the municipal roads has been presented below which has been categorized according to the scoring system mentioned before.

Table No. 27: List of road for Municipality Perspective Plan

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02A001	A001_Amarai Jukena Deurali Airawati Road (Patanjali Marga)	4,5,6,7	18.17	66	1	1
551M02A002	A002_Chakla-Khumchikot-Harre-Pakhuri- Dhankhola	9,10,12	33.41	60	2	2
551M02A003	A003_Gabdawa - Khayar bhatti - Phorsal - Suparineta -kathekhola -Harre (Taratej- Sahidsmriti marga)	10, 11	13.29	55	5	5
551M02A004	A004_Pipra - Pawara - Simlpani - Bhedemare - Harre -Shilling khola-Satmara(Krishna sen ichhuk marga)	14,13,12, 10,9,8, 4	64.71	58	3	3
551M02A005	A005_Sitapur-Rajubas Suvanakhal Gharthiswara- Mandre hudai Neta Pokhara (Yagyamin lila Marga)	1,2	19.28	58	4	4
551M02A006	A006_Dhanchaur-Deurali-Lamatal-Lahpe- Bhalubang	6,7	37.64	55	6	6
551M02B001	B001_Dhodare - Purkishilli Ghumaure - Thado khola - Lamidamar	8,9	11.92	45	16	9
551M02B002	B002_Lamataal - sitalpati-chidichaur-nangal	7,9,10	15.69	51	12	5
551M02B003	B003_Nangal - Bokre tole- Chhhabineta tole - Dobata	10,11	15.13	39	23	15
551M02B004	B004_Ranikuwa - Mauwabari - Khairabhatti - Banakasa Basa motor road	10,11	15.40	46	14	7
551M02B005	B005_Harre - Pokhara tole- Kalgaira-dhaireni- ranikuda-Pathrakot bazaar	10,11	18.83	47	13	6
551M02B006	B006_Harre - Kapurkot- Galdha	5,10	14.46	42	19	12
551M02B007	B007_Damar Besi-Phursa-Ratamata-dihi	7	5.92	39	24	16
551M02B008	B008_Deurali - Thula Dhongre - Bangasagar - Chaida Ghat - Pyuthan motor road	14	3.42	41	20	13
551M02B009	B009_Barabot - Kamle khola - Pokhe danda Swamika Sita Khola motor road	4	2.82	44	17	10
551M02B010	B010_Simalpani -Gandhi - Mudribas - Pawara	12	9.14	41	21	14
551M02B011	B011_Gaura secondary school - Supadeuralli - Aryal Tole - Naya basti - Pokhari - Pahera - Rojiya Pokhari motor road	12	1.24	51	11	4

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02B012	B012_Dhaseni - Ratamata - Maidan - Dhole Takura - Darbare motor road	12	10.85	45	15	8
551M02B013	B013_sitapur- Kodanda- Badganga- besi-salyan danda	2,13	9.27	53	9	3
551M02B014	B014_Sitapur - Dodkatta- Dhara-Nipane- Mulabari- Paiyapata- Paire- Dhatibang	2	7.87	53	8	2
551M02B015	B015_Simalpani -Gandhi - Mudribas - Pawara	14	14.39	55	7	1
551M02B016	B016_Karechuli balaju mandir-karechuli danda- Keurepani-Mahendra Highway	14	11.15	42	18	11
551M02C001	C001_Rangakate - Nayabasti - Kharghat motor road	9	4.24	22	66	32
551M02C002	C002_Sitalpati -Palase-Apchaur	8,9	10.13	23	64	30
551M02C003	C003_Siyala- Naumure	7	6.11	35	25	3
551M02C004	C004_Deurali-Bandre-Tarule	7	2.92	28	39	13
551M02C005	C005_Pyuthani danda-Kalleri-Simle-Chisapani- Bebade	7,6	7.32	26	46	19
551M02C006	C006_Shivadaha - Sana Dhongre - Majhi Damar	6	2.16	28	40	14
551M02C007	C007_Malika - Dasekharka - Dhanchaur motor road	5,4	7.79	22	65	31
551M02C008	C008_Chhahare kaseri - Sidhhara	9,10	8.73	26	47	20
551M02C009	C009_Siddhara - Nepane-Dihi motor road	10	4.87	24	61	29
551M02C010	C010_Aarichaur -Hattidunga-Chakla - Hattidunga-Chakla	10,12	7.20	28	36	11
551M02C011	C011_DeuralithanSindure dhunga - Phorsalkhet-Apkhola-Majhkharka	11	23.93	26	45	18
551M02C012	C012_Simaldip- Sinduredhunga	11	4.88	28	34	9
551M02C013	C013_Ranagai - Mauwabari - Lungri - Aapkhola - Dussi motor road	11	6.27	24	60	28
551M02C014	C014_Deurali - Nipane - Damar - Dhunge - Sera motor road	12	4.64	28	35	10
551M02C015	C015_Barabot - Ratamata -Khal - Kolksare - Galda motor road	4,5	5.86	51	10	1
551M02C016	C016_Ratamata-Galdha - Bhabin-Seudeni-Chakla	4,5	6.92	27	43	17
551M02C017	C017_Baiska tree - Bhotu dhunge bridge - Jhapang River - Kalimati krishi road	5	3.97	32	27	4
551M02C018	C018_Bhumikasthan - Pokhari -Jhakri Jhakrini - Sengelen(Bhumika nagarpalika sthan ward no. 10)	3,5	6.60	28	38	12
551M02C019	C019_Barbot - Khandua - Padme - Pokhar danda motor road	3	8.69	25	54	24
551M02C020	C020_Kalimati-padme-sitapur-Kailase - Padme - Khibdi motor road	3,5	4.95	25	50	21

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02C021	C021_Sitapur - sitkhola sabdaha - Kailaro	2,3	2.74	24	57	27
551M02C022	C022_Bhuwanpata pul - Suppa kasyap gufa - Suppa deurali - Falaa chaur - Kharyan - Chamar - Todke	2	1.87	30	32	8
551M02C023	C023_Jaluke khola- Sabdu-Karmadip- Dhartiswara Sadak	1,2	5.35	30	31	7
551M02C024	C024_Bahunkarka - Gangafaat Krishi road	4,10	8.00	27	42	16
551M02C025	C025_Subarnakhal-Badar khola- Kalleri -Bokhar	1,13	11.36	25	51	22
551M02C026	C026_Majhgaun-Milan chowk-Chandithanmandir danda tole	1	0.80	32	28	5
551M02C027	C028_Subarnakhal-Majhgaun-Milan chowk- Mandre-Chaupari-Milan Chowk	1	6.88	40	22	2
551M02C028	C028_Maineri-Mandre-Bagra Sadak	1	2.44	25	55	25
551M02C029	C029_Mandre Maidan Thok- Jadi Kharka- Malarani- Pipalneta- Bahundi- Bajra mandir road	1	5.54	31	29	6
551M02C030	C030_Bikram- Khormor - Toribari - Salajandi highway jodne motor road	14	1.10	27	41	15
551M02C031	C031_Karechuli-Dhungri khola gaun	14	8.60	25	52	23
551M02C032	C032_Bharlabas - Musichan Dhab motor road	13	4.56	25	56	26
551M02D001	D001_Satmara krishi road	8	0.76	17	83	29
551M02D002	D002_Milanchowk bata purba jane bato	8	0.91	5	154	100
551M02D003	D003_Tinkhande Jholunge pul - Charinge motor road	8	2.67	10	115	61
551M02D004	D004_Gothki - Mithiaap motor road	9	0.90	10	115	61
551M02D005	D005_Dhankhola - Bhakkuchowk - Jabune motor road	11	1.35	5	154	100
551M02D006	D006_Chatteban to Bandre - Raktari Badhidamar ringroad	8	0.92	3	168	114
551M02D007	D007_Baghdwar motor road	7	0.48	8	135	81
551M02D008	D008_LahaveniLamidamar - Baraha daha motor road	9	5.29	18	76	22
551M02D009	D009_Kartike - Lauri motor road	9	3.54	3	168	114
551M02D010	D010_Kanachaur-Chidi chaur	8,9	14.80	3	168	114
551M02D011	D011_Lakurikot sadak	9	3.87	0	194	140
551M02D012	D012_Asare - Bisvure - Baravure motor road	9	3.83	3	168	114
551M02D013	D013_Sittalpati - Dhokhola - Barseni motor road	9	2.64	3	168	114
551M02D014	D014_Ratamata-Naumure-Airawat	7	4.96	10	115	61
551M02D015	D015_Swamineta - Chidi - Sankash motor road	7	1.76	7	151	97
551M02D016	D016_Lamatol Dhikamathi ko motor bato	7	0.67	22	67	13
551M02D017	D017_Lamatal Gaun Ring Road	7	1.51	22	67	13

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02D018	D018_Jaluke - Batako - Chaupari motor road	7	7.02	31	30	2
551M02D019	D019_Swamineta - Kalleri motor road	7	2.63	0	194	140
551M02D020	D020_Dhunge danda - Damar - Takura motor bato	7	3.11	10	115	61
551M02D021	D021_Khaniyapani road	7	2.23	8	135	81
551M02D022	D022_Kalleri-Amelichaur-Pakhachaur-sadak	7	1.89	3	168	114
551M02D023	D023_Talla bahule - Upalla bahule - Sera - Damar besi - Khaireni - Chahare motro road	7	1.21	3	168	114
551M02D024	D024_Oripari paani - kot - Swamineta motor road	7	2.19	0	194	140
551M02D025	D025_Kalleri - Swamineta - Dandabari - Aamilechaur - Pakhachaur motor road	7	1.84	12	100	46
551M02D026	D026_Nuwakot - Pokhari danda - Jabunne Pokhari motor bato	7	5.91	3	168	114
551M02D027	D027_Jaluke - Dangal danda - Vada gaun - View tower motor road	7	2.39	3	168	114
551M02D028	D028_Jwakot-Pokhardanda sadak-Saligram ko Chaupari - Siyala motor bato	7	1.56	3	168	114
551M02D029	D029_Shivadaha - Koibang motor road	7	0.79	3	168	114
551M02D030	D030_Jhate - Aapkhola motor road	11	2.01	0	194	140
551M02D031	D031_Shivadatta - Dhungepani motor road	6	0.48	0	194	140
551M02D032	D032_Tallo Sidhara - Sakeni - Kanachaur motor road	9	4.46	0	194	140
551M02D033	D033_Charikattare - Budapadhera motor road	9	0.36	0	194	140
551M02D034	D034_Tallo Chahare motor road	9	1.03	0	194	140
551M02D035	D035_Gabade - Chakhola - Bhalukhola - Kathekhola	10	3.87	0	194	140
551M02D036	D036_Phedi - Tadhaka Chaap - Khalaka Pokhara motor road	10	3.01	0	194	140
551M02D037	D037_Harre hulak office sadak	10	0.53	0	194	140
551M02D038	D038_Harre ringroad	10	0.45	0	194	140
551M02D039	D039_Kayureni - Avari chaur	12	1.29	0	194	140
551M02D040	D040_Phedi -Thapa ko pata	10	2.94	11	113	59
551M02D041	D041_Chapaka pata - Rakse Bahune moto road	10	5.60	23	62	11
551M02D042	D042_Barre -Padhera chaur motor road	10	1.30	4	163	109
551M02D043	D043_Naha - Palla - Unnaye batule motor	10	7.23	12	100	46
551M02D044	D044_Dhunga Falne - Gauri Kunda motor road	4	0.23	5	154	100
551M02D045	D045_Khumchikot - Shivalaya motor road	12	3.99	0	194	140
551M02D046	D046_Nepane - Makaipate - Sani Kharka Krishi Road	12	1.88	0	194	140
551M02D047	D047_Maidan - Jorule - Gaira krishi road	12	0.79	12	100	46

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02D048	D048_Sera Kalika Mandir - Jhuse danda motor road	11	1.07	0	194	140
551M02D049	D049_Deurali danda - Sera Khola - Duvar - Chakla motor road	11	1.13	12	100	46
551M02D050	D050_Jhate - Aapkhola motor road	11	1.37	0	194	140
551M02D051	D051_Tarai gaun-jalugai sadak	12	1.94	0	194	140
551M02D052	D052_Pirapani sadak	12	0.89	12	100	46
551M02D053	D053_Kalika madir- Bhangala tole	12	1.30	5	154	100
551M02D054	D054_Dohote gaun sadak	12	1.19	9	130	76
551M02D055	D055_Kukurgade - Daha - Aapmoti krishi road	12	1.40	0	194	140
551M02D056	D056_Kudule-Thanchauki sadak	12	1.78	8	135	81
551M02D057	D057_Rajiya danda sadak	12	0.53	13	98	44
551M02D058	D058_Rajiya gaun sadak	12	0.76	13	98	44
551M02D059	D059_Jasrame-Rajiya	4,12	3.87	5	154	100
551M02D060	D060_Dhaseni Deurali motor road	12	1.63	19	72	18
551M02D061	D061_Rata mata - Thamkot - Sitalpati- Bajagara (krishi road)	4	4.05	3	168	114
551M02D062	D062_Shitalpati - Dhekka fore - Saune - Bhabini krishi road	4	1.15	0	194	140
551M02D063	D063_Thamkot gaun sadak	4	0.37	3	168	114
551M02D064	D064_Sana daha - Gaira kharka - Paani pata - Nepali tole - Okhaldhunga solti marg	4	2.36	22	67	13
551M02D065	D065_Aamrai - Gurjithum - Phapareni motor road	4	0.79	9	130	76
551M02D066	D066_Sahutol - Gangakhola motor road (krishi road)	4	1.07	29	33	3
551M02D067	D067_Amarai Tallo Ghumti - Jhakareni - Upallo ganga Fewi krishi firm motor road	4	0.59	8	135	81
551M02D068	D068_Thula Padhera - Maina danda - Dharam paani - Gangakhola	4	1.17	19	72	18
551M02D069	D069_Tatiya bazar - Tundikhel - Barbot	4	0.68	27	43	5
551M02D070	D070_Bosse dhunga - Telephone tower - Khanepani tanki motor road	4	0.58	12	100	46
551M02D071	D071_Amarai - Tallo bazar - Chagbaas - Gorathum motor road	4	0.29	17	83	29
551M02D072	D072_Badachour-Kailase-Padme-Jukena hudai Pyuthan	3,4	1.44	0	194	140
551M02D073	D073_Kalimati-Phanel ko rukh sadak	3	0.33	0	194	140
551M02D074	D074_Paari ma.bi - Khime Danda motor road	5	1.66	8	135	81
551M02D075	D075_Hari ma b-Dotekharka-Tharpaila	5	1.15	8	135	81
551M02D076	D076_Khanepani-Dhuncahur	5	0.49	8	135	81

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02D077	D077_Majhgaun dhara jane bato	5	0.54	3	168	114
551M02D078	D078_Dhanchaur jane bato	5	0.90	8	135	81
551M02D079	D079_Phalate Cheda - Bhala Kharka motor road	5	1.21	0	194	140
551M02D080	D080_Kalimati - Chaap dhanda (New track)	5	1.18	0	194	140
551M02D081	D081_Ratamata-Kalimati-Padme- Sitapur	5	0.47	0	194	140
551M02D082	D082_Ghaiya bari- Dosekharka agricultural road	5	1.24	0	194	140
551M02D083	D083_Malika- Dosekharka	5	1.28	0	194	140
551M02D084	D084_Bhumikasthan - Tusare motor road	5	1.63	0	194	140
551M02D085	D085_Lamo chaupari-Deurali-	6	0.75	0	194	140
551M02D086	D086_Gyan deep -Batase Road	5	0.66	0	194	140
551M02D087	D087_Mulabari - Sana Kalleri motor Road	5	1.24	3	168	114
551M02D088	D088_Bagar - Damaar - Lamakhet krishi road	5	1.96	3	168	114
551M02D089	D089_Supa-Patal Tole-Nipane	2	2.38	12	100	46
551M02D090	D090_Aatari - Gera Kharka - Khamari motor road	5	0.52	0	194	140
551M02D091	D091_Pratichyalaye - Kalleri - Gobang - Khamari - Badare motor road	6	1.43	3	168	114
551M02D092	D092_Anpbot- Kalam kot - Khamari - Gaira kharka	5,6	0.87	0	194	140
551M02D093	D093_Praktiksyala-Kalleri-Kamalkot	6	1.98	14	94	40
551M02D094	D094_Praktiksyala-Kalleri raod	5	0.40	0	194	140
551M02D095	D095_Bhanbhane - Galdung - Khamari motor road	5,6	4.29	15	89	35
551M02D096	D096_Anpbot- Kalam kot - Khamari - Gaira kharka	6	4.79	18	80	26
551M02D097	D097_Anpbote - Bokse chaur motor road	6	5.49	10	115	61
551M02D098	D098_Phursamara - Deurali - Kalamkot motor road	6	1.74	8	135	81
551M02D099	D099_khamari-Boksechaur- Damar besi	6	0.66	0	194	140
551M02D100	D100_Kalika Malika mandir sadak	5	0.56	0	194	140
551M02D101	D101_Kohol-Bakhre-Kapabutta-Kartike-Damar	2,3	5.66	10	115	61
551M02D102	D102_Pokhe danda - Bhusleghat - Pakhere - Sengalen motor road	3	1.19	3	168	114
551M02D103	D103_Takura Sadak	3	0.46	0	194	140
551M02D104	D104_Ghumti Khola Sadak	2	0.80	0	194	140
551M02D105	D105_Phalachour-Khariyana Khola Sadak	2	0.47	3	168	114
551M02D106	D106_Khatri Tole Motor Bato-Dhorbanda-Karnel pata-Jholunge pool	2	2.09	15	89	35
551M02D107	D107_Phalachour-Khariyana Khola Sadak	2	1.33	5	154	100

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02D108	D108_Bhuvan Pata-Supa-Phalachour Sadak	2	0.72	17	83	29
551M02D109	D109_Dhara - Kaule - Patale tole - Naya gaun motor road	2	2.14	22	67	13
551M02D110	D110_Upallo Panch Pokhare Sadak	3	0.58	0	194	140
551M02D111	D111_Badachaur- Thulakharka- Chalauja- Subarnakhal (new track)	1,2	3.63	24	58	9
551M02D112	D112_BK Tole-Adhikari Tol Samma Sadak	2	0.28	8	135	81
551M02D113	D113_Dharmashala- Kalikasthan- Sangam Aa.bi motor road	2	1.31	12	100	46
551M02D114	D114_Padheri Motor Bato	2	1.19	3	168	114
551M02D115	D115_Ale Marga	3	0.30	9	130	76
551M02D116	D116_kholte pani sadak	3	0.24	4	163	109
551M02D117	D117_Kharseka Baunne motor road	3	1.39	4	163	109
551M02D118	D118_Damaru Daha-Kailase Proposed Road	3	2.05	28	37	4
551M02D119	D119_Purano gaun ringroad	4	1.36	10	115	61
551M02D120	D120_Dhara - Ravan Shankha(maika than)	2	0.91	8	135	81
551M02D121	D121_Bharlabas - Khutkhute - Rikot motor road	13,12	8.60	12	100	46
551M02D122	D122_Deurali - Kritipur tower - Bolthum chaur - Rikot motor road	13	2.99	26	48	6
551M02D123	D123_Mushi chan - Majha ko faat - Dhadeni - Pare - Deurali motor road	13	6.98	25	53	8
551M02D124	D124_Kirtipur sadak	13	0.98	3	168	114
551M02D125	D125_Netakharka - Badganga motor road	13	1.83	10	115	61
551M02D126	D126_Kamal chaur -Maithan mandir sadak	13	0.66	18	76	22
551M02D127	D127_Cheda - Bokhar - Saani- Lekh - Badare motor road	13	4.86	26	48	6
551M02D128	D128_Balukurantha mandir- Madhuban dham - Mahendra highway jodne motor road	14	0.64	12	100	46
551M02D129	D129_Sukhaur - Nepali tole - Kale gaida jodne motor road	14	1.54	12	100	46
551M02D130	D130_Wada Karyalaya-Bokram tole	14	0.35	11	113	59
551M02D131	D131_Karechuli ringroad sadak	14	1.30	12	100	46
551M02D132	D132_Raina devi mandir sadak	14	1.13	3	168	114
551M02D133	D133_Karechuli -Pasrbati adharbhut schoo sadak	14	0.29	0	194	140
551M02D134	D134_Damarudaha Sadak	3	0.40	33	26	1
551M02D135	D135_Deurali - Chaapdanda motor road	10	2.27	4	163	109
551M02D136	D136_Dharapani- Kalika pra.bi- Bhartapur krishi road	1	3.51	19	72	18
551M02D137	D137_Baghkhor - Lisikuna motor road	10	3.16	17	83	29

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02D138	D138_Dhwasepokhara- Kalika pra.bi- Ghatsukaura krishi road	1	2.03	8	135	81
551M02D139	D139_Rangakate ringroad	9	0.69	0	194	140
551M02D140	D140_Upalli Khanda- Upalla Gaun- Kakri chaur krishi road	1	2.21	14	94	40
551M02D141	D141_Mandre healthpost road	1	0.25	4	163	109
551M02D142	D142_Labdi- Bakheli Chautari krishi road	1	2.23	7	151	97
551M02D143	D143_Shabdu-Paire	1	2.98	8	135	81
551M02D144	D144_Shabdu-Dhartisara	1	1.50	18	80	26
551M02D145	Chaupara-Kantheri	1	1.50	15	89	35
551M02D146	Chaupari- Bhedabari- Pakrighat	1	2.85	15	89	35
551M02D147	D147 _Karechulipakha -Bhatani tole sadak	14	0.73	0	194	140
551M02D148	D148_Jaluke - Saligram ko chaupari - Siyala motor bato	7	2.47	10	115	61
551M02D149	D149_Rajmarga bata Ghat jane bato	3	0.46	5	154	100
551M02D150	D150_Oli danda-Jhirrathum Majh Gau-Kodanda Sadak	2,3	2.59	7	151	97
551M02D151	D151_Deurali danda-Dihi	6,7	2.96	3	168	114
551M02D152	D152_Naya basti ringroad	9	1.07	3	168	114
551M02D153	D153_Simal paani - Janajyoti Aa.bi - Badare - Dandagaun	13	0.21	12	100	46
551M02D154	D154_Kareyuli - Batheni - Bikram - Kapilbastu Mahendra highway jodne motor road	14	0.25	0	194	140
551M02D155	D155_Khaniya paani - Kumbhi gaira - Rata danda - Jaluke - Vadagaun - Naumure - Airabati	7	1.81	3	168	114
551M02D156	D156_Kanchiroad - Chaupari - Kala siddha mandir motor road	8	1.63	10	115	61
551M02D157	D157_Dohore - Kartike - Bahule motor road	10,11	3.54	8	135	81
551M02D158	D158_Rajiya Pokhar bata Rajmarga jodne sadak	12	0.74	15	89	35
551M02D159	D159_GalDha - Dhanchaur - Thapakharka - Khane paani mul	5	2.31	8	135	81
551M02D160	D160_GalDha - Dhanchaur - Thapakharka - Khane paani mul	5	1.97	18	80	26
551M02D161	D161_Bhumikasthan - Dhanu kharka - Bhulke motor road	5	3.68	8	135	81
551M02D162	D162_Kholtepani - Gangakhola motor road (krishi road)	3	4.68	9	130	76
551M02D163	D163_Nwara Pokhari motor road	3,5	3.36	5	154	100
551M02D164	D164_Okhadhunga - Sital paati - Bajagara krishi road	4	1.67	0	194	140
551M02D165	D165_Kopchibas - Gorji - lama khet - Bajagara - Bhabin (krishi road)	4	3.64	5	154	100

Road Code	Road Name	Ward Pass	Length (Km)	Score	Overall Rank	Rank in class
551M02D166	D166_Aamarai (bhattikhola) - Sahu danda - Ratamata motor road	4	0.98	17	83	29
551M02D167	D167_Rata Danda Sadak	3,4	0.57	9	130	76
551M02D168	D168_Army gate, Sahutol motor road	3	0.94	24	58	9
551M02D169	D169_Hitan tole - Netakharka - Salyan dhara - Betane - Khaskharka motor road	13	2.47	10	115	61
551M02D170	D170_Jhirrathum Majh Gau-Kodanda Sadak	2	1.15	10	115	61
551M02D171	D171_Mandre Pokhe danda- Pipalneta-Bahundi motor road	1	3.01	14	94	40
551M02D172	D172_Badachour-Jhirra-Banganga Simalpani Kapilvastu Sadak	2	6.71	22	67	13
551M02D173	D173_Sitalpur bazaar- Kodanda-Subarnakhal	1,2	5.11	17	83	29
551M02D174	D174_Galgade-Phalachour-Siddha Baba Motor Sadak	2	2.94	3	168	114
551M02D175	D175_Ghumti-Damar- Sengelen motor road	2	2.45	10	115	61
551M02D176	D176_Ghumti-Ghorbanda -Sikhra sadak	2	4.42	10	115	61
551M02D177	D177_Badachaur-Sikhra-Dhanchaur	2,3	3.69	19	72	18
551M02D178	D178_Mulabari School to Todki hudai Saune thum Sadak	2	1.07	10	115	61
551M02D179	D179_Mushichan - Dhad - Tarike - Koidanda - Patale paani motor road	13	4.12	23	62	11
551M02D180	D180_kamal chaur -simal pani-bauri tole sadak	13	1.96	18	76	22
551M02D181	D181_Cheda - Health post - Simal Paani - Darji tole - Lekhali tole - Sukali khola - Badare motor road	13	0.55	18	76	22
551M02D182	D182_Kaule - Bakhre - Odar pata - Powera - Bikram - Kapilbastu Mahendra Highway jodne motor road	14	5.73	14	94	40

5.4 Intervention Categories

After the finalization of perspective plan through the categorization of rural municipal road, required interventions of municipal road, required interventions should be decided according to the priority and necessity of the roads. Only 0.24 Km is black topped and 17.8 Km gravelled in this Municipality, therefore, almost all roads need improvement or upgrading in the first phase parallel with conservation intervention. A considerable length of new linkage to remote areas require new construction as well. For the reference of the Municipality the categories of the interventions are defined below

5.4.1 Conservation

Conservation refers to the actions required to repair a road and keep it in good and passable condition. Conservation activities include:

- 1. Emergency maintenance Basic repairs aimed at removing landslides and repairing damage to the road that inhibit the proper use of the road and make it impassable. This mainly takes place during and after the rainy season. A provisional lump sum is reserved for the entire district road core network based on the network length. Allocation to specific road sections is based on the actual need for clearing landslides or repairing washouts and cuts in the road.
- 2. Routine maintenance General maintenance of the road aimed at preventing damage by ensuring the proper working of the different road elements (retaining walls, drainage system, carriageway, etc.) and cutting vegetation. This is carried out each year on a more or less continuous basis. Routine maintenance is required for the entire district road core network. The specific requirements for routine maintenance are determined on an annual basis through the road condition survey and defined in the Annual Road Maintenance Plan (ARMP).
- 3. Recurrent maintenance Repairs of minor damage to the road surface and road structures to bring them back to good condition. This is generally carried out once or twice a year. Recurrent maintenance is required for the entire district road core network, whereby distinction is made according to the surface type. The specific requirements for recurrent maintenance are determined on an annual basis through the road condition survey and defined in the ARMP.
- 4. Periodic maintenance Larger repairs to the road largely aimed at renewing the road surface through re-gravelling, resealing or overlays. It is generally carried out with several years interval. Although periodic maintenance is only required for specific sections of the district road core network, a lump sum allocation is made for the entire district road core network based on average annual requirements, distinguishing between different surface types. The specific periodic maintenance requirements are determined on an annual basis through the annual road condition survey and defined in the ARMP.

The length of roads to be included under each conservation type for the first year is indicated below. This is basically the entire district road core network as far as it does not require rehabilitation.

5.4.2 Improvement

Improvement refers to actions required to improve a road to bring it to a maintainable allweather standard. It includes the following actions, which are described briefly as following:

- 1. **Rehabilitation** Significant repairs required to bring a very poor road back to a maintainable standard. This does not include any changes to the original surface type.
- **2. Gravelling -** Placement of a gravel layer to make it all-weather and ensure that the road remains passable during the rainy season.
- 3. Cross drainage structures- Placement of suitable cross-drainage structures with the aim of making the road all-weather and ensuring that the road remains passable even during the rainy season
- **4. Protective structures -** Placement of retaining walls and lined side drains to avoid excessive damage to the road during the rainy season and bring it to a maintainable standard.
- **5. Blacktopping -** Placement of a blacktop layer in roads with traffic volumes exceeding 50 passenger car units (PCU) to reduce damage to the road surface.
- **6. Widening** Increase of the road width in roads with traffic volumes exceeding 500 passenger car units (PCU) to ensure the proper flow of traffic.

5.4.3 New Construction

New construction refers to construction of new road linkage according to the necessity of the Municipality especially in those places where roads have not linked. This includes opening of new track and establishment connectivity to the new area.

5.4.4 Sharing of Fund

The financial plan and the finalization of the MTMP shall be done based on terms of reference as given by ministry (then Ministry of Federal Affairs and Local Development ,MoFALD now Ministry of Federal Affairs and General Administration, MoFAGA). During preparation of MTMP, the investment from total available resources under road sector for different classes of the road can be distributed as Apportion 30% for maintenance at first and

remaining 70% shall be distributed. The MoFALD guidelines has set different view for budget distribution in different class of road:

- Class A road, $\geq 50\%$
- Class B road, $\leq 30\%$
- Class C road, $\leq 20\%$
- Class D road, < 10%

Although, MoFALD has set guidelines for the distribution of budget, it was adjusted by making discussion with local authorities based on local condition and requirement of Municipality. Sitganga Municipality has decided to invest the 70% in construction and 30% in Maintenance of road for next 5 fiscal year. The construction sector Budget shall be invested with 50% in A-Class, 30% in B-class, 20% in C-class.

The estimate of budget required for the five years is prepared based on the assumption that the Class A road is to be made full of side drain with required widening, Class B road is to be made widening with side drain and Class C and few of Class D road is to be made single lane and lane considered are assumed to be gravelled for considerable length. Due to limitation of budget, the roads are assumed to have simple cross drainage structures within this period whereas cross drainage structures such as Bridges are not included in this budget and expected to be completed within this time period by external sources. For approximate costing, the construction rate of road appurtenances is assumed to be equal to that of gravelling cost and for short term the minimum width of 3m is assumed if existing road width doesn't exist. Similarly, longitudinal drainage on both side of roadway is not considered in this plan.

MTMP mainly deals with Class A, Class B, Class C, and Class D roads but private owned Roads are not given any consideration. Interventions on those roads need to be incorporated in annual budget plan. As compared to the present budget of Municipality, the estimated budget is more and the deficit amount should be managed from outer sources.

Intervention that needs can't be completed in predetermined year; hence should be the next priority in coming year. If a certain road which was targeted to complete in first year could not be finished in first year, need to be given first priority in next year expenditure plan. If there is deficit in annual expenditure, municipality needs to incorporate that particular heading in next year at any cost. They can look for grant, assistance from province or even from federal level or they can incorporate them by shifting budget from less importance item/heading.

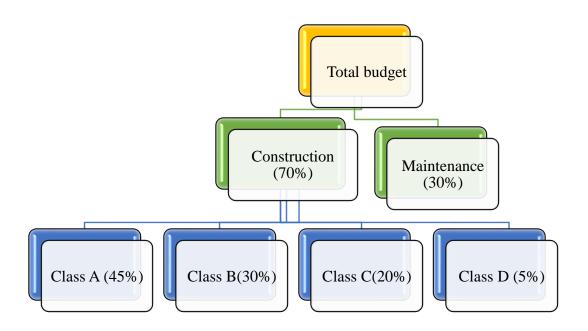


Figure 22: Budget Allocation as Per Interest of Local Authorities over Planning of Municipal Road (Source: MoFALD MTMP preparation Guidelines)

Chapter - 6: First Five Years Municipal Transport Master Plan

This chapter deals with the interventions to be made in road and transport sectors for first five years according to the road priority finalized in the perspective plan

6.1 Prioritized Municipality Road for MTMP

Municipality Transport master Plan (MTMP) of this Municipality includes following prioritized roads for upcoming five years. 6 roads of class "A", 16 roads under class "B", 15 class "C" roads and 5 class D will be implemented as conservation, improvement and new construction in this period.

Table No. 28: List of prioritized Roads in MTMP

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02A001	A001_Amarai Jukena Deurali Airawati Road (Patanjali Marga)	4,5,6,7	18.17	66	1
551M02A002	A002_Chakla-Khumchikot-Harre-Pakhuri- Dhankhola	9,10,12	33.41	60	2
551M02A004	A004_Pipra - Pawara - Simlpani - Bhedemare - Harre - Shilling khola-Satmara(Krishna sen ichhuk marga)	14,13,12, 10,9,8, 4	64.71	58	3
551M02A005	A005_Sitapur-Rajubas Suvanakhal Gharthiswara- Mandre hudai Neta Pokhara (Yagyamin lila Marga)	1,2	19.28	58	4
551M02A003	A003_Gabdawa - Khayar bhatti - Phorsal - Suparineta -kathekhola -Harre (Taratej- Sahidsmriti marga)	10, 11	13.29	55	5
551M02A006	A006_Dhanchaur-Deurali-Lamatal-Lahpe-Bhalubang	6,7	37.64	55	6
551M02B015	B015_Simalpani -Gandhi - Mudribas - Pawara	14	14.39	55	7
551M02B014	B014_Sitapur - Dodkatta- Dhara-Nipane-Mulabari- Paiyapata- Paire- Dhatibang	2	7.87	53	8
551M02B013	B013_sitapur- Kodanda- Badganga- besi-salyan danda	2,13	9.27	53	9
551M02B011	B011_Gaura secondary school - Supadeuralli - Aryal Tole - Naya basti - Pokhari - Pahera - Rojiya Pokhari motor road	12	1.24	51	11
551M02B002	B002_Lamataal - sitalpati-chidichaur-nangal	7,9,10	15.69	51	12
551M02B005	B005_Harre - Pokhara tole- Kalgaira-dhaireni- ranikuda-Pathrakot bazaar	10,11	18.83	47	13
551M02B004	B004_Ranikuwa - Mauwabari - Khairabhatti - Banakasa Basa motor road	10,11	15.4	46	14
551M02B012	B012_Dhaseni - Ratamata - Maidan - Dhole Takura - Darbare motor road	12	10.85	45	15
551M02B001	B001_Dhodare - Purkishilli Ghumaure - Thado khola - Lamidamar	8,9	11.92	45	16
551M02B009	B009_Barabot - Kamle khola - Pokhe danda Swamika Sita Khola motor road	4	2.82	44	17
551M02B016	B016_Karechuli Balaju Mandir-Karechuli danda- Keurepani-Mahendra Highway	14	11.15	42	18
551M02B006	B006_Harre - Kapurkot- Galdha	5,10	14.46	42	19
551M02B008	B008_Deurali - Thula Dhongre - Bangasagar - Chaida Ghat - Pyuthan motor road	14	3.42	41	20
551M02B010	B010_Simalpani -Gandhi - Mudribas - Pawara	12	9.14	41	21

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02B003	B003_Nangal - Bokre tole- Chhhabineta tole - Dobata	10,11	15.13	39	23
551M02B007	B007_Damar Besi-Phursa-Ratamata-dihi	7	5.92	39	24
551M02C015	C015_Barabot - Ratamata -Khal - Kolksare -Galda motor road	4,5	5.86	51	10
551M02C027	C028_Subarnakhal-Majhgaun-Milan chowk-Mandre- Chaupari-Milan Chowk	1	6.88	40	22
551M02C003	C003_Siyala- Naumure	7	6.11	35	25
551M02C017	C017_Baiska tree - Bhotu dhunge bridge - Jhapang River - Kalimati krishi road	5	3.97	32	27
551M02C026	C026_Majhgaun-Milan chowk-Chandithanmandir danda tole	1	0.8	32	28
551M02C029	C029_Mandre Maidan Thok- Jadi Kharka- Malarani- Pipalneta- Bahundi- Bajra mandir road	1	5.54	31	29
551M02C023	C023_Jaluke khola- Sabdu-Karmadip-Dhartiswara Sadak	1,2	5.35	30	31
551M02C022	C022_Bhuwanpata pul - Suppa kasyap gufa - Suppa deurali - Falaa chaur - Kharyan - Chamar - Todke	2	1.87	30	32
551M02C012	C012_Simaldip- Sinduredhunga	11	4.88	28	34
551M02C014	C014_Deurali - Nipane - Damar - Dhunge - Sera motor road	12	4.64	28	35
551M02C010	C010_Aarichaur -Hattidunga-Chakla - Hattidunga- Chakla	10,12	7.2	28	36
551M02C018	C018_Bhumikasthan - Pokhari -Jhakri Jhakrini - Sengelen(Bhumika nagarpalika sthan ward no. 10)	3,5	6.6	28	38
551M02C004	C004_Deurali-Bandre-Tarule	7	2.92	28	39
551M02C006	C006_Shivadaha - Sana Dhongre - Majhi Damar	6	2.16	28	40
551M02C030	C030_Bikram- Khormor - Toribari - Salajandi highway jodne motor road	14	1.1	27	41
551M02C024	C024_Bahunkarka - Gangafaat Krishi road	4,10	8	27	42
551M02C016	C016_Ratamata-Galdha - Bhabin-Seudeni-Chakla	4,5	6.92	27	43
551M02C011	C011_DeuralithanSindure dhunga - Phorsalkhet- Apkhola-Majhkharka	11	23.93	26	45
551M02C005	C005_Pyuthani danda-Kalleri-Simle-Chisapani-Bebade	7,6	7.32	26	46
551M02C008	C008_Chhahare kaseri - Sidhhara	9,10	8.73	26	47
551M02C020	C020_Kalimati-padme-sitapur-Kailase - Padme - Khibdi motor road	3,5	4.95	25	50
551M02C025	C025_Subarnakhal-Badar khola- Kalleri -Bokhar	1,13	11.36	25	51
551M02C031	C031_Karechuli-Dhungri khola gaun	14	8.6	25	52
551M02C019	C019_Barbot - Khandua - Padme - Pokhar danda motor road	3	8.69	25	54
551M02C028	C028_Maineri-Mandre-Bagra Sadak	1	2.44	25	55
551M02C032	C032_Bharlabas - Musichan Dhab motor road	13	4.56	25	56
551M02C021	C021_Sitapur - sitkhola sabdaha - Kailaro	2,3	2.74	24	57
551M02C013	C013_Ranagai - Mauwabari - Lungri - Aapkhola - Dussi motor road	11	6.27	24	60
551M02C009	C009_Siddhara - Nepane-Dihi motor road	10	4.87	24	61

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02C002	C002_Sitalpati -Palase-Apchaur	8,9	10.13	23	64
551M02C007	C007_Malika - Dasekharka - Dhanchaur motor road	5,4	7.79	22	65
551M02C001	C001_Rangakate - Nayabasti - Kharghat motor road	9	4.24	22	66
	IVau				
551M02D134	D134_Damarudaha Sadak	3	0.4	33	26
551M02D018	D018_Jaluke - Batako - Chaupari motor road	7	7.02	31	30
551M02D066	D066_Sahutol - Gangakhola motor road (krishi road)	4	1.07	29	33
551M02D118	D118_Damaru Daha-Kailase Proposed Road	3	2.05	28	37
551M02D069	D069_Tatiya bazar - Tundikhel - Barbot	4	0.68	27	43
551M02D122	D122_Deurali - Kritipur tower - Bolthum chaur - Rikot motor road	13	2.99	26	48
551M02D127	D127_Cheda - Bokhar - Saani- Lekh - Badare motor road	13	4.86	26	48
551M02D123	D123_Mushi chan - Majha ko faat - Dhadeni - Pare - Deurali motor road	13	6.98	25	53
551M02D111	D111_Badachaur- Thulakharka- Chalauja- Subarnakhal (new track)	1,2	3.63	24	58
551M02D168	D168_Army gate, Sahutol motor road	3	0.94	24	58
551M02D041	D041_Chapaka pata - Rakse Bahune moto road	10	5.6	23	62
551M02D179	D179_Mushichan - Dhad - Tarike - Koidanda - Patale paani motor road	13	4.12	23	62
551M02D016	D016_Lamatol Dhikamathi ko motor bato	7	0.67	22	67
551M02D017	D017_Lamatal Gaun Ring Road	7	1.51	22	67
551M02D064	D064_Sana daha - Gaira kharka - Paani pata - Nepali tole - Okhaldhunga solti marg	4	2.36	22	67
551M02D109	D109_Dhara - Kaule - Patale tole - Naya gaun motor road	2	2.14	22	67
551M02D172	D172_Badachour-Jhirra-Banganga Simalpani Kapilvastu Sadak	2	6.71	22	67
551M02D060	D060_Dhaseni Deurali motor road	12	1.63	19	72
551M02D068	D068_Thula Padhera - Maina danda - Dharam paani - Gangakhola	4	1.17	19	72
551M02D136	D136_Dharapani- Kalika pra.bi- Bhartapur krishi road	1	3.51	19	72
551M02D177	D177_Badachaur-Sikhra-Dhanchaur	2,3	3.69	19	72
551M02D008	D008_LahaveniLamidamar - Baraha daha motor road	9	5.29	18	76
551M02D126	D126_Kamal chaur -Maithan mandir sadak	13	0.66	18	76
551M02D180	D180_kamal chaur -simal pani-bauri tole sadak	13	1.96	18	76
551M02D181	D181_Cheda - Health post - Simal Paani - Darji tole - Lekhali tole - Sukali khola - Badare motor road	13	0.55	18	76
551M02D096	D096_Anpbot- Kalam kot - Khamari - Gaira kharka	6	4.79	18	80
551M02D144	D144_Shabdu-Dhartisara	1	1.5	18	80
551M02D160	D160_GalDha - Dhanchaur - Thapakharka - Khane paani mul	5	1.97	18	80

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02D001	D001_Satmara krishi road	8	0.76	17	83
551M02D071	D071_Amarai - Tallo bazar - Chagbaas - Gorathum motor road	4	0.29	17	83
551M02D108	D108_Bhuvan Pata-Supa-Phalachour Sadak	2	0.72	17	83
551M02D137	D137_Baghkhor - Lisikuna motor road	10	3.16	17	83
551M02D166	D166_Aamarai (bhattikhola) - Sahu danda - Ratamata motor road	4	0.98	17	83
551M02D173	D173_Sitalpur bazaar- Kodanda-Subarnakhal	1,2	5.11	17	83
551M02D095	D095_Bhanbhane - Galdung - Khamari motor road	5,6	4.29	15	89
551M02D106	D106_Khatri Tole Motor Bato-Dhorbanda-Karnel pata- Jholunge pool	2	2.09	15	89
551M02D145	Chaupara-Kantheri	1	1.5	15	89
551M02D146	Chaupari- Bhedabari- Pakrighat	1	2.85	15	89
551M02D158	D158_Rajiya Pokhar bata Rajmarga jodne sadak	12	0.74	15	89
551M02D093	D093_Praktiksyala-Kalleri-Kamalkot	6	1.98	14	94
551M02D140	D140_Upalli Khanda- Upalla Gaun- Kakri chaur krishi road	1	2.21	14	94
551M02D171	D171_Mandre Pokhe danda- Pipalneta-Bahundi motor road	1	3.01	14	94
551M02D182	D182_Kaule - Bakhre - Odar pata - Powera - Bikram - Kapilbastu Mahendra Highway jodne motor road	14	5.73	14	94
551M02D057	D057_Rajiya danda sadak	12	0.53	13	98
551M02D058	D058_Rajiya gaun sadak	12	0.76	13	98
551M02D025	D025_Kalleri - Swamineta - Dandabari - Aamilechaur - Pakhachaur motor road	7	1.84	12	100
551M02D043	D043_Naha - Palla - Unnaye batule motor	10	7.23	12	100
551M02D047	D047_Maidan - Jorule - Gaira krishi road	12	0.79	12	100
551M02D049	D049_Deurali danda - Sera Khola - Duvar - Chakla motor road	11	1.13	12	100
551M02D052	D052_Pirapani sadak	12	0.89	12	100
551M02D070	D070_Bosse dhunga - Telephone tower - Khanepani tanki motor road	4	0.58	12	100
551M02D089	D089_Supa-Patal Tole-Nipane	2	2.38	12	100
551M02D113	D113_Dharmashala- Kalikasthan- Sangam Aa.bi motor road	2	1.31	12	100
551M02D121	D121_Bharlabas - Khutkhute - Rikot motor road	13,12	8.6	12	100
551M02D128	D128_Balukurantha mandir- Madhuban dham - Mahendra highway jodne motor road	14	0.64	12	100
551M02D129	D129_Sukhaur - Nepali tole - Kale gaida jodne motor road	14	1.54	12	100
551M02D131	D131_Karechuli ringroad sadak	14	1.3	12	100
551M02D153	D153_Simal paani - Janajyoti Aa.bi - Badare - Dandagaun	13	0.21	12	100
551M02D040	D040_Phedi -Thapa ko pata	10	2.94	11	113
551M02D130	D130_Wada Karyalaya-Bokram tole	14	0.35	11	113

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02D003	D003_Tinkhande Jholunge pul - Charinge motor road	8	2.67	10	115
551M02D004	D004_Gothki - Mithiaap motor road	9	0.9	10	115
551M02D014	D014_Ratamata-Naumure-Airawat	7	4.96	10	115
551M02D020	D020_Dhunge danda - Damar - Takura motor bato	7	3.11	10	115
551M02D097	D097_Anpbote - Bokse chaur motor road	6	5.49	10	115
551M02D101	D101_Kohol-Bakhre-Kapabutta-Kartike-Damar	2,3	5.66	10	115
551M02D119	D119_Purano gaun ringroad	4	1.36	10	115
551M02D125	D125_Netakharka - Badganga motor road	13	1.83	10	115
551M02D148	D148_Jaluke - Saligram ko chaupari - Siyala motor bato	7	2.47	10	115
551M02D156	D156_Kanchiroad - Chaupari - Kala siddha mandir motor road	8	1.63	10	115
551M02D169	D169_Hitan tole - Netakharka - Salyan dhara - Betane - Khaskharka motor road	13	2.47	10	115
551M02D170	D170_Jhirrathum Majh Gau-Kodanda Sadak	2	1.15	10	115
551M02D175	D175_Ghumti-Damar- Sengelen motor road	2	2.45	10	115
551M02D176	D176_Ghumti-Ghorbanda -Sikhra sadak	2	4.42	10	115
551M02D178	D178_Mulabari School to Todki hudai Saune thum Sadak	2	1.07	10	115
551M02D054	D054_Dohote gaun sadak	12	1.19	9	130
551M02D065	D065_Aamrai - Gurjithum - Phapareni motor road	4	0.79	9	130
551M02D115	D115_Ale Marga	3	0.3	9	130
551M02D162	D162_Kholtepani - Gangakhola motor road (krishi road)	3	4.68	9	130
551M02D167	D167_Rata Danda Sadak	3,4	0.57	9	130
551M02D007	D007_Baghdwar motor road	7	0.48	8	135
551M02D021	D021_Khaniyapani road	7	2.23	8	135
551M02D056	D056_Kudule-Thanchauki sadak	12	1.78	8	135
551M02D067	D067_Amarai Tallo Ghumti - Jhakareni - Upallo ganga Fewi krishi firm motor road	4	0.59	8	135
551M02D074	D074_Paari ma.bi - Khime Danda motor road	5	1.66	8	135
551M02D075	D075_Hari ma b-Dotekharka-Tharpaila	5	1.15	8	135
551M02D076	D076_Khanepani-Dhuncahur	5	0.49	8	135
551M02D078	D078_Dhanchaur jane bato	5	0.9	8	135
551M02D098	D098_Phursamara - Deurali - Kalamkot motor road	6	1.74	8	135
551M02D112	D112_BK Tole-Adhikari Tol Samma Sadak	2	0.28	8	135
551M02D120	D120_Dhara - Ravan Shankha(maika than)	2	0.91	8	135
551M02D138	D138_Dhwasepokhara- Kalika pra.bi- Ghatsukaura krishi road	1	2.03	8	135

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02D143	D143_Shabdu-Paire	1	2.98	8	135
551M02D157	D157_Dohore - Kartike - Bahule motor road	10,11	3.54	8	135
551M02D159	D159_GalDha - Dhanchaur - Thapakharka - Khane paani mul	5	2.31	8	135
551M02D161	D161_Bhumikasthan - Dhanu kharka - Bhulke motor road	5	3.68	8	135
551M02D015	D015_Swamineta - Chidi - Sankash motor road	7	1.76	7	151
551M02D142	D142_Labdi- Bakheli Chautari krishi road	1	2.23	7	151
551M02D150	D150_Oli danda-Jhirrathum Majh Gau-Kodanda Sadak	2,3	2.59	7	151
551M02D002	D002_Milanchowk bata purba jane bato	8	0.91	5	154
551M02D005	D005_Dhankhola - Bhakkuchowk - Jabune motor road	11	1.35	5	154
551M02D044	D044_Dhunga Falne - Gauri Kunda motor road	4	0.23	5	154
551M02D053	D053_Kalika madir- Bhangala tole	12	1.3	5	154
551M02D059	D059_Jasrame-Rajiya	4,12	3.87	5	154
551M02D107	D107_Phalachour-Khariyana Khola Sadak	2	1.33	5	154
551M02D149	D149_Rajmarga bata Ghat jane bato	3	0.46	5	154
551M02D163	D163_Nwara Pokhari motor road	3,5	3.36	5	154
551M02D165	D165_Kopchibas - Gorji - lama khet - Bajagara - Bhabin (krishi road)	4	3.64	5	154
551M02D042	D042_Barre -Padhera chaur motor road	10	1.3	4	163
551M02D116	D116_kholte pani sadak	3	0.24	4	163
551M02D117	D117_Kharseka Baunne motor road	3	1.39	4	163
551M02D135	D135_Deurali - Chaapdanda motor road	10	2.27	4	163
551M02D141	D141_Mandre healthpost road	1	0.25	4	163
551M02D006	D006_Chatteban to Bandre - Raktari Badhidamar ringroad	8	0.92	3	168
551M02D009	D009_Kartike - Lauri motor road	9	3.54	3	168
551M02D010	D010_Kanachaur-Chidi chaur	8,9	14.8	3	168
551M02D012	D012_Asare - Bisvure - Baravure motor road	9	3.83	3	168
551M02D013	D013_Sittalpati - Dhokhola - Barseni motor road	9	2.64	3	168
551M02D022	D022_Kalleri-Amelichaur-Pakhachaur-sadak	7	1.89	3	168
551M02D023	D023_Talla bahule - Upalla bahule - Sera - Damar besi - Khaireni - Chahare motro road	7	1.21	3	168
551M02D026	D026_Nuwakot - Pokhari danda - Jabunne Pokhari motor bato	7	5.91	3	168
551M02D027	D027_Jaluke - Dangal danda - Vada gaun - View tower motor road	7	2.39	3	168
551M02D028	D028_Jwakot-Pokhardanda sadak-Saligram ko Chaupari - Siyala motor bato	7	1.56	3	168
551M02D029	D029_Shivadaha - Koibang motor road	7	0.79	3	168

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02D061	D061_Rata mata - Thamkot - Sitalpati- Bajagara (krishi road)	4	4.05	3	168
551M02D063	D063_Thamkot gaun sadak	4	0.37	3	168
551M02D077	D077_Majhgaun dhara jane bato	5	0.54	3	168
551M02D087	D087_Mulabari - Sana Kalleri motor Road	5	1.24	3	168
551M02D088	D088_Bagar - Damaar - Lamakhet krishi road	5	1.96	3	168
551M02D091	D091_Pratichyalaye - Kalleri - Gobang - Khamari - Badare motor road	6	1.43	3	168
551M02D102	D102_Pokhe danda - Bhusleghat - Pakhere - Sengalen motor road	3	1.19	3	168
551M02D105	D105_Phalachour-Khariyana Khola Sadak	2	0.47	3	168
551M02D114	D114_Padheri Motor Bato	2	1.19	3	168
551M02D124	D124_Kirtipur sadak	13	0.98	3	168
551M02D132	D132_Raina devi mandir sadak	14	1.13	3	168
551M02D151	D151_Deurali danda-Dihi	6,7	2.96	3	168
551M02D152	D152_Naya basti ringroad	9	1.07	3	168
551M02D155	D155_Khaniya paani - Kumbhi gaira - Rata danda - Jaluke - Vadagaun - Naumure - Airabati	7	1.81	3	168
551M02D174	D174_Galgade-Phalachour-Siddha Baba Motor Sadak	2	2.94	3	168
551M02D011	D011_Lakurikot sadak	9	3.87	0	194
551M02D019	D019_Swamineta - Kalleri motor road	7	2.63	0	194
551M02D024	D024_Oripari paani - kot - Swamineta motor road	7	2.19	0	194
551M02D030	D030_Jhate - Aapkhola motor road	11	2.01	0	194
551M02D031	D031_Shivadatta - Dhungepani motor road	6	0.48	0	194
551M02D032	D032_Tallo Sidhara - Sakeni - Kanachaur motor road	9	4.46	0	194
551M02D033	D033_Charikattare - Budapadhera motor road	9	0.36	0	194
551M02D034	D034_Tallo Chahare motor road	9	1.03	0	194
551M02D035	D035_Gabade - Chakhola - Bhalukhola - Kathekhola	10	3.87	0	194
551M02D036	D036_Phedi - Tadhaka Chaap - Khalaka Pokhara motor road	10	3.01	0	194
551M02D037	D037_Harre hulak office sadak	10	0.53	0	194
551M02D038	D038_Harre ringroad	10	0.45	0	194
551M02D039	D039_Kayureni - Avari chaur	12	1.29	0	194
551M02D045	D045_Khumchikot - Shivalaya motor road	12	3.99	0	194
551M02D046	D046_Nepane - Makaipate - Sani Kharka Krishi Road	12	1.88	0	194
551M02D048	D048_Sera Kalika Mandir - Jhuse danda motor road	11	1.07	0	194
551M02D050	D050_Jhate - Aapkhola motor road	11	1.37	0	194

Road	Road Name	Ward pass	Leng th, Km	score	over all rank
551M02D051	D051_Tarai gaun-jalugai sadak	12	1.94	0	194
551M02D055	D055_Kukurgade - Daha - Aapmoti krishi road	12	1.4	0	194
551M02D062	D062_Shitalpati - Dhekka fore - Saune - Bhabini krishi road	4	1.15	0	194
551M02D072	D072_Badachour-Kailase-Padme-Jukena hudai Pyuthan	3,4	1.44	0	194
551M02D073	D073_Kalimati-Phanel ko rukh sadak	3	0.33	0	194
551M02D079	D079_Phalate Cheda - Bhala Kharka motor road	5	1.21	0	194
551M02D080	D080_Kalimati - Chaap dhanda (New track)	5	1.18	0	194
551M02D081	D081_Ratamata-Kalimati-Padme- Sitapur	5	0.47	0	194
551M02D082	D082_Ghaiya bari- Dosekharka agricultural road	5	1.24	0	194
551M02D083	D083_Malika- Dosekharka	5	1.28	0	194
551M02D084	D084_Bhumikasthan - Tusare motor road	5	1.63	0	194
551M02D085	D085_Lamo chaupari-Deurali-	6	0.75	0	194
551M02D086	D086_Gyan deep -Batase Road	5	0.66	0	194
551M02D090	D090_Aatari - Gera Kharka - Khamari motor road	5	0.52	0	194
551M02D092	D092_Anpbot- Kalam kot - Khamari - Gaira kharka	5,6	0.87	0	194
551M02D094	D094_Praktiksyala-Kalleri raod	5	0.4	0	194
551M02D099	D099_khamari-Boksechaur- Damar besi	6	0.66	0	194
551M02D100	D100_Kalika Malika mandir sadak	5	0.56	0	194
551M02D103	D103_Takura Sadak	3	0.46	0	194
551M02D104	D104_Ghumti Khola Sadak	2	0.8	0	194
551M02D110	D110_Upallo Panch Pokhare Sadak	3	0.58	0	194
551M02D133	D133_Karechuli -Pasrbati adharbhut schoo sadak	14	0.29	0	194
551M02D139	D139_Rangakate ringroad	9	0.69	0	194
551M02D147	D147 _Karechulipakha -Bhatani tole sadak	14	0.73	0	194
551M02D154	D154_Kareyuli - Batheni - Bikram - Kapilbastu Mahendra highway jodne motor road	14	0.25	0	194
551M02D164	D164_Okhadhunga - Sital paati - Bajagara krishi road	4	1.67	0	194

 Table No. 29: Estimated budget for 5 years MTMP period

			Forecasted Budge	t For the Mun	icipality			
BUDGET	Probable Budget	Construction (70%)	Maintainance (30%)	Class A (45%)	Class B (30%)	Class C (20%)	Class D (5%)	Total (NPR)
Base Year	73,825,000	51,677,500	22,147,500	23,254,875	15,503,250	10,335,500	2,583,875	51,677,500
First Year	81,207,500	56,845,250	24,362,250	25,580,363	17,053,575	11,369,050	2,842,263	56,845,250
Second Year	89,328,250	62,529,775	26,798,475	28,138,399	18,758,933	12,505,955	3,126,489	62,529,775
Third Year	98,261,075	68,782,753	29,478,323	30,952,239	20,634,826	13,756,551	3,439,138	68,782,753
Fourth Year	108,087,183	75,661,028	32,426,155	34,047,462	22,698,308	15,132,206	3,783,051	75,661,028
Fifth Year	118,895,901	83,227,131	35,668,770	37,452,209	24,968,139	16,645,426	4,161,357	83,227,131
Total	569,604,908	398,723,436	170,881,472	179,425,546	119,617,031	79,744,687	19,936,172	398,723,436

 Table No. 30: Year wise target output of prioritized road of MTMP

															M	TMI	Perio	d								
Road Type		Base	year(2	2018/2	2019)			Y	ear 1			,	Year 2			Y	ear 3			Y	ear 4	ļ.		Y	ear 5	
- J P •								20	19/20			2	020/21			20	21/22			20)22/2	3		20	23/24	
	BT	GR	ER	Trail	Total	NEW	BT	GR	ER	Track	ВТ	GR	ER	Track	ВТ	GR	ER	Track	ВТ	GR	ER	Track	BT	GR	ER	Track
Class "A"	-	6.1	174		180	6.1	-	-	17	-	-	-	25	-	-	-	20	-	-	-	22	-	-	-	24	-
Class "B"	-	9.1	136		145	20	-	-	41	-	-	-	22	-	-	-	12	-	-	-	14	-	-	-	16	-
Class "C"	-	-	164		164	31	-	-	54	1.9	-	-	17	0.3	-	-	9.8	0.3	-	-	10	0.2	-	-	29	0.4
Class"D"	0.2	2.6	279	-	282	0.2	-	-																		
SRN	44	-	-		44		-																			
Total	45	18	753	-	815	58	-	-	112	1.9	-	-	64	0.3	-	-	42	0.3	-	-	46	0.2	-	-	69	0.4

Figure 23: MTMP Output

Road Class	Black top	Gravelling	Widening	Track opening
Class A	-	-	107.88	-
Class B	-	-	105.09	-
Class C			119.39	3.15
Class D	-	-	-	-
SRN	-	-	-	-
Total	-	-	332.36	3.15

6.2 MTMP Output

Based on imvestment plan, all MTMP roads will be maintained over five year period. 332.36 Km MTMP roads will be improved and prepared for gravel road standard including widening and maintaining longitudinal and cross drainage system. This intervention ensures to bring into all weather road for maintainable stage. 3.15 Km new track will be opened and be brought into vehicle pliable condition (full design width and side drain construction) during the MTMP period as projected budget. Additional length could have chance of upgrading if additional fund is available during this MTMP period. During the MTMP period, NPR 398.72 Million will be invested for construction while NPR 170.88 Million on maintenance.

Annexs

Annex 1 : Photograph



Presentation on MTMP at Sitganga Municipality



Ward 2 meeting on MTMP



Ward 3 meeting on MTMP



Road maintenance work going on



Ward 4 meeting on MTMP



Ward 9 meeting on MTMP



Publc Vehicle at Ward 5



Ward 7 Meeting on MTMP



Ward 12 meeting on MTMP



A typical bridge at Sitganga Municipaity

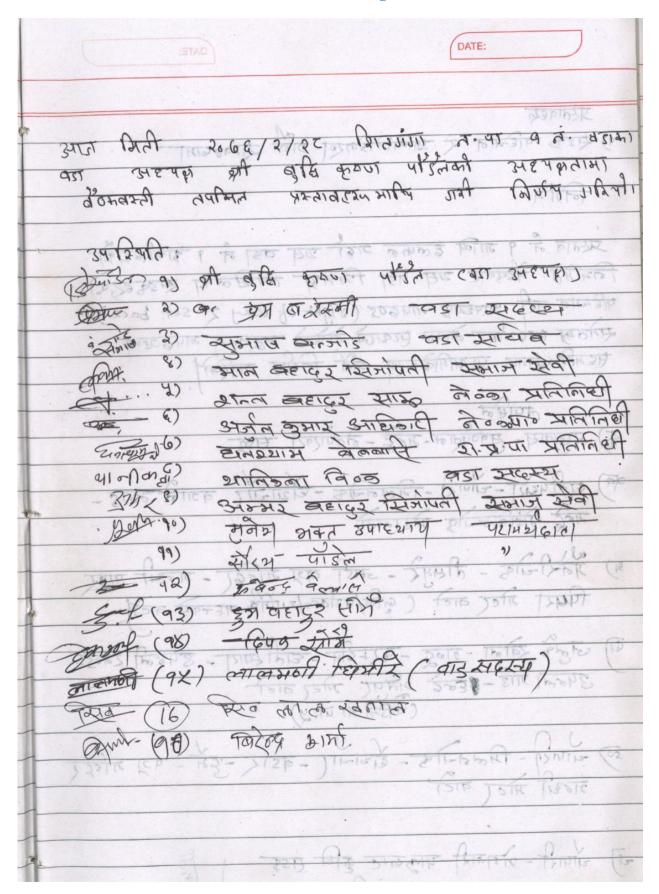


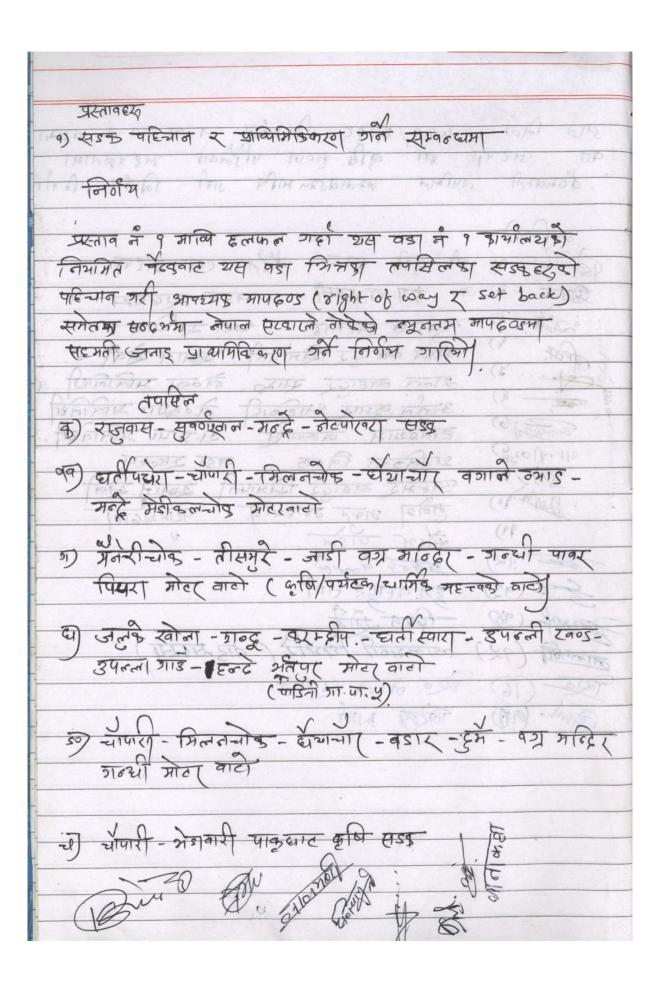
Ward 13 meeting on MTMP

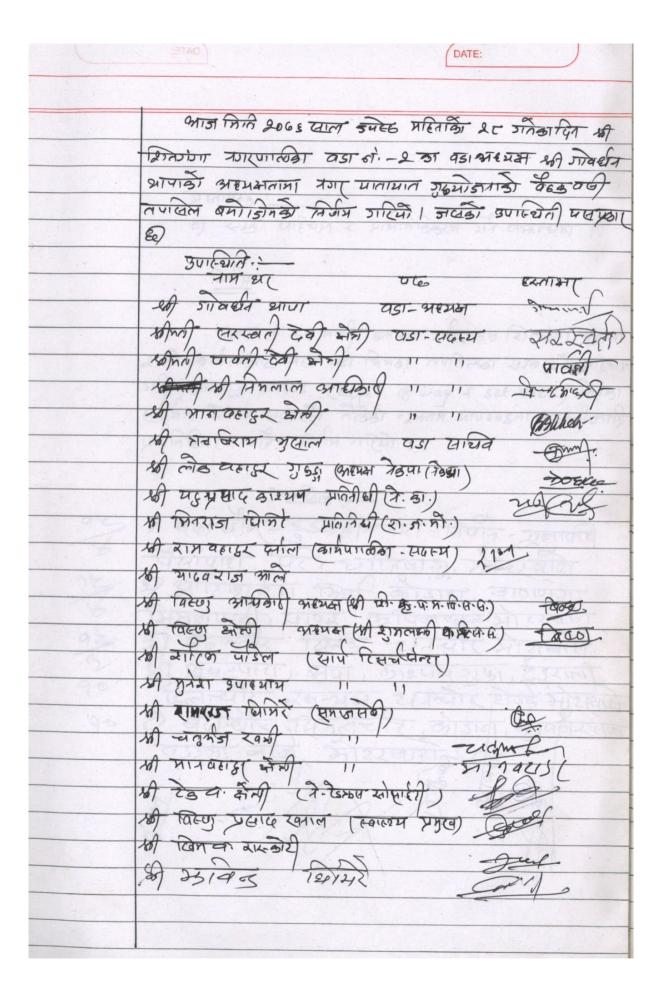


Ward 14 meeting on MTMP

Annex 2: Minuting



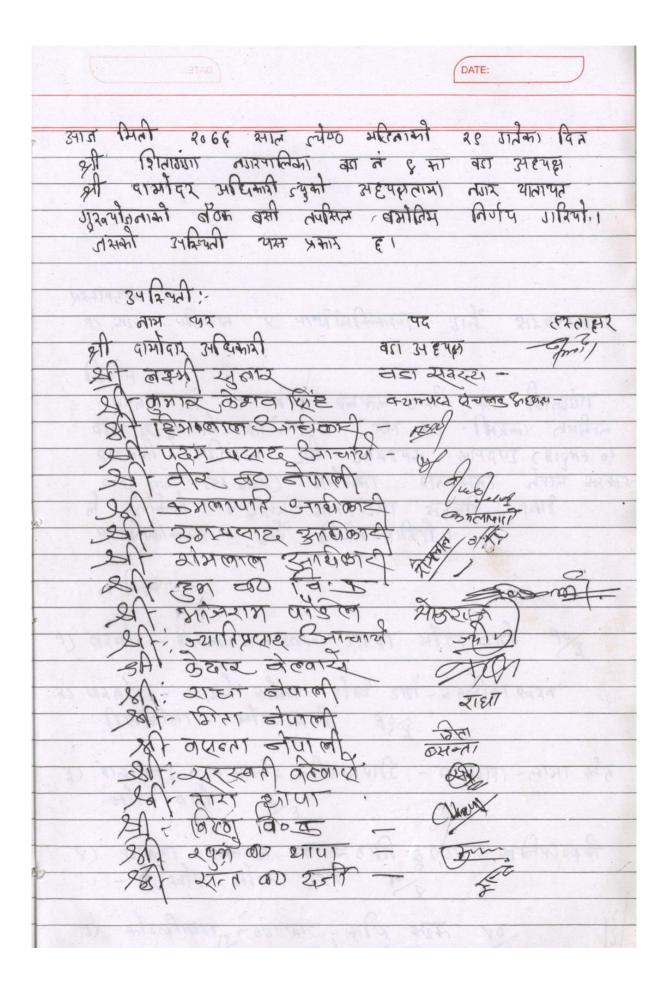




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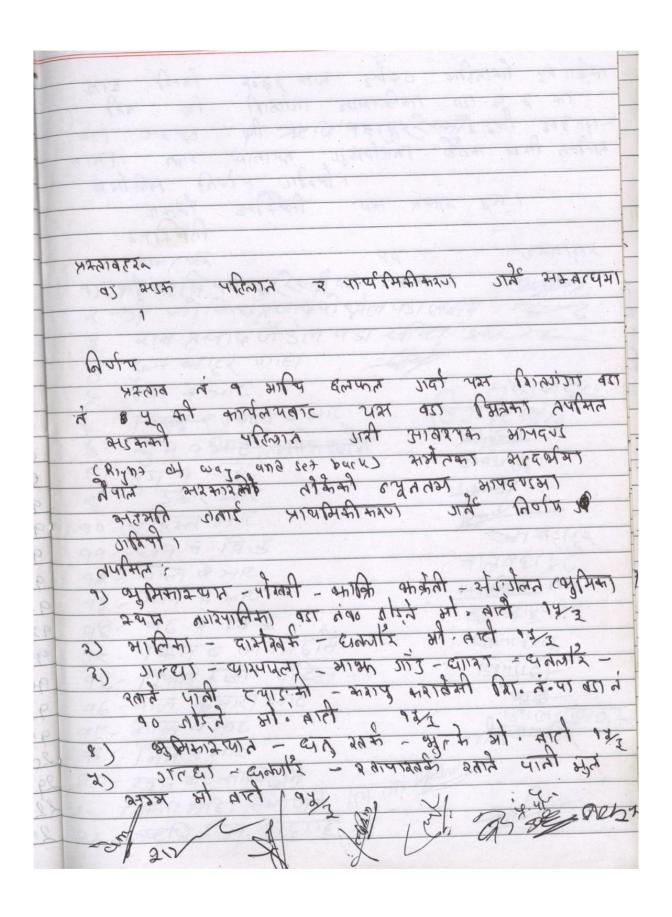
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प्रस्ताव से 9 भारित दल फल गर्दी पम शि बहा ते ३ को कार्यलय बाट पम बहा ि प्रमान त्या भारकार्य परितान गारी उपावश्यक अपपण (किन्न बर्ग कार्य हुट्टे केट्ट () भार्मतमा भारपणा भारमि प्रत्यार प्राप्तिमिक्षी महण गार्न विजीप गाहिलों। व) इभरव दह - पार्डगेरा रिट्टे शेंड (प्राप्त) श्रीमिनीट - भार्डगेरा रिट्टे शेंड (प्राप्त) श्रीमिनीट - भार्डगेरा सेंडे शेंद (प्राप्त) श्रीमिनीट - भार्डगेरा मेंद्र वारी (क्रिक्ट्र) श्रीमिनीट - भार्डगेरा भीत्र वारी (क्रिक्ट्र) श्रीमिनीट - भार्डगेरा भीत्र वारी (क्रिक्ट्र) श्रीमिनीट - भार्डगेरा - प्रवर्ग - श्रिक्टी भीत्र वारी (क्रिक्ट्र)		0.
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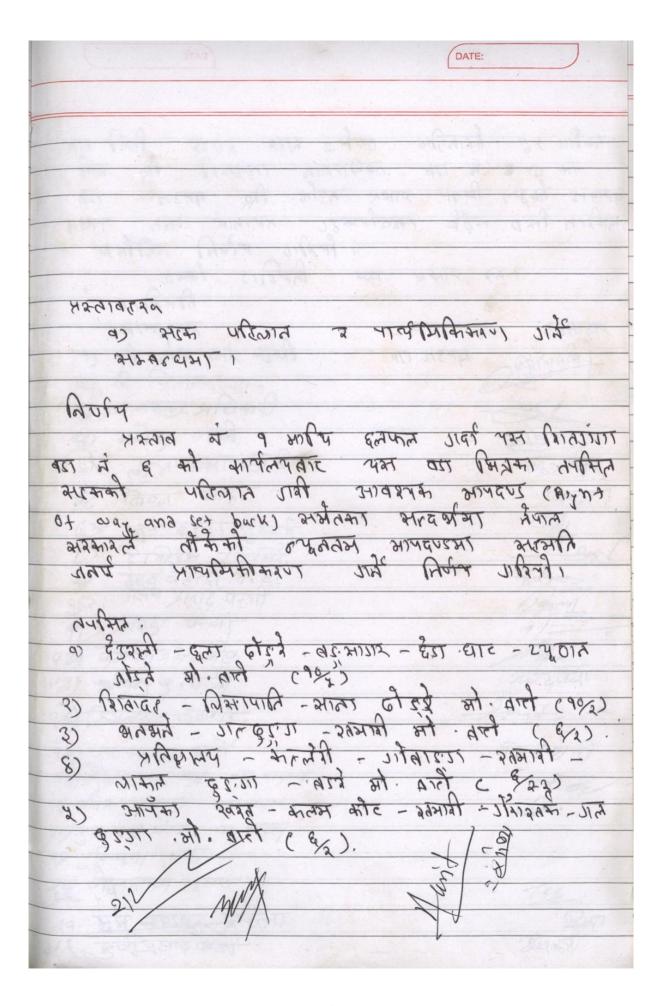
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३) शताभारा - पामकोट - शितमपारि - वालाया -लामा भतेत
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तमित्र वस्ति २०६६/२/३१ भितांष्ठा त.पा पूर्व वहासा वहा अहम् क्षी भन्नत परित इपुक्ती अहम्भतामा वैक्स वस्ति क्षी भन्नत परित इपुक्ती अवस्ति समी तमित्रत वस्ति अवार पातामार अहत्योजना बेव्स बमी अभिमी उपिर्विषती पस प्रमार ह। - उपस्पती व) श्री भन्न पीरल 44 424183 क्य अध्यव रे, स्म राम प्रताद पाँउल वार्ड सचिव छ हम संख्य पाँडल ड मिरात्याम वाडेरा वाष्ट्र डा. हः ४-१भ गोपिस प्र पाडल स्माजसेवि १. १० मुलियम पाँउल 6 हम अवराज याँडेरा इ.की अवराज्ञ पाँडल 90 क्षेत्र अर्जुल यसाद पाँउल 99-19 -19 -1 HIG 9/50 95-71001 92 - 8A तिसात्व पाउल 93- श्री वेट्यमाद मेडल 98- हिने यम्लाल बीडल 92- 80A GET 9813[361213] 98 क्षेत्र साधुरात्र पाडल मार्ड राम 96 हिनी डिमला प्रसाद पाडल 11 98 हम पामनारायण पाँडला 98 88 तिल्यीराम पीडल 20 १मी निगरीराज पंजल 29 स्मि चित्रका पाँडल 82 BA रहे का राती 23 वित १५061 का खाती

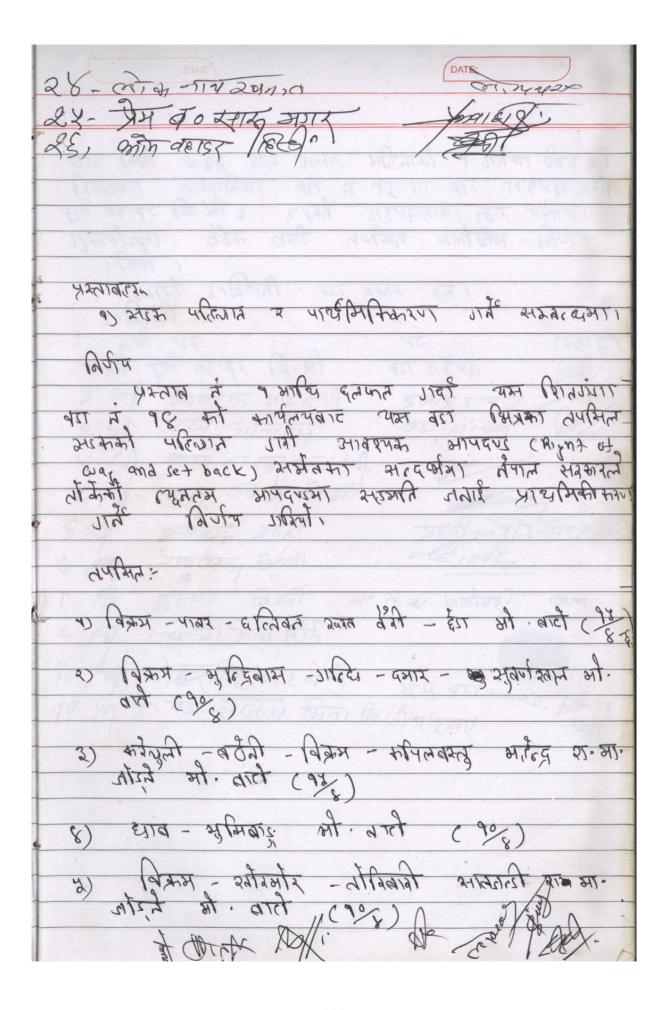


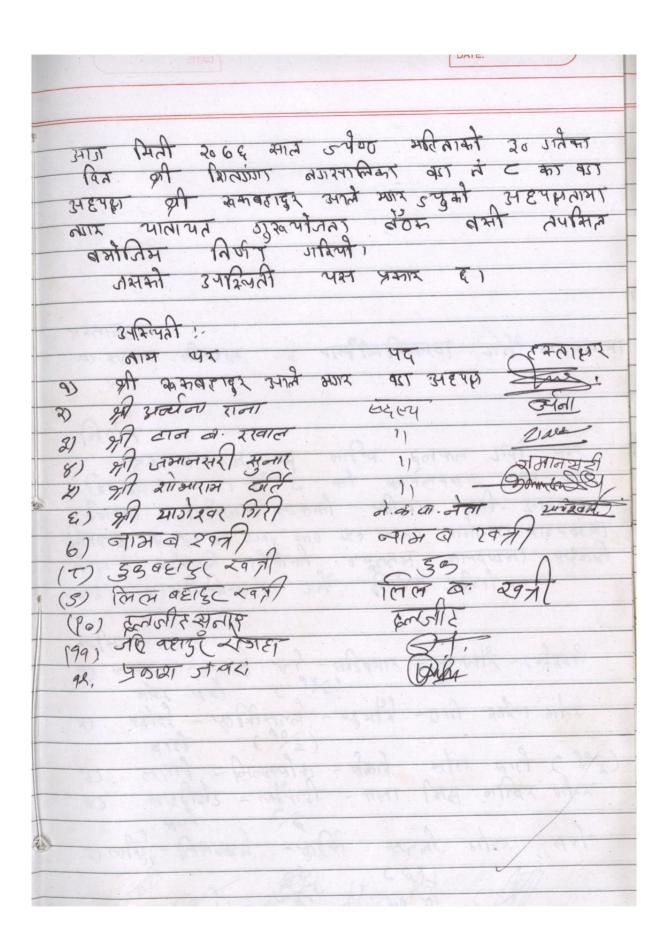
616 TOPPOT 618C अग्र किर्ध डे के अध्याम देव अध्यामी डेव ग्राप्तमा बड़ा अहम्का की सहादि पहाँदर रेस्क्रुट पुकी अहम्। तामा तार यातापत गुरुवपोजता वैठक वसी वपित्र वर्मा किम तिर्णप अधियो। उपिश्री 99 MOD (127) 192 माम/यर 9) 81 xe14 98132220 31 31 848 1 1 mysel 2 - डी भोषिकद्वसमाद पोस्त्रल पडा सद्य राम स्थाद पाँडल वडा याये 21 दिन वहाहर गाहा गीर के अरि E. विस्तु न निवन के आहे. 6. दुभ व शाही असिम्हान ए- हम व स्राक्ष-हु: प्रकार आर 8098188 90 / Bkoj 2112 र्भाश्वीदीहर 99- 879 9 19.5. वालवहार 92 - 9181 9212 HAEROND 804. 93- HIT & HIT केंद्र कराहर वे न 96-96 9 19.5. Quantilas 5 १६. किम व लगि दाने 1294(16) 98- 1294 AIST 4/301-96-9101 3416 2116 Marginers ? 91- Oll 9 ATE 93 - POTH 9 HIZ 20- रक्त द्य-लामिहामें २५ किला महि, न्योपाने लि ला. क्रिकेट 22- अव्हिर्ज राम् अपूराह

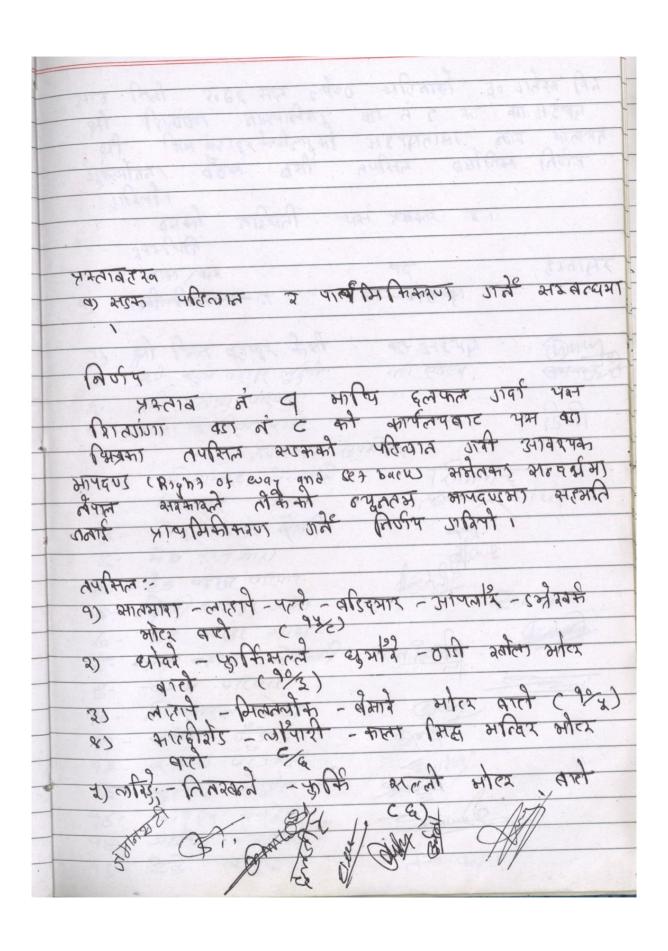
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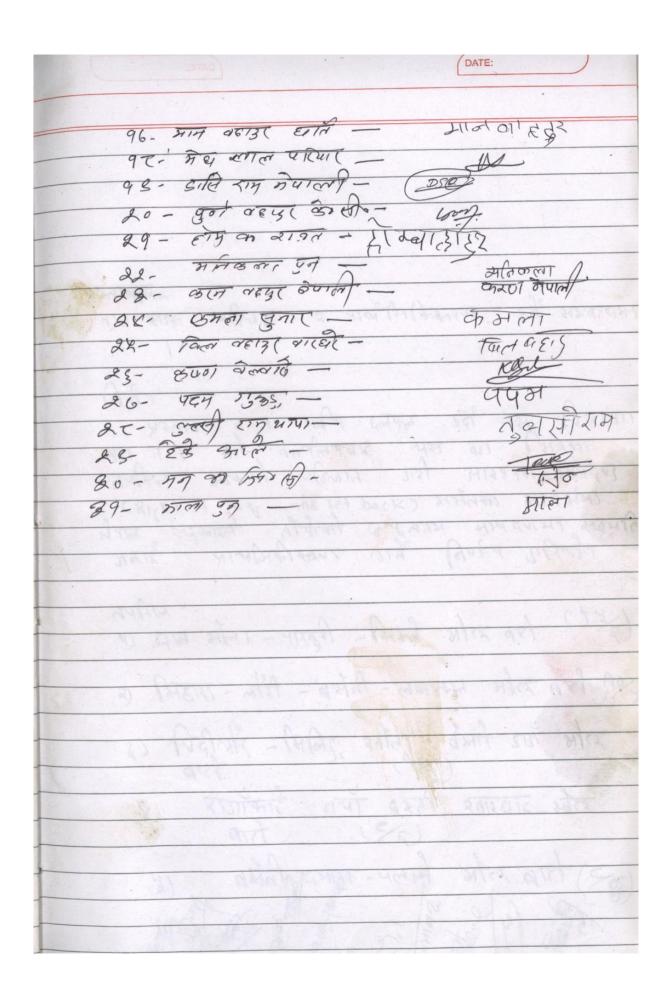
मात मिली २०६६ साल उपीक अहिलाओ ३२ गरीका वित भी विश्वांगा लगरपालिको वहा ते ७ ७ का विदा अहम्ह भी भीत्र भ्रमाद पहली दप्तमी अहम्ह तामा ताम प्राची पातापत भूज्यपितता बेंद्रम द्वारी तपिमत अभागे २५/२ वर्ती प्रम प्रकार 37/24/1 पद नाम/रार १२लाकार व) और अमर प्रमाद पहली क्या अध्यम 2) श्री पिताम्बर साद 3) पूर्व वहाडा अस्टिकारी अर्थांतु आर्व मिहानावता परिक 160880 क्य विकृत जाहा 10661 6> जन वाडापु पुलामि) हान्साम रिकामि 90 रिवम प्रमाद पन्धी 99 Taker 4-21 92) व्यवपात्र व्यास मान दुपानी 98) Exeller acong 9%) राम यहापा धारी विद्यो जीत्य हा प्रा arrar १ए) मा वहापु अरेडा वडा ३०) तीक्षापाण भूमाल THE वर्ष- हर्गायुरमद क्ली

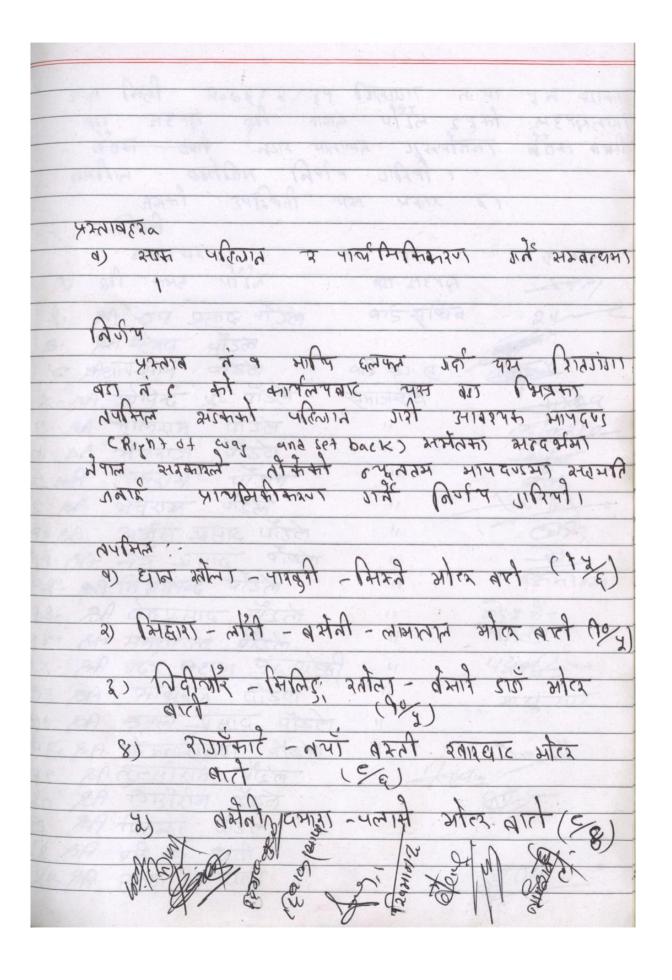




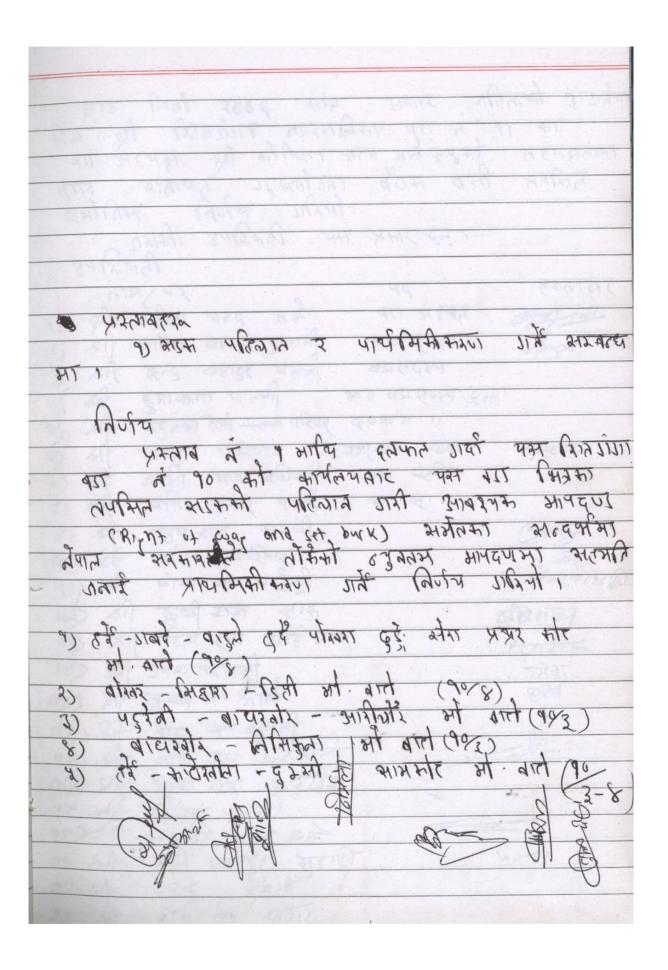


उसाउ मिली २०६६ साल इसेट अहितामी ३० गतेमा दित श्री शिराणा त्यारपालिका वडा मं ह का वडा अहपाल श्री श्रिम वहादुर केशील्युका अहपालामा त्यार भातापत अवस्पीतन वेठक वसी तपिस्त वर्मातिस तिर्णिप जमकी अदिवारी पर प्रमाप है। 342 (4/2 EXAIAS 1181/42 व) भी किया न त बार अस्ति। थ- द्री रुम वहादुर केमी थ- द्री रुम वहादु लड्डें थ- द्री कवित्रा जिल्लार 45 34E4h वर्डा एडएय ४. १९) हिलीसा रामा n)1 1344-12/ (344) 10) 9- विमान्तद येल्यास 1294101-6 2- FEVIOR 21141 3- -4-8 484 (QZ4) K- 481 217 1161 रुंड वहाडि पारिपार isal exerg (2 101) 6- 87 4813(21181 C. 0114 AEISC WAIGHT 90 - 121 41 41 (4) (4) (4) (4) (4) ११ - समिला पाँडेपाल 93 - 41AM 41 41 AM 98- 23 24541 -300

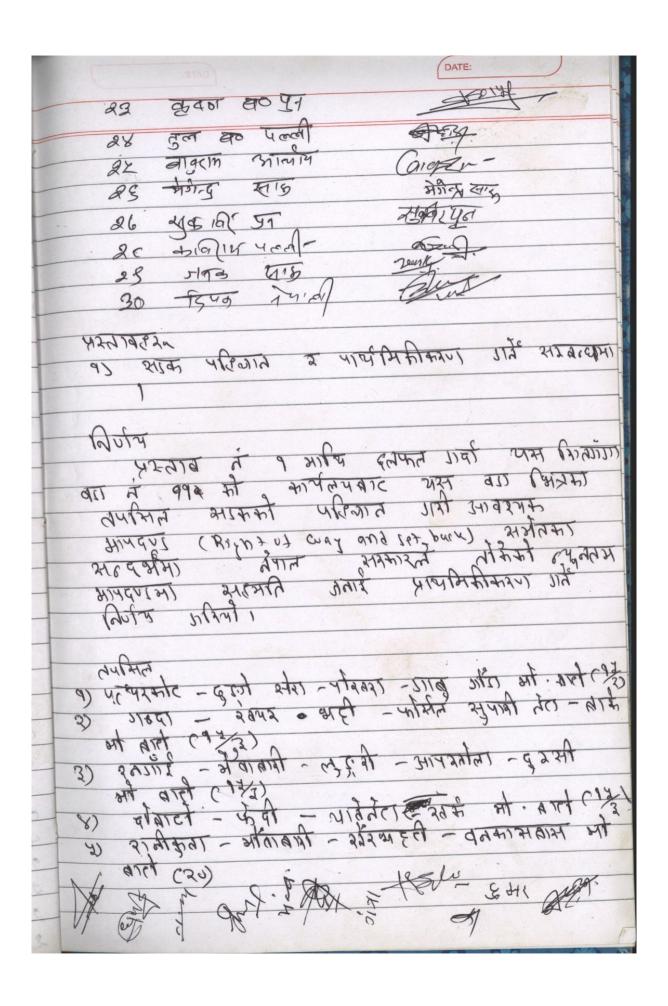




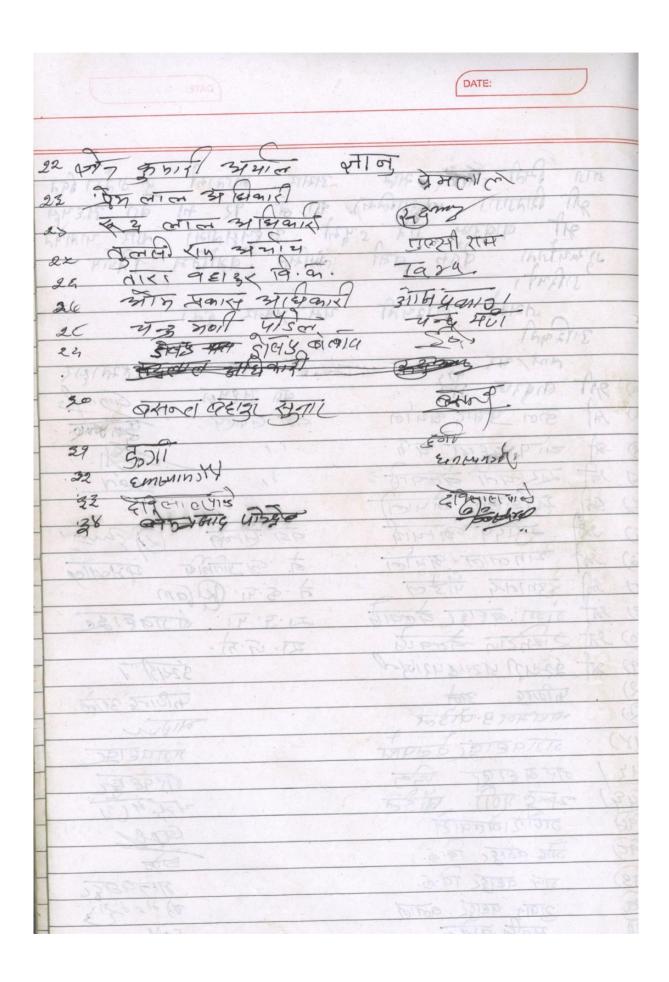
त्य भी किलांगा अग्रयालिमा वहा त पर का नार क्ष्म अनदर्प शादन स्विमात्री द्रपूर्म उन रूप कृतामा नार पातापर अग्रवपीत्रका वं कि का विर्णाप गहिला। उपिन्नरी 418/ V3 ग्रिशिशास्ता अस्मिमोरी मार सद्भ राज्य 2) डी बिर्मलाइजी ast GGF4 यम प्रधाद गीतम BINOSPA व, रामिड्याम द्वाराम पारंडल 6, 2110d Q. 61410) इ. हिमा लप वट्यास



DATE: उपात्र मिली २०६६ साम असार अस्ति। की ३ गर्म पत्र श्री शित्रांगा त्यायमालिका वडा तं पर का वण अहयहा श्री किपिला अन्य आले द्वाकी अहयहतामा वणार यासापत गुरूवर्योगता वेठक वसी तपसित वर्मातिम निर्णेष गारियो। जमको उपार्रकारी यस प्रकार दत्। उपिक्ती नाम/यर 49 हरतासर १) श्री कोषिला यत्व आसे वता अहबी ठाठेका बहाद्ध पुलामी वडा स्दल होर इन्द्र वहाद्वर पहल 951447 ४) हि दुमाकता पत्नी भ ० थडा सदाम इस りの चुल्छा देवी अलवं परिया 25 11 11 0800 विदेश परियार 20 माक्रिक रादल Good. शानि मापा द्विधारी 201 बडा स्तिव रविन कुमा पलती का. स. न्द्राय राजा पन्ची भाया पार्मार Sir गुरावाद्यकी नेगा क मसीडी 99) 31 हुछी राज सारु दिव राम हासि मगा ESBRIG1 GAZIF 3mer upa गर्भह क्षेत्र वर भारत DOTACI तारा क युनारी मान वहाड़ा द्वार वा कि



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अरम् न्डाउर केराजी 312/12 मोहा वद्यांड ज्यारिकाल वेस्वास 2/11/10 जीवाल वि.ज. यवारीराम पाउँदा पद्स अविश्वारी 247481 Y reutaeige adaid काळा प्रदाद प्राञ्जली डिल व्हाड्स दी में 30016132210V 42419830 य) अपुक्त पहिलात र पार्चि किकी स्था गार्वे अप्रवाद्यमा िर्णिप अप्रतात त व भाषिप हलपत्र पार्च पस (रात्यापा)

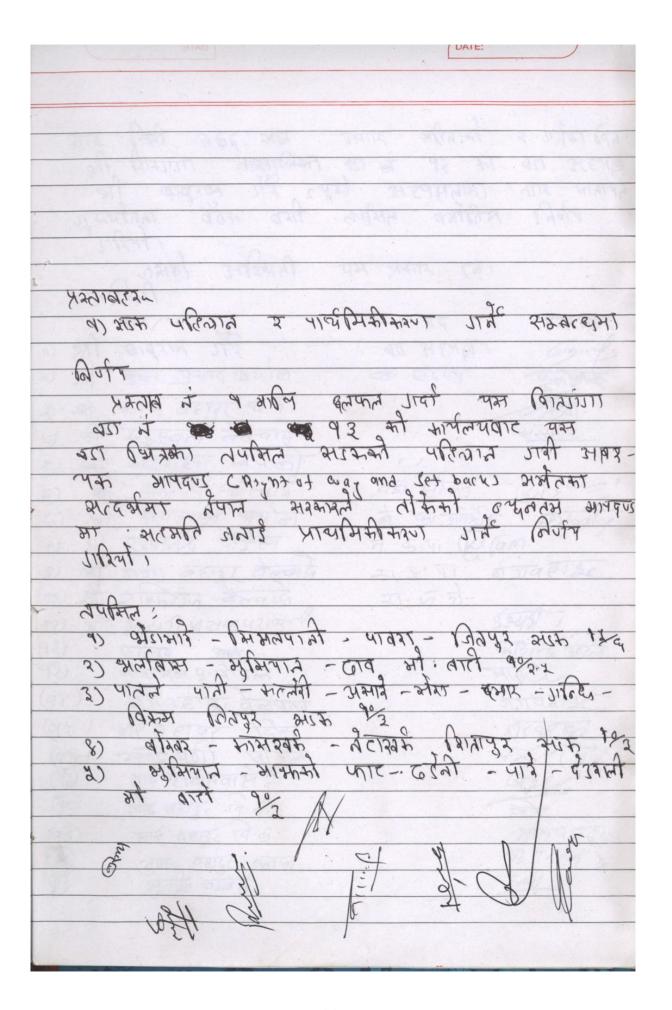
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तपिमान स्पाक्को परिजात असे स्पावश्मक आपदण

(रि.१०) ०१ ००५ वृत्व ६० ४००५) समीतका सेएवअका

तपान अरकारते तिकेको एयुन्ततम भापदण्का सहमति अतार प्रापमिकी भरण अर्थ विर्णय अरियो। तपिम्न : 9) अर्थती - श्वामाटा - भेदात - दीले टाइना - दरवारे भी 2) हिले वर्तना - वर्राचे - दोरे भो बाले (१५) 3) देखाती - लिपाने - दमार - ६ ट्रांगे भी भी भारी (१%) 8) यास्ता - क्षाति दृशां - वविषात्रवर्म - वोत्रत्र अते वर्ष अ) गरित भावि - अपादेश्वासी - अपति त्रेत - तपा वर्षेत्र पोववद्वीर पहेंग इ.द. वर्गात्रिया प्रावेश्वरी अर्था कारो (१००) कि क्रिकार क्रिकार क्रिकार क्रिकार क्रिकार क्रिकार क्रिकार क्रिकार

अस भिन्ने २०६६ साम अभार भिरताकी प गर्नेका वित श्री द्वातिका तारपालिका का तं १३ का वडा सहपद्दा श्री द्वाति वहाद्दर वि. भी 8 द्वप्ती अहपद्यामा त्यात्र यातापते गुरुवर्षात्रका वेटक वसी तपिस्त वस्तिम निर्णय गुरवर्षात्म<u>ा</u> तम्मी उपिम्पती यस प्रमार इत। माम / पर पद 9 श्री दुर्गी तहादूर वि. भी 13 HE 726 819 metore 121 2002 5/5) इलाउ इल्यांड 21192151 for 3. कुस्मा किसी था है या करिया @m1 (न्द्रन्य) भाष सोर्न केट्राविड भार को अप. वडा ments pun 9. वडा सद्द्र्य मिना कि भी परियार मिन



DATE: सात मिर्त २०६६ मात असार अधिताको व अतेका वित श्री विश्वापा निर्मा वटा तं १८ का वडा सहपक्ष श्री दाओदर ल्यूपात इसकी अर्थप्रतामा नात्र पातापत अर्थे वाओदर ल्यूपात इसकी अर्थप्रतामा नात्र पातापत 18241 1 datant उपिक्षिती यस प्रकार ताम / पर 8241813 १) श्री वार्भादर हथ्याते वडा अहप्र अर्ग अन्त कहाद यादिकारी लाल का पार्ड विम वर रही के न्द्रका जाहा HADOT THO OSO विर वट खन्याकी ट) यादन प्रसाद क्यीपान जारीयाद्य अर्ट्या हाल व्हाय क्वाल 90 दुगावहाइर छाति मगट 99 92 **अ।**ना 93 EGLIN VON 98 च्या भगी केली 92 ध्वत वडाइ पुत 98 क्का कर व्यक्ति ar बिक्क मावा अहराई 98-कछ्ठा दलांभी दानप्रमारी थापा

