

Revenue Trend Analysis of Bharatpur Metropolitan City (BMC), Nepal

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Article History: Received 28 March 2024; Reviewed 15 June 2024; Revised 15 August 2024; Accepted 20 September 2024.

Abstract

The present study aims to explore a comprehensive analysis of the revenue trends with special focus on the case of Bharatpur Metropolitan City. The study adopts a quantitative research design, employing document analysis, and an observation checklist. This study presents findings over the last 13 years 2067 to 2079, focusing on three key headings: Tax related to Land and Property, Service fee and Tariff and Dividend tax. Tax related to Land and Property encompasses taxes such as property tax, Malpot tax, business tax, house rent tax and homeland registration tax it exhibited the most substantial growth. Service fee and tariff represent the total sum of service fees and tariff, including fees for Building permits, event registration, and fines, relationship certification, education fees, electricity fees and parking fees. This variable showed initial growth but also experienced fluctuations. Dividend tax includes vehicle tax, entertainment tax, and advertising tax, showing modest yet steady growth, despite having the smallest contribution, it displayed consistent growth. The study underscores the diverse contributions of these revenue sources, emphasizing the need for strategic planning to stabilize and enhance the financial health of BMC by optimizing each revenue stream's potential.

Key words: Public Governance, Revenue, Financial analysis, Local Governments

Introduction

Bharatpur Metropolitan City (BMC) lies in the heart of Nepal, renowned for its rich cultural heritage, versatile community life, and mushrooming economic activities (BMC, 2024). Situated in Chitwan district, this metropolitan city serves as a vital hub for trade, commerce, and administration. As a local government entity, BMC plays an essential role in administering

public services, infrastructure development, and community welfare within its jurisdiction. In terms of development, BMC is facing number of developmental challenges while striving to capitalize emerging opportunities. Its' developmental trajectory is shaped by a complex interplay among various factors, including urbanization, environmental sustainability, social equity, and economic resilience (BMC, 2024). Through years of dedicated service, first author has recognized the profound impact of revenue trends on the efficiency of governance, particularly at the local governments (LGs) in Nepal.

Regarding local governance and fiscal management, the analysis of revenue trends plays a pivotal role in steering policies, allocating resources, and ensuring developmental activities. For example, Ningsih et al (2023) mentioned in a literature:

Local taxes are an important source of revenue for regions to meet expenditures, especially capital expenditures, so the relationship between the community and local government in the context of local revenues can be seen from the ability and responsibility of local governments in providing good public services and improving community welfare through capital expenditures.

Arguing the same matter, (Anicic et al., 2016) illustrated that local communities must have an active tax policy to contribute to the achievement of their economic and social objectives.

In essence, the analysis of BMC's revenue trend is not merely an academic pursuit but a pragmatic endeavor with far-reaching implications for governance, development, and the welfare of our communities. Talking about local levels revenue sources like local tax (property tax, house rent tax, fee on registration of houses and land, vehicle tax), service fee, tourism fee, advertisement tax, business tax, land tax (land revenue), fines, entertainment tax are common (Constitution of Nepal, 2015). Similarly, Local Government Operation Act (LGOA, 2017) illustrates that local levels do not impose tax except as per the law. So, local levels have been collecting tax in the headings such as, property tax and house and land tax, land tax (land revenue), house rent-tax, business tax, rent or tenancy tax, parking fee, herbs, scrap and wildlife tax, and service fee. These are the major areas that BMC has been practicing for the purpose of collecting tax. Therefore, studying revenue and expenditure analysis provides valuable insight into the financial health of BMC and informs strategic decision-making processes.

Federalism places a significant responsibility on local governments to optimize local resources for the betterment of communities and the nation at large. From the document analysis of BMC, it is seen that the contribution of revenue to the annual budget is 25%, 27%, and 21% respectively during the fiscal years 2021, 2022, and 2023. In this context, this paper aims to fill existing gaps in our understanding of BMC's revenue dynamics identifying trends, and so analyzing the opportunities and challenges for improvement.

This data counters the essence of sustainable development of local governments because local revenue is an important source to meet expenditures, in providing good public services and improving community welfare through capital expenditures. This also supported the views the sub-national governments with their revenue sources respond better to local demands and promote greater economic efficiency (Wagle, 2018). It is also said that the local government is expected to increase local revenue so that dependence on the central government can be reduced and can improve the welfare of the community for sustainable development (Kuntari et al., 2019), which is therefore important to analyze in the context of BMC. In this context, the research question of this study is “What is the revenue trend of BMC in Nepal?”

Methods and Procedures

The philosophy of inquiry underlying this research was primarily grounded in positivism. Positivism emphasizes the objective observation and measurement of phenomena, aiming to uncover empirical regularities and causal relationships (Creswell & Creswell, 2023; Denzin & Lincoln, 2018). In the context of analyzing the revenue trend of BMC, a positivist approach enables the systematic examination of quantitative data to identify patterns, trends, and factors (Creswell & Creswell, 2023), that influence revenue generation and expenditure in the context of this study.

This study employed quantitative research methods to systematically collect and analyze numerical data related to BMC's revenue trend. Quantitative methods enabled the measurement, comparison, and statistical analysis of revenue data over time, facilitating the identification of trends, correlations, and predictive models (Creswell & Creswell, 2023; Denzin & Lincoln, 2018).

The research tool utilized in this study is structured surveys/checklists which were administered through BMC's revenue department, financial institutions, and relevant stakeholders. The survey checklist was used to collect information on BMC's annual budget, local revenue, and public expenditure over the years 2015 to 2023.

To ensure the reliability of data collection instruments, pilot testing was conducted to assess the clarity, comprehensiveness, and consistency of the survey checklist. Concurrent validity was assessed by comparing survey checklist results with established benchmarks and expert opinions. Also, secondary data sources such as financial reports, budget documents, and government publications were systematically reviewed and analyzed to complement primary data. The data analysis involved descriptive statistics such as mean, standard deviation and time series analysis to summarize and visualize BMC's revenue trend.

Results and Discussion

BMC has experienced significant changes and developments in its revenue trends over the period from 2013 to 2023. The descriptive analysis of the revenue trend of BMC from 2013 to 2023 reveals several important findings in different sectors such as (a) Tax related to Land and Property encompasses taxes such as property tax, Malpot tax, business tax, house rent tax and homeland registration tax, (b) service fee and Tariff, including fees for Building permits, event registration, and fines, relationship certification, education fees, electricity fees and parking fees and (c) dividend tax, which is from Vehicle tax, entertainment tax, and advertising. From the survey checklist, the collected data are as follows.

Table 1: Revenue in thousands

F year	Land and Property	Service fee and Tariff	Dividend	T
2067/68	16751	63724	1482	81957
2068/69	33857	80099	474	114430
2069/70	41407	55457	2703	99567
2070/71	39215	87030	1523	127768
2071/72	61038	151911	780	213729
2072/73	76795	158138	4401	239334
2073/74	141370	259022	4823	405215
2074/75	88400	375874	4784	469058
2075/76	573502	469991	5759	1049252
2076/77	549942	383621	5938	939501
2077/78	755526	298975	577	1055078
2078/79	1027894	268463	6180	1302537
2079/2080	828175	340342	10132	1178649

The analysis of the data is given as below.

Land and Property Revenue

Land and Property revenue represents the total revenue collected from

Property tax, Malpot tax, business tax, house rent tax and homeland registration tax in Bharatpur Metropolitan City (BMC), Nepal. The data collected over the period 2067/68 to 2079/2080, the revenue shown a significant upward trend, reflecting the Metropolitan's expanding economic activities and improved tax collection mechanisms.

Land and Property

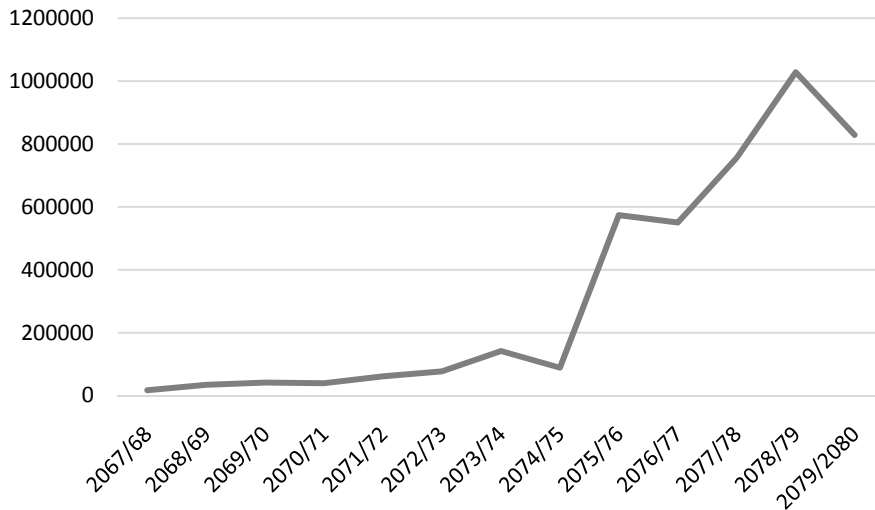


Fig. No. 1

The average revenue collected over the 13 years is approximately 325 million. This average indicates a substantial inflow of revenue from these key tax sources, which play a vital role in the Metropolitan's financial health. The standard deviation is approximately 366 million, signifying a high degree of variability in the revenue figures. This variability highlights the rapid changes in revenue collection, particularly in the later years of the period under review.

The revenue started at 16.7 million in 2067/68, reflecting the early stages of revenue collection from these sources. The revenue became more than double in 2068/69 to 33 million, marking the beginning of a strong growth trend. By 2070/71, the revenue reached 39 million, indicating a steady increase as the Metropolitan. It improves its tax collection processes and expands its tax base. The upward trend continued, with revenues soaring to 755 million in 2077/78 and reaching a peak of 1 billion in 2078/79. This dramatic rise can be attributed to extensive economic growth and an aggressive approach to tax collection, reflecting the Metropolitan's focus on enhancing its revenue streams. The revenue in the final year, 2079/2080, settled at 82 million, slightly lower than the peak but still indicative of a sustained high level of revenue collection.

The overall trend of tax related to Land and Property is strongly positive, with a significant increase in revenue over the 13-year period. The sharp increase in revenue, particularly in the last five years, suggests that BMC has been successful in expanding its tax base, possibly due to urbanization, increased property transactions, and a broader business environment. Arguing the same matters Upadhyay et al (2015) illustrates that municipal taxpayers and municipal policy making advisors, property tax is more potential own sources

revenue of municipality in comparison to others sources. Furthermore, property tax is highly potential own source revenue of municipal finance in Nepal.

In conclusion, the revenue collected under tax related to Land and Property for Bharatpur Metropolitan City demonstrates a robust growth trend, with the mean revenue significantly increasing over time. This analysis provides insights into the economic progress of Bharatpur Metropolitan and the effectiveness of its revenue collection strategies.

Service fee and Tariff Revenue

Service fee and Tariff revenue represents the total revenue collected from various service fees and tariff, building permits, event registration, and fines, relationship certification, education fees, electricity fees and parking fees in Bharatpur Metropolitan City (BMC), Nepal over the period of 13 years, from 2067/68 to 2079/2080, the revenue under this category has shown considerable growth, although it has experienced fluctuations during certain periods.

The average revenue collected over the 13-year period is approximately 230 million. This substantial mean highlights the significant role that service fees and duties play in the overall revenue structure of the Metropolitan. The standard deviation is approximately 139 million, indicating a considerable degree of variability in the revenue collected under this category. The variability suggests that revenues from service fees and tariff can be sensitive to changes in metropolitan policies, economic conditions, and the demand for Metropolitan services.

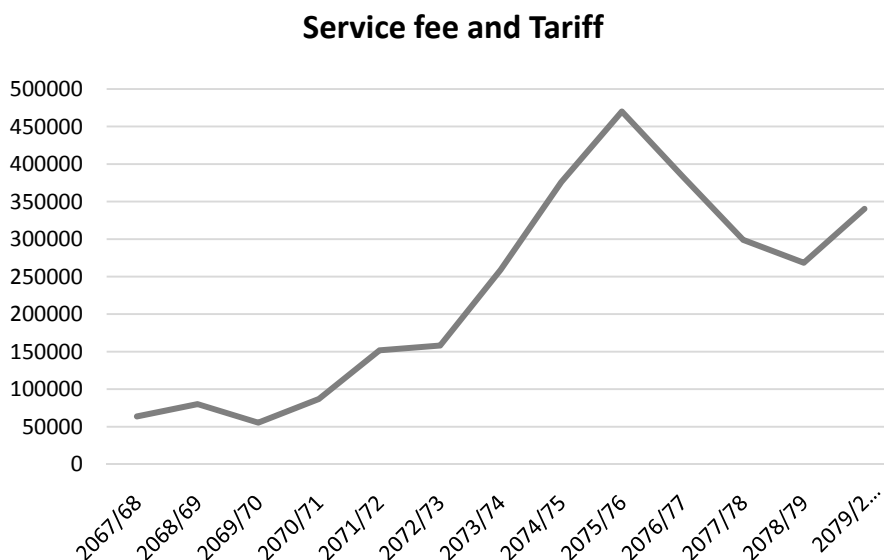


Fig. No. 2

In the initial years, the revenue from Service fee and Tariff was relatively modest, starting at 63 million in 2067/68. The revenue increased steadily to 151 million by 2071/72, indicating a growing reliance on and expansion of services offered by the Metropolitan. The period from

2071/72 to 2075/76 saw significant growth, with revenue reaching 375 million by 2074/75. This growth reflects the expansion of service-based revenue streams, possibly due to increased urbanization, greater demand for metropolitan services, and improved fee collection mechanisms. After reaching its peak, revenue declined to 383 million in 2076/77 and further to 268 million by 2078/79. This decline could be due to a reduction in the demand for services, changes in fee structures, or other economic factors. The revenue partially recovered to 340 million in 2079/2080, suggesting stabilization in service-related revenues. Upadhyay et al (2015) adds that tax source is an important own source municipal revenue.

The overall trend of Service fee and Tariff shows an initial steady increase in revenue, followed by significant growth in the mid-period and a subsequent decline before partial recovery in the final year. In conclusion, the revenue collected under Service fee and Tariff for Bharatpur Metropolitan City demonstrates significant growth over the 13 years, with notable fluctuations. Understanding the factors driving these fluctuations can help in formulating strategies to stabilize and enhance service-related revenues in the future.

Dividend Tax Revenue

Dividend tax revenue encompasses the total revenue collected from vehicle tax, entertainment tax, and advertising tax in Bharatpur Metropolitan City, Nepal over the period from 2067/68 to 2079/2080. The revenue from Dividend tax has shown a varied and somewhat volatile pattern, reflecting the fluctuating nature. The average revenue collected over the 13-year period stands at approximately 3 million. This relatively low average reflects the smaller contribution of vehicle, entertainment, and advertising taxes compared to other revenue sources in BMC. The standard deviation is approximately 2 million, indicating a high degree of variability in the revenue collected from these taxes. This variability suggests that the revenue from these categories is sensitive to changes in economic conditions, regulatory enforcement, or other external factors.

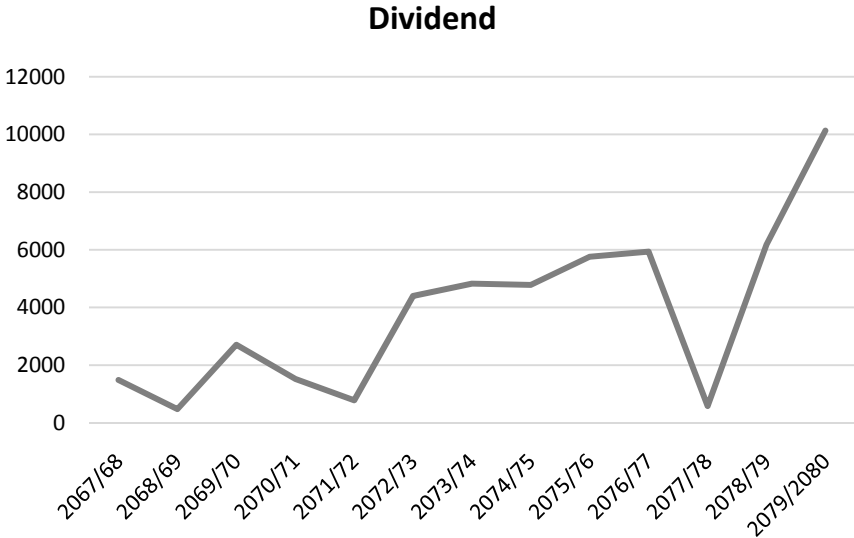


Figure No. 3

In the early years, the revenue from dividend tax was modest, beginning at 1.48 million in 2067/68. This figure remained relatively low in the following years, with a slight increase to 2.7 million by 2069/70. A more significant rise is observed in 2072/73, where revenue jumped to 4.4 million, reflecting a possible expansion in vehicle registrations or increased enforcement of entertainment and advertising taxes. The highest revenue collected under dividend tax was recorded in 2079/2080 at 10.13 million, a more than six-fold increase from the initial year. This peak suggests either a substantial increase in taxable activities under these categories or possibly a revision in the tax rates. The data shows a sharp increase in revenue from 2078/79 to 2079/2080, where the revenue jumped from 6.18 million to 10.13 million. This could reflect a recovery or growth phase in the underlying sectors, possibly due to economic improvements or changes in policy that positively impacted the collection of these taxes.

Despite the variability, the long-term trend for dividend tax is positive, with an average annual increase, though the year-on-year changes are inconsistent. In conclusion, the revenue collected from vehicle, entertainment, and advertising taxes in Bharatpur Metropolitan City demonstrates substantial variability over the years, with significant fluctuations that likely correspond to broader economic conditions and specific local factors. The mean revenue is relatively modest, with a high standard deviation, indicating the unpredictability of these revenue sources. The time series analysis reveals a general upward trend with some notable peaks and troughs, reflecting the dynamic nature of these taxes. Understanding the factors driving these fluctuations could help in formulating more stable and predictable revenue strategies for the Metropolitan in the future.

Land & Property; Service fee & Tariff; and Dividend: A Comparative Analysis

Tax related to Land and Property, Service fee and Tariff and Dividend tax represent different revenue streams collected by Bharatpur Metropolitan City from 2067/68 to 2079/2080. These heading capture the diverse sources of income for the Metropolitan: tax related to Land and Property includes taxes such as property tax, Malpot tax, business tax, house rent tax and homeland registration tax; Service fee and Tariff encompasses building permits, event registration, and fines, relationship certification, education fees, electricity fees and parking fees; and dividend tax covers vehicle tax, entertainment tax, and advertising tax. Analyzing these together reveals distinct patterns and contributions to the Metropolitan's overall revenue.

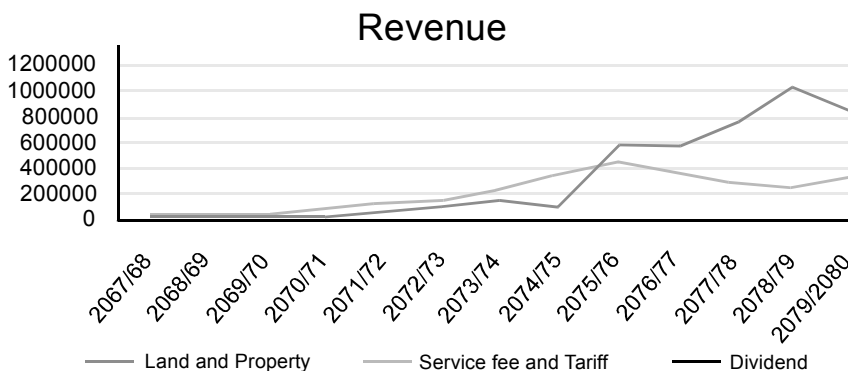


Figure No. 4.

Tax related to Land and Property shows the most significant growth over the period, with revenues increasing from 16.75 million in 2067/68 to a peak of 1.027 billion in 2078/79, before slightly decreasing to 828 million in 2079/2080. This sharp rise indicates a robust expansion in tax revenue, likely driven by urbanization, property transactions, and enhanced tax collection efficiency. In terms of Service fee and Tariff, starting at 63 million in 2067/68, it peaked at 470 million in 2075/76 before declining to 268 million in 2078/79 and slightly recovering to 340 million in 2079/2080. The fluctuations suggest sensitivity to changes in demand for services, fee structures, and economic conditions.

Dividend tax demonstrates the least growth among the three, beginning at 1.48 million in 2067/68 and gradually rising 10.13 million in 2079/2080. Although it shows an overall upward trend, the growth in dividend tax is more modest and less volatile than tax related to Land and Property and Service fee and Tariff.

The time series analysis reveals that tax related to Land and Property has experienced the most dramatic and consistent growth, especially in the later years, indicating a strong and expanding tax base. Service fee and Tariff, while initially growing steadily, has shown more pronounced fluctuations, with periods of both growth and decline, reflecting its dependence on service demand and fee structures. Dividend tax, despite its modest growth, has maintained a more stable upward trend, suggesting a steady contribution from vehicle, entertainment, and advertising taxes.

In conclusion, the comparative analysis of tax related to Land and Property, Service fee and tariff and dividend tax reveals that while tax related to Land and Property has shown the most substantial and consistent growth, Service fee and Tariff and dividend tax also play important roles in the revenue structure of Bharatpur Metropolitan City.

Conclusion

The internal revenue of Bharatpur Metropolitan's has been increasing in the last 13 years. However, each heading of tax has unique characteristics and contributions, reflecting different aspects of the Metropolitan's economic activities and tax collection efforts. The time series analysis highlights that tax related to Land and Property has experienced the most substantial and consistent growth, particularly in recent years. It reflects a strong and expanding tax base. In contrast, Service fee and Tariff, while initially showing steady growth, have been more volatile, with periods of both growth and decline due to fluctuations in service demand and fee structures. Meanwhile, Dividend tax, although it shows more modest growth, has maintained a steady upward trend. It contributes consistently through vehicle, entertainment, and advertising taxes.

Overall, Land and Property tax has emerged as the most significant source of revenue, but Service fee and Tariff, along with Dividend tax, continue to play important roles in the revenue structure of Bharatpur Metropolitan City. Therefore, it is necessary to develop targeted strategies and a revenue improvement plan to optimize collection across all categories of BMC.

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