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**Analyzing the Gaps in Institutional Capacity of Dhulikhel Municipality
in Implementing IUDP: A Case Study**

by

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A THESIS

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LIST OF ABBREVIATIONS

ADB	: Asian Development Bank
CAO	: Chief Administrative Officer
CBOs	: Community-Based Organizations
CBS	: Central Bureau of Statistics
CIP	: Capital Investment Plan
CPN-UML	: Communist Party of Nepal-United Marxist Leninist
DFID	: Department for International Development
DHUD	: Department of Housing and Urban Development
DPID	: Dynamic Participatory Institutional Diagnosis
DRM	: Disaster Risk Management
DUDBC	: Department of Urban Development and Building Construction
FGDs	: Focus Group Discussions
GIZ	: German International Agency for International Cooperation
GON	: Government of Nepal
GESI	: Gender Equality and Social Inclusion
GLD	: Guided Land Development
GTZ	: German Technical Support
IAP	: Integrated Action Plan
IDF	: Institutional Development Framework
IUDP	: Integrated Urban Development Plan
KIIs	: Key Informant Interviews
KMC	: Kathmandu Metropolitan City
KVDA	: Kathmandu Valley Development Authority
KVTDC	: Kathmandu Valley Town Development Committee
LGOA	: Local Government Operation Act
LISA	: Local Government's Institutional Capacity Self-Assessment
LLRs	: Land and Land Resources
LSGA	: Local Self Governance Act

LUIS	: Land Use Information System
LUPs	: Land Use Plans
LUZs	: Land Use Zones
MICA	: Municipal Institutional Capacity Assessment
MOFAGA	: Ministry of Federal Affairs and General Administration
MoLRM	: Ministry of Land Reform and Management
MOUD	: Ministry of Urban Development
MSIP	: Multi Sectoral Investment Plan
MTF	: Medium Term Forecast
MTMP	: Municipal Transportation Master Plan
NUA	: New Urban Agenda
NGOs	: Non-Government Organizations
NRM	: Nepal Residents Mission
NRs	: Nepali Rupees
NUDS	: Nepal Urban Development Strategy
OCAT	: Organizational Capacity Assessment Tool
OCI	: Organizational Capacity Indicator
PCR	: Project Completion Report
PEDP	: Physical and Environment Development Plan
PPP	: Public Private Partnership
PROSE	: Participatory, Results-Oriented Self-Evaluation
RBN	: Road Board Nepal
ROW	: Right of Way
RUPSON	: Regional and Urban Planners Society of Nepal
SMC	: Sub-Metropolitan City
SLUZs	: Specific Land Use Zones
Sq.km	: Square kilometre
TDC	: Town Development Committee
TDF	: Town Development Fund
TOR	: Terms of References

UDLE	: Urban Development through Local Effort
UIDC	: Urban Infrastructure Development Corporation
UKAID	: United Kingdom Agency for Internal Development
UN	: United Nations
UNDP	: United Nations Development Programme
UNISDR	: United Nations Disaster Risk Reduction Offices
USAID	: United States Agency for International Development

LIST OF TABLES

Table 1: Methodologies and Methods	7
Table 2: Timeline of urban development attempts in Nepal.....	11
Table 3: A comparison between various planning approaches	18
Table 4: Details related to municipal budget from fiscal year 2076/77 to 2078/79	37
Table 5: Actual Budget Expenditure details from fiscal year 2076/77 to 2078/79	39
Table 6: Details related to municipal revenue from fiscal year 2076/77 to 2078/79.....	40
Table 7: Provision of municipal loans	41
Table 8: Implementation Status of IUDPof Dhulikhel Municipality	61
Table 9: Table showing the name of departments in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality	63
Table 10: Table showing the human resources in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality in departments related to urban development.....	64
Table 11: Table showing Schedule of the activities of the thesis.....	67

LIST OF FIGURES

Figure 1: Location of Dhulikhel Municipality in the map of Nepal (Source: Google image)	5
Figure 2: Map of Dhulikhel Municipality showing ward boundaries (Source: Google Image).....	5
Figure 3: Organogram of Dhulikhel Municipality at the time of IUDP preparation	32
Figure 4: Current Organogram of Dhulikhel Municipality	34

ABSTRACT

In the realm of urban planning in Nepal, there has been paradigm shift in approaches of urban planning; Master Planning in the 1960s, Structure Planning in the 80s, Integrated Action Planning (IAP) in the 90s and lately (from mid 2010s) Integrated Urban Development Planning. Integrated Urban Development Plan (IUDP) is a long-term strategic plan that integrates multisectoral development, sets long term vision, goals and strategies for sectoral development that are driven by the lead development sector of the town. The review of previous planning approaches clearly suggests that previous planning approaches failed mainly because of lack of legal basis for implementation and weak institutional capacity of the planning in implementing the plans. Besides, the implementation aspect of IUDP is affected by the institutional, policy and legal frameworks pertaining to urban development planning in the country. The review of institutional, policy and legal framework for IUDP implementation, suggest that the preparation of IUDP is supported by prevailing international and national policies on urban development, clear roles and responsibilities of the institutions and legal basis for preparation, however the implementation of IUDP is challenging mainly in terms of (i) lack of legal basis for implementation, (ii) challenge in implementing local land use plans and assuring the compliance with upper level land use plans adhering to federal level Land Use Acts and Regulations and (iii) lack of institutional provision for monitoring and evaluation of IUDP. For this particular study, Dhulikhel Municipality was chosen. Six capacity areas were chosen based upon the review of various tools related to measuring institutional capacity of an organization: (i) human resources and organizational management, (ii) Financial and Economic Management, (iii) legal mandates and tools, (iv) planning, implementation, monitoring and evaluation, (v) external resources and relations, (vi) political commitment and willingness for implementation. The analysis of the gaps in the institutional capacity areas of Dhulikhel Municipality showed that in terms of human resource management Dhulikhel Municipality has insufficiency of the crucial manpower like urban planner, GIS expert required for urban development plan implementation and weak coordination between the departments. The gaps in financial and economic management accounts for weak budget expenditure capacity, incapability to minimize the current expenditure with regard to the increase in budget amount and gaps regarding the implementation of the strategies for economic development identified by the IUDP and strategies set by the periodic plan for various sub economic sectors for the overall economic development of the municipality. Likewise, in terms of legal mandates and tools, there exist gaps in terms of weak enforcement of the laws and acts including the bye laws. Similarly, in terms of planning, implementation, monitoring and evaluation, there exists gaps in terms of lack of informed decision making based on monitoring and review of plan and consideration of statistics. Lastly, in terms of external resources and relations there exist gaps with regard to the weak coordination between the different layers of government and inability to attract and channelize national and international investment for mega project implementation.

Keywords: urban development, urban development planning, Integrated Urban Development Plan, institutional, policy, legal, framework.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS.....	i
LIST OF TABLES	iv
LIST OF FIGURES.....	v
ABSTRACT.....	vi
TABLE OF CONTENTS.....	vii
1. INTRODUCTION	1
1.1 BACKGROUND	1
1.2 PROBLEM STATEMENT.....	2
1.3 RESEARCH OBJECTIVES.....	2
1.4 RATIONALE OF THE RESEARCH	3
1.4.1 Need.....	3
1.4.2 Importance	3
1.5 VALIDITY OF THE RESEARCH.....	3
1.6 LIMITATIONS.....	4
1.7 STUDY AREA	4
1.8 RESEARCH METHODOLOGY.....	5
1.8.1 Conceptual Framework.....	5
1.8.2 Methodology and Research Design.....	6
1.9 EXPECTED OUTPUTS.....	7
2. LITERATURE REVIEW.....	8
2.1 INSTITUTIONAL CAPACITY	8
2.1.1 Definition of Institutional Capacity.....	8
2.1.2 Capacity Areas of Institutional Capacity	8
2.2 HISTORY OF PLANNING APPROACHES IN NEPAL	11
2.3 DIFFERENT APPROACHES TO URBAN PLANNING: A THEORITICAL REVIEW	14
2.3.1 MASTER PLANNING.....	14
2.3.2 STRUCTURE PLANS	14
2.3.3 INTEGRATED ACTION PLANNING (IAP).....	14

2.3.4.	PERIODIC PLANS	15
2.4.	BACKGROUND OF INTEGRATED APPROACH TO URBAN PLANNING IN THE WORLD 15	
2.5.	BACKGROUND OF IUDP IN NEPAL	16
2.6.	IUDP PLANNING AND APPROVAL PROCESS	17
2.7.	COMPARISON OF VARIOUS PLANNING APPROACHES	18
2.7.1.	COMPONENTS OF IUDP	21
2.7.2.	PROS AND CONS OF IUDP	21
2.8.	INSTITUTIONAL FRAMEWORK FOR IUDP PREPARATION AND IMPLEMENTATION 22	
2.8.1.	Ministry of Federal Administration and General Affairs (MOFAGA)	22
2.8.2.	Ministry of Urban Development (MOUD) and DUDBC (Department for Urban Development and Building Construction).....	23
2.8.3.	The Local Government (Municipality).....	23
2.8.4.	Consultants.....	24
2.8.5.	Ministry of Land Management Cooperatives and Poverty Alleviation	24
2.9.	INSTITUTIONS FOR PROJECT FINANCING.....	24
2.9.1.	Department of Urban Development and Building Construction (DUDBC)	24
2.9.2.	Town Development Fund	25
2.9.3.	Road Board Nepal (RBN).....	25
2.9.4.	Development Banks.....	25
2.9.5.	International Development Partners	25
2.10.	POLICY FRAMEWORK FOR IMPLEMENTING IUDP.....	26
2.10.1.	The 2030 Agenda for Sustainable Development.....	26
2.10.2.	The New Urban Agenda	26
2.10.3.	National Urban Policy 2007.....	26
2.10.4.	Planning Standards and Norms 2013.....	26
2.10.5.	National Land Use Policy 2015	27
2.10.6.	National Urban Development Strategy (NUDS) 2017	27
2.11.	LEGAL FRAMEWORK FOR IMPLEMENTING IUDP	27
2.11.1.	The Constitution of Nepal 2015	27

2.11.2.	Local Government Operation Act	27
2.11.3.	Land Use Act 2019 and Land Use Regulations 2022	27
2.11.4.	Legal mandates and tools at the local level.....	28
2.12.	INSIGHTS FROM PREVIOUS URBAN DEVELOPMENT PROJECTS IN TERMS OF INSTITUTIONAL CAPACITY IN IMPLEMENTATION.....	28
3.	CASE STUDY OF DHULIKHEL MUNICIPALITY	30
3.1.	PREPARATION OF IUDP OF DHULIKHEL MUNICIPALITY	30
3.2.	IMPLEMENTATION STATUS OF IUDP OF DHULIKHEL MUNICIPALITY.....	31
3.3.	FINDINGS IN TERMS OF INSTITUTIONAL CAPACITY AREAS	31
3.1.1.	Human Resources and Organizational Management.....	31
3.1.2.	Financial and Economic Management.....	36
3.1.2.1.	Budget Allocation for IUDP implementation.....	36
3.1.2.2.	Expenditure of the municipality	38
3.1.2.3.	Revenue of the municipality.....	40
3.1.2.4.	Provision of Loans and Assistance for Budget Financing.....	41
3.1.2.5.	Strategies for Financial Resource Mobilization	41
3.1.2.6.	Strategies for Revenue Increment.....	42
3.1.2.7.	Strategies for Economic Development.....	42
3.1.3.	Legal Mandates and Tools	43
3.1.4.	Planning, monitoring and evaluation.....	44
3.1.5.	External Resources and relations	45
3.1.6.	Motivation, Willingness and Political Commitment	45
4.	CONCLUSION	47
5.	REFERENCES.....	48
6.	ANNEXES	53
	Annex 1: Checklist for Key Informant Interviews at Dhulikhel Municipality	53
	Annex 2: Schedule of activities related to data collection	54
	Annex 3: Key Informant Interviews	54
	Annex 4: Implementation Status of IUDP of Dhulikhel Municipality	61
	Annex 5: Comparison of Departments in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality	63

Annex 6: Comparison of Human Resources in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality	64
Annex 6: Acknowledgement Email from Journal of Innovation and Engineering Excellence (JIEE) regarding the Thesis Partial Paper Submission	66
Annex 7: Schedule of the activities of the thesis.....	67
Annex 8: A matrix showing the calculation of budget spent for implementation of programs of IUDP under physical development and economic development.....	68

1. INTRODUCTION

1.1 BACKGROUND

In the realm of urban planning in Nepal, there has been paradigm shift in urban planning approaches: emergence of Master Planning in the 1960s, Structure plans in the 1980s, Integrated Action Planning in the early 1990s, Periodic Planning in the late 1990s and Integrated urban Development Plan (IUDP) lately in the mid-2010s. The successive planning approaches emerged to address the drawbacks/shortcomings in the previous planning approaches. The plans prepared in the past failed to achieve the goals or let alone be implemented mainly because of the following reasons: (i) lack of legal basis for the implementation (ADB, 2020), (ii) lack of ownership of the plan by the agency for whom the plan is made (Thapa, 2022), (iii) lack of political commitment for the plan implementation (Thapa, 2022), (iv) lack of monitoring and evaluation of the implemented plans (Lal, 2021). All of the reasons stated earlier are rooted to the institutional capacity of the planning and implementing agency.

Nepal has adopted the federal system of governance with three tiers of government: Federal government, Provincial government and Local government. The three level governments are mandated by our constitution to prepare and implement the policies and plans in the respective tiers. The national, provincial and local level plans are the periodic plans with a period of five years. The National Planning Commission of Nepal prepares the national plans at the federal level. In provincial level, some of the provinces have formed the Provincial Planning Commission which is responsible for preparing the provincial plans. The local level is the lowest tiered government which is actually responsible for delivering the development activities through its annual and periodic plans. In the post federal scenario, there has been shift from Periodic Planning to Integrated Urban Development Planning (IUDP) regarding the urban development planning of the municipality. IUDP is the latest approach in municipal urban development planning in Nepal that integrates multisectoral development plans, adopts strategic actions to achieve long term physical (spatial) development. IUDP identifies the lead development sector that can drive the municipal development (Dahal, 2020). The reviews presented of the previous plans suggest that the implementation aspect of those plans is not satisfactory due to the lack of institutional capacity in the implementing agencies to execute the integrated urban development plans.

Regarding the urban development in Nepal, the national policy and legal documents like Town Development Act 1988, National Urban Policy 2007, Planning Standards and Norms 2013, National Urban Development Strategy 2017 and Land Use Policy 2015, Land Use Act 2019, Land Use Regulations 2022 have been formulated so far. Besides, for the preparation of Integrated Urban Development Plans, Department of Urban Development and Building Construction (DUDBC) under the Ministry of Urban Development (MOUD) has formulated a mandatory guidelines and TOR for the preparation of IUDP (DUDBC, MOUD, 2017). The DUDBC is a government entity responsible for promoting planned residential development and developing and implementing building bye laws for making the buildings safer, resilient and long lasting. It is responsible for providing the technical support in the preparation of IUDP (DUDBC, MOUD, GON, 2017) and facilitate the implementation of IUDP but municipality is actually the agency that is responsible for the preparation and implementation of the integrated urban development plans. For the implementation of IUDP, the projects within IUDP needs to be integrated in

annual and periodic plans. Nepal has recently conducted the municipal level election across the country. The municipalities will again be preparing the periodic plans for 5 years. In the last five years, most of the municipalities could not initiate the implementation of IUDP due to the lack of sufficient institutional capacity. The studies regarding the assessment of the gaps in institutional capacity of the municipalities to deliver the integrated urban development plans has not been conducted yet in the context of Nepal. This suggests that without the assessment and mitigation of such gaps in institutional capacity areas of the municipalities, the outcome of the IUDP will not be achieved as envisioned in the IUDP preparation. This may clearly affect the outcomes envisioned by the provincial and federal plans as it is imperative for the municipal level governments to deliver the development goals which aligns with the national goals and interests.

1.2 PROBLEM STATEMENT

Various planning approaches have approached in Nepal with regard to urban development. The plans prepared in the past failed to achieve the goals or let alone be implemented mainly because of the following reasons rooted to the weak institutional capacity of the planning and implementing agency. The Local Self Governance Act 1999 had empowered the local levels (municipalities) in Nepal to prepare annual and periodic plans (Nepal Law Commission , 1999). Aside from the periodic plans, the municipalities are preparing Integrated Urban Development Plans (IUDP) in the present context (Nepal Law Commission, 2017). IUDP is the long-term strategic plan that aims to achieve long term physical (spatial) development through the integration and harmonization of multisectoral development by adopting the strategic measures for each multisectoral plans (Dahal, 2020). The implementation of IUDP requires the integration of projects within IUDP to the annual and periodic plans which is also challenging regarding the lessons learnt from the failure of previous planning approaches in urban development planning. Some municipalities in Nepal have started implementing IUDP but most of the municipalities do not even have capacity to implement the plans. The previous planning approaches clearly show the lack of needed institutional capacity in the municipalities and the implementing agencies in implementing the various plans and projects related to the urban development. Failing to enhance the institutional capacity hinders the execution of the urban development plans as envisioned. This clearly demands the analysis of the gaps in the institutional capacity of the local governments in implementing IUDP.

1.3 RESEARCH OBJECTIVES

The overarching objective of this study is to analyze the gaps in the institutional capacity of the municipalities in implementing Integrated Urban Development Plan (IUDP). The other specific objectives are:

- i. To review the policy, legal and institutional framework for IUDP preparation and implementation.
- ii. To conduct a case study of the Dhulikhel Municipality to draw inference on gaps in institutional capacity of the municipalities in implementing IUDP

1.4 RATIONALE OF THE RESEARCH

1.4.1 Need

As discussed earlier, there has been paradigm shift in urban planning approaches in Nepal and currently IUDP has been adopted as a latest approach to planning. The implementation aspect of the past approaches to planning was weak and in most cases the plans were not even implemented. This can be accounted to several reasons among which the lack of institutional capacity of the planning and implementing agencies is a prominent factor for the poor implementation and even the failure of the plans. Institutional capacity of any agency like municipality is determined by various capacity areas like resources management, organization and administration, financial and economic management, technical programs and functions, political commitment legal mandates and tools etc. The gaps in these institutional capacity areas account for the weak institutional capacity. For the effective implementation of the policies, plans and programs including IUDP, the institutional capacity of the municipalities must be bolstered. For this, the identification of the gaps in the institutional capacity of the municipality and their mitigation through appropriate strategies is necessary. In that regard, the need for the analyzing the gaps in the institutional capacity of the municipalities through case study in this research is justified.

1.4.2 Importance

As discussed earlier, there is clearly a lack of needed institutional capacity in the municipalities of Nepal. The DUDBC had called up for Expression of Interest for the preparation of IUDP for 185 municipalities. Most of the municipalities have prepared IUDP while some even haven't been able to prepare the IUDP. A few municipalities including Dhulikhel Municipality have started the implementation of IUDP. Clearly there are challenges for the municipalities in implementing IUDP looking at the experiences of project implementation related to physical development plan, IAP, land pooling, town development project etc. For the effective implementation of the IUDP and achieving the milestones and goals envisioned by IUDP, the institutional capacity of the municipalities must be strengthened by identifying the gaps in institutional capacity and later mitigating them through appropriate strategies. The study regarding the analysis of gaps in capacity areas of the municipality in implementation of IUDP has not been conducted yet. In that regard, the outcomes and findings of this study will be beneficial for the municipalities to assess their own institutional capacity gaps and later mitigate those gaps which will help them strengthen their institutional capacity to implement not only IUDP but also other plans and programs. Further, the assessed gaps in institutional capacity of local governments can be the learning for the provincial and federal level as well for devising new policies in mitigating the gaps seen in their institutional setup and enhancing their capacities.

1.5 VALIDITY OF THE RESEARCH

The research regarding the assessment of the gaps in the institutional capacity of the local governments in implementing IUDP has not been conducted in the context of Nepal so, this research holds its validity in that regard. Likewise, the findings of this research will add a new dimension in the perspectives of the municipalities regarding the implementation of urban development plans.

1.6 LIMITATIONS

There are a few limitations related to the different aspects of this research. In terms of scope, this research does not assess the quality of the IUDP. Similarly, for the analyzing the gaps in financial management aspect, this study has taken into account the budget allocation instead of actual budget expenditure on the consecutive fiscal years. The municipality had not previously sorted the programs implemented under IUDP so, during the course of data collection, the programs under annual programs and budget had to be firstly tracked (from the booklet of Act formulated each year for the allocation of fiscal budget of the municipality) and plotted against the programs identified under IUDP. There were so many activities and programs which were difficult to track down considering all the multisectoral aspects of the IUDP. And also, many programs did not show absolute clarity regarding whether the programs were actually referred from programs under IUDP. To know about the actual budget expenditure on IUDP projects, the list of programs identified needed to be submitted to the resource person of financial administration of Dhulikhel Municipality which seemed to be a cumbersome additional homework for the resource person and there was chance that most likely the resource person from financial administration would not cooperate regarding the time to be given to just track down the titles of municipal expenditure under the annual programs. To keep the track of study in time and ease for the analysis, the budget allocation was taken as the benchmark for analyzing the implementation status of IUDP programs and overall financial management aspect of IUDP. Likewise, for the calculation of budget allocated on implementing programs of IUDP in annual programs and budget of consecutive fiscal years, this study has only taken into account of the programs pertaining to the physical aspect of the development (land development, urban infrastructure development, transportation infrastructure development, solid waste management and drinking water projects) and economic development as delineated in IUDP. The basic assumption is that majority of budget is allocated on physical aspects of the municipal development and financial management and capability of the municipality can be analyzed from the inference drawn from the allocation of budget expenditure on programs corresponding to IUDP. Furthermore, while assessing the programs implemented under IUDP, it became overwhelmingly difficult to list out the programs under every aspect of IUDP, so this study has not taken into account the programs under the social development plan, environment management plan, culture and tourism development plan and disaster risk management plan. Additionally, the findings from this study cannot be generalized globally however they can have contextual relevance with regard to the urban areas/municipalities of Nepal.

1.7 STUDY AREA

For this study, Dhulikhel Municipality has been chosen as the case study area. Dhulikhel Municipality lies in Kavrepalanchok district 30 km south-east of Kathmandu valley at 1550 m from the mean sea level (Dhulikhel Municipality, 2022). The municipality shares its boundary with Banepa Municipality and Panauti in the west, Panauti Municipality and Namobudhdha Municipality in the south, Panchkhal Municipality and Namobudhdha Municipality in the east. The core town of Dhulikhel Municipality is an old traditional Newari settlement and also the headquarter of Kavrepalanchowk district before the restructuring of the state in federalism. Dhulikhel Municipality comprises of 12 wards and is distributed over an area of 55 sq.km (MOFAGA, GON, 2022) with a total population of 32, 162 (CBS, GON, 2022). In the fiscal year 2079/80 Dhulikhel Municipality had the total budget expenditure of NRs. 1 billion 350 million (Dhulikhel Municipality, 2022). The municipality has prepared IUDP in 2019 and has completed 3

years since the implementation of IUDP began (Luitel, 2022). Dhulikhel Municipality has performed comparatively well and the past leadership led by Mayor Ashok Byanju was praised for his outstanding works in the overall development of Dhulikhel Municipality. CPN-UML, the leading party in previous election along with Ashok Byanju as a mayor have been reelected in the local election recently.

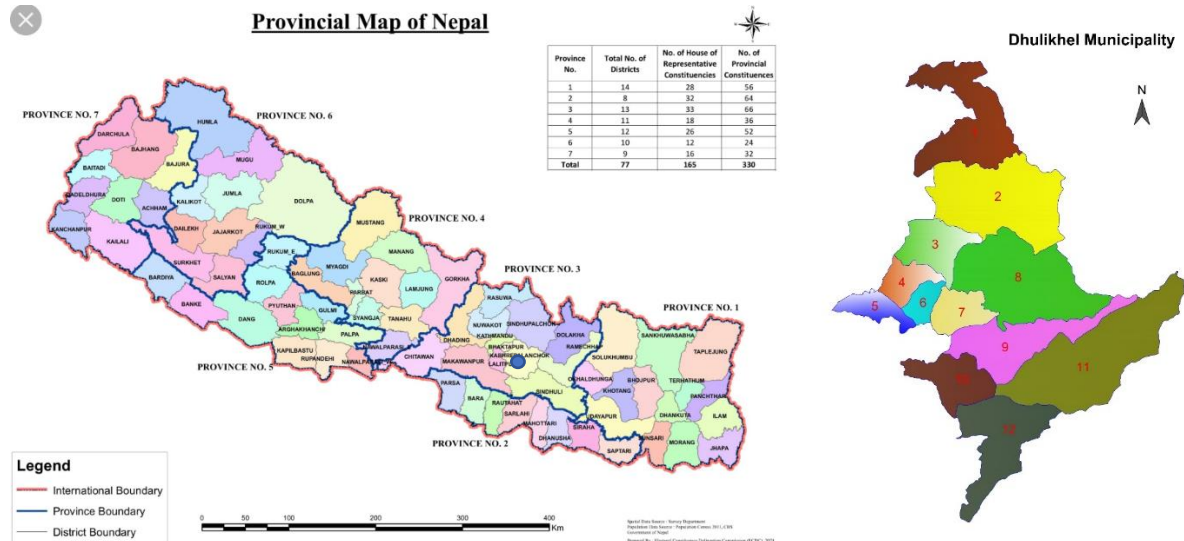


Figure 1: Location of Dhulikhel Municipality in the map of Nepal (Source: Google image)

Figure 2: Map of Dhulikhel Municipality showing ward boundaries (Source: Google Image)

1.8 RESEARCH METHODOLOGY

1.8.1 Conceptual Framework

The urban development though it manifests itself physically in the reality of physical world, it has the social dimension which the residing population experience which is subjective and entirely different from the scientific/natural reality. The institutional capacity of the municipalities, urban development planning, and gaps existing in institutional capacities are the socially constructed concepts, so this research needs to be framed within the realm of the social research. The ontological position of this study is that for achieving the outcomes envisioned by the Integrated Urban Development Plans, the institutional capacity of the municipalities must be enhanced for which the gaps existing in the institutional capacity must be assessed and mitigated. Likewise, the epistemological position for this study is that the gaps in the institutional capacity of the municipalities in delivering the urban development plans can be assessed from the qualitative interpretation of the interaction with the personnel from municipalities and review of the existing literature documents pertaining to the institutional capacity of the municipality.

There are various world views or the paradigms to examine the various social and natural realities occurring in this world. Paradigms can be understood as the multitude of logically related concepts and assumptions

that orient research (Bogdan & Biklen, 1998). The research needs to be located in particular paradigm or sometimes in more than one paradigm to address the different objectives of the research. Appropriate paradigm selection for the research has been done being based upon which paradigm offers the most convenient choices of methods, methodology and literature to carry out the research.

In this research, the objective has been set to assess the gaps in institutional capacity of the municipalities in implementing IUDP. This particular research can't be approached through the positivist paradigm as the subject taken for the research; assessing the gaps in institutional capacity of the municipalities in implementing IUDP is a phenomenon of the social world. In positivist paradigm, the scientific research is done in a controlled environment inside the lab and regardless of the personal value of the researcher the universal results are obtained in researches conducted under positivist paradigm. The phenomenon taken for this study cannot be tested in the scientific lab so, this particular research objective can't be achieved through the positivist paradigm.

In post positivist paradigm, the idea of truth or reality can't be universal and same phenomenon under study might show different result when the research area or the research subject is altered. The assessment of the phenomenon/reality in the post-positivist research only gives the probabilistic idea of the truth associated with the phenomenon. Further, in post positivist paradigm the interrelationship between the variable and the outcome associated with the phenomenon and between the variable themselves are approached through the correlational strategy. In this research, the assessment of the gaps in institutional capacity of the municipalities cannot be processed through the correlational strategy rather it requires the qualitative interpretation of the literature and opinions of the individuals in the institutions so, this research cannot be located in the post-positivist paradigm.

Interpretive paradigm suggests that reality is socially constructed. Research located in interpretivist paradigm do not usually begin with a theory (as with post-positivists) rather the researchers develop a theory or pattern of meanings through interpretation of the findings (Creswell, 2003) throughout the research process. The assessment of the gaps in institutional capacity of the local governments in implementing IUDP can only be done through the qualitative interpretation of the interaction with the individuals from the municipality and review of available literature documents pertaining to the institutional capacity. This suggests that the objectives of this research can only be addressed through the approaches of interpretivist paradigm.

Any research would be located in pragmatic paradigm if it adopts the methods within more than one paradigm to meet its research objectives. This shall not be confused with intermix of paradigm but two different paradigms shall be used for achieving two different objectives. From the above discussion it has been seen that this particular research is going to be approached only through the methods or strategies within the interpretivist paradigm to address the different research objectives pertaining to this research. In interpretivist paradigm a researcher reaches the conclusion after interpreting the available facts.

1.8.2 Methodology and Research Design

This research is located within the interpretivist paradigm and will be approached entirely through the qualitative approach. The methodologies namely: literature review, case study and consultation sessions will be carried out in this study. For this particular research, the review of literature deduces the findings being based on more than one fact so the literature review will be based on deductive logic. On the other hand, a case study will also be conducted in which the ideas are built being based upon the observed facts

along with the deduction of the observed facts which suggests that the inductive logic as well as the deductive logic will be used in case study. Likewise, the findings of the literature review and the case study needs to be consulted with the experts in personal interviews and consultation sessions. In the consultations and the brainstorming session/workshops with the experts, the abduction of the core ideas from the ideas and opinions expressed by the experts is required to reach the conclusion which suggests that the abductive logic will be used in the analysis of the findings of the consultations and the brainstorming sessions.

For the different methodologies mentioned earlier the following methods of information designated in the table below will be used:

Table 1: Methodologies and Methods

Methodologies	Method/sources of information
Literature review	Secondary data from the documents published online and in book form
Case study	Primary data from field study, KIIs and FGDs, secondary data from the published literature
Consultation sessions/brainstorming sessions	Consultative meetings, brainstorming (KII, FGDs) session with the experts

The following steps will be carried out in chronological order to proceed this research:

- i. Desk review of available literature documents pertaining to the institutional capacity of the municipalities
- ii. Case Study of a municipality where IUDP has been prepared and executed
- iii. Analysis from the literature review and case study
- iv. Consultation of the findings with experts

1.9 EXPECTED OUTPUTS

The expected outputs from this research are:

- Insights on the institutional, policy and legal provisions related to IUDP preparation and implementation, and
- Gaps in the institutional capacity in terms of human resources, financial resources, revenue, budget, legal mandate and tools, and political commitment

2. LITERATURE REVIEW

For this study, the review of various literature documents pertaining to the objective of the study have been reviewed. The literature review for this study covers the following aspects:

- i. theoretical aspect of institutional capacity of the institutions and the parameters that give the measure of the institutional capacity
- ii. the theoretical aspect of various approaches to urban planning and their characteristics
- iii. historical aspect of approaches of urban panning attempts in Nepal and the reason for failure of previous approaches of development of urban plans
- iv. theoretical underpinning of IUDP approach of urban development planning in Nepal
- v. institutional and legal framework for the implementation of IUDP
- vi. institutions for financing urban development projects

The aspects stated above are categorically discussed in details below:

2.1. INSTITUTIONAL CAPACITY

2.1.1. Definition of Institutional Capacity

According to (Hopkins, 1996 and Bhagavan & Virgin, 2004 as cited on (The Canadian Rural Revitalization Foundation, 2004)), within discussions of institutional capacity, institutions can be understood as entities with an organizational structure, with human, technical and financial resources, and with “normative relationships, rules and action patterns”.

The United Nations Development Programme (UNDP) and United Nations Disaster Risk Reduction Offices (UNISDR) define institutional capacity as the capability of an institution to set and achieve social and economic goals, through knowledge, skills, systems, and institutions (Institute for Transportation and Development Policy, 2016). (Bhagavan & Virgin, 2004) have mentioned in their study that they chose to work with a broad definition of institutional capacity that comprises (i) competence (ability), (ii) resources and (iii) structures. They also have mentioned that definition of “institutional capacity” encompasses, on the one hand, the functions (tasks) that institutions should have the competence (ability) to perform, and, on the other, the resources (human, technical and financial) and structures they need to that end.

2.1.2. Capacity Areas of Institutional Capacity

There are various parameters that collectively determine the institutional capacity of any institution. (Bhagavan & Virgin, 2004) have identified the following six key capacity areas that determine the institutional capacity:

- i. Information & knowledge
- ii. Competence & ability
- iii. Governance, institutional economy and institutional finance
- iv. Technical & infrastructural resources
- v. Policy arena, and
- vi. Policy instruments

Likewise, a study by (USAID, 2011) has mentioned that institutional capacity of any organization can be measured on the basis of following capacity areas and sub elements of respective capacity areas:

- a. Administrative and Support Functions
 - Administrative procedures and management systems
 - Financial management (budgeting, accounting, fundraising, sustainability)
 - Human resource management (staff recruitment, placement, support)
 - Management of other resources (information, equipment, infrastructures)
- b. Technical/Program Functions
 - Service delivery system
 - Program planning
 - Program monitoring and evaluation
 - Use and management of technical knowledge and skill
- c. Structure and Culture
 - Organizational identity and culture
 - Vision and purpose
 - Leadership capacity and style
 - Organizational values
 - Governance approach
 - External relations
- d. Resources
 - Human
 - Financial
 - Other

The USAID and other development organizations use the institutional assessment tools like Participatory, Results-Oriented Self-Evaluation (PROSE), Institutional Development Framework (IDF), Organizational Capacity Assessment Tool (OCAT), Dynamic Participatory Institutional Diagnosis (DPID), Organizational Capacity Indicator (OCI), The Yes/No Checklist or “Scorecard” (USAID, 2011) etc. The PROSE method measures institutional capacity by developing the questionnaire with response spectrum on the following capacity areas:

- i. External relations (constituency development, fund-raising and communications)
- ii. Financial Resource Management (budgeting, forecasting, and cash management)
- iii. Human Resource Management (staff training, supervision, and personnel practices)
- iv. Organizational Learning (teamwork and information sharing)
- v. Strategic Management (planning, governance, mission, and partnering)
- vi. Service Delivery (field-based program practices and sustainability issues)

Similarly, Institutional Development Framework (IDF) identifies five organizational capacity areas:

- i. Oversight/Vision (board, mission, autonomy)
- ii. Management Resources (leadership style, participatory management, management systems, planning, community participation, monitoring, evaluation)
- iii. Human Resources (staff skills, staff development, organizational diversity)
- iv. Financial Resources (financial management, financial vulnerability, financial solvency)

v. External Resources

Likewise, the Organizational Capacity Assessment Tool (OCAT) identifies the following capacity areas and their sub-elements:

- i. Governance (board, mission/goal, constituency, leadership, legal status)
- ii. Management Practices (organizational structure, information management, administration procedures, personnel, planning, program development, program reporting)
- iii. Human Resources (human resources development, staff roles, work organization, diversity issues, supervisory practices, salary and benefits)
- iv. Financial Resources (accounting, budgeting, financial/inventory controls, financial reporting)
- v. Service Delivery (sectoral expertise, constituency, impact assessment)
- vi. External Relations (constituency relations, inter-NGO collaboration, public relations, local resources, media)
- vii. Sustainability (program/benefit sustainability, organizational sustainability, financial sustainability, resource base sustainability)

Similarly, the toolkit named “Municipal Institutional Capacity Assessment (MICA)” (The World Bank, 2019) developed by the World Bank could measure the local institutional capacity on four areas:

- i. Disaster Risk Management (DRM),
- ii. Municipal finances,
- iii. Municipal investments, and
- iv. Better understand the mechanisms municipal governments use for engaging with citizens.

In addition to the institutional capacity measuring tool in international context, the Government of Nepal has developed a tool called Local Government’s Institutional Capacity Self-Assessment (LISA) which enables the local governments to self-assess their institutional capacity. The LISA Guidelines 2077 (MOFAGA, GON, 2021) has specified 10 parameters for self-assessing the institutional capacity of local government as mentioned below:

- i. Governance
- ii. Organization and Administration
- iii. Annual Budget and Programmes Management
- iv. Financial and Economic Management
- v. Public Service Delivery
- vi. Legal Service Delivery
- vii. Physical Infrastructures
- viii. Social Inclusion
- ix. Environment Conservation and Disaster Risk Management
- x. Cooperation and Coordination

From the review of capacity areas as identified in different assessment tools for measuring institutional capacity of the institutions, the following capacity areas have been chosen from different institutional capacity analyzing tools for analyzing the gaps in institutional capacity of the local government for this study:

- i. Human resources and organizational management

- ii. Financial and Economic Management
- iii. Legal mandates and tools
- iv. Planning, implementation, monitoring and evaluation
- v. External resources and relations
- vi. Political commitment and Willingness for Implementation

2.2. HISTORY OF PLANNING APPROACHES IN NEPAL

Nepal prepared its first national plan in 1955 following the worldwide trend of preparing national plans after the World War II (Joshi, 2008). The national plans were focused on economic growth and did not encompass the physical aspects of the development. Over time, the national plans were made comprehensive. Local plans on the other hand, were based on the physical development models. Their linkage with national plan was not clear as they should have been. They did not receive the resources as planned. Rural and urban development were treated in isolation like any other sector. Till this date, several types of plans have been developed so far, but most of them just remain as paper works. The table below shows the timeline of the urban planning related practices in Nepal:

Table 2: Timeline of urban development attempts in Nepal

Year	Event/Activity
1944	<ul style="list-style-type: none"> • Rajbiraj was planned as Planned Administrative Town (Uprety, 2020).
1962	<ul style="list-style-type: none"> • In 1962 the Kathmandu Beautification was launched for its Visual improvements seeing the need for renewal and preservation of historic core identified and planning inputs were proposed (Uprety, 2020). • UN Technical Assistance to Nepal for Urban Planning (Uprety, 2020)
1963	<ul style="list-style-type: none"> • Town Development Committee Act 1963 was promulgated (Uprety, 2020).
1969	<ul style="list-style-type: none"> • Kathmandu Valley Plan was developed (Uprety, 2020).
1972	<ul style="list-style-type: none"> • The division of Nepalese administrative territory into 4 development regions: Eastern Development Region, Central Development Region, Western Development Region and Far-Western Development Region (Uprety, 2020).
1973	<ul style="list-style-type: none"> • Town Development Implementation Act 1973 was approved (Uprety, 2020). • Kathmandu Valley Town Development Committee was formed (Uprety, 2020) • Sections of Kathmandu Valley Plan was revised by national professionals (Uprety, 2020).
1975	<ul style="list-style-type: none"> • Ring Road for Kathmandu was proposed (Uprety, 2020).
1976	<ul style="list-style-type: none"> • Comprehensive General Plan for Kathmandu was again revised (Uprety, 2020).
1980	<ul style="list-style-type: none"> • Formation of Ministry of Panchayat and Local Development in 1980 (MOFAGA, GON, 2022)
1982	<ul style="list-style-type: none"> • Decentralization Act 1982 (Joshi, 2008)

	<ul style="list-style-type: none"> The Far-Western Development Region was again divided into Mid-Western and Far-Western Development Region (Joshi, 2008)
1987	<ul style="list-style-type: none"> Structure Plan for Greater Kathmandu was proposed (Uprety, 2020).
1988	<ul style="list-style-type: none"> Town Development Act was promulgated
1991	<ul style="list-style-type: none"> Kathmandu Urban Development Project was prepared by Department of Housing and Urban Development (DHUD) in support of Asian Development Bank (ADB) (ADB, 2003)
1992	<ul style="list-style-type: none"> IAP execution in municipalities began in Nepal in support of German Technical Support (GTZ) (Uprety, 2020).
1999	<ul style="list-style-type: none"> Local Self Governance Act 1999 was formulated; it required municipalities to prepare municipal periodic plans
2016	<ul style="list-style-type: none"> Integrated Urban Development Plan (IUDP) was introduced by Ministry of Federal Affairs and Local Development (MOFALD) (Now MOFAGA)
2017	<ul style="list-style-type: none"> Local Government Operation Act 2017 was formulated; it required all the local level governments to prepare local level periodic plans

As we see in the above table showing the timeline of development of urban planning approaches in Nepal, it is evident that the urban planning approach in Nepal was initiated from the planning of Rajbiraj City as an administrative town. Initially planned in grid iron pattern, the city now seems to be no different from the other cities in the Terai region of Nepal after expanding along the access routes (Uprety, 2020). Likewise, the Kathmandu Beautification launched in 1962 was another subsequent approach to planning/management of urban fabric of Kathmandu. Seeing the need for renewal and visual improvements, the historic core areas were identified for conservation and planning inputs were proposed.

Under UN Technical Assistance, Planning Office was setup in Nepal in 1962 (Uprety, 2020). It supported the formulation of the building code for monumental zone and Town Development Committee Act 1963. Under the same technical assistance, the Kathmandu Valley Plan was developed in 1969 which was a model of Comprehensive Physical Development Plan. It had carried out excellent background study regarding the overall aspect of Kathmandu valley but the plan was limited only to the publishing. It was never approved and implemented. As the Kathmandu Valley Plan approval process was delayed, the UN technical assistance for Urban Planning was stopped (Uprety, 2020). In 1973, the Nepalese professionals revised some sections of the plan however the plan could not be implemented because of the lack of the legal basis for implementation. There was delay in formation of acts and regulations on one hand. On the other hand, required resources and political commitment for the implementation was clearly lacking. The Comprehensive General Plan for Kathmandu 1969/73 was again revised in 1976. The revision constituted minimum zoning proposals and “instructions for actions” but there were no actual interventions or actions. The scanty land use policy and the regulations were passed this time but still it could not be implemented due to the failing political commitments.

In 1972, under the Panchayat period, the concept of regional development germinated with the division of Nepalese administrative territory into 4 development regions-Eastern Development Region, Central Development Region, Western Development Region, Far-Western Development Region (Upreti, 2020). Further in 1982, the Far-Western Development Region was divided into Mid-Western and the Far-Western Development Region. The regional development centers for each development region were assigned as their respective headquarters. The plans were prepared for these regional centers mainly comprising of the land use and transportation network supporting the development goals. For the development of the town, the acquisition of the land was carried out by the state which led the execution of plan to be expensive. In Birendranagar, Pokhara and Dhankuta, the planning and implementation were carried out at the highest level.

In 1987, the Structure Plan for Greater Kathmandu was proposed (Upreti, 2020). It constituted the guidelines for future development of Kathmandu and Lalitpur. It focused on land use and had a 20-year perspective for Kathmandu Valley. Structure Plans aimed to steer or manipulate the direction of development through judicious planning of urban services (transportation networks and public services).

In 1991, The Kathmandu Urban Development Project was prepared by Department of Housing and Urban Development (DHUD) with the support of Asian Development Bank (ADB, 2003). It was aimed to improve Kathmandu's urban environment through physical works, as well as institutional and policy development. The physical interventions in the project covered (i) upgrades to Kathmandu's urban core, (ii) storm drains and environmental improvements to the Bishnumati River Corridor, and (iii) Naya Bazar land pooling. The project was rated partly successful. However, KMC's weak organizational structure did not improve, despite major restructuring efforts under the Project (ADB, 2003).

In 1992, the IAP was introduced in Nepal. The execution of IAP in municipalities began in 1992 by (German Technical Cooperation) GTZ within its UDLE programme (Upreti, 2020). IAP had been launched in 22 municipalities by 1997 in partnership with the Department of Housing and Urban Development (DHUD). Dhulikhel, Banepa, Dhankuta, Palpa, Birgunj were some of the early municipalities to prepare and implement IAP. IAP plans were prepared for many cities but the impact and implementation were not impressive. 60 – 70% of the planned activities were completed in Dhulikhel while only 38.71% of the 144 planned activities were achieved in Banepa. The reason for the poor implementation and impacts of IAP are mainly (i) change in municipal leadership, (ii) poor commitment of the municipalities, (iii) lack of coordination and cooperation between central and local government, (iv) the implementation was rarely monitored even if there was provisioning of monitoring and follow up.

From the review of the various past approaches of urban planning in Nepal, it is evident that the implementation aspect of those plans seems to be very weak due to mainly because of: (i) lack of legal basis for implementation, (ii) lack of ownership of the plan by the implementing agencies and commitment to implement the same, (iii) weak coordination between the implementing agencies and (iv) lack of monitoring and follow up of the implemented plans.

2.3. DIFFERENT APPROACHES TO URBAN PLANNING: A THEORITICAL REVIEW

2.3.1. MASTER PLANNING

Master Planning is a conventional planning technique based on land use model. It is used to develop a land use plan consistent with the development goals (Joshi, 2008). In master planning, the resource endowments, the thresholds limits, and the built environment all are considered. The planning process follows the sequence of survey, analysis, evaluation and implementation. Master Plans have the following characteristics (Joshi, 2008):

- Masters Plans are time consuming to prepare, too rigid, and geared to a single, long-term outcome (Joshi, 2008).
- The plan is developed in the form of maps and explanatory texts through which describes the proposed future land use and infrastructure pattern of a city, for 15 to 20 years of time (Joshi, 2008).
- They have legal mandates which constitute bye laws, regulations etc. related to buildings and zoning (Joshi, 2008).

2.3.2. STRUCTURE PLANS

The structure plans are prepared with maps and explanatory texts that show the magnitude and direction of urban growth including infrastructure networks and the placement of social services (Joshi, 2008). They do not specify the land use to the lot level rather identify the areas where detailed local plans are needed (Joshi, 2008). Unlike master plans, structure plans require much less time in gathering data and preparation of the plan (Joshi, 2008). They are flexible enough to update as per the necessity depending upon the changing demands in course of time (Joshi, 2008). Those are actually the redressing to the drawback of the master plans which took long time to prepare and which are too rigid (Joshi, 2008). Structure Plans indicate where the public investment should be made and how these sectors need to be coordinated (Joshi, 2008). They can provide a framework to the Capital Investment Plan (CIP) and budget together with the series of policy-oriented action plans (Joshi, 2008). In Structure Planning Approach the Local Area Plan is prepared where necessary while Structure Plans are indicative in nature (Joshi, 2008).

2.3.3. INTEGRATED ACTION PLANNING (IAP)

According to Joshi (2008), during the decade of 1950s and 1960s, the conventional approach of master planning was then deemed inadequate by the planners to solve the immediate problems of the city. He also quotes that the concept of Action Planning was first advocated by Otto Koenisberger in 1964 in the context for planning in Singapore. Joshi (2008) defines IAP as a community driven, highly participatory and need based planning process that facilitates the development through implementable and realistic projects. The projects or the actions in IAP are integrated to Multi Sectoral Investment Plan (MSIP) and Physical and Environment Development Plan (PEDP) (Joshi, 2008). “Action” in IAP implies the projects or activities which are immediately put into implementation to meet urgent need of the area or to solve the problems for which immediate actions are desired. IAP takes very less time for planning and implementation. It is a field-based planning process in which planning team of professionals work closely with the municipality staffs and the community (Uprety, 2020). The major components/outputs of IAP are Physical and Environment

Development Plan (PEDP), Actions or the Projects and the Multi Sectoral Investment Plan (MSIP). IN IAP, there is a provision of twice-yearly follow-up to assist municipality: provision followed for three years and discontinued thereafter (Upreti, 2020). According to (Subba, 2022) the Integrated Action Plan only focused on actions/projects aimed to solve immediate problems of the municipality and it could not provide long term vision for the municipal development.

2.3.4. PERIODIC PLANS

The periodic planning started in Nepal from the First Five Year Plan in the context of national planning (Joshi, 2008). However, in the realm of municipal urban development, the periodic planning was envisaged by the Local Self Governance Act 1999 (Nepal Law Commission , 1999). The periodic planning approach was comprehensive in nature and comprised sectoral goals and programs that were in coherence with the physical development plan of the municipality and the long-term vision for the municipal development. The local Self Government Regulations of 1999 required the periodic plan to contain the schedule of activities for five years and procedures for making plans and plan approvals (Ministry of Local Development, 1999). After the restructuring of the country in federalism, the Local Level Operation Act, 2074, requires the formulation of the local level periodic plan for all the local level governments (municipalities and the rural municipalities) (Nepal Law Commission, 2017).

Components of a Periodic Plan

The periodic planning requires the following components to constitute the whole of a local level periodic plan (Lungru Rural Municipality, 2020):

- Vision, Goals, objectives, strategies, outcomes and outputs
- Physical Development Plan (PDP)
- Environment Management plan
- Social development plan
- Economic Development Plan
- Resource Mobilization Plan
- Institutional Development plan
- Disaster Management Plan
- Multi-Sectoral Investment Plan (MSIP)

According to (Subba, 2022) the periodic plan is more of an advisory document for the decision makers (mayors of the municipality). Subba mentioned that the periodic plans though provided vision for municipal development but could not generate large municipal investment projects that could drive municipal urban development.

2.4. BACKGROUND OF INTEGRATED APPROACH TO URBAN PLANNING IN THE WORLD

The concept of integrated development in general is associated with the aspects of sustainable development and management (Milojevic, 2018). Integrated approach of planning has evolved from the improvement of process of rational planning of the 1950s and by integrating the socio-economic process relating to the complex and dynamic nature of urban areas (Milojevic, 2018). Looking back at the development of

planning, the Comprehensive Planning is the rational approach of planning based on land use which are consistent with the development goals (Joshi, 2008). In the rational approach, the technical expertise of the planners was the deciding factor how the development of a city should go in a long run (Joshi, 2008). The comprehensive approach in planning did not follow societal processes, and its aims went beyond human intellectual capabilities and technical and organizational capacity in the 1960s (Milojevic, 2018). Urban planning in itself is a multidisciplinary, technical and socio-political process that is concerned with the efficient usage of land, social welfare, design, management and enhancement of urban environment (Milojevic, 2018). For a long time, the experts in the various sectors of development worked in isolation and cities suffered from many chronic urban problems related to multiple sectors of urban development like social justice, unemployment, traffic congestion, and environmental pollution and many more. Social process of planning was largely ignored in planning (Milojevic, 2018). The search for sustainable and comprehensive solutions to address the multitude of problems in urban development in general and the accumulation of knowledge and process in those multiple sectors led to the paradigm shift in planning towards integrated approach of urban planning (Milojevic, 2018). The idea of integrated planning had been germinating and growing for many decades at international forums and conferences like the United Nations Conference on the Human Environment, Stockholm, 1972; Habitat I and II - Conference on Human Settlements, Vancouver, 1976; and Istanbul, 1996; the United Nations Conference on Environment and Development, Rio de Janeiro, 1992; the World Summit on Sustainable Development or ONG Earth Summit 2002, Johannesburg, 2002; Rio+10, 2002 and Rio+20, 2012 etc. (Milojevic, 2018). The development of all these concepts in international conferences are actually directed to achieving sustainability which also provide the background for the development of integrated approach in planning (Milojevic, 2018). Activities related to urban planning and housing are coordinated by UN-Habitat, which produces studies and publications on all types of human settlements with the aim of protecting the environment and ensuring a better quality of life for the present and future generations (Milojevic, 2018). Research has shown that the execution of integrated urban planning is directly affected by the multidimensional aspects; socio-economic aspects, legal provisions, technological aspects, and professional and educational potentials of societies pertaining to the particular urban setting (Milojevic, 2018).

2.5. BACKGROUND OF IUDP IN NEPAL

Nepal's Urbanization is rapid and imbalanced as compared to the regional context (MOFAGA, GON, 2016). Looking at the government's efforts for addressing the urban issues and planned urban development, the Physical Development Plan of Kathmandu Valley prepared in 1969 can be considered pivotal in the realm of urban planning in Nepal (MOFAGA, GON, 2016). After this so many development plans were prepared but they failed to get implemented due to lack of legal/institutional mechanism and financial resources (MOFAGA, GON, 2016). In the 70s Regional Planning concept was introduced in Nepal with master planning of four regional headquarters (Dhankuta, Pokhara, Surkhet and Dipayal) (MOFAGA, GON, 2016). In the late 80s, the structure plans of designated urban centres were prepared (MOFAGA, GON, 2016). Similarly, IAP was introduced in 1990s. IAP more focused on ward level programs targeted to solve problems requiring immediate solutions however, it could not provide vision for municipal development (Subba, 2022). Likewise, the periodic planning introduced by Local Self Governance Act 1999 though provided comprehensive planning with multisectoral programs supporting the vision and goals for municipalities, it failed to generate the large municipal investment projects that could actually drive the municipal urban development and achieve long term physical development backed by concrete land use

plans (Subba, 2022). Keeping in view of this context, the government of Nepal had been developing National Urban Policy 2007. The policy is directed to prioritize the investments in lagging regions within the country (MOFAGA, GON, 2016). In this background, the Government of Nepal introduced the concept of Integrated Urban Development Plan under the initiative of Ministry of Urban Development (MOFAGA, GON, 2016). The IUDP is envisioned to achieve long term physical development backed by strategic measures (actions) pertaining to multisectoral development plans integrated within IUDP which are also driven by a lead sector (Dahal, 2020). Ministry of Federal Affairs and Local Development (MOFALD) initially prioritized 25 municipalities for investment (MOFAGA, GON, 2016).

2.6. IUDP PLANNING AND APPROVAL PROCESS

The IUDP planning process can be summarized into the following bullets (MOFAGA, GON, 2016):

- Mass consultation/sharing meetings at municipality with the participation of local political parties/representatives, district level government officials, and concerned stakeholders for getting consensus on sectoral analysis report, sectoral plans and final IUDP report.
- Expert panel review by local level experts/intellectual people, at least before each consultative meeting
- Submission of IUDP to steering committee for review (Steering Committee is the body for facilitation of IUDP preparation however it does not have role in IUDP endorsement.)
- Sharing of IUDP to MOFALD (now MOFAGA) Technical Review Committee formed for reviewing MTMP, which consists of representatives from MOFALD, DOLIDAR, MOUD, TDF, Department of Roads etc. for getting feedbacks and no objection.
- Final approval by municipal council

2.7. COMPARISON OF VARIOUS PLANNING APPROACHES

The various planning approaches were reviewed and were compared in terms of the attributes like features, components/outputs, **Agency for preparation and implementation, Guiding Factors/Policies on Urban Development**

Table 3: A comparison between various planning approaches

Comparison in terms of features, pros and cons	
Master Plan (Physical Development Plan)	<p>Master Plan</p> <ul style="list-style-type: none"> • is not participatory (Joshi, 2008). • is dependent on rationality of planners (Joshi, 2008). • is too rigid, seldom revised (Joshi, 2008). • is time consuming (Joshi, 2008). • did not provide detailed estimate of the projects (Joshi, 2008). • did not have clear delineation of financing mechanism was not clear (Joshi, 2008). • had statutory status (Joshi, 2008).
Structure Plan	<p>Structure Plans</p> <ul style="list-style-type: none"> • does not dictate the land use up to plot level (Joshi, 2008). • provides the direction to which development needs to be oriented (structural guidance for the development and investment) (Joshi, 2008). • is indicative in nature (Joshi, 2008). • also details out local area plan where detailed planning is required (Joshi, 2008). • did not have any provisions for periodic review (Joshi, 2008).
Integrated Action Plan (IAP)	<p>IAP</p> <ul style="list-style-type: none"> • is highly participatory (Joshi, 2008). • is focused on actions for solving immediate problems (Joshi, 2008). • did not provide vision for municipal development (Subba, 2022).
Periodic Plan	<p>Periodic Plan</p> <ul style="list-style-type: none"> • is comprehensive in nature (Lungri Rural Municipality, 2020). • participatory in approach (Lungri Rural Municipality, 2020). • an advisory document for elected officials (mayors) (Subba, 2022). • has a provision of periodic review (Subba, 2022). • failed to generate investment projects for municipal growth/development (Subba, 2022).
Integrated Urban Development Plan (IUDP)	<p>IUDP</p> <ul style="list-style-type: none"> • is an amalgamation of previous planning approaches (Subba, 2022). • is highly participatory in approach (Subba, 2022).

	<ul style="list-style-type: none"> • is a visionary document as well as project generating document, comprehensive in nature (Subba, 2022).
Comparison in terms of components/outputs	
Master Plan (Physical Development Plan)	<ul style="list-style-type: none"> • Physical and Environment Development Plan based on land use (Joshi, 2008). • Bye Laws (Joshi, 2008). • Capital Investment Plan (Joshi, 2008).
Structure Plan	Structure Plans, Indicative Plan or Local Area Plan (Joshi, 2008).
Integrated Action Plan	PEDP, actions (Projects) and Multi Sectoral Investment Plan (MSIP) (Joshi, 2008).
Periodic Plan	<p>The Periodic Plan has following components/outputs (Lungri Rural Municipality, 2020):</p> <ul style="list-style-type: none"> • Vision, goals, objectives, strategies, outcomes and outputs for 5 years • Physical Development Plan (PDP) • Environment Management plan • Social development plan • Economic Development Plan • Resource Mobilization Plan • Institutional Development plan • Disaster Management Plan • Multi-Sectoral Investment Plan (MSIP)
IUDP	<p>The IUDP has following outputs/components (DUDBC, MOUD, GON, 2017):</p> <ul style="list-style-type: none"> • Long term vision, strategies, objectives • Long-Term Physical Development Plan • Social Development Plan • Conservation, Cultural& Tourism Development Plan • Economic Development Plan • Financial Development Plan • Institutional Development Plan • Municipal Transport Master Plan (MTMP) • Environment Management Plan) • Multi Sectoral Investment Plan (MSIP) • Municipal Bye Laws • Two detailed engineering projects
Comparison in terms of agencies responsible for preparation and implementation	
Master Plan (Physical Development Plan)	Central Government, DUDBC (Joshi, 2008).
Structure Plan	Central Government (Joshi, 2008).

Integrated Plan	Action	MOUD, UDLE, GIZ (Joshi, 2008)
Periodic Plan		Local government through consulting services (Lungri Rural Municipality, 2020).
IUDP		Local government through consulting services (DUDBC, MOUD, GON, 2017).
Comparison in terms of guiding factors/policies on urban development		
Master Plan (Physical Development Plan)	Plan	Imitation of the planning approach from the outside world after world war (Joshi, 2008).
Structure Plan		Drawbacks in the Master Planning approach (Joshi, 2008).
Integrated Plan	Action	Urgent needs of the municipality (Joshi, 2008)
Periodic Plan		Policies of National Planning Commission (Lungri Rural Municipality, 2020).
IUDP		National Urban Policy 2007 (MOFAGA, GON, 2016).
Comparison in terms of legal provisions		
Master Plan (Physical Development Plan)	Plan	No legal provisions for plan implementation (MOFAGA, GON, 2016)
Structure Plan		No legal provisions for plan implementation (MOFAGA, GON, 2016)
Integrated Plan	Action	No legal provisions for plan implementation (Subba, 2022).
Periodic Plan		Periodic Plan is mandated by: <ul style="list-style-type: none"> • LSGA 1999 previously for all the municipalities before the enforcement of three layer of government under federalism (Nepal Law Commission , 1999). • LGOA 2017 for all the local level government after the federal transformation of the governance structure of Nepal (Nepal Law Commission, 2017).
IUDP		Not enacted by the law but has legitimacy as a municipal plan as it is endorsed by the local government and the DUDBC (Subba, 2022).
Comparison in terms of financing mechanism		
Master Plan (Physical Development Plan)	Plan	Central Government (Joshi, 2008).
Structure Plan		Central Government (Joshi, 2008).
Integrated Plan	Action	DUDBC, GIZ (Joshi, 2008)

Periodic Plan	Municipality, Loan from TDF (Town Development Fund, 2022), Development Partners (Town Development Fund, 2022)
IUDP	Municipality, Loan from TDF (Town Development Fund, 2022), Development Partners for financing the projects (Town Development Fund, 2022), Road Board Nepal for financing the projects related to road (Dhulikhel Municipality, 2019).

2.7.1. COMPONENTS OF IUDP

The guidelines for IUDP preparation (DUDBC, MOUD, GON, 2017) had required the following outputs:

- Delineation of long-term vision, overall goal, objectives and strategies (for 15 years period) for municipal development.
- Multi Sectoral Plans:
 - Long-Term Physical Development Plan,
 - Social Development Plan
 - Conservation, Cultural & Tourism Development Plan
 - Economic Development Plan
 - Financial Development plan
 - Institutional Development Plan
 - Urban/Municipal Transport Master Plan (MTMP)
 - Environment Management Plan
- Multi Sectoral Investment Plan (MSIP)
- Bye Laws for regulating the Land Use and Physical Development
- Detailed Engineering Design Report of 2 prioritized projects belonging to different sectors.

From the aforementioned expected outputs of IUDP, it is seen that IUDP has derived various multi sectoral programmes and visions, goals and strategies as its outputs from Periodic Planning. Likewise, the MSIP in IUDP is derived from IAP and Periodic Plan. Similarly, the land use zoning/plans in IUDP are essentially the elements of Physical Development Plan. Hence it is the amalgamation of the previous planning approaches. One innovation peculiar to IUDP is that it has two detailed engineering projects which are supposed to go to immediate implementation and these projects are expected to drive the municipal development.

2.7.2. PROS AND CONS OF IUDP

From the review and comparison of various planning approaches, the following pros and cons of IUDP are identified below:

Pros

- IUDP integrates the multi sectoral development plans and provides a comprehensive and integrated development planning model for the municipality. This is in line with sustainable development envisioned by the The 2030 Agenda for Sustainable Development and New Urban Agenda.

- It provides a long-term vision, strategies, goals, objectives and outputs and can be pivotal for providing right direction for the municipal development based on its own lead sectors.
- It prioritizes the projects in Multi Sectoral Investment Plan (MSIP) in the long-term period for efficient capital investment.
- It is highly participatory and inclusive.
- The IUDP develops the Detailed Engineering Report of the two major projects for the municipal investment.

Cons

- It does not have any legal basis for implementation though it has legitimacy as the plan endorsed by the government agencies.
- It does not have a separate implementation framework. The projects and programmes outlined in IUDP needs to be integrated in annual and periodic plans which have legal basis for implementation.
- The TOR of IUDP has not envisaged the review, monitoring and evaluation framework regarding the implementation of IUDP.

2.8. INSTITUTIONAL FRAMEWORK FOR IUDP PREPARATION AND IMPLEMENTATION

Regarding the preparation and implementation of IUDP, the jurisdictions of the institutions like Ministry of Federal Administration and General Affairs (MOFAGA), Ministry of Urban Development (MOUD) and Department for Urban Development and Building Construction (**DUDBC**), Ministry of Land Management, Cooperatives and Poverty Alleviation (MOLMCPA) are attracted. The review of these institutions is presented below:

2.8.1. Ministry of Federal Administration and General Affairs (MOFAGA)

Ministry of Federal Administration and General Affairs (MOFAGA) was reformed from Ministry of Local Development in the federal transformation of the state. Ministry of Local Development was formed in 2037 B.S. to deliver local governance, development and service delivery from the central level (MOFAGA, GON, 2022). MOFAGA is responsible for the coordination between all three levels of government. With regard to local level development and planning MOFAGA is responsible for (i) the coordination in the tasks related to the formulation and implementation of policies, laws, plans and programmes (ii) monitoring and evaluation of the programmes (iii) coordination between the three levels of government regarding the aspects of planning. Regarding the urban development, it is also responsible for the coordination in implementation of the land use policies, planned residential development, municipal bye laws, policies and programmes related to Disaster Risk Management (DRM), Climate Resilience, international aid, etc. MOFALD (now MOFAGA) initially prioritized the 25 municipalities for preparation and implementation of IUDP (MOFAGA, GON, 2016).

2.8.2. Ministry of Urban Development (MOUD) and DUDBC (Department for Urban Development and Building Construction)

The Ministry of Urban Development is a ministry responsible for regulating the affairs related to Urban Development and Building Construction (MOUD, GON, 2022). The Department for Urban Development and Building Construction (DUDBC) under MOUD is responsible for promoting planned residential development and developing and implementing building bye laws for making the buildings safer, resilient and long lasting (DUDBC, MOUD, GON, 2022). With regard to urban development and planning, DUDBC is responsible for (DUDBC, MOUD, GON, 2022):

- Drafting working policies for solving the problems arising in implementation of planned residential development and increasing environmental problems and coordinating and cooperating with the local level governments to implement the same.
- Implementing Town Development Act, Plans adhering to Bye Laws on Urban Development
- Updating bye laws
- Empowering the local level governments to enhance their institutional capacity to deliver their plans and programs
- Formulating and implementing short term and long-term policies and plans for building construction and urban development

DUDBC had prepared TOR for the preparation for IUDP for municipalities and it was responsible for overall supervision on the planning process particularly for: (i) overall supervision and monitoring of the consultant and (ii) facilitation to the consultant for the overall planning process (DUDBC, MOUD, GON, 2017). However, it does not have its concrete role in implementation of IUDP as IUDP is the plan that is prepared and implemented by municipality from its own investment.

2.8.3. The Local Government (Municipality)

The local level government is the lowest tier of government that is responsible for delivering the development. Regarding the aspect of local level planning, the local level government is empowered by the Local Government Operation Act 2017 to prepare local development plan, annual, mid-term and periodic plans (Nepal Law Commission, 2017). This suggests that the Act provides the legal basis for the preparation of the IUDP as a municipal urban development plan. The IUDP is prepared by the municipal governments through consulting services from private firms while the process is monitored and facilitated by DUDBC.

The Terms of Reference for IUDP has assigned the following responsibilities for the municipality (DUDBC, MOUD, GON, 2017):

- facilitate internally and externally in the entire planning process till the completion of plan preparation.
- help the planning team to provide and gather data.
- raise specific planning issues and provide suggestions separately to the planning team.
- help the planning team to organize inclusive municipal level meeting in each municipality.

The municipal government has the ownership of the plan and it is solely responsible for executing the projects within IUDP. The IUDP is implemented by the municipalities by integrating the programmes and

projects identified by IUDP in their annual and periodic plans and programmes as no other implementation mechanism has been envisaged for the implementation of IUDP.

2.8.4. Consultants

Consultants are responsible for carrying out the planning process of IUDP starting from data collection to the delivery of the expected deliverables as mentioned in the Terms of reference (TOR) (DUDBC, MOUD, GON, 2017). While carrying out the preparation of IUDP, the consultants are expected to make the planning process participatory of the various stakeholders.

2.8.5. Ministry of Land Management Cooperatives and Poverty Alleviation

This Ministry regulates the affairs related to land management, cooperatives and poverty alleviation. Regarding the urban development, it is responsible for the implementation of Land Use Regulations 2022. The Planning, monitoring and evaluation division under the ministry is responsible for planning, implementation, monitoring and evaluation of the plans and projects carried out by the ministry and the departments under the ministry. The Land Use Regulations 2077 requires that all the local government needs to prepare land use plans which needs to comply with the higher level (federal and provincial level) land use plans. This clearly impacts on the land use of the municipality and ultimately the physical development aspect of the municipality. The IUDP delineates the land use zones/plans and municipal bye laws which are also affected by the jurisdiction of the ministry regarding the provisions of Land Use Regulations 2022.

2.9. INSTITUTIONS FOR PROJECT FINANCING

For the implementation of IUDP, the projects identified by the IUDP needs to be implemented for which the financing is required for the investment in construction of the projects. In the context of Nepal, the various agencies like DUDBC, TDF, Development Banks, International Development Partners have been involved in financial assistance through grants or loan for the implementation of the urban projects. The reviews of these institutions have been presented below:

2.9.1. Department of Urban Development and Building Construction (DUDBC)

As mentioned earlier, the DUDBC is a department under MOUD which is responsible for the formulation, implementation, monitoring and evaluation of policies, plans, projects related to urban development. The DUDBC channelizes the government funds for the implementation of projects pertaining to the urban development (DUDBC, MOUD, GON, 2022). Currently it is implementing various projects like Secondary Town Integrated Urban Environment Project (STIUEIP), New Town Project, Regional Urban Development Project (RUDP), Nepal National Building Code Compliance, Special Building Construction Project, Nepal Urban Governance and Infrastructure Project (NUGIP) etc. (DUDBC, 2022).

The concept of IUDP was envisaged by the DUDBC to generate the municipal investment projects. Hence, regarding the implementation of IUDP, the DUDBC also has its stake (MOFAGA, GON, 2016). The municipalities can pledge with DUDBC for financing the detailed engineering projects identified by the IUDP.

2.9.2. Town Development Fund

Town Development Funds (TDF) is an autonomous financing institution established by the Government of Nepal (GoN) in 1989 (Town Development Fund, 2022). The TDF provides debt financing to local governments and finances long-term urban infrastructure development projects through its loan and grant funding. It has provided loans for the execution for various projects like Town Development Program, Urban Environment Improvement Project (UEIP) Secondary Town Integrated Urban Environment Project (STIUEIP), Integrated Urban Development Project (IUDP), Second Small Town Water Supply and Sanitation Sector Project (STWSSSP-II), Third Small Town Water Supply and Sanitation Sector Project (STWSSSP-III) etc (Town Development Fund, 2022). It partners with various international development partners like GIZ, ADB, World Bank, etc. for financing the development projects (Town Development Fund, 2022). Regarding the implementation of IUDP, the municipalities can seek loan from TDF to finance their investment projects.

2.9.3. Road Board Nepal (RBN)

The Road Board Nepal is an autonomous and self-sustaining government institutions based on Public-Private Partnership [PPP] model (Roads Board Nepal, 2022). It provides fund for the planned maintenance of the roads (Roads Board Nepal, 2022). The projects identified under the Municipal Transportation Master Plan (MTMP) and Physical Development Plan (PDP) related to roads are also funded by RBN.

2.9.4. Development Banks

There are development banks in Nepal which provide loan to finance the large-scale urban projects like land pooling. The Town Development Committee and the municipalities used to take loans from development banks to construct infrastructures in land pooling project (Thapa, 2022). Regarding the implementation of IUDP, the municipalities can finance their project implementation by arranging loans from the development banks.

2.9.5. International Development Partners

Various international development partners have accompanied in the past urban development projects in Nepal in collaboration with DUDBC. Some of the major international development partners working in Nepal are:

- Asian Development Bank (ADB) (ADB, 2003)
- World Bank (The World Bank, 2022)
- German Agency for International Cooperation (GIZ) (GIZ, 2022)
- United States Agency for International Development (USAID) (USAID, 2022)
- United Nations Development Programme (UNDP) (UNDP, 2022)

Given the history of involvement in development assistance in urban development projects, the municipalities can seek financial assistance (grants/loans) from these international development partners for the implementation of project identified by the IUDP.

2.10. POLICY FRAMEWORK FOR IMPLEMENTING IUDP

The preparation and implementation of IUDP attracts the provisions of the various policies related to urban development in the national and international contexts. Such policies have been reviewed below:

2.10.1. The 2030 Agenda for Sustainable Development

Regarding the international policies for sustainable development, Nepal has shown its commitment for attaining the goals set by the 2030 Agenda for Sustainable Development (United Nations, 2022). The agenda has set altogether 17 goals and 117 targets. The Goal 11 is specifically directed towards making the sustainable cities and resilient communities. The target 11.3 within the goal 11 is targeted to enhance inclusive and sustainable urbanization. Likewise, the target 11.b within goal 11 directs for the development and implementation of integrated policies regarding social inclusion, disaster resilience, climate change etc. The National Planning Commission of Nepal has fully aligned the current 15th Plan (2019/20-2023/24) along with the sectoral, plans policies and targets with the SDGs (National Planning Commission, Government of Nepal, 2022). This suggests that the IUDP, as a municipal urban development plan, needs to be aligned with the national plans with regard to achieving SDGs targets.

2.10.2. The New Urban Agenda

The New Urban Agenda (NUA) is an international commitment in the realm of urban development. The NUA also has shown commitments to other international commitments like Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction 2015-2030, Paris Agreement and several others (UN Habitat, 2022). The NUA commits to achieve environmentally sustainable and resilient urban development and ensure the sustainable use of land and resources in urban development (UN Habitat, 2022). This suggests that the strategies and recommendations from the NUA can be useful with regard to the development of urban development plans like IUDP.

2.10.3. National Urban Policy 2007

The DUDBC under MOUD formulated the National Urban Policy in 2007 (DUDBC, MOUD, GON, 2007). The objectives of the policy are directed to promoting the investment in infrastructures and services for achieving balanced urban form and also to enhancing the institutional capacity of local level and the agencies dedicated to urban development for the effective urban management. The DUDBC envisaged the concept of IUDP taking into account the policies and strategies delineated by National Urban Policy for urban development.

2.10.4. Planning Standards and Norms 2013

The Planning Standards and Norms 2013 was developed by the DUDBC under MOUD (DUDBC, MOUD, GON, 2013). Regarding the urban development its objectives are directed (i) to identify and forecast essential infrastructure need of urban areas as well as help prepare urban plans and programs, (ii) to enrich understanding of urban form and land use and ensure balance between them, and (iii) to guide the development and management of physical, social and economic infrastructure services in a planned manner. The infrastructure projects identified by IUDP needs to adhere according to the standards outlined by the document.

2.10.5. National Land Use Policy 2015

The National Land Use Policy 2015 requires all the three levels of governments; federal, provincial and local governments to classify their land and prepare land use plans (MOLCPA, GON, 2015). It has also required that the lower-level land use plans need to comply with the higher-level land use plan. Since land use plan is one of the outputs of IUDP preparation, the land use plan preparation and implementation needs to take into account the provisions outlined by the National Land Use Policy 2015.

2.10.6. National Urban Development Strategy (NUDS) 2017

NUDS 2017 has adopted the five principles for the urbanization in Nepal: (i) sustainability, (ii) inclusivity, (iii) resilience, (iv) green, and (v) efficient which are directed towards achieving SDGs. The NUDS 2017 has set milestones for urban development sector (Ministry of Urban Development, Government of Nepal, 2017). It has delineated the investment requirements for urban infrastructures, set out urban development strategies and activities pertaining to various aspects of urban development: urban system, urban infrastructures, urban environment, urban economy, urban investment, urban finances, urban governance and urban land management. The urban development strategies and investment requirements needs to be taken into account while preparing IUDP as the principles outlined in NUDS 2017 show adherence to the SDGs.

2.11. LEGAL FRAMEWORK FOR IMPLEMENTING IUDP

Regarding the implementation of IUDP, the duties and powers assigned by The Constitution of Nepal 2015 and the Local Government Operation Act 2017 are attracted.

2.11.1. The Constitution of Nepal 2015

The Constitution of Nepal 2015 has assigned 22 duties and powers to the local government (Nepal Law Commission, 2015). One of the power and duties of the local government is to prepare a local level development plan. Since IUDP is the urban development plan for the municipality, it has legitimacy as a local level plan prepared and endorsed by the municipality.

2.11.2. Local Government Operation Act

The LGOA 2017 has empowered the local government to formulate and implement the plans, programmes and projects related to urban development, planned residential development, building construction and disaster risk management complying to provincial and federal level provisions regarding the same (Nepal Law Commission, 2017). This implies that municipality has a legal basis to prepare IUDP as a municipal development plan but doesn't compulsorily require to prepare and implement IUDP except for periodic, annual and mid-term plans.

2.11.3. Land Use Act 2019 and Land Use Regulations 2022

The Land Use Act 2019 was enforced to implement the Land Use Policy 2015 (Nepal Law Commission, 2019). The Land Use Regulations 2022 have been recently formulated to implement the provisions of Land Use Act 2019 (Ministry of Land Management, Cooperatives and Poverty Alleviation, 2022). The Regulations requires all the three levels of government to prepare land use plans. It requires the lower-level

land use plans to align with the higher-level land use plans. It prohibits the alteration of assigned land use after the preparation of land use plan but has provisioned for the change in land use upon the approval of the land use council. The regulations also have provisioned for land consolidation, land pooling, planned residential development following the regulations set by the local level government. Likewise, it also has set the criteria for the classification of various land uses. The IUDP has land use zoning/plans and municipal bye laws as the outputs. The national policies and regulations related to land use clearly affect the implementation of IUDP so the provisions of the land use regulations need to be considered while preparing and implementing the IUDP.

2.11.4. Legal mandates and tools at the local level

The implementation of IUDP is affected by the provisions in policies, acts and regulations at local level specifically related to the local urban development planning, land use and land management.

2.12. INSIGHTS FROM PREVIOUS URBAN DEVELOPMENT PROJECTS IN TERMS OF INSTITUTIONAL CAPACITY IN IMPLEMENTATION

For the successful implementation of the urban development plans and projects, the institutional capacity of the governing body plays a vital role. The lessons and experiences from the previous urban development projects like land pooling, road expansion projects etc. can be insightful regarding the institutional capacity required for the implementation of urban development planning projects like IUDP.

In Nepal, three types of land development tools have been used so far namely Sites and Services, Guided Land Development and Land Pooling (Thapa, 2022). The concept of Land Pooling or Land Readjustment consists of acquisition of an area of land divided into large number of irregular parcels belonging to large number of land owners, deletion of the original parcel boundaries, deduction of proportionate amount of land area from each parcels, development of required infrastructures, readjustment of the parcel area and boundaries into regular sized parcels, provisioning of service plots for sale and returning the readjusted land parcels to the original landowners (Bhandari, 2015). It is a self-financing tool where the government need not invest any amount from its own reserve. The development cost incurred is compensated from the deduction of certain percentage of land proportionately by all of the land owners and the sale of the service plots.

The Town Development Act 1988 has provisioned that the government can form Town Development Committee (TDC) in any area where development of town is deemed necessary (Nepal Law Commission, 1988). The TDC is mandated for the planning the town area along with the execution of land development project like land pooling whereby necessary. The Act also has provisioned that the local body can conduct land pooling itself if it intends to. Besides TDC, other committees are also formed namely Assistance Committee and Land Management Committee which were required to facilitate the land pooling process (Thapa, 2022).

According to Kishore Thapa, the former Secretary of Nepal Government, the success of the land pooling projects can be attributed to the following factors which are associated with the institutional capacity aspects of the agencies and actors involved in land pooling (Thapa, 2022):

- i. Highly motivated civil service employees:
 - The civil servicemen were given incentives apart from salary.
 - The Project Manager was given the travel vehicle, fuel expenses.
 - The policy makers were highly motivated as they could take the credits of the land pooling project works they were involved in.
- ii. Availability of data and knowledge Resource to the civil service employees:
 - The project team had knowledge and lessons from previous experiences
 - If anyone had to know about the information regarding the plots, the information was readily available
- iii. Strong political will:
 - The politicians were also motivated as they could use the available local resources without managing funds from elsewhere
- iv. Project Financing:
 - Land pooling in itself is a self-financing tool though it requires bank loan to construct services and infrastructures during the project and is a huge success because of the no external cost incurred from outside the project
 - Financing can be done without involving bank loan by directly selling the service plots to the purchasing parties like corporate houses, banks and other big agencies as in the case of Sintitar and Kamerotar land pooling.

A study report by ADB titled “Land Pooling in Nepal, From Planned Urban “Islands” to City Transformation (ADB, 2020) has pointed out (i) the flaws in regulations related to lack of preparation and implementation framework of land pooling, (ii) lack of legal basis of implementation of guidelines of land pooling prepared by DUDBC, (iii) importance of public participation and awareness for greater acceptance and successful implementation, (iv) financial weakness and shortfall in implementing project

A study by (Karki, 2014) has presented the findings regarding the huge success of road expansion in Kathmandu during the prime-ministership of Dr. Baburam Bhattarai. The study attributes the previous failures of road widening attempts to these reasons: (i) lack of coordination and cooperation among the three interrelated agencies, namely local government (issuing building permit), Kathmandu Valley Town Development Committee (KVTDC) (monitoring the construction site) and Chief District Administration Office (punishing defaulters) and (ii) shifting responsibilities by KVTDC and KMC regarding punishing those who breach the bye laws and demolition of illegal construction. Huge public pressure for change regarding the traffic problems in Kathmandu. The study has pointed out following factors related to institutional capacity of the government for the success of the road widening initiative:

- High level political-commitment, and associated coordination and resource mobilization
- Daring enforcement officers, and implementers backed by PM’s strong political will
- Legitimacy of the problem; the Right of Way (ROW) was breached by buildings all across Kathmandu and it was imperative for the governing bodies to address the issue.

3. CASE STUDY OF DHULIKHEL MUNICIPALITY

3.1. PREPARATION OF IUDP OF DHULIKHEL MUNICIPALITY

Regarding the preparation of IUDP of Dhulikhel Municipality, the TOR for preparation of IUDP of Dhulikhel has outlined the following 19 expected outputs (Dhulikhel Municipality, 2019):

- i. Establishment of Establishment of Planning and Data Server
- ii. Assessment and Preparation of Base Map
- iii. Municipality Profile
- iv. Analysis (SWOT, Spatial and Financial)
- v. Municipality Vision Paper
- vi. Sectoral, Goals, Objectives, Outputs and Programs
- vii. Long Term Physical Development Plan
- viii. Land Use Plan (land use plan, land use regulations (risk zones, environmental conservation areas, agricultural land preservation areas, city development areas, formalization areas, functional zones (residential, industrial)
- ix. Risk Sensitive Land Use Plan
- x. Environment Management Plan
- xi. Social Development Plan
- xii. Municipal Transportation Master Plan (MTMP)
- xiii. Conservation, Cultural and Tourism Development Plan
- xiv. Economic Development Plan
- xv. Financial Development Plan
- xvi. Institutional Development Plan
- xvii. Disaster Risk Management Plan
- xviii. Multi Sectoral Investment Plan
- xix. Planning and Building Bye Laws

But the complete report of IUDP has shown that out of the above-mentioned outputs, the following outputs were not delivered (Dhulikhel Municipality, 2019):

- i. Establishment of Establishment of Planning and Data Server
- ii. Risk Sensitive Land Use Plan
- iii. Multi Sectoral Investment Plan
- iv. Planning and Building Bye Laws

From the report of IUDP of Dhulikhel Municipality, it is found that the MSIP has not been prepared and the plans and programs outlined are only for five years which is in contradiction to the long-term vision for the municipality as envisaged by the concept of IUDP.

3.2. IMPLEMENTATION STATUS OF IUDP OF DHULIKHEL MUNICIPALITY

For assessing the implementation status of the IUDP of Dhulikhel Municipality, strategies of periodic plan and programmes of annual plan were inspected against the programmes of IUDP pertaining to the Physical Development Plan by developing a matrix in which Programmes of IUDP were plotted in the row while the strategies of periodic plans and programmes of annual plan were plotted on the columns as shown in the table below. Only the Physical Development Plan was taken into consideration with an assumption that if the programmes of IUDP are reflected in the strategies of periodic plans and in the programmes of annual plans, then same kind of result will be reflected in other sectoral plans' implementation of IUDP.

The table in the Annex 4 above shows that the strategies set by periodic plan and the programmes of annual plan pertaining to the physical development seem to address the programmes of IUDP which shows that the programmes of IUDP are integrated into periodic and annual plans and IUDP has been implemented and is in the right direction.

3.3. FINDINGS IN TERMS OF INSTITUTIONAL CAPACITY AREAS

The findings of this case study have been presented below with regard to the institutional capacity areas identified from the review of various institutional capacity assessment tools:

3.1.1. Human Resources and Organizational Management

At the time of IUDP preparation, the organizational structure of Dhulikhel Municipality was as shown below. Ten departments and 35 staffs worked under CAO at department level however sub-departments under the department were unclassified (Dhulikhel Municipality, 2019). As the sub departments were not clearly defined deficiency of working staffs within various departments of Municipalities was not determined by IUDP. However, the IUDP had recommended that each sub-department needs to carry out a specific set of municipal functions and as such, need to be resourced with staff (Dhulikhel Municipality, 2019). Likewise, the IUDP also had recommended that each department should have at least one officer level staff and each sub-department should have at least one to three supervisors and three assistants.

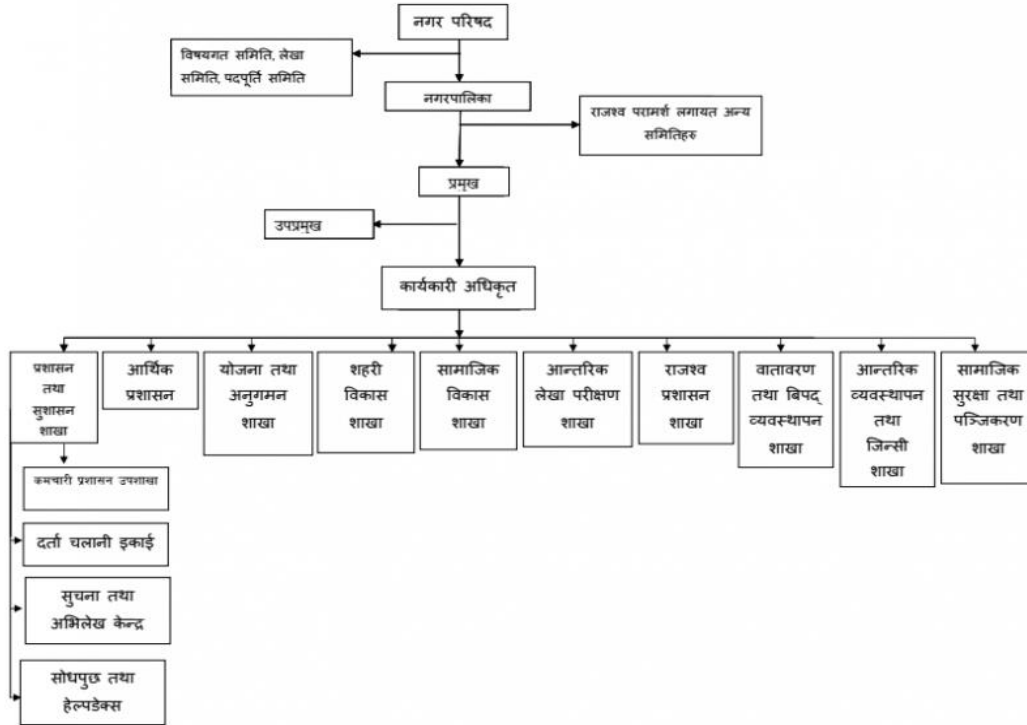


Figure 3: Organogram of Dhulikhel Municipality at the time of IUDP preparation

Source: (Dhulikhel Municipality, 2019)

Currently, the previous Department of Urban Development has been reconstituted into Physical Infrastructure and Environment Division with the 3 departments; Department for Urban Infrastructure, Department for Land Management and Building Regulations and Department for Disaster and Management (Dhulikhel Municipality, 2022).

By the time IUDP was prepared, Department for Forest, Environment, Waste and Disaster Risk Management were yet to recruit any staff to work under the departments (Dhulikhel Municipality, 2019). From the field study it is found that the department was reformed into Department of Disaster Management and Environment under Physical Infrastructure and Environment Division (Dhulikhel Municipality, 2022). It currently has 1 administrative assistant (sixth grade officer) and 1 assistant (fifth grade officer).

The Municipality had previously (at the time of IUDP preparation) employed 4 civil engineers at the Department of Urban Development who were responsible for planning and overseeing the development work in relation to water supply, reticulated sewerage, irrigation, roads, bridges, drainage and other civil works (Dhulikhel Municipality, 2019). That included design, data collection surveying, preparation of estimates and guidance to User Committees, who then undertake the works. In addition, one Land Surveyor was employed to assist subdivisions. Likewise, there were 1 senior engineer, 1 sub engineer and 1 student engineer working under the Department of Urban Development and were responsible for assessing and issuing building permits. The IUDP had recommended for the provisioning of a statutory planner (or regulatory urban planner) for day to day permits, as well as a strategic urban planner. One urban planner was recruited in the role as a designer with heritage skills at that time. But from the field study it was known

that there is no provisioning of urban planner till yet (Dhulikhel Municipality, 2022). By the time of this study, 1 civil engineer as department head, 2 technical officers and 5 technical assistants are currently working at the Department of Urban Development under Physical Infrastructure and Environment Division (Dhulikhel Municipality, 2022). Likewise, at the Land Management and Building Regulation Department, there are currently 1 architect, 1 civil engineer, 1 surveyor and 3 other assistant employees.

Besides the insufficient human resources at various departments of Dhulikhel Municipality, the IUDP had identified the gaps regarding capacity to implement the long-term strategic planning (as outlined in the IUDP) in a coordinated and consistent manner, implement land use zoning and building bye laws (Dhulikhel Municipality, 2019). The IUDP had recommended 1 strategic urban planner, 1 urban designer/architect and 1 regulatory planner for the Department of Planning, Monitoring and Statistics.

Regarding the financial management, the IUDP had recommended the provision of 1 economist at the municipality for economic analysis related to the alternative ways of resource mobilization for the financing of urban infrastructures (Dhulikhel Municipality, 2019). From this study, it is found that the economist has not been provisioned by the municipality.

Additionally, the IUDP report had recommended that a dedicated GIS officer is needed to develop GIS capability which is accessed across the entire organization (this includes creating mapping systems that pulls together land ownership, tax status, physical land characteristics, history of permits and approvals, heritage status, zoning status, registrations, present infrastructure and infrastructure planning and assets management (Dhulikhel Municipality, 2019). This information, presented in a land-based format, is an invaluable tool to assist better decisions and planning across the organization. The GIS officer has not been recruited by the time of this study.

The IUDP report had clearly pointed out that the existing institutional capacity of the municipality would not be sufficient regarding the execution of the duties and power assigned for the municipalities despite the fact that municipality has enough physical resources in terms of land and building (Dhulikhel Municipality, 2019).

The recent organogram of Dhulikhel Municipality shows that the municipality has 5 main divisions as mentioned below (Dhulikhel Municipality, 2022):

- i. Administration and Planning Management Division
- ii. Financial Management Division
- iii. Social Development Division
- iv. Economic Development Division
- v. Physical Infrastructure and Environment Management Division

Altogether, there are 108 employees in municipality in different sections of municipal organization excluding the Chief Administrative Officer and including the employees at wards.

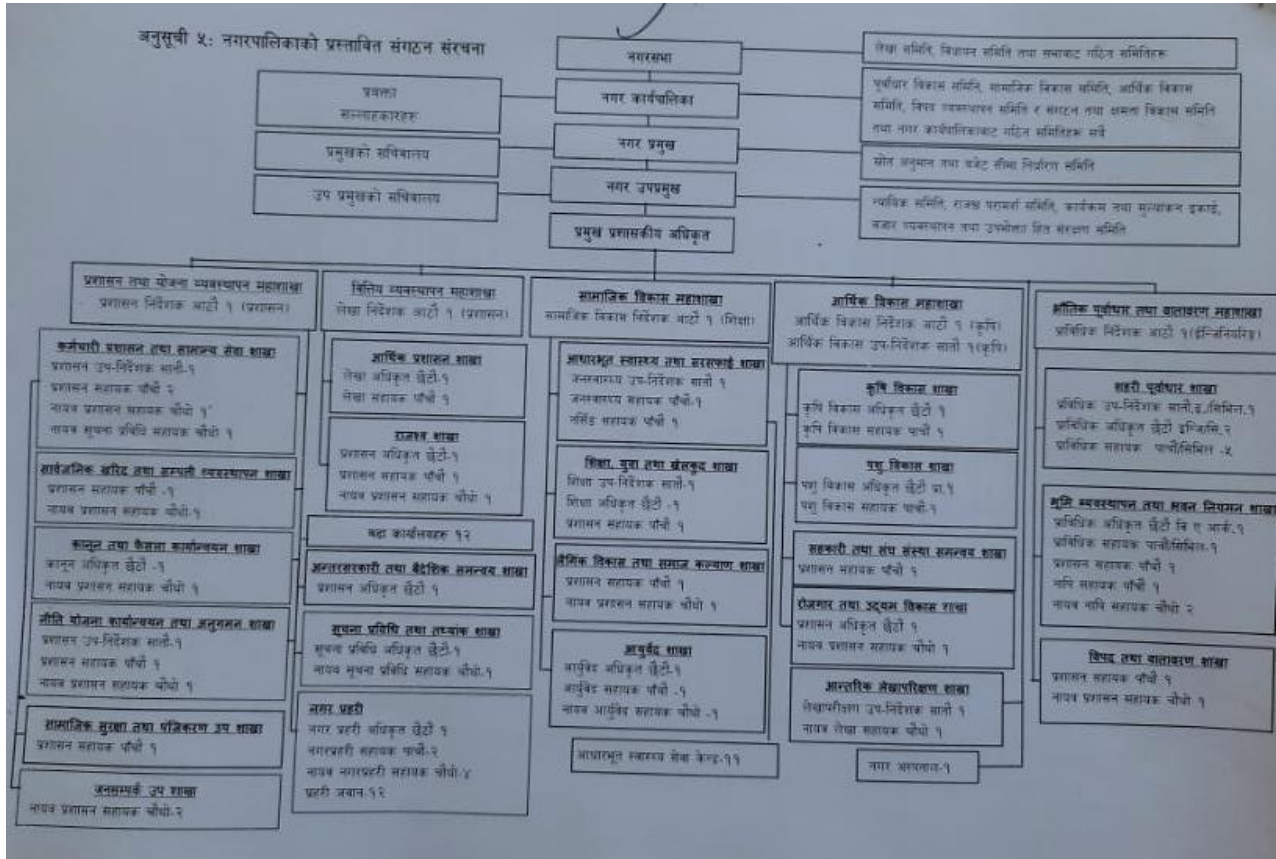


Figure 4: Current Organogram of Dhulikhel Municipality

Source: (Dhulikhel Municipality, 2022)

Comparative Case Study of Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality

For the comparative case study the Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality were chosen.

Rationale for the Selection of the Municipalities

For analyzing the human resources management aspect of the institutional capacity, the human resources aspect of Dhulikhel Municipality is compared with Neelkantha Municipality. Both of the municipalities are hill towns and were the district headquarters of Kavre and Dhading district previously before the federal transformation of Nepal into 7 provinces and 753 local level governments. The population of Dhulikhel Municipality and Neelkantha Municipality are thirty-two thousand one hundred and sixty two (32162) (Dhulikhel Municipality) and fifty eight thousand five hundred and fifteen respectively (58515) (CBS, 2011). Similarly, Dhulikhel Municipality and Neelkantha Municipality have allocated their budgets one billion three hundred fifty million (1350000000) (Dhulikhel Municipality, 2022) and one billion one hundred fifty million (1150000000) (Neelkantha Municipality, 2022) respectively. Likewise, both of these municipalities have prepared IUDP and are currently implementing IUDP. The aforementioned facts

provide a good rationale for comparing the human resources management aspect of these municipalities in the national context. To have a broader context and standard comparison in the regional context, the Phuentsholing Municipality of Bhutan with a total population of twenty seven thousand six hundred fifty eight (27650) (2018 National Statistics Bureau of Bhutan, 2017). It is a foothill town at the bank of Torsha river at near the Southern border to India and has slightly hilly characteristics similar to that of Nepalese towns. On the other hand, the Phuentsholing Municipality has prepared its 12th Five Year Plan (2018-2023) (Gross National Happiness Commission, Royal Government of Bhutan, 2018) and Phuentsholing Township Development Project (ADB, 2018).

In Nepal the municipalities which have prepared the IUDP do not have separate implementation framework so the programs and projects identified by the IUDP are integrated in periodic and annual plans for the implementation of IUDP. Likewise, in Phuentsholing Municipality of Bhutan the periodic plan and annual plans are prepared which suggests that the municipal plan is implemented by the municipal team led by the technical section of the municipality. This suggests that the implementation framework of municipal plans in Bhutan and particularly to Phuentsholing Municipality is similar to that of municipalities of Nepal which makes it justifiable for the comparison of the human resource management in municipalities of Nepal. The table below shows the various departments that constitute the organizational structure of the three municipalities: Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality.

Findings from the comparative case study

From the comparison of the departments and human resources in the three municipalities in the Annex 5 and Annex 6, it is seen that Phuentsholing Municipality of Bhutan has five departments with forty one employees dedicated to urban planning and physical development; Development Regulatory Division (seven employees), Land and Survey division (five employees), Urban Planning and Development Division (five employees), and Infrastructure Development Division (thirteen employees) and Environment Division (eleven employees). Likewise, Dhulikhel Municipality has a Physical Infrastructure Development Division and Environment Division with three departments with a total of sixteen employees; Urban Infrastructure Department (eight employees), Land Management and Building Regulation Department (five employees) and Disaster Risk and Environment Department (two employees). Similarly, Neelkantha Municipality has a single department named Physical Infrastructure and Monitoring Division with fifteen employees. The aforementioned data shows that Dhulikhel Municipality has a more organized institutional setup dedicated for urban development and physical development. As compared to Neelkantha Municipality in national context despite having lesser population than Neelkantha Municipality. When compared in regional context with Phuentsholing Municipality of Bhutan with lesser population than Dhulikhel, it is seen that Phuentsholing Municipality has more organized institutional setup and more human resources dedicated for urban planning and physical development. Particularly to urban planning, Phuentsholing Municipality has dedicated Urban Planning and Development Division with four urban planners and a GIS officer which makes it well equipped to execute the municipal plans. However, there are no departments dedicated to urban planning in Dhulikhel Municipality and Neelkantha Municipality and there is also no any provisioning of post for urban planner and GIS expert as well. In that regard, the human resource management aspect of Dhulikhel Municipality is weak as compared to regional context while the number of manpower and department provisioned seemed to be adequate in the national context.

From the field study, the informants in the municipality pointed out that coordination between the departments is weak. This particularly applies to the departments under Physical Infrastructure and

Environment Divisions: Urban Development Department, Disaster Risk and Environment Department and Land Management and Building Monitoring Department. The departments are working mostly in isolation though the working areas they deal with have cross cutting issues within them.

Strategies for Institutional Capacity Development

Regarding the institutional capacity development of Dhulikhel Municipality, the Periodic Plan of Dhulikhel Municipality has outlined the following strategies (Dhulikhel Municipality, 2020):

- Prompt implementation of periodic plan after preparation
- Endorsement from the integrated plan formulation committee and the municipal council
- Coordinating and cooperating with all government, non-government and development agencies regarding the implementation of periodic plan

The aforementioned strategies seem to support the enhancement of the institutional capacity of the municipality and also support the human resources development regarding the implementation of IUDP.

There has been reformation of municipal divisions and department and increase in the number of municipal employees which show that Dhulikhel Municipality has improved the human resources management aspect of the institutional capacity, however, few crucial human resources; statutory planner, regulatory planner, architect, economist and GIS expert as recommended by the IUDP has not been recruited yet which shows the necessity for further improvement in human resources management.

3.1.2. Financial and Economic Management

Regarding the financial and economic management this study has assessed the annual budget allocation, revenue and expenditure of the municipality, provision of loans and assistance for budget financing, strategies for financial resource mobilization, strategies for revenue increment and strategies for economic development which are presented below in separate headings:

3.1.2.1. Budget Allocation for IUDP implementation

To assess the budget allocated for IUDP implementation, the following steps were carried out in sequential order:

- The programs identified under Physical Development Plan, Municipal Transportation Master Plan, Solid Waste Management Plan and Economic Development Plan of IUDP of Dhulikhel Municipality were listed in a matrix in Excel sheet (see Annex 8).
- The programs and respective budget allocation in the acts formulated for the allocation of annual budget of Dhulikhel Municipality for the fiscal years 2076/77, 2077/78 and 2078/79 corresponding to the programs of Physical Development Plan, Municipal Transportation Master Plan, Solid Waste Management Plan and Economic Development Plan of IUDP were plotted in the Excel sheet (see Annex 8).
- The total budget allocated for the programs under physical development aspect (urban infrastructure development, transportation infrastructures development, drinking water, land development etc.) and economic development aspect of IUDP were calculated (see Annex 8).

- The percentages of budget allocated from the total budget and the capital expenditure budget for the physical development and economic development were also calculated (see Annex 8).

From the review of annual budget allocation after the implementation of IUDP started in 2076 BS (2019), it is seen that there has been increment in municipal budget allocation in the consecutive years: 784 million, 111 million and 115 million in the fiscal years 2076/77, 2077/78 and 2078/79 respectively. This shows the 41.68 % increase in budget from fiscal year 2076/77 to 2077/78 and 3.64 % increase from fiscal year 2077/78 to 2078/79.

Table 4: Details related to municipal budget from fiscal year 2076/77 to 2078/79

Particulars	Fiscal Year 2076/77	In %	Fiscal Year 2077/78	In %	Fiscal Year 2078/89	In %
Allocated Budget	784818000		1111111000 (Increased by 41.68 %)		1151500000 (Increased by 3.64 %)	
Current Expenditure	96875000	12.34	546509065	49.19	574594543	49.90
Capital Expenditure	687943000	87.66	563201935	50.69	575405457	49.97
Fiscal Management Expenditure					1500000	0.13
Budget utilized for the implementation of the programs under Physical Development Plan, MTMP and Solid Waste Management Plan of IUDP	153648000	19.58	279734000	25.18	318011000	27.62
Budget utilized for the implementation of the programs under Physical Development Plan, MTMP and Solid Waste Management Plan of IUDP from the Capital Expenditure	153648000	22.33	279734000	49.7	318011000	55.3
Budget utilized for the implementation of the programs under Economic Development Plan from IUDP	6409000	0.82	6755000	0.61	8219000	0.71
Budget utilized for the implementation of the programs under from Capital Expenditure	6409000	4.17	6755000	2.41	8219000	2.58

Table Source: (Dhulikhel Municipality, 2019), (Dhulikhel Municipality, 2020) and (Dhulikhel Municipality, 2021)

In all the fiscal years 2076/77, 2077/78 and 2078/79, the percentage of capital expenditure is greater than that of the current expenditure which is how it is supposed to be. In the fiscal year 2076/77, the capital expenditure (87.66 %) was a lot greater than the current expenditure (12.34 %). As we look into the Table 7 below, it is seen that the percentage contribution of current expenditure in the municipal budget allocation seem to increase in the consecutive years: 12.34 %, 49.19 % and 49.90 % in the fiscal years 2076/77, 2077/78 and 2078/79 respectively. On the other hand, there is a decrease in the percentage contribution of the capital expenditure in the total municipal budget: 87.66 %, 50.69 % and 49.97 % in the fiscal years 2076/77, 2077/78 and 2078/79 respectively. Despite the increase in municipal budget, the increase in percentage of the current expenditure and decrease in percentage of the capital expenditure shows that the despite the increase in municipal budget in the consecutive years, a large amount of municipal budget is allocated and spent in the running expenses of the municipality which indicates the decline of the financial health of the municipality in terms of the budget expenditure.

In terms of implementation of programs identified by IUDP, this study has tried to assess the percentage of the municipal budget allocated in IUDP implementation. Since, the physical development accounts for the major municipal development expenditure, this study has assessed the budget allocated in the implementation of the programs identified under the Physical Development Plan, Municipal Transportation Master Plan (MTMP) and Solid Waste Management Plan of IUDP as a whole. As we look into the Table 7 below, it is seen that for the implementation of the programs identified under the Physical Development Plan, Municipal Transportation Master Plan (MTMP) and Solid Waste Management Plan of IUDP, 19.58 %, 25.18 % and 27.62 % of the total municipal budget was allocated in the fiscal years 2076/77, 2077/78 and 2078/79 respectively regarding the physical development aspect of the municipality as a whole. On the other hand, for the implementation of the programs under the aforementioned aspect of IUDP, 22.33 %, 49.7 % and 55.3 % of the total amount allocated for the capital expenditure in the fiscal years 2076/77, 2077/78 and 2078/79 respectively. This shows the increase in the percentage of the budget utilized for the physical development of the municipality which is a good indication for the implementation of IUDP.

Looking at the implementation of the programs under the Economic Development Plan of IUDP, regardless of the increase in budget, the percentage of the budget allocated for the implementation of the programs under Economic Development Plan of IUDP seems significantly low: 0.82 %, 0.61 % and 0.71 % of the total budget and 4.17 %, 2.41 % and 2.51 % of the total capital expenditure in the fiscal year 2076/77, 2077/78 and 2078/79 respectively. This shows that the municipality needs to do integrate more programs for the economic development in the municipality which is very essential for the enhancement of the internal revenue of the municipality in terms of tax.

3.1.2.2. Expenditure of the municipality

From Table 5, it is seen that there is 41.68 % increase in budget from fiscal year 2076/77 to 2077/78 and 3.64 % increase from fiscal year 2077/78 to 2078/79. However, the amount of actual budget spent seem to be quite similar in amount: 828 million, 833 million and 810 million in the fiscal year 2076/77, 2077/78 and 2079/80 respectively. There was a slight increase (0.58 %) in budget expenditure from 2076/77 to 2077 and even a slight decrease (-2.71 %) from 2077/78 to 2078/79 despite the increase in budget in the consecutive fiscal years. The actual budget expenditure accounted for 105.57 %, 75 % and 70.41 % of the

total budget allocation in the fiscal year 2076/77, 2077/78 and 2078/79 respectively (See Table 8). This shows that the budget expenditure capacity of the municipality has declined.

Table 5: Actual Budget Expenditure details from fiscal year 2076/77 to 2078/79

Particulars	Fiscal year 2076/77	In %	Fiscal year 2077/78	In %	Fiscal year 2078/79	In %
Allocated Budget	784818000 (Increased by 41.68 %)		1111111000 (Increased by 41.68 %)		1151500000	
Actual Expenditure	828543668.62	105.57	833351249.91	75.00	810793431.3	70.41
Actual Current Expenditure	431847265.22	52.12	502262446.47	60.27	468137155.5	57.74
Actual Capital Expenditure	396486913.18	47.85	329791702.34	39.57	341329450.8	42.10
Actual Expenditure Financial Management	209490.22	0.03	1297101.10	0.16	1326825.08	0.16

Table Source: (Dhulikhel Municipality, 2022)

From Table 5, it is also seen that despite the increase in the percentage of the budget for current expenditure and the decrease in the budget for capital expenditure, budget for the capital expenditure was still greater than that of the current expenditure. The actual current expenditure accounted for 52.12 %, 60.27 % and 57.74 % of the actual budget expenditure in the fiscal year 2076/77, 2077/78 and 2078/79 respectively. Likewise, the capital expenditure accounted for 47.85 %, 39.57 % and 42.10 % of the actual budget expenditure in the fiscal year 2076/77, 2077/78 and 2078/79 respectively. This shows that the actual current expenditure exceeded the actual capital expenditure in terms of percentage in all the fiscal years despite the fact that the budget allocated for capital expenditure was higher than that of current expenditure in the consecutive fiscal years.

The aforementioned facts about the total budget, percentage of budget allocated for current expenditure and capital expenditure, the actual amount of budget spent and the percentage of the actual budget spent for current and capital expenditure indicate that:

- i. Despite the increase in budget, the budget expenditure has not increased and the budget expenditure capacity of the municipality is weak.
- ii. More financial resource is utilized on the administrative aspect and the running expenses of the municipality which signifies that the financial management aspect of the municipality is weak.

3.1.2.3. Revenue of the municipality

The Table 6 below illustrates that the external source of income is the major source of income in the municipality for the last three years. Likewise, within the external source of income, government related grant is the major source of income while other sources are negligible.

Table 6: Details related to municipal revenue from fiscal year 2076/77 to 2078/79

Income/Expenditure Title	Fiscal year 2076/77	Fiscal Year 2077/78	Fiscal Year 2078/79
Total Revenue	850075966	952040680	980872448.4
Percentage increment		11.99	3.03
Internal revenue	46822623.77	50878517.65	50564608.99
Percentage Contribution to total revenue	5.51	5.34	5.16
Percentage increment		8.66	-0.62
External Revenue	803253342.2	901162162.35	930307839.36
Percentage Contribution to total revenue	94.49	94.66	94.84
Percentage increment		12.19	3.23
Inter Government Fiscal Transfer	549989512.7	655313325.49	630425000.00
Percentage Contribution to total revenue	64.70	68.83	64.27
Percentage increment		19.15	-3.80
Public Participation	30398147.88	22583501.23	12963158.00
Percentage Contribution to total revenue	3.58	2.37	1.32
Percentage increment		-25.71	-42.60

Table Source: (Dhulikhel Municipality, 2022)

As we look into actual revenue collected in the fiscal years 2076/2077 to 2079/80, we can see that there has been gradual increment in the revenue; 850 million, 952 million (11% increment) and 980 million (3% increment) in the consecutive years respectively. Likewise, the internal revenue has also increased from 2076/77 to 2077/78; 46.8 million to 50.8 million while it slightly decreased to 50.5 million in the fiscal year 2079/80.

Regarding the partnership with the external agency for financial management, only 3.58 % was contributed from the public participation in the year 2076/77. There is seen decrease in percentage contribution in municipal revenue from the public participation in the year 2077/78 (decreased by 25.71 %) and 2078/79

(decreased by 42.61 %). For the fiscal year 2079/80, the revenue contribution from public participation is expected to be 2.04 % but it is more than 100 % increase in previous years amount which is also quite challenging to achieve.

The pattern of total, revenue, internal revenue suggests that the contribution of internal revenue to total revenue has remained around 5 % which suggest that internal financial strength of municipality has not changed despite the fact that the total revenue has increased.

3.1.2.4. Provision of Loans and Assistance for Budget Financing

The provisions of loans and assistance from various agencies in the fiscal year 2076/77 and 2077/78 as presented in the budget allocation act has been presented below:

Table 7: Provision of municipal loans

S.N.	Source	Fiscal year 2076/77	Fiscal year 2077/78	Fiscal year 2078/79
1.	Town Development Fund (TDF)	12200000	90000000	10000000
2.	Road Board Nepal (RBN)	8127893	11000000	20342084

Table Source: (Dhulikhel Municipality, 2019), (Dhulikhel Municipality, 2020) and (Dhulikhel Municipality, 2021)

The Table 7 above shows that the municipality allocated the loan amount of 12 million, 90 million and 10 million from the Town Development Fund in the annual budget of the fiscal years 2076/77, 2077/78 and 2079/80 respectively. Likewise, the municipality has allocated the fund amount of 8.1 million, 11 million and 20.34 million from Road Board Nepal (RBN) for the maintenance and construction of various sections of the municipal roads. This shows that in the coming years, the municipality is most likely to receive more amount of loan and fund assistance from the infrastructure funding agencies.

3.1.2.5. Strategies for Financial Resource Mobilization

The IUDP has not delineated strategies for financial resources management and mobilization however, the periodic plan has set out strategies for resources mobilization. The periodic plan acknowledges the public investment as main basis for local development. Besides it also focuses on partnership between public, private and cooperatives for investment in physical infrastructure and operation, service sector management, agriculture, forest and rural industrialization. It has set following strategies for resource mobilization:

- Arranging policy and institutional framework for the partnership of public, private and cooperative sectors
- Creating investment friendly environment, assuring security for the investment by promoting the investment from public, private and cooperative sectors and increasing the overall investment.
- Prioritization of projects from National Project Banks that can be implemented in municipality under public, private and cooperative partnership

The aforementioned strategies for resource mobilization seem to support the implementation of IUDP as the strategies are directed to promote investment in development projects through the development appropriate policies for partnership between public private and cooperatives sectors and also promoting investment from international investors.

3.1.2.6. Strategies for Revenue Increment

The increase in internal revenue indicates the increasing financial capacity of the municipality. The IUDP of Dhulikhel has set not set out strategies for revenue increment however, the periodic plan has set out following strategies for the increment of internal revenue of the municipality (Dhulikhel Municipality, 2020).

- Registering all forms of businesses under taxation and widening the basis of revenue
- Making the taxation system efficient, professional and transparent.

The aforementioned strategies for revenue increment are beneficial regarding the implementation of IUDP as the increase in financial capacity through internal revenue assist the municipality to implement more projects within IUDP.

3.1.2.7. Strategies for Economic Development

To increase the financial capability of the municipality, the municipality needs to increase its internal revenue for which the economic growth of the municipal region is necessary. The IUDP of Dhulikhel Municipality has identified four major sectors as focus areas for economic development of the region: (i) tourism, (ii) agriculture processing, (iii) commerce and industry, (iv) government services. For the economic development of the municipality, the IUDP of Dhulikhel Municipality has set out following strategies (Dhulikhel Municipality, 2019):

- i. Infrastructure:** investment in the infrastructure, polices and support services required to enable private investment in the sectors identified, improve the linkages between the rural and urban areas through appropriate upgrades to road infrastructure.
- ii. Tourism:** Promote the development of tourism in accordance with the Conservation, Culture and Tourism Development Plan, in order to create and increase foreign currency earnings.
- iii. Agriculture:** supporting continued production improvements, to develop or repair irrigation networks, support agriculture cooperatives to develop the post production and storage facilities, private investment in agriculture production and processing, development of market and other infrastructures required for agriculture sector
- iv. Business development:** support entrepreneurship development to foster the creation of new businesses, Support the development of businesses in appropriate locations through effective zoning and by-laws, building on the critical mass and existing public and private investment in activity centres throughout the Municipality
- v. Government services:** Lobby the provincial government to develop the provincial capital in the Dhulikhel Municipality
- vi. Health and Education:** Continue to support the education and health sectors through support of school activities and strong partnerships with the Kathmandu University and Hospital.
- vii. Resourcing: creation of Economic Development Unit,**

Likewise, the periodic plan of Dhulikhel Municipality has set out following sectoral strategies for the economic development of municipality (Dhulikhel Municipality, 2020):

Strategies for Agriculture

- Modernization, commercialization and industrialization of agriculture
- Usage of land according to land use plan/zones
- Focusing on export oriented agricultural products
- Construction of irrigation canal for increasing agricultural productivity

Strategies for Industries and Commerce

- Making reforms in policy, legal and institutional framework for industrial development
- Making the operation of small, medium and large-scale industries by utilizing local skills and resources
- Economic mainstreaming of commerce and facilitating the national and international investment on commerce in an integrated way for establishing the commerce sector as a main economic sector.
- Identification, promotion, increasing the productivity of the food items and fundamental goods, and services that have comparative advantage and competitive potential, management of the import and promotion of export.

Strategies for Tourism Sector

- Promotion and expansion of tourism destinations through diversification of the tourism activities based on local unique identity
- Increasing the quality of the tourism services by promoting the local/traditional approach to hospitality for the tourists
- Promoting the rural tourism and extending the reach of fruition of rural tourism to the general people of rural areas

The aforementioned strategies on economic sectors set by periodic plan seems to be in coherence with the strategies set by the IUDP for the economic development of Dhulikhel Municipality. However, the assessment of the programmes under economic development integrated in the annual programmes and budget shows that very less programs have been integrated regarding the economic development and very less budget has been spent as compared to that of the implementation of programmes under physical development.

3.1.3. Legal Mandates and Tools

The Constitution of Nepal, 2015 and Local Government Operation Act, 2017 provides the legal framework for local government and defined their responsibilities. The Constitution has assigned 22 duties and powers for local government which are annexed to the Annex 4 of this report.

The Dhulikhel Municipality has prepared all the 22 acts related to the aforementioned duties and powers of local government assigned by the constitution. Regarding the implementation of multisectoral projects identified by IUDP, the formulated acts provide the legal basis for implementation. At the federal level, the Land Use Act 2019 is formulated. To implement the provisions of Land Use Act 2019, Land Use Regulations 2077 has also been formulated. The Regulations has required the local governments to classify

the land use and prepare local land use plan which is compliant to the higher-level land use plans (provincial and federal level). The Physical Development of any municipality (urban area) is dependent upon the Physical Development Plan of the municipality which is based upon the land use zones/plans. The physical development is regulated by building and zoning bye laws. The IUDP report has pointed out that there are gaps in implementing bye laws regarding the weak enforcement of the regulations due to lack of sufficient human resources. Likewise, the provisions for compliance of lower-level land use plans to the higher-level land use plans seems to affect the land use plan (which is yet to be formulated) of the municipality. The delay in formulation of crucial acts and policies particularly related to urban development and land management impact negatively on the implementation of IUDP regarding the physical consequences on land use.

3.1.4. Planning, monitoring and evaluation

The TOR of IUDP has not envisaged any separate mechanism for IUDP implementation so for the implementation of IUDP, the programmes in IUDP needs to be integrated in periodic and annual plans of the municipality. For planning and implementation of the municipal plans and projects, the Dhulikhel Municipality has set out following strategies for plan formulation and implementation in its periodic plan:

- Establishment of project banks for identification, evaluation, selection and prioritization of projects based on data, statistics and bye laws.
- Coordinating between provincial and local level for carrying out necessary works related to the establishment of project banks
- Preparing the port-folio of the projects ready for the implementation and mobilizing the investment and assistance/grants from private sector from national and international level for the

Regarding the implementation of IUDP, the TOR of IUDP has not envisaged the monitoring and evaluation of IUDP however in the IUDP of Dhulikhel Municipality, the programmes have been defined and indicators have been set which can be regarded as the measure for the monitoring of implementation status of IUDP. It is also implied that till now there has not been the practice of planning based on reliable data and statistics, and informed decision making based on results and statistics from monitoring and evaluation of the projects and plans.

The periodic plan of Dhulikhel Municipality has set out following strategies for monitoring and evaluation of the municipal projects:

- Institutionalizing the monitoring and evaluation of the policies, plans and projects by amending the policies, legal provisions
- Upgrading the quality of monitoring and evaluation and using the results of monitoring and evaluation in decision making
- Enhancing the capacity of the monitoring and evaluation section

Though the periodic plan has spelt out the institutionalization of monitoring and evaluation of polices, plans and projects through the policy and legal measures, such initiatives has not been seen till the time of conduction of this study which itself signifies as a gap in monitoring and evaluation aspect. This explains the fact that the annual review of the IUDP projects have not been done yet. As told by the Chief Administrative Officer of Dhulikhel Municipality, the review of IUDP will be done after the completion of first five years. This shows the gap in review, monitoring and evaluation of IUDP.

3.1.5. External Resources and relations

For the implementation of projects in social sectors, the municipality has collaborated with CBOs and NGOs. Besides, the municipality has good relation with the provincial and federal levels. The provincial and federal level governments have trust and confidence in the delivery of the municipality as a whole. This can be related to the increment of federal and provincial grants for municipal fiscal budget. Besides, the development partners are also sensitized regarding the development delivery of Dhulikhel Municipality. The municipality arranges loans from Town Development Fund, DFID and other development partners for the execution of Projects. The details of amount from TDF and DFID are presented earlier. Currently a commercial complex is being built from the loan from TDF. Similarly, a municipal conference hall is being made from the joint collaboration of municipality and the DCC. Likewise, the municipality has received the funds from Road Board Nepal and DFID for the maintenance of the roads.

The IUDP also has some projects which are to be executed by the provincial and the federal governments too. Such projects include drinking water projects, sanitation, drainage etc. The Provincial level institutional framework is yet to mature so there exist some gaps in coordination regarding the implementation of development projects under the jurisdiction of federal and provincial level. Regarding the past performance image of Dhulikhel Municipality, the provincial and the federal governments have the confidence in Dhulikhel Municipality regarding the successful mobilization of funds and the execution of the projects. For the effective cooperation and coordination between the three tiers of the governments the Dhulikhel municipality has set out following strategies in its periodic plan (Dhulikhel Municipality, 2020):

Strategies for coordination between three layers of government

- Increasing the coordination between the three layers of government and making the implementation of development projects and service delivery effective and efficient.
- Creating a healthy competitive environment among the local levels for overall development and enhancing the governance

Regarding the aspect of attracting investment from national and international level from the government and private sector, there still exist huge gaps. The mega projects like Dhulikhel Solid Waste Management Project, creation of Industrial Park have been spelt in the annual policies and programs but the initiation and the feasibility study of such projects have not been done yet. This clearly signifies gaps regarding coordination with the federal level regarding initiation and implementation of such ambitious projects.

3.1.6. Motivation, Willingness and Political Commitment

Regarding the motivation and willingness of the municipality in implementing IUDP, the municipality team is motivated and highly willing to implement the IUDP. The personnel from planning, monitoring and evaluation division, engineers and architects from physical development and environment division, chief executive officers all expressed that the employees in municipality are motivated to work and achieve the goals and targets achieved by IUDP. The motivating factor for the implementation is the common dream of the employees to achieve the integrated, efficient development of Dhulikhel Municipality and also to align the municipal plans (annual plan, periodic plan and IUDP) with the national plans to achieve the goals with regard to Sustainable Development Goals.

For the successful implementation of any project, there requires common consensus among the stakeholders and the strong political commitment. Previously, CPN-UML was the party holding majority in the municipal council and after the local level election of 2079 Baisakh, once again CPN-UML has held the majority in the municipal council. The municipal leadership is determined to implement IUDP as known from the Chief Administrative Officer, Planning Officer and the policies and programs spelt out in annual plans and periodic plan. Being reelected twice, the municipal leadership has the opportunities to implement the remaining projects as formulated by IUDP. Besides the opposition parties are also cooperative regarding the implementation of IUDP and achieving the goals and strategies outlined by the IUDP for the municipal development. The political commitment among the party in power and party in opposition can be corroborated from the smooth execution of the projects like Kavre Valley Integrated Water Supply since several years without any hurdles from the opposition parties. Besides, Dhulikhel itself is a very development partners friendly municipality. Regardless of the political affiliation of the leadership, the municipality has been very eager to implement any development projects proposed by the government and the international development partners like IAP, drinking water projects, agricultural empowerment and so on.

4. CONCLUSION

The review of institutional, policy and legal framework for IUDP implementation, suggest that the preparation of IUDP is supported by prevailing international and national policies on urban development, clear roles and responsibilities of the institutions and legal basis for preparation, however the implementation of IUDP is challenging mainly in terms of (i) lack of legal basis for implementation, (ii) challenge in implementing local land use plans and assuring the compliance with upper level land use plans adhering to federal level Land Use Acts and Regulations and (iii) lack of institutional provision for monitoring and evaluation of IUDP.

Likewise, in terms of the gaps in the institutional capacity areas, following conclusions have been drawn with specific to Dhulikhel Municipality:

i. Gaps in human resources and organizational management:

- Insufficiency of the crucial manpower (like urban planner, GIS expert, economist etc.) and departments (department for urban development or town planning etc.) required for IUDP implementation
- Lack of/weak coordination between the departments

ii. Gaps in financial and economic management

- Weak budget expenditure capacity
- Incapability to minimize the current expenditure and maximize the capital expenditure with regard to the increase in budget amount
- Gaps regarding the implementation of the strategies for economic development identified by the IUDP and strategies set by the periodic plan for various sub economic sectors for the overall economic development of the municipality; lack of business and large investment friendly policies.
- Major focus of budget in physical development works; least consideration of programs under economic, social development, culture and tourism development and disaster risk management from IUDP in annual programs and budget as suggested by the Biniyojan Ain (Act formulated for the budget allocation in each fiscal years)

iii. Gaps in legal mandates and enforcement:

- Weak law enforcement capacity including the implementation of bye laws
- Delay in formulation of policies, acts and regulations (particularly related to land use),

iv. Gaps in planning, implementation, monitoring and evaluation

- Lack of data and statistics in planning;
- Lack of informed decision-making culture based on the monitoring, evaluation and learning; very few programs identified under the Economic Development Plan have been integrated in annual budget of the consecutive fiscal years since the preparation of IUDP.

v. Gaps in External Resources and Relations

- Weak coordination between the different layers of government regarding project implementation
- Inability to attract and channelize national and international investment for mega project implementation

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6. ANNEXES

Annex 1: Checklist for Key Informant Interviews at Dhulikhel Municipality

About IUDP

- Understanding of IUDP
- How is it different from other kind of plans?
- Procedural aspect of IUDP preparation (Inclusion, participation)
- Implementation modality/procedure of IUDP (Inclusion in annual and periodic plans)
 - Separate implementation committee??
 - Existing municipal human resources sufficient?
 - PPP projects, collaboration with other stakeholders
- Implementation status of IUDP
- Measurement of targets of IUDP (MEL)
- Institutional Strengths and Challenges regarding IUDP implementation
- Revision of IUDP Plans and Projects?

Capacity Areas of Institutional Capacity

- Resources
 - Human Resources
 - Financial Resources
 - Revenue
 - Others
 - Infrastructural Resources
 - Knowledge and Information (from previous planning, implementation experience)
- Governance
- Organization and Administration (institutional setup, departments, administrative procedures and management systems)
- Annual Budget and Programs Management
- Financial and Economic Management
 - Budgeting
 - Financing
- Legal Mandates and Tools
 - PPP Policy
 - Bye Laws and Regulations (LUP and building construction)
 - Local Land Use Policy/Act
- Competence & ability
 - Technical/Program Functions (Planning, implementation, monitoring, Use and management of technical knowledge and skill)
- External relations:

- cooperation, coordination with other local bodies, CBOs
- Political Commitment for implementing IUDP
 - Continuation of plans and policies from previous government

Annex 2: Schedule of activities related to data collection

S.N.	Activities	Date and Time
1.	KII with Kishore Thapa	July 14, 2022, 2:00 pm
2.	KII with Smita Yogal, an architect from Land Management and Building Regulation Department, Physical Infrastructure and Environment Division	August 2, 2022, 11:00 am
3.	KII with KII with Taranath Luitel, the Chief Administrative Officer, Dhulikhel Municipality	August 2, 2022, 12:00 pm
4.	KII with Puja Kafle, Planning Officer, Planning, Monitoring and Evaluation Division, Dhulikhel Municipality	August 2, 2022, 12:30 pm
5.	KII with Dr. Mahendra Subba, President, Regional and Urban Planners Society of Nepal (RUPSON)	September 12, 2022, 1: 11 pm
6.	Visit to Dhulikhel Municipality for collection of additional data	October 20, 2022

Annex 3: Key Informant Interviews

KII with Smita Yogal

Date and Time: August 2, 2022, 11:00 am

Key Notes:

- 20 years long term strategic plans/targets
- Plans broken down into terms
- Implementation of projects by incorporating them in annual and periodic plans
- Implementation is done by the Technical Section, Urban Development Division
- There is no urban planner's position in technical section
- MTMP and other sectoral plans within IUDP
- The municipality gets budget from federal and provincial grants apart from its internal revenue
- Financial Management: For implementation of urban development projects, the municipality manages loans from Town Development Fund (TDF), DFID etc.

- Urban Planning Dept and Urban planner is needed in municipality to plan and implement the programs in more coordinated way.
- There is no coordination between the various departments as of now
- It is impossible to implement the Land Use Plan strictly and implement projects solely based on land use
- There had been talk about preparing master plan but it was not done
- For the implementation of IUDP there is no separate committee, the departments in municipality do their respective jobs
- Existing human resource is not sufficient, if there was urban planner then the execution of the plans and projects would be more coordinated
- The municipality have implemented few projects in PPP modality
- There must have been a provision of MEL in IUDP
- Regarding the expertise for implementation, there are various departments with specialized manpower



Fig: KII with Smita Yagal, an architect from Land Management and Building Regulation Department, Physical Infrastructure and Environment Division

KII with Taranath Luitel, Chief Administrative Officer

Date and Time: August 2, 2022, 12:00 pm

Key Notes:

- Understanding of IUDP: A long term strategic plan for municipality that identifies the key/primary priority sectors

- There is an urban development unit, it will check whether plans and projects are within the frame of IUDP or not
- IUDP implementation is still in the nascent stage, 3rd year completion, so MEL has not been done yet
- From 3rd party verification, the sectoral monitoring and evaluation has been done which has shown that IUDP implementation is on the right track
- The municipal policies and plans have been oriented to SDGs to line up with the provincial and national plans and policies>> the IUDP is SDG oriented in that regard
- The IUDP has not been revised as the phase of periodic evaluation has not been reached, as its 3rd year running
- The IUDP amendment will take place after the periodic assessment and evaluation
- SWOT regarding IUDP implementation:
 - Strong political commitment
 - Ownership of the plan
 - Annual policies and programs based on IUDP
 - The municipality has performed relatively well so the image of the municipality is good
 - There has been tremendous support from Federal and provincial government
 - Development partners are also sensitized
 - Weakness
 - Local Financial Strength is weak
 - There are challenges regarding resource mobilization
 - Existing manpower is sufficient in number but there is knowledge and expertise gap
 - Coordination between the federal, provincial and local government is weak
 - There only has been political transition regarding the restructuring of the state in federalism but there are still administrative infection- various federal level acts like civil service commission act, education act and various others has left discrepancies regarding the jurisdiction and responsibilities of federal, provincial and local governments, those acts needs to be amended
 - Legal infection
 - The local government have been assigned 22 responsibilities. Out of 22 responsibilities, the acts for 21 responsibilities have been made.
 - The main challenge is about Land Use Policy
 - The local land classification has been done and Land uSe Act is in the process of making
 - There are federal units that operate locally too like Department of Road, Department of Land Management, Department of Water Supply etc. that also creates the discrepancies in roles and responsibilities of the federal agencies and local agencies
- Regarding the project implementation, some projects are implemented in cooperation with provincial and federal government
- Federal implements projects under drinking water and sanitation
- Provincial implements projects under agriculture, livestock, poultry, forest etc.
- The financing is done by local revenue, and grants from the provincial and federal governments. Besides that the municipality takes loan from Town Development Fund and development partners like ADB to finance the project within IUDP

- Some of the projects were shopping complex construction land pooling in 250 ropanis of land, integrated water supply project (Loan taken from TDF for infrastructure development)
- Development partners are collaborating in the sectors of irrigation, agriculture, institutional capacity building etc.
- EBPS is in the phase of implementation
- The existing number of manpower is sufficient but the skills are insufficient in the existing manpower.
- There is an urban development unit but there is not the position for urban planner



Fig: KII with Taranath Luitel, the Chief Administrative Officer of Dhulikhel Municipality

KII with Puja Kafle- Planning Officer, Planning Monitoring and Evaluation Division

Date and Time: August 2, 2022, 12:30 am

Key Notes:

- IUDP is considered as the basis for municipal urban development,
- Annual and periodic plans are based on IUDP
- The projects are selected from IUDP based on prioritization
- But it has been impossible to stick around the plans within IUDP
- Plan policies are one way and projects are on the other way

- To create the harmonization between the annual, periodic and IUDP plans, the draft of MTF is in the process of making. Medium Term Financial Structure. It is expected to project budget expenditure for 3 years
- Internal revenue for the municipality is obtained from the tax from the hotel businesses.
- There are not natural mining resources within the municipality
- In 2078/79 the total budget of 1 billion, 350 million out of which only 52 million 250 thousand had been collected from internal revenue
- The relation of mayor of Dhulikhel municipality is good with national and international agencies so he is doing best regarding the financing of the projects in municipality



Fig: KII with Puja Kafle, the Planning Officer from Planning, Monitoring and Evaluation Division, Dhulikhel Municipality

KII with Dr. Mahendra Subba, President, Regional and Urban Planners Society of Nepal (RUPSON)

Date and Time: September 12, 2022, 1: 11 pm

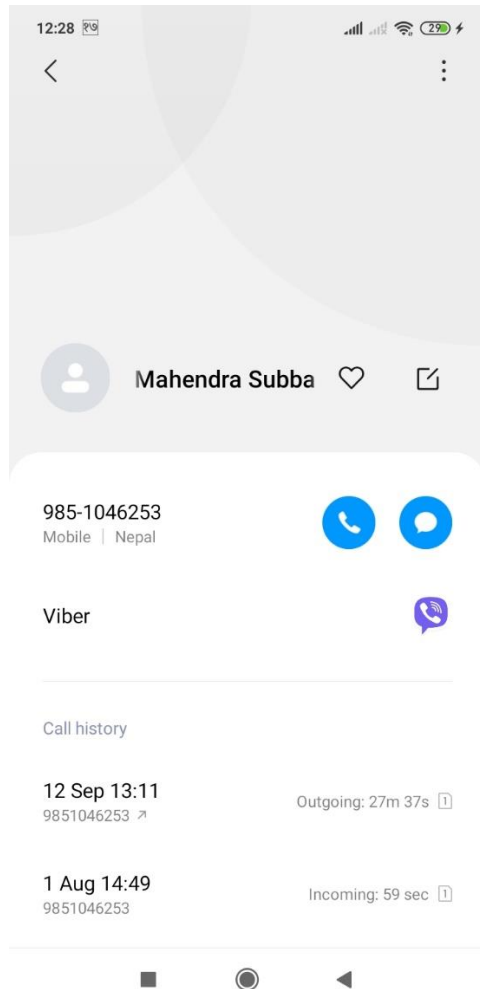
Mode: Phone Call

Key Notes:

- IUDP is the initiative of Ministry of Urban Development (MOUD). The Department of Urban Development and Building Construction (DUDBC) under MOUD developed the approach of IUDP.
- Integrated Action Plan (IAP) addressed the immediate problems of the municipality however it did not provide vision for municipal development, so there was a shift from IAP to Periodic Planning.

- Periodic Plan provided the vision for municipal development but it could not generate the large-scale municipal investment projects which could actually drive the municipal development, so the Government of Nepal shifted to IUDP approach
- IUDP has derived the features from Physical Development Plan, IAP and Periodic Plan.
- The feature unique to IUDP is that it identifies two investment projects which goes into implementation as the IUDP implementation begins and those identified projects are expected to drive the municipal development.

Record of the Phone Call



KII with Kishore Thapa

July 14, 2022, 2:00 pm

Venue: Annapurna Mithai Bhandar, Patandhoka

Key Points

- Three types of land development practices in Nepal: Sites and Services, Guided Land Development and Land Pooling.

- Land Pooling financed by the Town Development Committee with the loan from development banks
- Municipality also self-financed the Land Pooling projects like Manohara Land Pooling

Reasons for the success of land pooling projects

- i. Highly motivated civil service employees:
 - The civil servicemen were given incentives apart from salary.
 - The Project Manager was given the travel vehicle, fuel expenses.
 - The policy makers were highly motivated as they could take the credits of the land pooling project works they were involved in.
- ii. Availability of data and knowledge Resource to the civil service employees:
 - The project team had knowledge and lessons from previous experiences
 - If anyone had to know about the information regarding the plots, the information was readily available
- iii. Strong political will:
 - The politicians were also motivated as they could use the available local resources without managing funds from elsewhere
- iv. Project Financing:
 - Land pooling in itself is a self-financing tool though it requires bank loan to construct services and infrastructures during the project and is a huge success because of the no external cost incurred from outside the project
 - Financing can be done without involving bank loan by directly selling the service plots to the purchasing parties like corporate houses, banks and other big agencies as in the case of Sintitar and Kamerotar land pooling.

Annex 4: Implementation Status of IUDP of Dhulikhel Municipality

Table 8: Implementation Status of IUDP of Dhulikhel Municipality

Physical Development Plan			Status of Implementation/ Integration	
S.N.	Plans	Programs	Strategies in Periodic Plan	Annual Plan and Programs 2076/77
1.	Implementation of Land use plan: planned urban development in the Municipality.	Translate the Land Use Plan into Land Use Zoning maps and by-laws	Physical Infrastructures <ul style="list-style-type: none"> Expanding the reach of electrification, upgrading the quality of infrastructures for management and transmission of electricity for ultimately enhancing the local economic activities for local economic growth Expanding the reach of agriculture, industry, commerce, tourism, health and education through the expansion of road network for the ultimate contribution to local economy 	Prohibition of plotting development till LUP formulation
2.	Establishment of land pooling/consolidation mechanism in the Municipality	Identify areas for land pooling and consolidation in order to relocate the scattered, risk prone houses and to improve the agricultural production		Regulating Plotting
3.	Masterplans for Urban Dhulikhel and small settlements – village	Undertake an Urban Masterplan for urban Dhulikhel and each Village Centre in each Ward: Include detailed location of land pooling areas, road network and other necessary attributes		
4.	Drainage	Drainage design and construction - Areas where the population density is high		
5.	Water supply	Water supply projects under Dhulikhel water supply users Committee, Feasibility study for combined water supply in various wards		
			Urban Development and Housing	DPR for drinking water projects

Analyzing the gaps in institutional capacity of Dhulikhel Municipality in implementing IUDP: A Case Study

6.	Waste water and Sanitation planning and service extension	Pipe Sewerage design and construction - Areas where the population density is high	<ul style="list-style-type: none"> Promoting the integrated settlement with the provision of basic physical infrastructures and city development with identity Promoting the land use plan based urban development Promoting the rural urban linkage Provisioning the safe, durable and environment friendly housing for poor and marginalized communities Enforcing building bye laws for safe housing construction 	
7.	Improvement in the linkage of rural centres of the Municipality with the urban centers like Dhulikhel Bazar	Construction, improvement and maintenance of various road sections in the wards and settlements		<ul style="list-style-type: none"> DPR of main municipal roads Road Maintenance from Road Board and funding by DFID
8.	Creation of the employment by promoting the decentralised balanced industrial development	Support the Establishment of small-scale industries related to the agriculture. Establishment of vegetable, milk collection centres, Rice mill, Flour mill		
9.	Development of Municipal facilities related Infrastructure.	City House (1) New Buspark (1) Public Toilets in Main bazaar areas, Primary tourist areas, Cultural areas. Central Vegetable Market (1) Slaughter House (1) Security Posts School in Ward 2 Health posts Recreation facilities in Public Open Space Cycling tracks Trekking tracks Sanitary Landfill site (include within Masterplans)		Promotion of Public Private Partnership
10	Co-ordinated and Integrated Development approvals	<ul style="list-style-type: none"> Establish a new integrated permit system of development approvals and infrastructure provision Development Referrals to Environmental Health Development Referrals to Engineering Water Department and Power Service providers 		

Annex 5: Comparison of Departments in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality

Table 9: Table showing the name of departments in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality

Municipalities	Dhulikhel Municipality, Kavrepalanchowk, Bagmati Province	Neelkantha Municipality, Dhading, Bagmati Province	Phuentsholing Municipality, Bhutan (Phuentsholing Thromde, 2022)
Departments	<ol style="list-style-type: none"> 1. Administration and Planning Management Division 2. Social Development Division 3. Economic Development Division 4. Physical Infrastructure and Environment Management Division 	<ol style="list-style-type: none"> 1. Administration and Good Governance Section 2. Physical Infrastructure and Monitoring Division 3. Information and Communication Department 4. Law Section 5. Health Section 6. Women Development/Empowerment Section 7. Economic Development and revenue Section 8. Education, Youth and Sports Section 9. Financial Administration Section 10. Internal Audit and Examination Section 	<p>Under Executive Secretary</p> <ol style="list-style-type: none"> 1. Development Regulatory Division 2. Financial management division 3. Urban Planning and development division 4. Infrastructure Development Division 5. Environment Division 6. Land and Survey Division 7. Census and Civil Registration Services 8. Education Services <p>Under Secretariat</p> <ol style="list-style-type: none"> 1. Policy and Planning 2. Human Resource 3. Internal Audit 4. ICT 5. Legal 6. Procurement

Annex 6: Comparison of Human Resources in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality

Table 10: Table showing the human resources in Dhulikhel Municipality, Neelkantha Municipality and Phuentsholing Municipality in departments related to urban development

	Dhulikhel Municipality, Kavrepalanchowk, Bagmati Province	Neelkantha Municipality, Dhading, Bagmati Province	Phuentsholing Municipality, Bhutan (Phuentsholing Thromde, 2022)
Human Resources at Urban Development Related Department	<p>Physical Infrastructure and Environment Division- Technical Director (8th level), Civil Engineer -1 nos.</p> <p>Urban Infrastructure Department-8 nos. Technical Sub director (7th level), Civil Engineer - 1 nos. Technical Officer (6th level), Civil Engineer-2 nos. Technical assistant (5th level), Sub Engineer -5 nos.</p> <p>Land Management and Building Regulation Department-5 nos. Technical Officer (6th level), Architect-1 nos. Technical Assistant (5th level), Civil-1 nos. Admin Assistant (5th level) - 1 nos. Survey Assistant (5th level)-1 nos. Survey Assistant (4th level) -1 nos.</p>	<p>Physical Infrastructure and Monitoring Division 2-Civil Engineer 4-Sub Engineer 7 -Assistant Sub Engineer 2-Surveyor (Amin)</p> <p>Total : 15</p>	<p>Development Regulatory Division- 7 nos.</p> <ul style="list-style-type: none"> • Chief Engineer-1 • Executive Architect-1 • Executive Engineer-1 • Senior Building Inspector-1 • Building Inspector-3 <p>Land and Survey division- 5 nos.</p> <ul style="list-style-type: none"> • Chief Land Registrar-1 • Survey Engineer-1 • Senior Surveyor-1 • Land Record Assistant-2 <p>Urban Planning and Development Division-5 nos.</p> <ul style="list-style-type: none"> • Chief Urban Planner-1 • Senior Urban Planner-1 • Urban Planner-2 • GIS Officer-1

	<p>Disaster Risk and Environment Department-2 nos. Admin Assistant *5th level)-1 nos. Assistant Admin Assistant (4th level)-1 nos. Total : 16</p>		<p>Infrastructure Development Divison-13 nos.</p> <ul style="list-style-type: none"> • Chief Engineer-1 • Principal Engineer-1 • Assistant Engineer-7 • Deputy Executive Engineer-1 • Senior Technician-2 • Electrical Engineer-1 <p>Environment Divison-11 nos.</p> <ul style="list-style-type: none"> • Chief Environment Officer-1 • Civil Engineer-1 • Senior Technician-3 • Technician-1 • Senior Lab Assistant-1 • Sanitary Inspector-3 • Assistant Engineer-1-Sewerage Section
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Annex 6: Acknowledgement Email from Journal of Innovation and Engineering Excellence (JIEE) regarding the Thesis Partial Paper Submission

[JIEE] Submission Acknowledgement Inbox x



postmaster@nepjol.info

to me ▾

Sep 7, 2022, 7:18 PM



English ▾ > Nepali ▾ [Translate message](#)

[Turn off for: English](#) x

Sagar Humagain:

Thank you for submitting the manuscript, "A review of A Review of Institutional, Policy and Legal Framework for IUDP Implementation in Nepal" to Journal of Innovations in Engineering Education. With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

Manuscript URL: <https://www.nepjol.info/index.php/jiee/authorDashboard/submission/48178>

Username: arsagarhumagain

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Dr. Khem Gyanwali

Annex 7: Schedule of the activities of the thesis

Table 11: Table showing Schedule of the activities of the thesis

S.N.	Proposed Activities	Timeline																			
		Jestha				Ashad				Shrawan				Bhadra				Ashwin			
		Weeks				Weeks				Weeks				Weeks				Weeks			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.	Literature review	■	■																		
2.	Thesis proposal submission		■																		
3.	Presentation of thesis proposal			■																	
4.	Revised thesis proposal submission				■																
5.	Preliminary thesis presentation				■																
6.	Field Visit for case study				■	■															
7.	Preliminary analysis from literature review and case study				■	■															
8.	Detailed analysis of data							■	■	■											
9.	Mid-Term Thesis Report submission										■										
10.	Mid-Term Thesis Presentation											■									
11.	Addressing the feedbacks and conduction of additional tasks.											■	■	■	■						
12.	Draft final thesis report submission															■					
13.	Final Thesis defence																		■		
14.	Final report submission																			■	

Annex 8: A matrix showing the calculation of budget spent for implementation of programs of IUDP under physical development and economic development

