

“स्वस्थ, सुसंस्कृत ए सुखी जनता: समाजवाद उन्मुख समृद्ध प्रदेश”

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सल्लाहकार समिति

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श्री प्रल्हाद लामिछाने
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सम्पादक मण्डल

प्रधान सम्पादक
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सम्पादकहरू

श्री शुकदेव सापकोटा
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प्रकाशक

प्रदेश नीति तथा योजना आयोग,
बागमती प्रदेश
हेटौंडा, मकवानपुर।

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बागमती प्रदेशमा पोषणको अवस्था र सुधारका प्रयासहरू

पुरुषोत्तम अर्याल

यस जर्नलमा प्रकाशित लेखहरूमा प्रस्तुत विचारहरू सम्बन्धित लेखकहरूका निजी विचारहरू हुन् र तिनले प्रदेश नीति तथा योजना आयोग, बागमती प्रदेशको विचारको प्रतिनिधित्व गर्दैनन्।

(Opinions expressed in the articles published in this journal are the views of respective authors and not represent the views of Province Policy and Planning Commission, Bagmati Province)

सम्पादकीय

प्रदेश विकास जर्नलको दोश्रो अङ्क प्रकाशित भएको छ। यस अङ्कमा प्रदेश सरकारको सार्वजनिक खर्चको प्रवृत्ति र समस्याहरू, अनलाई सिकाइप्रति विद्यार्थीको रूझान, स्थानीय सेवा प्रवाहको गुणस्तर, बाल अधिकार, नेपाल र भारत बिचको व्यापारिक सम्बन्ध, एक विद्यालय एक नर्स कार्यक्रमको प्रभावकारिता, प्रदेश कानून कार्यान्वयनको अवस्था र नयाँ कानूनको आवश्यकता, गाँजाको उपयोगिता, वन पैदावरमा आधारित उद्योग र पोषणसँग सम्बन्धित लेखहरू समेटेका छौं। हाम्रो आग्रहलाई स्वीकार गरी आफ्ना अमूल्य लेख रचना मार्फत सहयोग पुऱ्याउनुहुने विद्वान लेखकहरू प्रति सम्पादक मण्डल हार्दिक कृतज्ञता दिन चाहन्छ।

सङ्घ, प्रदेश र स्थानीय तहलाई नीति, योजना र कार्यक्रम तह गर्न सहयोग पुग्ने अनुसन्धानात्मक लेख रचनाहरू प्रकाशन गर्ने हाम्रो मुख्य लक्ष्य हो। यसले तीनै तहको सरकारलाई दूरगामी महत्त्वको नीति तथा योजना तर्जुमा गर्न र आम नागरिकहरूले सामना गरिरहेका समस्याहरूलाई हल गर्न ठुलो सहयोग पुग्छ भन्ने अपेक्षा गरेका छौं। संघीय संरचनाबमोजिम स्थानीय तहले एक कार्यकाल पुरा गरी दोश्रो कार्यकालको थालनी गरिसकेको छ भने प्रदेश सरकारहरूले पहिलो कार्यकाल पुरा गर्दैछ। पहिलो कार्यकालको उपलब्धि, अनुभव, सिकाइ र सुधार गर्नुपर्ने विषयहरूलाई समेटेर आगामी अङ्क प्रकाशन गर्ने हाम्रो प्रयाय हुनेछ।

यस अङ्कमा केही कमीकमजोरीहरू रहेका हुन सक्छन्। ती कमजोरीहरू औल्याइ दिनुहुन र अगामी दिनमा प्रदेश विकास जर्नललाई थप स्तरीय बनाउन उपयुक्त सुझाव तथा सहयोग उपलब्ध गराई दिनुहुन विद्वान पाठक र लेखकहरूमा सम्पादक मण्डल हार्दिक अनुरोध गर्दछ।

Public Expenditure of the Province: Patterns and Problems with Special Reference to Bagamati Province of Nepal

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Abstract

Government expenditure is the major driver of the growth and development of an economy. It has multiplier effect on aggregate demand via growth in investment, output and employment. In Nepal, progress in actual expenditure of both provinces and federal government seems to be low during past few years. Though share of capital budget in provinces is higher, actual progress in capital expenditure is lower compared to federal one. In this background, the study aims to analyze the pattern and explore the problems in expenditure of provincial government taking the reference of Bagamati Province. Using simple descriptive method of analysis and limitedly available data, the study reveals that expenditure pattern of the province is very low where the progress in capital expenditure is further poor. It is revealed that poor expenditure pattern of the province is due to the legal, institutional, technical and financial problems being faced by the province government. It is in need to go for the rigorous reforms to avoid such problems in order to achieve good progress in the government expenditure and thus to gain the economic growth and development of the province.

(Keywords: Expenditure, Growth, Development, Effectiveness)

1. Introduction

Government expenditure is a key factor that affects the size of economy and an important driver in fostering the economic growth. However, the effectiveness depends on the degree of productivity of the expenditure and composition of the two major parts (i.e. recurrent and capital) in it. As per Keynesian approach, government expenditure is a significant booster of aggregate output in the case of the developing economies falling under an enormous market failure and poverty trap. On the other hand, it could have adverse effect resulting in unwanted inflation and boom-boost cycle (Wang and Wen, 2013). The government expenditure on infrastructure projects and social services has multiplier effect on aggregate demand through increase in investment, productivity and employment. Conversely, neoclassical school of thought advocates for the limited role of government and depicts the negative effects of such public expenditure that has crowding out effect on the private investment and consumption.

The government, in the form of public expenditure, spends its resources for the provision of goods and services and its institutional management to achieve the growth of national economy (i.e., increase in output and employment) and promotion of the public welfare (Aigheyisi, 2013).

In their development model, Rostow (1971) and Musgrave (1969) have accentuated the government expenditure as the precondition for the economic development of a country. As per the government finance system, such expenditure has been broadly categorized into recurrent and capital expenditure. The recurrent expenditure includes all the expenses other than investment on capital assets. It includes the expenditure on the goods and services, operational costs, and wages and salaries of the workers of the government institutions, etc. However, expenditure on the fixed capital assets such as roads, buildings, furniture, agriculture infrastructures etc. comes under the capital expenditure.

The World Bank and International Monetary Fund (IMF) have classified the government expenditure as- social, economic and other expenditure (Panta, 2015). The social expenditure includes the expenditure on public services such as education, health, social safety etc. that are effective to enhance knowledge, long life and short-run incomes of the people. However, economic expenditure consists of the government spending on services such as agriculture, transport, energy etc. which improve access, employment and income.

In Nepal, compared to recurrent budget, average annual growth of capital budget is running low during the past three decades. Both the share of capital budget and percent of actual capital expenditure in total budget are in decreasing trend. In the total budget of federal government, the share of capital budget is fluctuating around one fourth even after the federal set up. During the last two years of period, the capital expenditure remained low, i.e., 46 percent and 64 percent in fiscal year (FY) 2019/20 and 2020/21 respectively because of the effect of Covid-19 pandemic (MoF, 2022). Next, there is an increasing trend of payment of capital expenditure in the last moment of the fiscal year leading to the adverse effect on the transparency, quality and efficiency of such expenses. In the country, quality and effectiveness of the capital expenditure have not been increasing as well. These challenges regarding the capital expenditure are being hurdle in physical and human capital formation and economic development. According to various studies, the political turmoil, administrative bottleneck, coordination failure among the ministries, coordination gap between planning and implementation, weak technical capacity, legal gaps, etc. are observed as the cause of the gap and the inefficiency of the capital expenditure in Nepal (Ghimire & Bhusal, 2015; Singh, 2016).

Among the three levels of government, the share of capital expenditure in total budget is higher in provinces compared to the federal budget (MoF, 2022). The integrated capital expenditure of all levels of government is in increasing trend followed by the growing trend of the share of such expenses in subnational governments. According to NCE Nepal (2021), in the first eight months of FY 2020/21, the average total expenditure of all provinces is observed only 24.7 percent. However, Lumbini Province and Province No. 1 has exhibited higher progress compared to other provinces. Though the pandemic had led adverse impact on capital expenditure of all levels of government, the ratio of such expenditure is gradually being recovered. In this background, this paper aims to analyze the patterns of and the problems associated with the public expenditure of the province taking the case of Bagmati province.

2. Theoretical Review

In an economy, to correct market failure and achieve and sustain the pro-poor growth and distribution, government expenditure could play important role through its appropriate policies and frameworks. According to the nature and objectives, the approach of government expenditure can be classified into- *welfarist approach* and *social justice approach* (Coady and Fan, 2008). The services provided by the government expenditure, i.e. social and economic expenditure both, lay the long term impact on human and social capital building, and short term effect as a safety net for the vulnerable people. Thus, government spending on public goods and services is key factor to improve the welfare and achieve a just society in a country.

In their developmental models, Mosgrave (1969) and Rostow (1971) argue that the social and economic infrastructural development through the government expenditure (basically capital expenditure) trigger the economy towards the maturity. Hence, regarding the composition, government expenditure moves from the capital expenditure (i.e., expenditure on infrastructures, equipment etc.) towards the recurrent expenditure (i.e. expenditure on education, health and welfare services) gradually as the economy gains maturity.

According to the Wagner's theory-'Law of Increasing State Spending', public expenditure increases with growth of the economy because of the increase in activities and functions of government (Lamarthina & Zaghini, 2011). The theory observed the positive relationship between public expenditure and income. Likewise, witnessed one way causality from economic growth spending to the government expenditure. In Solow growth model, Robert N. Solow has hypothesized that- increase in government spending leads to the growth of production, employment and income (Nyarko-Asomani et al, 2019). However, some portion of income of the economic agent goes to savings which is used for the further investment.

Baro (1990) argues that the government expenditure (on investment and productive sector, i.e., as capital/ development expenditure, is supposed to contribute to economic growth through both the physical and human capital formation (Agrawal & Lertjanyakit, 2019). In an empirical study, Agrawal & Lertjanyakit (2019) has observed the significant impact of the agriculture, health, transportation, electricity, education on Nepalese economy and positive relationship between government expenditure and economic growth.

3. Method and Materials

This study is completely descriptive and explanatory in nature. As it has the objective to analyze the pattern and explore the problems related to the expenditure of the province, very simple statistical tools like percent, mean etc. has been used. The secondary sources of information has been used for the collection of data and other information which were collected from budget document, economic survey reports, websites and reports of the various meetings of the federal and province government. Likewise, research reports, national and international books and journals, and other relevant unpublished reports were also reviewed during the study. In the analysis, FY 2017/18 (2074/75) has not been taken in consideration as the province government

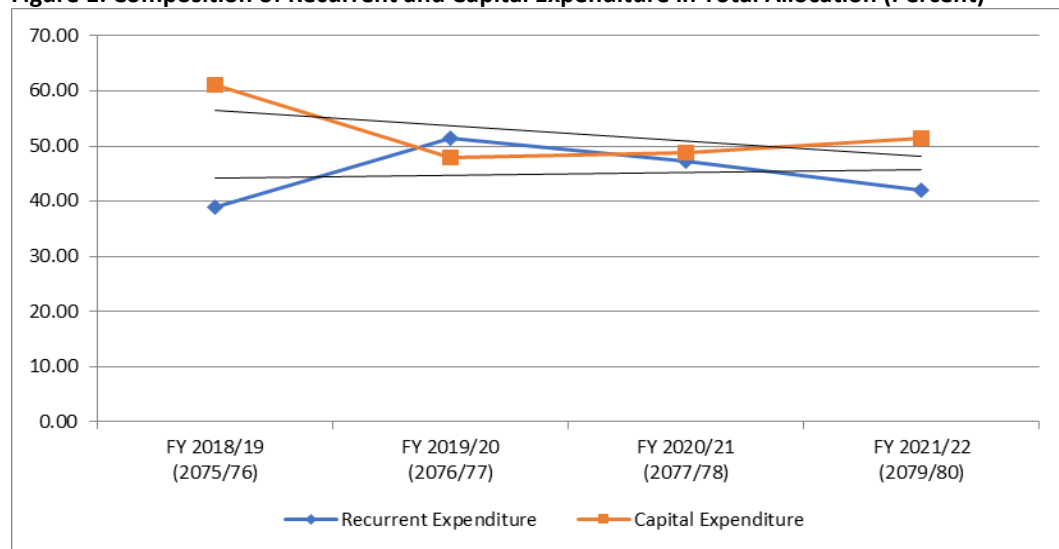
had enjoyed only less than half period of the year and was the time of its establishment. It is supposed to be helpful to avoid the problem in data comparability. The study is very limited due to the dearth of data on different variables that analyses the relationship between public expenditure and economic development of the provincial government. Because of the poor data management and availability, this study is based on the limited data of the Bagamati province government.

4. Presentation and Analysis of Data

4.1 Pattern of Allocation

Bagamati province is running in fifth year of its establishment. The first FY 2017/18 for the province government was very short. There was no internal revenue of the province and it had expended 26.4 percent of the federal equalization grant only. Hence, it is not included in this analysis. Over the period, size of the budget of Bagamati province is in increasing trend. However, the share of capital expenditure in total allocation is has been sharply decreased first by 13 percent, i.e., from 61 percent in FY 2018/19(2075/76) to 48 percent in FY 2019/20 (2076/77). Then, it is increased slightly to 51.5 percent in FY 2021/22(2078/79). The share of capital expenditure in total allocation is high in the province compared to the federal level (lowest) and the local level (MoF, 2022).

Figure 1: Composition of Recurrent and Capital Expenditure in Total Allocation (Percent)



Source: Ministry of Economic Affairs and Planning, Bagamati Province, 2022.

4.2 Expenditure Pattern

In FY 2018/19, the province government had spent about 58 percent of the total allocation (Table 1). The actual expenditure reached to 58.71 percent in FY 2019/20 and soared to 69.22 in FY 2020/21 (2077/78). However, in absolute amount, the expenditure has been increased by 35.34

percent and 27.36 percent in FY 2019/20 and 2020/21 respectively, compared to their respective earlier FYs.

The pattern of progress in recurrent expenditure of the province government has decreased sharply in FY 2019/20 and slightly increased in 2020/21 reaching to 58.41 percent. Though the share of capital expenditure in total allocation of the province seems to be more than double as compared to case of federal government, the percent of actual expenditure of province is very low than of the federal one. It remained between 58 percent to 69.2 percent during three years of the period. The pattern shows the gradual reform in capital expenditure but the progress seems to be not so satisfactory. Likewise, share of capital expenditure in actual total expenditure is observed being in slightly increasing order.

Table 1: Comparison of The Expenditure of Last Three Years (in Rs. Ten million)

Types of Expe	FY 2018/19(2075/76)			FY 2019/20(2076/77)			FY 2020/21(2077/78)		
	Allo	Expe	Prog(%)	Allo	Expe	Prog(%)	Allo	Expe	Prog(%)
Recurrent	1386.25	1109.83	80.06	2446.79	1226.88	50.14	2428.73	1418.66	58.41
Percent growth				76.5	10.55	-37.37	-0.74	15.63	16.49
Capital	2175.3	955.43	43.92	2283.98	1568.02	68.65	2514.01	2000.82	79.59
Percent growth				5	64.12	56.31	10.07	27.6	15.93
Financing	0	0		30	0	0	200	140	70
Total	3561.56	2065.3	57.99	4760.77	2795.08	58.71	5142.74	3559.91	69.22
Percent growth				33.67	35.64	1.25	8.02	27.36	17.9
Share of Capital Exp. (percent)	61.08	46.26		47.98	56.1		48.88	56.2	

Note: Expe = Expenditure Allo = Allocation

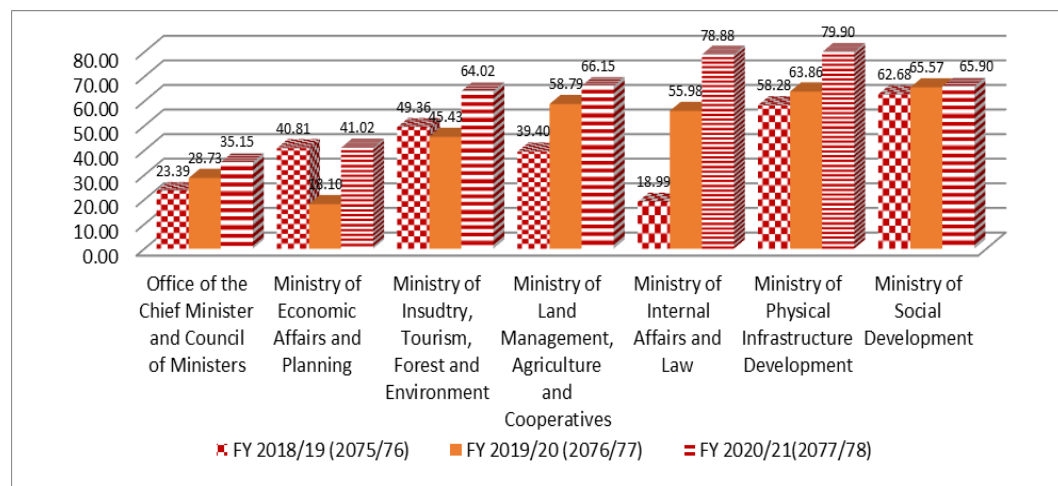
Source: Ministry of Economic Affairs and Planning, Bagmati Province, 2022.

Compared to same period (first eight months) of previous FY, the progress in total expenditure of the province in FY 2021/22 has been increased by 11.70 percent (MoEAP, 2022). However, increase in recurrent expenditure by 20.82 percent is followed by decrease in capital expenditure (i.e., -6.67 percent). According to the MoEAP (2022), such changes in expenditure are due to the residual impact of Covid-19, change in the provincial government and additional liabilities and expenditure of newly assigned ministries. In this period, expenditure of federal government has also found squeezed by 3.4 percent (MoF, 2022).

Regarding the analysis of spending performance of the ministries, expenditure pattern of initially assigned seven ministries are taken¹so as to make the data comparable (Fig. 2). In case of total expenditure, the Ministry of Physical Infrastructure Development (MoPID) which holds the largest share of the budget also has higher performance over the period (ranging from 58-80 percent). However, the Office of the Chief Ministers and Council of Ministers (OCMCM) exhibits lowest performance among the ministries. Next, Ministry of Social Development (MoSD) shows the steady growth in the expenditure pattern. We can witness a significant progress in expenditure pattern of Ministry of Internal Affairs and Law (MoIAL), i.e., jumping from 19 percent (FY 2018/19) to 79 percent (FY 2020/21). The Ministry of Economic Affairs and Planning (MoEAP) shows itself as second lowest performer. Likewise, the progress in expenditure of Ministry of Industry, Tourism, Forest and Environment (MoITFE), and Ministry of Land Management, Agriculture and Cooperatives (MoLMAC) remains between about 40-66 percent over the period. However, expenditure progress of the government is observed very low reaching only 42.3 percent (during eleven months of FY 2021/22).

During the period, no one ministry could exceed the progress in total expenditure than 80 percent. The average expenditure progress of all ministries remains below 62 percent over the period. The pattern shows the low absorption capacity of the province government. The causes of the low performance and associated problems will be discussed in other sections later.

Figure 2: Pattern of Total Expenditure -Ministry wise (in Percent)



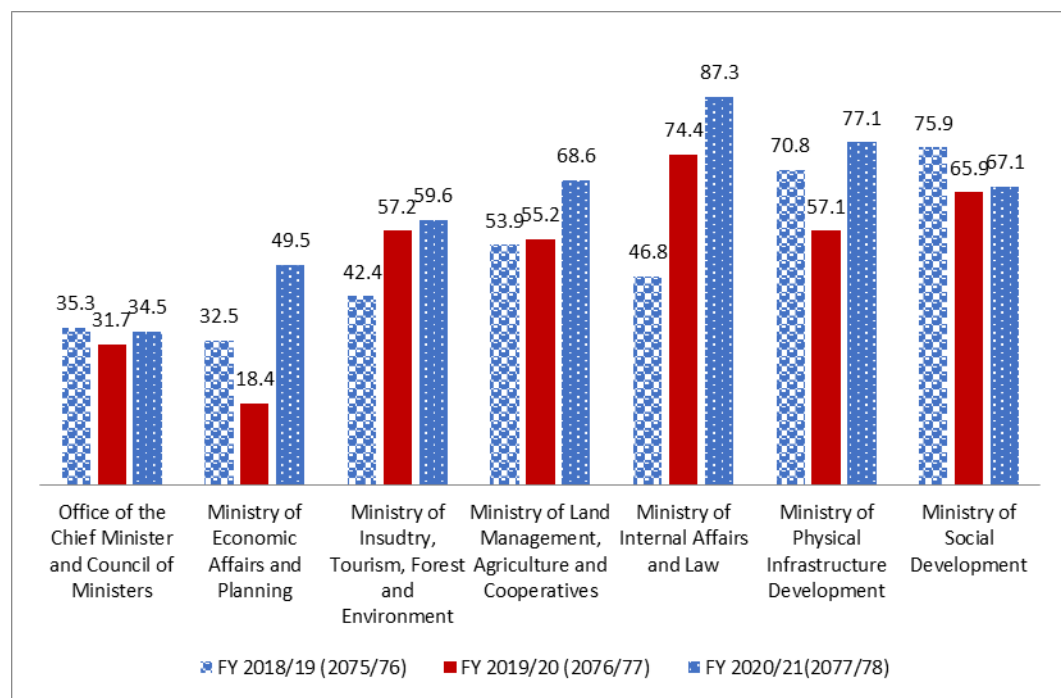
Source: Ministry of Economic Affairs and Planning, Bagamati Province, 2022.

¹ Till FY 2019/20, there were seven ministries in Bagamati province government. After that the Ministry of Physical Infrastructure Development, Ministry of Social Development, Ministry of Agriculture, Land Management and Cooperatives, and Ministry of Industry, Tourism, Forest and Environment were split. Then the number of ministries reached to fourteen in FY 2021/22.

Fig. 3 shows the pattern of recurrent expenditure in seven ministries of the province government. Here, Ministry of Internal Affairs and Law has highest and significant progress (87 percent in FY 2020/21). The Ministry of Social Development shows a decreasing pattern of recurrent expenditure. Among the seven ministries, three ministries are lowest performer (progress within 18- 60 percent in all of the FYs). Average absorption capacity of the province regarding recurrent spending has remained in the range of 51-63 percent which indicates the low spending performance of the province government.

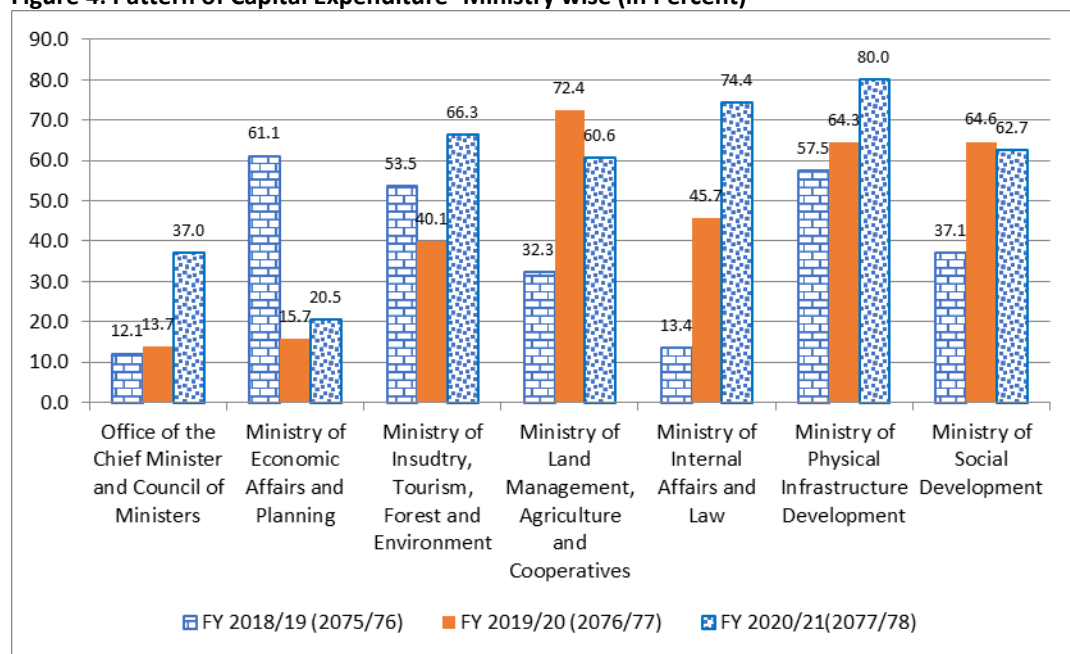
Regarding capital expenditure, the Ministry of Physical Infrastructure Development became the highest performer (average 67 percent during the period) among the seven ministries. However, the Office of the Chief Minister and Council of Ministers, and Ministry of Economic Affairs and Planning are the lowest performers. The pattern of capital expenditure seems to be fluctuating in the case of three ministries and the four ministries possess more or less increasing trend (Fig. 4). Though the average expenditure of the ministries has an increasing trend, it is very low in value- ranging from 38 percent to 57 percent over the years. It depicts the low capital spending capacity of province which adversely affects its capital formation and economic growth.

Figure 3: Pattern of Recurrent Expenditure -Ministry wise (in Percent)



Source: Ministry of Economic Affairs and Planning, Bagamati Province, 2022.

Figure 4: Pattern of Capital Expenditure- Ministry wise (in Percent)



Source: Ministry of Economic Affairs and Planning, Bagamati Province, 2022.

In FY 2021/22, the expenditure of province government seems to be poorer. The total expenditure remains 42.3 percent during eleven months of the year. According to the Province Treasury Control Office of Bagamati Province, average of total, recurrent and capital expenditure of the ministries remained on 35, 44.5 and 25 percent only. Among the ministries, Office of the Chief Minister and Council of Ministers has very low performance. The major ministries holding the higher amount of allocation also has the progress below 42 percent (Table 2). Hence, the data shows very low absorption capacity of the province government in the current FY as well.

Table 2 : Expenditure Progress of Various Ministries during Eleven Months of FY 2021/22 (2078/79)

Name of Ministries	Expenditure Progress (Percent)		
	Current	Capital	Total
Provincial Assembly Secretariat	58.90	18.39	51.14
Province Public Service Commission	49.25	61.17	50.62
Office of the Chief Attorney	49.75	76.71	51.56
Office of the Chief Minister and Council of Ministers	24.38	1.53	5.29
Ministry of Economic Affairs and Planning	74.43	13.95	70.26
Ministry of Industry, Tourism, Forest and Environment	52.15	28.44	35.97
Ministry of Land Management, Agriculture and Cooperatives	26.49	44.82	31.49
Ministry of Internal Affairs and Law	29.32	21.97	24.01

Name of Ministries	Expenditure Progress (Percent)		
	Current	Capital	Total
Ministry of Physical Infrastructure Development	59.94	40.48	41.43
Ministry of Social Development	44.28	24.35	36.93
Province Policy and Planning Commission	37.75	95.13	48.42
Financial management and share investment	0.00	0.00	65.00
Miscellaneous	0.00	0.00	0.00
Local Level	88.35	0.00	88.35
Total	53.52	33.11	42.33

Source: Province Treasury Controller Office, Bagamati Province, 2022.

The above analysis shows the low public expenditure pattern of the Government of Bagamati Province. In other word, it has low absorption capacity and expenditure performance. Next, there is trend of payment of the capital expenditure at the last month of the FY as the case of federal government. Likewise, increase in capital share in total expenditure is not followed by the efficiency and quality of the capital expenditure. This inversely affects the capital formation, economic development and quality of the services provided by the province.

5. Causes and Consequences of Low Public Expenditure

Though the Covid-19 pandemic had highly affected the public expenditure of all levels of government, the major causes of the low progress are the low level of political and bureaucratic commitment, lack of their accountability and weak governance (Ghimire & Bhusal, 2015). Regarding the province, the causes of low public expenditure can be broadly classified as legal, institutional, and technical and financial problems.

5.1 Legal Problems

The province government is still in lack of the necessary laws and regulations required for the smooth implementation of the development projects. A number of provincial laws are to be formulated and waiting the signal of the federal laws to specify the authority, roles and responsibilities of the province. Likewise, there is lack in uniformity of the sectoral laws and need of clarity among the ministries regarding the duplication of responsibilities. Problems in proper implementation of existing laws, regulations, procedures, norms and standards framed for budgeting, project selection, implementation, monitoring and evaluation, etc. have become very crucial. There is lack in existing practice of planned budgeting and program formulation. Some definitional unclarity of the recurrent and capital expenditure and mismatch in the accounting has been also appeared. The authorities are not following the proper standard for formulation and classification of the projects during budget preparation. Hence, very small and numerous projects included in the annual programs has led to difficulties in their implementation (MoEAP, 2022). All these legal gaps finally led to low public expenditure that has undermined the quality public services and the economic development of the province.

5.2 Institutional Problems

The weak institutional set up of the provincial ministries, departments and offices are another cause of low public expenditure, signified by the lack of office infrastructures, adequate and qualified staffs, and other amenities and equipment, according to the periodic progress reports of the ministries. A number of the institutions have no own building and adequate structure. According to Office of the Chief Minister and Council of Ministers, more than 40 percent approved quota of staffs are vacant. There is deficiency of trained technical and non-technical staffs. The administrative delay has affected all the procedure of the program implementation. Lag in use of new technology has also been appeared as a problem in project implementation. Likewise, these all-institutional hurdles including frequent transfer of the officials has slowed down the program formulation and implementation leading to the low public expenditure pattern.

5.3 Technical and Financial Problems

In the province, a number of technical and financial problems are responsible for the low public expenditure. The government includes the projects in the budget without any basic preparation, such as, detail project appraisal with designs, environmental studies, cost-benefit analysis, land acquisition, site clearance, procurement plan, etc. This trend has led to the delay or non-execution of the project and increased the unspent amount of the money designed to those projects. Similarly, local political conflict, the orders of the government entities like Commission of Investigation of Abuse of Authority etc. became hurdle in program implementation. Next, large number of pity projects with insufficient budget has resulted to the project incompleteness and low spending. The weak performance and accountability of the contractors (in terms of quality, experience, equipment and cash) and low bidding has questioned the timely completion of the project leading to the low annual expenditure. Improper and biased performance auditing and reward system has undermined the accountability of the stakeholders such as project manager, contractor etc. Moreover, the political patronage and elite connection has affected to the all cycles of the project (Ghimire & Bhusal, 2015). The coordination failure among the levels of government and concerned ministries has also retarded the project execution process. According to the Ministry of Economic Affairs and Planning, violation of fiscal discipline, such as, addressing non-budgetary demand, re-appropriation and pressure for program amendments, weakness in management of mandatory liabilities, difficulties in resource management for multi-year projects, insufficient allocation for the major projects, poor expenditure control etc. has inversely affected the government expenditure.

6. Conclusion

As mentioned in the earlier sections, public expenditure is the engine for economic growth. Hence, low absorption and inefficiency of the public expenditure adversely impact on the growth of output, employment and income in an economy. The Province government is at the last moment of its first tenure. In the case of Bagmati Province, pattern of both recurrent and capital expenditure during this period seems to be less satisfactory. Only few ministries have

crossed the average value of expenditure progress. However, low absorption capacity of the government has appeared as the major constraint in increasing public expenditure especially the capital expenditure that is in need to enhance the growth and economic activities during the period of four year. Though there is no sufficient data to measure such impact, it can simply say that low public expenditure has not only affected the quality and quantity of output (goods and services) but also impeded the human and physical capital formation that is required for a welfare and just society (Coady & Fan, 2008). So, there should be a significant government intervention to increase the public expenditure of the province focusing more on the capital expenditure.

7. Way Forward

Based on the above analysis, we can say that Government of Bagmati Province has to do more to structure and strengthen its public expenditure system. Regarding this, the author has some recommendations:

- a. Make the necessary laws and regulations and clarify the duplication of authorities among the levels of government regarding the expenditure management.
- b. Reshuffle the classification of capital and recurrent expenditure. Make and follow the project selection standard with the minimum ceiling for the kinds of projects. Discourage the trend of including pity projects in provincial budget.
- c. During budgeting, select only the projects those being had pre-preparation works, such as, feasibility study, detail project appraisal etc.
- d. Reduce the number of projects and concentrate the significant allocation to the specific projects.
- e. Reform the procurement process as simple as possible and avoid delay procurement. Consider not only the low bidder but focus on quality of the contractor. Launch the programs for empowering and capacity building of national contractors.
- f. Make the ministries and other offices equipped with necessary infrastructure and human resources.
- g. Establish coordination among the levels of government and strengthen inter- ministerial coordination on project implementation.
- h. Use new technologies regarding the budgeting, implementation and monitoring and evaluation.
- i. Make MTEF as a rule and prepare it with SDGs coding to assure the quality of expenditure changing it to the value for money.
- j. Establish the performance-based evaluation system of the officials.
- k. Adopt effective expenditure control system to ensure the value for money of the public resources. For this, government expenditure should follow the seven formal stages- covering the authorization of expenditure by the legislature and payment to the final beneficiary. For detail, see Pattanayak (2016).

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Students' Attitudes towards Online Learning during COVID-19 Pandemic

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Abstract

The focal objective of this research article is to appraise the bachelor level students' attitudes toward online learning overall. Despite the extensive use of online learning caused by the COVID-19 pandemic, students had heterogeneous attitudes towards this. The online cross-sectional survey with 15 Likert type questionnaires for the population of 415 students from the streams of management, education, science, and humanities at Makawanpur Multiple Campus, Hetauda was done in 2021. The sample size of the study consisted of 231 students by maintaining the confidence level of 95 % and the margin of errors 5 %. The students were selected by employing the simple random sampling techniques, especially the lottery method. The overall median score 2.00 showed that the students had a negative attitude towards online learning because of poor response rate of teachers, lack of interaction with friends and teachers, deficiency of technological support from institutions, frequent electricity cut-off, lack of sound internet facility and one-sided lecture method.

(Keywords: Attitude, COVID-19, online learning, pandemic)

1. Introduction

The Coronavirus, which first broke out in Wuhan, China in December 2019, was spreaded all over the world within a short period of time and got publicized as a pandemic by the World Health Organization on 11th March 2020 (Chakraborty et al., 2021). The countries which were affected by the COVID-19 pleaded their citizens to stay at home during the pandemic COVID-19 (Alchamdani et al., 2020). The information from the health technician, report of laboratory research concerning the production of vaccine against the Coronavirus and awareness publicized by media world widely horrified teachers, students, and parents. That resulted in a big interruption in the physical learning. After uncertainty, fright and uncertainty, the campuses commenced their online classes everywhere as there was no alternative safe mode to teach the

students. The COVID-19 pandemic abruptly brought forth a shift in the pedagogical modality of teaching and learning activities, not only at campuses, but also at schools. Universities, businesses sectors, community centers, and nongovernmental organization (NGO's) had been forced to close, mass gatherings were forbidden, and lockdown measures had been endorsed in many countries, allowing travel only for essential needs (Brodeur et al., 2020). That catastrophe shook the education sector, and that fear was likely to reverberate across the education sector globally. The COVID-19 pandemic outbreak enforced many schools and colleges to remain closed momentarily (Dhawan, 2020). These school closures were affecting the education of 80 % of children world-widely (Lancker & Parolin, 2020). Nepal reported its first covid-19 case on January 30, 2020 and started its full lockdown from March 24; and prolonged its lockdown until 14 June (Mahato et al., 2020). Online learning followed extensively to deal with the educational agitation caused by the covid-19 pandemic. The lockdown was lifted, and the modality of lockdown was made less stringent. The schools, colleges and universities adopted an online approach to teaching and learning, seeing the mounting cases in the country (Dangal & Bajracharya, 2020).

Tribhuvan University (TU), the leading and largest university in Nepal (Koirala et al., 2020), officially endorsed the virtual class model among its institution's guidelines. The University, which holds 82 % of higher education in Nepal (Acharya et al., 2020), notified all the campuses running under its affiliation to commence online classes through Microsoft Teams. With the pace of time, the professors and students at the university regularly adjusted to the unsolicited scenario (Chakraborty et al., 2021). The instant implementation of online classes led to a very innovative familiarity for both the students and the educators (Nepal et al., 2020).

This article, which is based on the data collected across the students from the Makwanpur campus covering four faculties, tries to appraise their attitudes towards online learning they have experienced during the COVID-19 pandemic. Online teaching and learning became only the way due to that pandemic. Both the teachers and the students, in general, underwent the problems in teaching and learning due to lack of technical knowledge, frequent electricity cut off and poor internet accessibility. This campus conducted online classes despite those problems. Some students were in favour of online learning, some were against it, while a few students expressed their opinions that both physical and virtual classes were the same. It means they expressed their varied attitudes regarding the online learning. The curiosity to examine their attitudes towards online learning on whole drove this writer to carry out the research study.

1.1 Null Hypotheses

Two Null hypothesis was set in this study as:

- a) There is no significant difference in the attitudes of students from various faculties towards online learning.

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- b) There is no significant difference between the boy and the girl scholars on their attitudes towards online learning.

2. Literature Review

Literature review embraces online learning and teaching, COVID-19, and online classes.

2.1 Online Learning and Teaching

Learning, a process of acquiring knowledge and enhancing the skills, helps in improvement of students' career. In that pandemic situation, there was no way of teaching in the classroom. All educational institutions were forwarded to the e-learning environment (Radha et al., 2020). Teaching in an online environment presented several challenges in comparison with face-to-face instruction. A key question raised about online learning was its effectiveness in comparison with traditional instruction (Guo et al., 2020). Learning can be explained as a quantitative increase in knowledge, memorizing of facts, skills, and methods that can be retained and used as necessary (Behlol & Dad, 2010). To make teaching and learning activities effective, the teaching methods and delivery technique should be easy and accessible for all types of students.

2.2 COVID-19

COVID-19 pandemic stirred the world. People were physically and mentally tortured by it. Uncertainty regarding life, health and education pervaded everywhere. Many students lost access to services that were offered by schools. The pandemic seemed to have a negative impact on students' and teachers' mental wellbeing globally and was more pronounced in under-resourced contexts (Christakis & Christakis, 2020). Many students were possibly experiencing an increased level of anxiety and even depression. Teachers had come under increased pressure not only to provide learning resources to their children or conduct lessons online but also to supervise their students' learning (Grubic et al., 2020). The education system was facing a crisis with the spread of the coronavirus, with over 190 countries having gone through some form of school closures that impacted more than 7 billion students (World Bank, 2020). Most governments directed academic institutions to stop their regular instruction and switched it to online teaching (Daniel, 2020). Hodges, Moore, Lockee, Trust and Bond (2020) contend that this temporary shift of instructional delivery, which was an alternative delivery mode due to crises, is Emergency Remote Teaching (ERT).

2.3 Online Classes

Conducting online classes in the rural teaching institutions in the developing countries like Nepal was an intricate task. Dawadi, Giri and Simkhada (2020) argued that an immediate shift to online classes in the current situation was extremely difficult due to the lack of experience, stable internet access, and digital illiteracy in the parents. Despite this, e-classes in educational institutions were on the rise (Karki, 2020). Bao (2020) reported that with the sudden emergence

of the covid-19, most faculties had faced the challenges owing to lack of online teaching experience, early preparation, or support from the technical experts. Faculties contended that lack of sufficient professional development created challenges to develop effective resources, lesson design, interactive mode of delivery over online and virtual classes, and lack of willingness to adopt the new paradigm remained another challenge as it required additional effort and time in context of Nepal. However, the insufficient professional development of faculties and institutional support was a communal issue for underdeveloped countries (Farooq et al., 2020). Moreover, the challenges encountered in developing online classes include affordability, technology literacy, and self-motivation among faculty members in Nepal.

3. Method and Materials

This article was based on a cross-section survey research design with 15 Likert type questionnaires for the population of 415 students from the streams of management, education, science, and humanities at Makawanpur Multiple Campus, Hetauda was in 2021. The sample size of the study consisted of 231 students selected through a simple random sampling, especially the lottery technique by maintaining the confidence level of 95 % and the margin of errors 5 %.

This research study included the ordinal data that were collected through 15 Likert type question items with the Strongly Disagree (SD: 1), Disagree (D: 2), Undecided (UD: 3), Agree (A: 4) and Strongly Agree (SA: 5). The subject matter of the questionnaire involved students' attitudes towards online learning. The median score along with percent was used to assess the students' responses regarding their attitude towards online learning and Krushkal-Wallis H test was executed to test the null hypothesis by using the IBM-SPSS Version 25.

4. Presentation and Analysis of Data

The following table exhibits findings of the research study obtained through 5-point Likert type question items based on the ordinal data.

Table 1: Findings of percent and median score

Constructs	Students' Responses Computed in Percent (%)					Total	Median
	SD	D	UD	A	SA		
1. Technical support from the campus	31.2	64.1	0.4	3.5	0.8	100.00 %	2
2. Availability of learning materials	44.6	30.3	23.8	0.4	0.9	100.00 %	2
3. Regular assignments	15.6	23.8	58.9	0.9	0.8	100.00 %	3
4. Interaction opportunity with friends	39.4	58.4	0.9	0.4	0.9	100.00 %	2
5. Interaction opportunity with teachers	45.0	53.2	0.6	0.3	0.9	100.00 %	2
6. Establishment of peer support	1.3	78.4	16.5	3.4	0.4	100.00 %	2
7. Confidence in handling difficult tasks	67.1	15.6	15.6	0.8	0.9	100.00 %	1

Constructs	Students' Responses Computed in Percent (%)					Total	Median
	SD	D	UD	A	SA		
8. Grasping concepts	30.7	52.4	15.6	0.4	0.9	100.00 %	2
9. Sound internet service	37.2	29.9	15.6	15.6	1.7	100.00 %	2
10. Electricity service	15.6	13.9	31.2	23.8	15.5	100.00 %	3
11. Academic interest	29.0	38.5	0.9	16.0	15.6	100.00 %	2
12. Activeness and enthusiasm	8.2	15.6	31.2	44.6	0.4	100.00 %	3
13. Responses from the teachers	0.9	35.1	26.8	7.8	29.4	100.00 %	3
14. Convenience in learning,	31.2	37.2	15.2	15.6	0.8	100.00 %	2
15. Satisfaction	23.8	45.5	29.0	0.8	0.9	100.00 %	2
Concluding Median							2

This table depicts that 64.1 % students did not receive the technical support from the campus. A minimal number of students enjoyed learning materials during the pandemic period. Many students did not have clear idea about regular assignments. 58.4 % and 53.2 % students disagreed with the interaction opportunity with friends and teachers respectively. The peer support was noticed to be very low. Only 0.4 % students agreed that they established peer support. 67.1 % responded to have lacked confidence in handling difficult tasks. More than 50 % students denied regarding the grasping of concepts of taught materials. They lacked sound internet service and 31.2 % students were undecided about the electricity. A few students had academic interest in online learning. Learning through online was their first experience; therefore 44.6 % students were active and enthusiastic. Most students did not find proper responses from the teachers. It was a one-side lecture method of teaching. Moreover, they did not find such online learning to be convenient. Finally, 69.3 % (23.8+ 45.5) students were not satisfied with the online learning. Most of the largest figures in percent belonged to either “Strongly Disagree” or “Disagree”. These figures infer that student had a negative attitude towards online learning.

The median score of all the constructs based on the students’ responses regarding their attitude towards online learning was 2. This figure indicates the level of their “Disagree”. It also implies that they had a negative attitude towards online learning.

4.1 Null Hypothesis Test: Faculty and Attitudes

Table 2: Hypothesis Test Summary

SN	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Median is the same across categories of Faculty	Independent-Samples Kruskal-Wallis Test	.053	Retain the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Kruskal-Wallis test shows that there was no significant difference in the median score across the categories of the faculty. It implies that the students in the four faculties had the same attitudes towards online learning on whole. It accepts the null hypothesis.

4.2 Null Hypothesis Test: Gender and Attitudes

Table 3: Hypothesis Test Summary

SN	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Median is the same across categories of gender	Independent-Samples Mann-Whitney U Test	.128	Retain the null hypothesis

Asymptotic significances are displayed. The significance level is .05

Mann-Whitney U test exhibits that there was no significant difference in the median score across the categories of the gender. It implies that the boy students and girl students had the same attitudes towards online learning on whole. It accepts the null hypothesis.

5. Results and Discussion

Previous research studies regarding the evaluation of students' attitudes towards online learning concluded with the divergent results. University students hold diverse attitudes toward e-learning, with most of them reporting positive perspectives (El-Gama & Aziz, 2011). The disparities were found in performance and attitudes among students trained online and on-site (Campbell et al., 2011). This present study indicated the students' negative attitudes. Negative attitudes of students were also noticed in the research studies of (Wijaya et al., 2020; Unger & Meiran, 2020). The research study on online learning before covid-19 showed the students' positive attitudes towards online learning (Rhema & Miliszewska, 2014). The positive attitudes were detected in the research studies executed by (Singh, 2021; Akcil & Bastas, 2021; Alghamdi & Ali, 2021; Boca, 2021; Yassine, 2020). Research studies by (Liaw & Huang, 2011) found that the students' attitudes depended on with intrinsic and extrinsic motivation. There was a link between technical skills and students' attitudes toward e-learning (Berteau, 2009). The research studies executed on online learning revealed the heterogeneous attitudes of the students, and their attitudes were shaped by manifold factors.

6. Conclusion

This research study findings indicate that the students' attitude towards online learning was negative. Secondly, there was no significant difference in the attitudes of four faculty students towards online learning. Previous research studies regarding online learning reflected the mixed attitudes of students depending on diverse factors such as motivation, technical knowledge, electricity facility, internet accessibility, teachers' methods of teaching, interaction among

teachers and students and nature of the subject matters. The students of the urban areas were found to be more benefitted from online learning than those of the rural ones.

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Determining the Quality of Local Government Service Using SURVQUAL Model

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Abstract

This paper explores the satisfaction level and discusses a comprehensive study of citizen perception and expectation of local government service delivery in Nepal. To have a better understanding the satisfaction level and perception and expectation of citizen from the service delivery of local government in Nepal a survey was conducted. A total 282 individual respondents were interviewed using a set of structured questionnaires in three local governments in different Provinces of Nepal. The objective of the analysis is to compare the mean scores measured before and after the intervention, i.e., the local election of Nepal in 2017.

A Cronbach's alpha is used It is used to assess the reliability, or internal consistency, of a set of scale or test items. In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept. The three-dimensional (i.e., responsiveness, basic service, and tax policy) service quality (SURVQUAL) estimation in a 5-point Likert scale has been conducted. The estimation result shows that the responsiveness (for before, mean =3.48, and for after, mean =3.61) seems positive due to a local election held in 2017. The basic service (for before, mean = 2.79, after, mean 2.89) is also tending towards the improvement due to the same cause though the people do not seem very satisfactory. However, tax policy (before mean=3.56 and after mean=2.87) has seen some different scenario. The mean value of after election is less than the mean value of before election. The new tax policy of local government has negative impact on taxpayers' perception. It is because the new tax policy has focused on increasing tax rate rather to expanding tax base and coverage.

(Keywords: local government, SURVQUAL, service delivery, perception, expectation, gap analysis)

1. Introduction

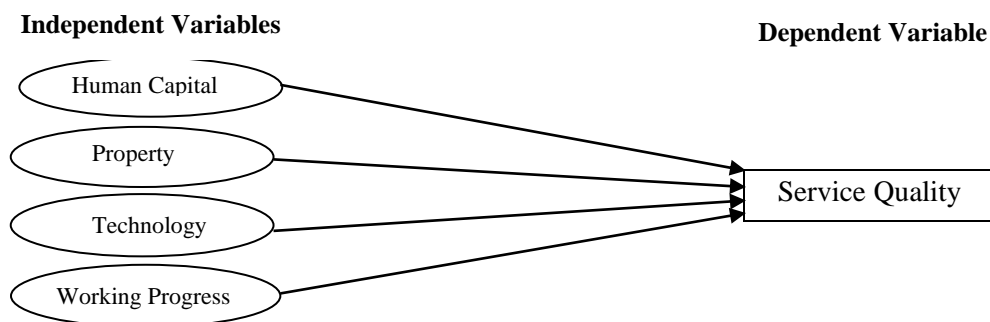
Quality of service can be observed as a function of the difference between customers' expectations and their perception about quality (Parasuraman, et al, 1985). There was a long gap from July 2002 to 2017 of elected representatives in local bodies because of the political conflict in Nepal. The local bodies were run by all party's mechanism and bureaucrats in different time as a temporary arrangement. There was a huge detachment between citizen and service provider i.e., local bodies during that period. Therefore, people had a high expectation of quality and fast

services from the newly elected representative after the restructured local government in 2017. To obtain the better understanding in the expectation and perception of the general people of selected local governments, a field survey was conducted using the structured questionnaires. The objective of the survey was to investigate the perception and expectation level of the citizen in three areas such as responsiveness, basis services and tax policies of the local governments in Nepal.

The mean scores of various dimensions such as (i) Responsiveness, (ii) Tax Policy, and (iii) Basic Service were compared to understand the satisfaction level of citizen of service delivery of local government in Nepal. At the same time, the mean scores of Expectations and Perceptions of citizens about the service quality of the local government of Nepal before and after the Government policy intervention, i.e., local election after the restructuring of the local bodies in Nepal in 2017 were also compared.

Participation in the decision-making process is essential for socially equitable economic growth and meeting the basic needs of the poorest groups. The decentralized governance system can ensure the participation of the targeted communities in decision-making process (Rondinelli, 1981). The efficient delivery of services to the rural community depends on the effective organization to have meaningful interaction with the service delivery agencies (UNDP, 1979). The service quality (SERVQUAL) is a research instrument that is designed to capture consumer expectations and perceptions of service. The SERVQUAL is used to measure the consumers' pre-consumption expectations of service quality and their actual perceptions of the service experience (Parasuraman et al., 1991). The SERVQUAL is the measurement tool used to conceptualize and measure service quality (Nyeck et al., 2002). The service quality depends on the organization's human capacity, property, technology, and working process (Figure-1). The relationship between independent and dependent variables used in the study acted as the conceptual framework as follows:

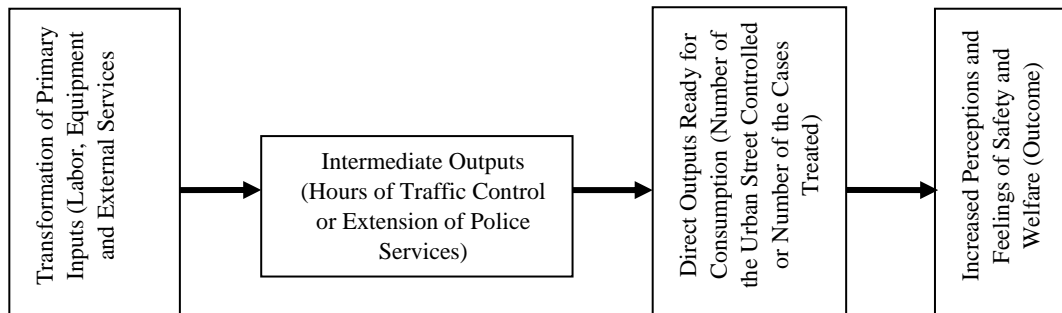
Figure 1: Conceptual Framework of Service Quality



(Source: Yusoff et al., 2008)

It is common to distinguish three stages of production function from inputs to outcome levels which are labeled direct outputs (Bradford et al., 1969). The direct outputs of the municipal activities (Service delivery) translate into welfare improvements perceived by consumers. Theoretically, efficiency can be measured at each stage of the production function. But due to the unavailability of data, it is not easy to distinguish between primary inputs, intermediate outputs, direct outputs, and final welfare effects. Therefore, the analysis is often limited in the relation between primary inputs and direct outputs (Balaguer-Coll et al., 2007).

Figure 2: Production Function-Transformation of Inputs into Outcomes



(Source: Balaguer-Coll, Prior and Tortosa-Ausina (2007))

What the customer expects is customer expectation, which is determined by available resources and is influenced by cultural background, family lifestyle, personality, demographics, advertising, experience with similar products, and information available online. Customer's or user's perception is entirely subjective and is shaped by the customer's interaction with the product or service. Perception is derived from the customer's satisfaction with the specific product or service and the quality-of-service delivery. The most critical gap is the customer gap, and in an ideal world, the customer's expectations would match the customer's perception. More specifically, the concept of expectation and perception is as follows (Prabha et al., 2010).

Costumers' Expectation = before a service encounter, consumers' predictions, desires or wants (Should offer rather than would offer), what they want?

Customers' Perceptions =after a service encounter (actual service delivered), what do they get?

Oliver, Balakrishnan, and Barry (1994) recommended the service quality conceptualization equation as follows:

$$SQ = P - E;$$

Where SQ = Service Quality; P = the Individual's Perceptions of Given Service Delivery and E = the Individual's Expectations of a Given Service Delivery

If, $P>E$ then Service Quality is High; if $P<E$ then Service Quality is Low and if $P=E$ then Service Achieved the Minimum of Quality Level,

2. Methodologies

The following methodologies were applied for the study of the perception and expectation.

2.1 The Sample Size

The sample districts and local governments were purposively selected considering that the district chosen will represent all ecological zones, Mountain, Hill, and Terai, and urban municipalities and rural municipalities. Uttargaya rural municipality of Rasuwa represents the Mountain region, Besisahar municipality of Lamjung represents the Hilly region and local urban level, and Bindyabasini rural municipality of Parsa represents the Terai region and rural municipality as well. A total of 282 respondents were selected purposively using convenience sampling method. The respondents were asked using the structured questionnaires to collect the primary information from the field. The distribution of respondents according to various aspects were presented in Table 1 below.

(Table 1: Demographic Characteristics of the Respondents (N=282))

SN	Variables	Descriptions	Number	Percent
1	Sex	Male	213	75.5
		Female	69	24.5
2	Marital status	Married	250	88.7
		Unmarried	32	11.3
3	Landowner	Yes	224	79.4
		No	58	20.6
4	Ethnicity	Indigenous	69	24.5
		Chhetri/Bhramin	117	41.5
		Dalit	9	3.2
		Madhesi	87	30.9
5	Profession	Farmer	116	41.1
		Businessperson	40	14.2
		Employee	44	15.6
		Student	22	7.8
		Social worker	21	7.4
		Teacher	25	8.7
		Self-employed	10	3.5
		Unemployed	4	1.4
6	Literacy	Illiterate	36	12.8

SN	Variables	Descriptions	Number	Percent
		Literate	69	24.5
		Secondary Level	66	23.4
		College level	81	28.7
		Master's degree and above	30	10.6
7	Age (Year)	<=25	33	11.7
		26-50	159	56.4
		> 50	90	31.9
8	Province	Two	87	30.9
		Bagmati	40	14.2
		Gandaki	155	55.0
9	Palika	Rural municipality	87	30.9
		Municipality	195	69.1
10	Ecology	Mountain	40	14.2
		Hill	155	55.0
		Terai	87	30.9

(Source: Field survey, 2018)

2.2 Research Design

The SERVQUAL conceptual model of service quality has been used in the study to measure the expectation and perception of the citizen of the local governments' service quality in Nepal. The SERVQUAL instrument/ approach was used to examine the gap between citizen's expectations of general services (before a service encounter, receiver's predictions, and desires of service quality) and their perceptions (actual service delivered or received) on the services received from local levels. This approach is developed as part of a broader conceptualization of how customers understand service quality. This conceptualization is known as the model of service quality or, more popularly as the gaps model. Three service quality dimensions such as responsiveness, basic service and tax policy of local government have been used for the measurement of perception and expectation using 5-points Likert scale.

2.3 Key Informant Interview

The questionnaire was designed using the SERVQUAL model. The closed questions were prepared to gather primary information regarding satisfaction level and expectation and perception of service delivery status from the service receivers' and provider's perspectives. From the receivers' side, the general people, teachers, students, businesspersons, etc., were interviewed in the selected field. From the providers' side, the Chairpersons and Vice-Chairpersons of selected rural municipalities, Mayors and Deputy Mayors of selected municipalities, selected Ward Chairs, and Chief Administrative Officers were interviewed. The performance or the outcomes of the service

delivery of local government have been tested using the method of constructing questionnaires through the field level survey that has helped to measure the residents' (citizens') perceptions and expectation of service delivery of local governments.

2.4 Data Analysis Methods

After data gathering, the study involved some quantitative analysis and statistical tools. The Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the data because of its broad range of functions and relatively simple user interfaces. Used descriptive statistics mainly include the number of valid samples, mean, standard deviation, minimum and maximum of the data values. Values of gaps between customers' expectations and perception of services quality were also calculated. Descriptive statistics analysis was performed to measure respondents' expectations and perception scores. Paired t-test was carried out to test the significant difference between the two means of expectations and perceptions. A gap score analysis was carried out to compare customers' expectations with their perceptions of the services delivered by local governments.

2.5 Sample Adequacy Test

Kaser-Meyer-Olkin test (KMO) and Bartlett's test has been used for sampling adequacy tests. If the KMO result is more significant than 0.05 alpha values, it means the sample size is sufficient (Coakes & Steed, 2001). If Bartlett's test gives the value 0.000, which is less than 0.05 alpha values, the sample size is significant.

2.6 Instrument Validity

Face and content validity can be used. Face validity refers to what extent the measurement can be used to reflect the actual value that needs measuring. Content validity refers to what extent the measurement contains the meaning in the items which construct upon the meaning that we want to study (Babbie, 2004). Before actual survey implementation, authorized and experience people in LAs and researchers can be consulted to evaluate the validity of the research instrument.

2.7 Reliability Test

The reliability test has been carried out to ensure the internal consistency of the Likert scale. Bruner and Hensel (1994) suggest that 'Alfa-Cronbach' is a standard method for measuring the reliability of the study. Cronbach's Alpha has been used to assess the reliability, or internal consistency, of a set of scale or test items. Cronbach's Alpha is one way of measuring the strength of that consistency. As the average inter-item correlation increases, Cronbach's alpha increases as well (holding the number of items constant). A reliability coefficient is a measurement of how well a test measures achievement. Cronbach's alpha is the most widely used internal consistency coefficient.

3. Results

In this study, the level of perception and expectation of the service receiver (general people) has been analyzed using a three-dimensional (i.e., responsiveness, basic service, and tax policy) service quality (SURVQUAL) estimation in a 5-point Likert scale has been conducted. A 5-point Likert's scale, as for instance, were 'highly satisfy, satisfy, neutral, dissatisfy, highly dissatisfy.

3.1 Overall Result

The paired t-test calculates the difference within each before-and-after pair of measurements, determines the mean of these changes, and reports whether this mean of the differences is statistically significant or not.

3.2 Hypotheses

- Null hypothesis (H_0): There is no significant difference in the mean scores of satisfaction levels of service delivery before and after the local election.
- The alternative hypothesis (H_1): There is a significant difference in the mean scores of satisfaction level of service delivery before and after the local election.

OR,

$H_0: \mu_1 = \mu_2$ ("the paired population means are equal")

$H_1: \mu_1 \neq \mu_2$ ("the paired population means are not equal")

OR

$H_0: \mu_1 - \mu_2 = 0$ ("the difference between the paired population means is equal to 0")

$H_1: \mu_1 - \mu_2 \neq 0$ ("the difference between the paired population means is not 0")

Where;

- μ_1 is the population mean of variable 1 (before the local election), and
- μ_2 is the population mean of variable 2 (after the local election).

Table 2 shows that the responsiveness (For before, mean = 3.48, SD = 0.753; for after, mean = 3.61, SD = 0.652) seems to be positive due to election and similarly basic service (For before, mean = 2.79, SD = 0.728; for after, mean = 2.89, SD = 0.783) is also tending towards the improvement due to the same cause though the people seem not very satisfactory. However, Tax policy (For before, mean = 3.56, SD = 0.680; for after, mean = 2.87, SD = 0.919) has some different scenario. Moreover, the election has seemed to affect a negative impact on the taxpayers due to the new tax policy implemented by the local government.

(Table 2: Paired Samples Statistics)

Constructs		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Responsiveness (BE)	3.48	282	.753	.045
	Responsiveness (AF)	3.61	282	.652	.039

Pair 2	Basic Service (BE)	2.79	282	.728	.043
	Basic Service (AF)	2.89	282	.783	.047
Pair 3	Tax Policy (BE)	3.56	282	.680	.041
	Tax Policy (AF)	2.87	282	.919	.055

(Note: BE= Before local election and AF = After local election in 2017)

The paired t-tests show a significant difference between each pair of responsiveness ($t = -2.516$, $p = 0.012$), basic service ($t = -2.493$, $p = 0.013$) and tax policy ($t = 10.593$, $p < 0.001$). The p-value of each dimension is less than 5 percent significant level. It means the null hypothesis is rejected, and the alternative hypothesis is accepted. So, these tests indicate that there is a statistically significant difference between the mean value of before and after the local election. The t-scores for responsiveness and basic service are negative, while that of tax policy is positive. The satisfaction level of the people about the responsiveness of local government has increased an average of 0.134 points and basic service by 0.104 points. Still, the satisfaction level on tax policy has decreased by 0.686 points after the local election (Table 3).

(Table 3: Paired Samples Test)

Constructs		Paired Differences					t	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Responsiveness (BE) Responsiveness (AF)	-.134	.891	.053	-.238	-.029	-2.516	281	.012
Pair 2	Basic Service (BE) Basic Service (AF)	-.104	.702	.042	-.187	-.022	-2.493	281	.013
Pair 3	Tax Policy (BE) Tax Policy (AF)	.686	1.088	.065	.559	.814	10.593	281	.000

(Note: BE= Before local election and AF = After local election in 2017)

Table 4 displays the correlation between three different pairs. Though the correlation coefficients for responsiveness ($r = 0.201$) and tax policy ($r = 0.100$) are relatively small, they are positive and linear, and significant too. It indicates that people have been experiencing those aspects in the local government almost similar behavior. The people seem to experience a small change in behavior in the part of responsiveness and tax policy. The correlation coefficient of a pair of basic services has more strength ($r = 0.570$) and is significant too. The basic service pattern at the local level has no drastic change after the local election.

Here we see that the p values of responsiveness ($p=.001$) and basic service ($p=.001$) are less than 0.05, and therefore, we can reject the null hypothesis that the correlation is zero. But the p-value of tax policy is .094) which is more than 0.05. Therefore, we cannot reject the null hypothesis that the correlation is zero (Table 4).

(Table 4: Paired Samples Correlations)

Constructs		N	Correlation	Sig.
Pair 1	Responsiveness (BE) & Responsiveness (AF)	282	.201	.001
Pair 2	Basic Service (BE) & Basic Service (AF)	282	.570	.000
Pair 3	Tax Policy (BE) & Tax Policy (AF)	282	.100	.094

(Note: BE= Before local election and AF = After local election in 2017)

3.3 Reliability Test of Expectation and Perception

The table shows the overall reliability test of mean expectation and perception of service quality, i.e., Cronbach's alpha for expectation 0.830 and perception 0.866, indicating that there is internal consistency (Table 5).

(Table 5: Results of the Overall Reliability Test)

Results	Expectation	Perception
Case processing	282	282
Cronbach's alpha	0.830	0.866
Mean	11.67	8.00
Variance	2.961	6.644
Std. deviation	1.721	2.578
No. of Item	3	3

(Source: Field Survey, 2018)

3.4 Normality Test of Expectation and Perception

No variable found to be normal as the p values are of all variables is less than 5 %. These results suggest applying a non-parametric approach to the normality test (Table-6).

(Table 6: One-Sample Kolmogorov-Smirnov Test)

		Expectations			Perceptions		
		E (1)	E (2)	E (3)	P (1)	P (2)	P (3)
N		282	282	282	282	282	282
Normal	Mean	3.87	3.93	3.88	2.48	2.87	2.65

Parameters ^{a,b}	Std. Deviation	.686	.624	.680	.921	1.045	.932
Most Extreme Differences	Absolute	.441	.434	.446	.323	.261	.290
	Positive	.339	.357	.348	.323	.261	.290
	Negative	-.441	-.434	-.446	-.209	-.226	-.178
Kolmogorov-Smirnov Z		7.408	7.288	7.494	5.416	4.378	4.871
	Expectations			Perceptions			
	E (1)	E (2)	E (3)	P (1)	P (2)	P (3)	
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000
a. Test distribution is Normal.							
b. Calculated from data.							

(Note: E= (Expectation) and P= (Perception), N=Number of observations)

The paired sample t-test of expectation and perception shows that there is a significant difference between each pair of expectation (1) and perception (1) (t = 22.330, p= 0.001), expectation (2) and perception (2) (t=15.864, p=0.001) and expectation (3) and perception (3) (t= 18.636, p< 0.001), it indicates that there is a significant difference between pair of expectations and perception at a 1 percent level.

It means that the quality-of-service delivery of local government is lower compared to the expectation before the local election. The 'lower' and 'upper' limits of the 95% confidence interval tell us that we can be 95 percent confident that the population mean difference between expectation (1) and perception (1) is between 1.268 and 1.513, expectation (2) and perception (2) is between 0.929 and 1.192, and expectation (3) and perception (3) is between 1.097 and 1.357 (Table 7).

(Table 7: Paired Samples test of Expectation and Perception)

Paired Expectation and Perception		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval				
					Lower	Upper			
Pair 1	Expectation (1) Perception (1)	1.390	1.045	.062	1.268	1.513	22.330	281	.000
Pair 2	Expectation (2) Perception (2)	1.060	1.122	.067	.929	1.192	15.864	281	.000
Pair 3	Expectation (3) Perception (3)	1.227	1.106	.066	1.097	1.357	18.636	281	.000

(Source: Field Survey, 2018)

The paired sample statistics say that there is a negative between expectation and perception about the service quality of local government. The gap between perception (1) and expectation (1) is 2.48-3.87=-1.390, perception (2) and expectation (2) are 2.87-3.93=-1.060 and perception (3) and expectation (3) are 2.65-3.88=-1.227 (Table 8).

(Table 8: Paired Samples Statistics of Expectation and Perception)

Paired Expectation and Perception		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Expectation (1)	3.87	282	.686	.041
	Perception (1)	2.48	282	.921	.055
Pair 2	Expectation (2)	3.93	282	.624	.037
	Perception (2)	2.87	282	1.045	.062
Pair 3	Expectation (3)	3.88	282	.680	.040
	Perception (3)	2.65	282	.932	.055

(Source: Field survey, 2018)

The paired sample correlation Table shows that there is a significantly positive correlation between the two paired variables. The correlation coefficients of expectation (1) and perception (1) is $r = 0.179$; of expectation (2) and perception (2) is ($r=0.170$); and of expectation (3) and perception (3) is $r=0.085$. Here we see that the p values of pair 1 ($r=0.003$) and pair 2 ($p=.004$) are less than 0.05, and therefore, we can reject the null hypothesis that the correlation is zero. But the p-value of pair 3 (0.153) is more than 0.05. Therefore, we cannot reject the null hypothesis that the correlation is zero (Table- 9).

(Table 9: Paired Samples Correlations of Expectation and Perception)

Paired Expectation and Perception		N	Correlation	Sig.
Pair 1	Expectation (1)	282	.179	.003
	Perception (1)			
Pair 2	Expectation (2)	282	.170	.004
	Perception (2)			
Pair 3	Expectation (3)	282	.085	.153
	Perception (3)			

(Source: Field Survey, 2018)

In the Paired Samples Statistics Box, the mean score for the perception is 2.6655, an unsatisfactory level, and the mean of expectation is 3.8913. The standard deviation of perception and expectation is .85921 and .57357, respectively (Table 10).

(Table 10: Paired Samples Statistics of Mean Expectation and Perception)

Paired Expectation and Perception		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Mean perception	2.6655	282	.85921	.05116
	Mean expectation	3.8913	282	.57357	.03416

(Source: Field Survey, 2018)

The mean scores of perceptions and expectations are weakly and positively correlated ($r=0.117$). Here we see that the p values ($p=.050$) are less than 0.05, and therefore, we can reject the null hypothesis that the correlation is zero (Table 11).

(Table 11: Paired Samples Correlations of Mean Score Perception and Expectation)

Mean Perception and Expectation		N	Correlation	Sig.
Pair 1	Mean perception & Mean expectation	282	.117	.050

(Source: Field Survey, 2018)

There was a significant difference between the mean score of expectation and perception ($t = -21.097, p < 0.001$). The p-value is less than 0.05. It means the null hypothesis i.e., the paired population means are equal ($\mu_1 = \mu_2$) is rejected, and the alternative hypothesis is accepted. Because of this, it can be concluded that there is a statistically significant difference between the perception and expectation of the quality-of-service delivery from local levels. Since, the mean value of expectations is greater than the mean value of perception; we can conclude that the quality-of-service delivery is poor as compared to the expectation of the respondents. On average, the perception score is lower ($2.6655-3.8913 = -1.22577$) than the expectation scores. It means that the local governments have not delivered services as expected by the citizen before the local election.

The 'lower' and 'upper' limits of the 95 % confidence interval tell us that we can be 95 % confident that the difference between mean expectation and mean perception is between -1.34014 and -1.11140 (Table 12).

(Table 12: Paired Samples Test)

Mean Perception and Expectation		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95 % Confidence Interval				
					Lower	Upper			
Pair 1	Mean perception - Mean expectation	-1.22577	.97571	.05810	-1.34014	-1.11140	-21.097	281	.000

(Source: Field Survey, 2018)

4. Conclusion and discussion

This paper deals with determining the level of citizens' perceptions on the quality of local government services. The paper proposes an instrument that empirically examines attitudes towards quality as well as satisfaction with local government services. The instrument is based on the widely used SERVQUAL scale, which serves to determine level of perceived quality of services.

The estimation result shows that the responsiveness of the local government seems to be improved after local election held in 2017 compared to before local election. The basic service is also tending towards the upgradation after local election compared to before that local election though the people do not seem very satisfactory. However, tax policy (before mean=3.56 and after mean=2.87) has reflected some different scenario. The mean value score of the case after election is less than the mean value of the score before election. The results refers that the new tax policy of local government has negative impact on taxpayers' perception. It is because the new tax policy has focused on increasing tax rate rather to expanding tax base and coverage. The study provides the feedback to the elected representatives of local government that local government must be more responsive towards the citizen while providing basic public service. On the other hand, the tax policy of the local government should have more tax-payer friendly. For that, the tax rate must be affordable and fair.

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Evaluation of Child Rights Factors in Relation to Adults' Personality, Strength, Development, Occupation Determination, and Financial Health: A Cross Sectional Study

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Abstract

Children are future citizens and are key resources to plan, manage and operate country's affairs. Children today have key role for freedom, justice, peace, and prosperity of future. The study aims to assess the child rights factors in relation to adults' health, personality, values, development, occupation, and financial health at four different outskirts of Kathmandu Valley. A cross sectional study was conducted among 214 respondents of age group 20-30 who are struggling to get job, financial security, and clear direction for moving forward. Effort was placed to relate their childhood experience shaping their current personality and capabilities.

The study reveals that the childhood upbringing, nutrition in early childhood, education qualifications, skills set, and physical and mental health can make significant differences in the employability and economic success of individuals. Childhood development is the key factor in shaping individual personality. Despite various legislative and programmatic measures to ensure the rights of children, the study found that children are still facing many problems that lead to uncertainty and vulnerabilities in their lives. Nation building is mainly dependent on the citizens' need, awareness, values, and strength. And Citizens' strength, values and aspirations are largely determined how family, society, education system and nation outline them. Therefore, emphasis should be given on these factors while providing rightful childhood via nation's intervention, counselling to family and most importantly Child Rights Governance.

(Keywords: *Child rights, problem of youths, reasons of unrecognizability, and governance).*

1. Introductions

As per Nepal Census 2011, Nepal's child population of age 14 and below constitutes 32.35% of the total population. Children aged 16 years and below make up 37.37% of the population and 41.84 % are below 18 years. As per demographic census of Nepal, 40 % of population is under the age of 18. Children are foundation stone of social and economic development of a country. Children are future citizens and key resources to plan, manage and operate country's affairs. Their growth, development, and physical/mental strengthening shape them as a country dream of future. Children today have key role for freedom, justice, peace, and prosperity of future.

Lower Personality Development and Unemployment Rates is one of most difficult challenge for individual's personal success, financial independence, and country's human capital optimization. It is the major determinant of individual's economic stability, self-confidence, social engagements, nationalism, and sense of responsibilities towards self, family, society, country, and the world. Skilled human capital base is prima facie for country's operation, planning and development. Hence, the study aims to assess the child rights factors in relation to adults' health, personality, values, development, occupation, and financial health at four different outskirts of Kathmandu Valley.

2. Objectives of the study

This study has been done to shed some lights on the factors determining shape of citizens, especially their childhood development and to provide the suggestions for prioritize better care from the time of gestation to their age of attaining maturity.

- 1) To analyze the factors determining personality shapes of the respondents mainly- childhood development and provide suggestions to the relevant peoples.

3. Methods

A cross sectional analytical study was conducted among 214 respondents of age group 20-30 who are struggling to get job, financial security, and clear direction for moving forward. The study was conducted in 2017-2019 at Jitpur/Bhaktapur, Jhor/Kathmandu, Ramkot/Kathmandu and Lakuri Bhanjyang/ Lalitpur.

Some pilot study was done prior to the field visit to analyses and obtained the facts of the study area. Those learning were useful to finalize the questionnaires and other check list materials which was used here.

Purposive sampling technique was used to select the sample for the study area. Informed written Consent was received from everyone with confidence of individual confidentiality and respect towards the facts. Interview was conducted using a self-structured questionnaire. Data were analyzed using descriptively to identify factors of powerlessness, incompetence, and unrecognizability.

4. Sampling Design

Sexual orientation: Of the total interviewed respondents, 59.41 % were male and around 41.6 % were female participation. The Education level, family size, age of their marriage, family backgrounds, role in a family, present occupation, financial source, social profile etc., were monitored and marked before research. Some 80 % of respondents were lower income group not having reliable regular source of income. Their job uncertainty was largely dependent on not being able to get skilled job, not having capital to start own livelihood, not being physically fit for

abroad jobs, not having technical skills to explore opportunities, perceptual barriers to engage in unskilled labor, and physical/ psychological reasons preventing confidence, dreams, and courage. Effort was placed to relate their childhood experience shaping their current personality and capabilities.

5. Limitation of the study

This study illustrates the opinion presented in an interview of 214 respondents of the vicinity of Kathmandu valley. This report doesn't necessarily represent the experience and opinion of the youth covering all geographical area of Nepal. During the interview, administered as structured set of questions which limited the responses of respondents. This report doesn't necessarily represent the experience and opinion of the youth covering all geographical area of Nepal. During the interview, administered as structured set of questions which limited the responses of respondents.

This study has following limitations as: -

- The study findings may not reflect the overall situation of the youth in Nepal.
- The study will not explain various factors of social-economic and cultural factors of youth which is only limited to the prescribed objectives.

6. Significance of the study

Unemployment, underemployment, outward skill flow and youth struggling to get sustainable job are difficult challenges of any developing countries. Human Capital is everyone's concern and matching of resources demands versus availability have wide gap in most of the areas associated. The physical fitness, mental wellbeing, adequate educations, technical skills etc., are largely dependent on the individual's development in gestation period, early childhood experience, and quality of education, parenting, socio-political influence, and opportunities availability. Those who are struggling to get proper job, employment security and basic financial health largely believe that their childhood development shapes their present personality and success measures. Childhood development needs to be concentrated for developing accomplished human capital base of a country.

- Children are human beings and have their own rights. Childhood development impacts overall life of an individual.
- The healthy development of children is crucial to the future well-being of any society
- Children play a vital role in the constructive process of building unity, economic prosperity, and political stability in a nation inclusively and democratically.

7. Defined Child Rights Provision in Nepal

The Constitution of Nepal has provided a remarkable space to the rights of children. The Government of Nepal promulgated Children's Act, 2075 and defined set of rights every child deserves for life, nutrition, education, love, identity, nationality, protection, participation, respects, engagements, confidentiality, and developments. Also, the duties are defined for priorities to be accorded to the best interest of children. The State shall make necessary arrangements for providing basic needs, including nurturing, protection, health, and education, for children in need of special protection based on available resources. Duties of media is also outlined.

As published in state of Children in Nepal 2019, published by Central Child Welfare Board (Ministry of Women, Children and Social Welfare), the access of children on health and education facilities has improved over the years, but there are challenges in child protection. Improvement is happening in nutrition, education, child marriage, child labor and vaccines availability. However, child protections are having multiple challenges due to increase in internet use, digital lifestyle reach, cyber-crimes, and modernization vulnerabilities.

8. ANALYSIS

8.1 Physical Health and Strength

High child mortality rates, low birth weight, malnutrition are key challenges for children's physical health. Malnutrition undermines human capital and economic productivity and can limit progress in achieving at least 6 of the 8 Millennium Development Goals and targets set by the World Health Assembly. Of the nearly 3 million children under 5 years of age in Nepal, approximately 1.2 million (41 %) are stunted. The mortality rate for children under 5 in Nepal is 32 per 1,000 live births, neonatal mortality rate 21/ 1000 —nearly 45 % of these child deaths attributable to various forms of undernutrition. According to Central Statistics Office, Nepal Multi-Index Cluster Survey, 2076, under five years, the percentage of underweight children is 24.3 % in the country, while it is 37.4 % in Karnali and 11.1 % in Bagmati province respectively. Similarly, those who have not reached the height below five years, the percentage of children in the country is 31.5 %, while in Karnali it is 47.8 %, it is found to be 22.9 % in Bagmati province.

Safer motherhood program has been in implementation for over two decades aiming at improving health of mother and child that generally includes protective, promotional, and curative measures. The main services cover birth safety package, safer motherhood tablet, iron, folic acid, calcium, nutrition program, golden thousand days program, incentives to institutional delivery, free health check-up, etc. However, gap is observed in regulatory provisions to ensure breast feeding rights of new-born. As per labor act of Nepal, working mother is provided 98 days of maternity leave for her recovery. So, her return to work hinders the fundamental rights of newborn for exclusive breastfeeding and adequate nutrition. Children's Act, 2018 has provisions

for child rights to nutrition, safe drinking water and breast feeding up to two years which is highly compromised for the children of working mother. In total interviews, 60 % clearly agreed on the nutrition factors for their childhood and present health strength. ²

8.2 Education

In Nepal, 770,000 children aged 5-12 years are still out of school. ³ Only a half of students in grades 3, 5 and 8 meet the academic achievement criteria for Nepali and mathematics. Attendance in early childhood education (ECE) is still low at 51 per cent. There is inequity in the education sector as only 12 per cent of children from the lowest wealth quintile are developmentally on track in literacy and numeracy compared to 65 per cent from the highest wealth quintile. Very few schools meet child-friendly school standards. As per the record of Department of Education, the net enrollment rate (NER) in primary education reached to 96.9 percent in 2073, whereas the rate was 96.6 percent the previous year. NER at the lower secondary level reached to 80.9 percent in 2073 against 77.7 percent of the previous year. This rate for the secondary (Grade 9 and 10) level reached to 59.8 percent in 2073 against 58.6 percent in the previous year. Likewise, at the higher secondary (Grade 11 and 12) level of education, the rate reached to 18.2 percent against 16.4 percent in the previous year. Education is foundation of skills set so childhood education quality plays vital role in citizen's occupation, career aspiration, earning capacity and net worth. Education is an important investment in a country as there are huge benefits. Education guarantees lifetime income; it promotes peace and reduces drop-out rates from schools and colleges and encourages healthy competition. Many children dropout from colleges as they are not aware of the advantages of college education. Education helps in making the right decisions at the time of conflicts. Education and development go hand in hand. Education is a human right, a powerful driver of development, and one of the strongest instruments for reducing poverty and improving health, gender equality, peace, and stability. It delivers large, consistent returns in terms of income, and is the most important factor to ensure equality of opportunities. About 80 % of respondents agreed that unavailability of education degree and knowledge has held up their economic opportunities and engagements.

8.3 Child Marriage

Child marriage is a human rights violation, restricting children's choices, changing their course in life, and putting them at significant risk of abuse and violence. Child marriage threatens the lives and health of girls and limits their prospects. Population Monograph, 2014 (Part 2) has found 26.3 % child marriage. Nepal has the third highest rate of child marriage in Asia. Despite laws

² <http://faostat3.fao.org/faostat-gateway/go/to/browse/FB/FB/E>

<https://www.fantaproject.org/sites/default/files/download/Nepal-Nutrition-Profile-Mar2014.pdf>

³ <https://www.unicef.org/nepal/education>

against it, the practice remains widespread in the country. Nepal has one of the highest rates of child marriage in Asia – for both girls and boys. More than a third of young women aged 20-24 report that they were married by the age of 18, and just over one in ten by 15. Nepali boys are among the most likely in the world to be child grooms. More than one in ten is married before they reach 18. Peer influence, social structures, family compositions and cultural reasons are still triggering child marriage. The clearest manifestation of this relationship is the high prevalence of early marriage and adolescent pregnancy, which reflect prevailing gender norms that discriminate against women and girls and contribute significantly to the high prevalence of low birth weight and chronic malnutrition in their children. 40 % of respondents were married in their secondary level education, which diverted them from rightful education to family obligations. Early marriage, school dropouts and early financial work engagements have been determinants their present health condition, occupation, and economic challenges. Child marriage negatively affects the economy and can lead to an intergenerational cycle of poverty. The social and economic aftermaths of child marriage are as dire as the health consequences and affect girls disproportionately. As for social consequences, child marriage significantly limits girls' access to education, which results in their life-long disempowerment.⁴

8.4 Child Labor

Despite the child labor situation having improved in Nepal, Nepali children still face the highest risk of being involved in child labor than elsewhere in South Asia (Khan and Lyon 2015). About 21 % of children aged 5 to 17 years were engaged in child labor in 2008 (CBS 2011a). Among total children involved in child labor, 39 % (0.6 million) were engaged in hazardous work which entails physically strenuous labor, and as a result are more likely to suffer from chronic health problems. Agriculture sector accounts for more than 85 % of the total child labor in Nepal. ⁵Physical and mental pressures of work affect children's physical growth, harms their health, and obstructs their education. One of the reasons of school dropout is found to be their engagement in farming.

8.5 Human Trafficking

Children are trafficked within the country as well as in neighboring countries for involuntary servitude as domestic servants, circus entertainers, factory workers, beggars, or prostitutions. As mentioned in State of Children in Nepal 2020, out of 2,729 missing children, 2,219 children (81.3 %) have been found from the National Center for Children At-Risk (Toll-Free No. 104) in the fiscal

⁴ <https://www.ohchr.org/sites/default/files/Documents/Issues/Children/Study/RightHealth/HerTurn.pdf>

⁵ <https://www.ilo.org/kathmandu/areasofwork/child-labour/lang-en/index.htm#:~:text=Though%20child%20labour%20is%20declining,total%20child%20labour%20in%20Nepal.>

year 2019/ 20 and the search for the rest is underway. According to Women, Children and Senior Citizens Service Directorate under Nepal Police Headquarters, a total of 75 children (71 girls and 4 boys) have been victims of human trafficking and smuggling in FY 2019/ 20. Child protections measures and arrangements are yet to be developed in community level. Children's safety concern has also pressurized women to concentrate at home than occupation, resulting in financial dependence on spouse of family. Children who are victims of trafficking experience complex trauma. Not only do they experience physical and sexual abuse, but their trauma is compounded by the actions a trafficker uses to manipulate and control them. Complex trauma considers the cumulative effects of these types of traumata. Trafficked children often lack access to educational opportunities. Under conditions of constant threat, trafficked children's internal resources go toward survival. When their bodies and minds have learned to be in chronic stress response mode, they may have trouble thinking a problem through calmly and considering multiple alternatives; find it hard to acquire new skills or take in new information; struggle with sustaining attention or curiosity or be distracted by reactions to trauma reminders; show deficits in language development and abstract reasoning skills; or have learning difficulties that may require academic support. Depression, hopelessness, guilt, shame, flashbacks, nightmares, loss of confidence, lower self-esteem, and anxiety are common experiences of trafficking survivors. The combination of adverse educational outcomes, physical and emotional problems and adverse behavioral outcomes place children who are victims of trafficking on a particularly challenging path to recovery.

8.6 Domestic violence and social dynamics

Report shows that domestic violence, rape, corporal punishments, online harassments etc are increasing like any other crime. Domestic violence and cruelty are driving factors for children to leave home. Children are exposed to various form of violence due to lack of child friendly house structure, family issues, exposure to sexual contents and conversations, peer influence, lack of awareness. Child surviving rape or cruelty struggles through life to heal, stand and socialize. 67% of street children are found to be of age 13-16 years and have high exposure of violence, abuse, drug addictions, social exclusions, alcoholism and involvement in criminal activities. 18 % of respondents shared various form of verbal and physical abuse in the childhood leaving permanent pain in the life. 75 % of respondents address those disciplinary punishments harms them negatively in their confidence, socialization, and growth aspirations. Children who witness domestic violence or are victims of abuse themselves are at serious risk for long-term physical and mental health problems.⁶

⁶ <https://www.womenshealth.gov/relationships-and-safety/domestic-violence/effects-domestic-violence-children>

8.7 Financial Background and Pressures

In developing countries like Nepal, children struggle from beginning for nutrition, equality, education, and respects. Children from marginalized family background must live deprived life. Children with financial burdens gets difficult to focus on studies, socialize among friends and society. Lack of adequate food supply, clothing and educational facilities to the children leads to present differently in the society. Financial pressures also drive children towards easy money-making traps resulting their entry to crime and immoral activities. Of the total interviewed respondents, about 45 % of them have at least one regular earning person at home and 35 % have sufficient food supply from their agriculture production. Those who have sufficient food supply and other basic needs have continued their educational attainment. Of the total interviewed, about 25 % have been dropped out at secondary level due to poverty status of the family. In general, children of financially stressed parents tend to be more depressed, more anxious, exhibit behavior problems in school, perform less well academically, and lower their career expectations. To summarize, the effect of parents' financial stress on children is quite consistent. Study after study indicates that financial pressure – whether due to poverty, unemployment, or economic downturn – has negative "trickle down" effects on children.

8.8 Discrimination based on Gender, Caste, and other social factors

Culture and taboos are still dividing humans in different class or genders, caste, and religious categories. Cultural traditions and social values of a respective society are influential factor determining the personality of a person. In the FY 2016/ 017, a total of 2,410 children at risk were rescued and provided with necessary relief, psycho-counseling, family reunification and social rehabilitation services as per their need through the Toll-Free Child Helpline 1098. Girl child hardly get equal food, clothes, toys, education, and opportunities as a boy child. In a patriarchal system, woman is deprived of equal participation in any system. Early marriage, sole responsibilities of home and childcare make women financially dependent on husband or family. 30 % of respondents were from backward caste and stressed on the facts that their social exclusion, family poverty and taboos have been prime factors in their poor academic results, skills, and financial progress. Only 10 % of backward caste respondents agreed that caste-based discriminations have not affected their rights, approach, and opportunities.

9. Conclusions and Recommendation

The fourteenth periodic plan (2016/ 017-2018/ 19) of Nepal has come up with the vision to create a conducive environment to ensure the rights of children and adolescents and make them determined and competent citizens of the country. Despite various legislative and programmatic measures to ensure the rights of children, they are still facing many problems that lead to uncertainty and vulnerabilities in their lives. Nation building is mainly dependent on the citizens' need, awareness, values, and strength. And Citizens' strength, values and aspirations are largely determined how family, society, education system and nation outline them. Therefore, emphasis

should be given on these factors while providing rightful childhood via nation's intervention, counselling to family and most importantly Child Rights Governance. Policies and System to be introduced to keep all children in country's database, protection, monitoring and care. All information and activities related to, accessible for and vulnerable to children shall be governed by Government regulations. Performance and Impact contributed by formal and informal sectors are to be monitored, measured, and evaluated efficiently.

Extensive research is recommended in the rural and marginalized area of Nepal to monitor the physical, mental, social, and emotional wellbeing of children. Child Rights Protection and Child Rights Governance to be integrated in parenting, education system and national interventions needed.

(Acknowledgement: I am very grateful to all the respondents who have provided the information).

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Trade Relation between India and Nepal with Special Reference to Kathmandu Valley

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ABSTRACT

Since ancient times, India and Nepal have enjoyed a special bond of friendship and mutually beneficial trade. People in India and Nepal have a common history, culture, language, and ethnicity, all of which contribute to the warmth and openness of their connection. Historically, India and Nepal have had close commercial and trading ties as neighbours in South Asia. If Nepal was plagued by political unrest, India remained its closest trading partner. To put it another way, India is Nepal's most important export market and its most important source of imports, as well as its top foreign investor. Since Nepal is a landlocked country bordered by India on three sides, India offers transit services across its territory to allow Nepal to access seaports for commerce with the rest of the globe.

The main aim of this study is to discuss the India's bilateral trade with Nepal, FDI from India and Nepal, the nature of India's balance of trade with Nepal, and the potential for India's trade with Nepal to grow in the future. Based on macroeconomic research, this article examines the relevance, strength, and character of bilateral trade between India and Nepal. To measure India's trade balance with Nepal, the Trade Reciprocity Index (TRI) was created, and the future of trade was estimated using the OLS approach. It is concluded that Trade with Nepal may be helped in the future by the Prime Minister Narendra Modi action for recent opening doors to the Nepalese business. Trade between India and Nepal might gain new heights if the issues could be resolved, however India-Nepal trade has increased in an imbalanced manner.

(Keywords – Trend analysis, India–Nepal, trade, Balance of Trade, Trade Reciprocity Index, economic cooperation)

1. Introduction

1.1 India and Nepal Trade

Trade between India and Nepal has a long history, and the connection is still going strong, according to studies in the sector. In the following sections, an attempt is made to analyse the structure of trade and trade patterns between the two nations.

It all started with the signing of the Treaty of Peace and Friendship between India and Nepal in 1950, which established a solid foundation for bilateral relations. BSMCF Limited, Bihar State Milk Cooperative (COMFED, 2014). As a result of the treaty, Indian citizens and Nepalese citizens alike are entitled to the same benefits and privileges. 16 Agricultural and basic products, such as paddy, wheat, maize, rice, pulses, and flour, have reciprocal duty-free and quantitative restriction-free market access thanks to the pact. All Nepalese-made goods are allowed duty-free and quota-free entry into the Indian market in India. India is Nepal's most important trading partner and a major source of inward investment and international tourists. 46 % of Nepal's total foreign investment comes from India. There are a wide range of Indian economic interests in Nepal ranging from manufacturing to banking and insurance to dry port services to education and telecommunications. Exports to India amounted for 65.1 % of Nepal's total trade in July 2012. Between 2006/ 07 and 2010/ 11, India's exports to Nepal increased by 137.7 % from \$927.4 million to \$2.2 billion, a total of \$2.7 billion in trade. There is a large amount of this commerce passing via Bihar's transit locations. In Nepal, the first three towns account for commerce between Nepal and India, while transit stations in Kathmandu, Biratnagar, Birgunj, and Nepalganj facilitate trade with India.

1.2 Historical Perspective

Indo-Nepalese trade relations may be traced back to ancient times. Kautilya (400 B.C.), outstanding economist of the time, cites Nepal as the primary supplier of woollen items. Increased economic operations were witnessed between northern India and Nepal during the golden age of Guptas (starting in 320 A.D.) (beginning in 320 A.D.). During the Nepal-Tibet conflict of 1791, the East India Company proposed a 7-clause contract under which imports and exports of commodities between India and British India would be subject to 2.25 % customs levy. A peace treaty of Sugauli in 1816 permitted the British to penetrate the Nepalese marketplace. (Dharamdasani, M.D. (ed.) 2000). In the early days, overseas trade of Nepal was restricted largely with India and Tibet. The sole trading route in between India and Tibet was through Nepal. It has contributed very significantly to increasing trade of Nepal. However, primary part of the Nepalese commerce was with India. Commerce with Tibet was aimed for supplying the fundamental necessities in the Himalayan and mountainous region, but trade with India consisted of export and import of many agricultural, mineral and forest goods. Before the eighteenth century, imports from India consisted of a few products of which scrap metals, valuable stones, spices, tobacco etc. were among them. Whereas Nepal exported majority of her basic products like wood, rice, ghee etc. Nepal's commerce with India lasted through 1923 without having a trade agreement with British India. Prior to the signing of this commercial agreement, British East India Company was keen to develop trading links with Nepal, for expansion of its own products. The introduction of direct India -Tibet route via Gyantse routes further stimulated Nepal to increase commerce with India. Moreover, the development of strong transportation infrastructure and the formation of various commercial hubs in the northern India further contributed to improve

the trade turnover between Nepal and India. (World Bank, 2001) The pattern of Nepal's commerce with India remained the same over the 19th century and first half of the 20th century. Exports to India generally comprised of food grains, raw jute, wool, cotton, hides and skins, musk, medicinal plants, cardamom, metal items, ghee, tobacco etc. Imports from India used to comprise of largely the agricultural items such as wheat, rice, gram and pulses, iron, brass, copper, cotton goods, salt, and live animals plus others. India has, consequently, been a key commercial partner of Nepal since a long time back. Popular and cultural links of India with Nepal have long remained tight and have reflected in commercial terms continuously.

1.3 Nepal-India Bilateral Relations

When the British colonised India, many features of Nepal-India relations were formed on a foundation founded on British colonial authority, even though Nepal was never colonised. On December 6, 1950, Jawahar Lal Nehru said this in a speech to the Indian parliament, according to Thapliyal (1998).

Since the dawn of time, the Himalayas have supplied humanity with a breathtaking border. They're no longer as impenetrable as they once were, but their effectiveness hasn't diminished. For this reason, we cannot allow the barrier to be breached, as it is also the primary obstacle to India. Our security is at danger if we allow anything to go wrong in Nepal, or if we allow that barrier to be crossed or weakened.

New beginnings in Nepal-India ties were supposed to begin after India's independence from the British colonial in 1947, based on the concepts of equal, independent, sovereign, and mutually beneficial relations (Adhikari, 2018). India, which has a vested interest in maintaining control over Nepal, has rarely honoured these values. Interference in Nepal's internal affairs, particularly its political, diplomatic, and military spheres is used to retain control over the country. Critically addressing the influence of Indian hegemony doesn't detract from a unique relationship and collaboration between India and Pakistan based on their shared values of cultural tradition, religious faith, and economic ties (Shah, 2017; Tripathi, 2019; Upreti, 2016). Nepal and India have had joint commission meetings on a regular basis, as well as other high-level exchanges and institutional talks, all of which have contributed to the development of bilateral goodwill, confidence, and collaboration between the two nations.

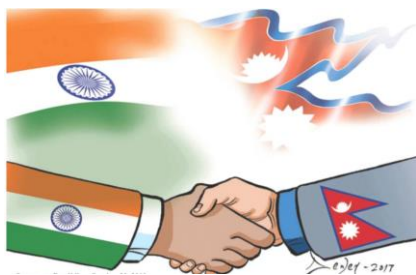


Figure 1: Nepal-India Bilateral Relations

2. LITERATURE REVIEW

Nisha Taneja, et al (2020) - Since ancient times, India and Nepal have enjoyed a special bond of friendship and mutually beneficial trade. India and Nepal share a history, culture, language, and ethnicity, and the two countries have an open border that is welcoming to people from both countries. Therefore, the primary goal of this paper is to identify policy changes that might promote bilateral trade and investment between India and Nepal. A study of the patterns of bilateral commerce is presented, together with an estimate of the additional trade that may be achieved. Trade concerns, including tariffs, agricultural reform fees, tariff quota underutilization, non-tariff measures, issues relating to ROO, and physical obstacles to cross-border flow of commodities, are addressed in this meeting. As a final note, the piece lays out an action plan for promoting bilateral economic cooperation by outlining ideas for increasing trade, removing non-tariff obstacles, modernising infrastructure to enhance connectivity, and boosting Indian FDI in Nepal.

Karun Kishor Karki and Hari Kc (2020) - As a starting point, we examine the faults in the historical narratives that portray Nepal-India ties as founded on mutual respect for each other's sovereignty, which not only risks establishing stereotypes, but also leaves it incomplete and inaccurate. " Nepal-India ties go back a long way, but any historical discourse that ignores India's hegemonic role in intervening in Nepali affairs and hindering that country's social, economic, and political development obscures the fact that India has been a power broker in Nepal from its founding.

Neetu Choudhary and Abhijit Ghosh (2015) - Considering the low levels of trade within the South Asian subregion, this article examines how a subregional engagement with neighbouring areas might boost economic cooperation among nations. A SWOT analysis is used to analyse and reflect on the necessity of a subregional viewpoint for the development of regional cooperation, with reference to shared historical legacy and culture-driven interaction between Nepal and the Indian state of Bihar.

Nisha Taneja and S. Chowdhury (2010) - For long-term expansion of the Himalayan economy and for long-term commerce between the two nations, the concessions given under numerous Indo-Nepal trading treaties are only temporary in nature. For stronger economic cooperation between India and Nepal, current accords need to be expanded.

Deeptima Shukla (2006) - The specialness of India-Nepal ties goes well beyond everything else. Many aspects of both countries' lives and economies are intertwined, including geography and politics. Additionally, Wiese has served as a venue for the development of several irritants and restrictions between the two nations. Equal stress is placed on informal; people-to-people ties as well as formal diplomatic connections in India-Nepal ties. The purpose of this article is to outline India's approach to Nepal. India-Nepal ties are examined in depth in this book. India and Nepal's relationship may be improved by following these recommendations.

3. SCOPE OF THE STUDY

From Nepal's standpoint, economic and trade relations with India should remain as important as they were in the past. As time goes on, it will continue to be of great importance. In general, the trade relations between Nepal and India are regarded good. The commercial relations between these two countries need to strengthen further in the context of global trade integration. However, in the current era of specialisation, both nations must establish their own unique trade operations based on the size of economies, value addition, and competitiveness.

4. RESEARCH METHODOLOGY

4.1 Research design

In this study, a mix of descriptive and exploratory research methods were used.

4.2 Sources of Data collection

Using secondary data, the study has attempted to concluded on the study's stated goals. Information about Nepal-India commerce was culled from a variety of sources, including peer-reviewed and unreviewed publications and books as well as blogs, forums, and government websites. The research was done utilizing secondary data. Trade data has been gathered from the World Trade Organization (ITC). Throughout the investigation, tables were employed that were both comprehensible and factual. The study's goals determine the best approach to take. The trade balance between India and Nepal is measured using the trade reciprocity index. The OLS approach has been used to forecast the future of commerce.

4.3 Methods and tools used for analysis

Trade Reciprocity Index: The entire balance of trade between two countries may be studied using this method. The following is the formula for calculating the trade reciprocity index (θ): (Azhar, 2004).

$$\theta = 1 - \frac{\sum_{j=1}^n \left[\frac{a_{ij} - a_{ji}}{a_{ij} + a_{ji}} \right] \sum_{i=1}^n a_{ij}}{(n-1) \sum_{i=1}^n \sum_{j=1}^n a_{ij}} \quad (1)$$

Where, θ = Trade reciprocity index a_{ij} = India's exports to Nepal a_{ji} = Nepal exports to India n = Members of a bilateral or regional organisation are taken into consideration collectively. Trade reciprocity index indicator (θ) may take value between 0 and 1. Having a trade reciprocity index equal to 1 means that trade between the trading countries is entirely balanced. In contrast, a 0-trade reciprocity index indicates that trade between the trading countries is fully imbalanced.

Regression Analysis (OLS Method): The regression analysis is used to estimate Future projection of Nepal's trade share in Indian trade markets as under

$$y = \alpha + \beta\chi + u_t \quad (2)$$

y = the value of the dependent variable α = intercept coefficient β = an independent variable's correlation coefficient χ = Independent Variable u_t = Prediction error or random variable

5. DATA ANALYSIS AND RESULT

5.1 India-Nepal Trade

The bilateral trade and transit treaties and agreements for cooperation govern commerce and other related topics between India and Nepal. Both nations have agreed to increase their commercial ties to better serve their respective economies. As a result, India and Nepal have been working hard to improve their trade and economic ties. Table 1 provides information on India-Nepal bilateral trade. Trade between India and Nepal has increased dramatically throughout the time under consideration. The volume of commerce between India and Nepal rose steadily over the previous years, reaching \$ 23, 28,500 thousand in 2008-09. In 2009-10, this amount of trade decreased slightly to \$ 17, 43,701 thousand. As a result of these changes, the amount of commerce in 2011-12 rose to \$ 30,681,124 thousand, while in 2010-11, it fell to \$1342,113 thousand. Final figures show that trade between India and Nepal in 2012-13 was \$ 14945.53 thousand (US dollars). Trade between India and Nepal increased from \$5,31,907 thousand in 2002-2003 to \$ 35,52,923 thousand in 2013-14. There was a six-fold increase in commerce between India and Nepal during this time. Although the overall trade volume between India and the rest of the world increased from \$ 1075 million in 2002-03 to \$ 8026 million in 2013-14. Trade between India and other countries grew by more than seven times over this period. India's overall trade expanded at a significantly quicker rate than the growth of trade between India and Nepal throughout the period under consideration.

Table 1: India-Nepal Trade – Trend analysis (US \$ Thousand)

Year	India-Nepal Trade	India's Total Trade	Percentage of India-Nepal's Trade
2002-03	5,31,907	1075,51,427	0.49
2003-04	8,96,584	1317,91,183	0.68
2004-05	10,86,949	1748,85,329	0.62
2005-06	12,22,488	2412,14,304	0.51
2006-07	12,43,571	2994,13,046	0.42
2007-08	17,06,888	3645,43,347	0.47
2008-09	23,28,500	4975,73,004	0.47
2009-10	17,43,701	4431,66,589	0.39
2010-11	24,10,609	5704,37,883	0.42
2011-12	30,68,124	7638,86,041	0.40
2012-13	28,94,451	7785,41,147	0.37
2013-14	35,52,923	8026,56,956	0.44

Figures show that India-Nepal trading accounts for 0.49 % of India's overall trade in 2002-03. In 2003-04, this percentage shot up to 0.68 %. In the following years, this proportion fell to 0.37 percent, except for 2011 when it reached 0.42 %, and ultimately reached 0.44 % in 2012.

5.2 Trade Patterns and Potential

(Table 2: India's Trade with Nepal (US\$ million))

Year	Export to Nepal	Import from Nepal	Total Trade	Trade Balance	Trade Balance Ratio (%)
2002–2003	350	282	632	69	11
2003–2004	669	286	955	383	40
2004–2005	743	346	1,089	397	36
2005–2006	860	380	1,240	480	39
2006–2007	927	306	1,233	621	50
2007–2008	1,507	629	2,136	879	41
2008–2009	1,570	496	2,066	1,074	52
2009–2010	1,533	453	1,986	1,081	54
2010–2011	2,168	513	2,682	1,655	62
2011–2012	2,722	550	3,272	2,172	66
2012–2013	3,089	543	3,632	2,546	70
2013–2014	3,592	530	4,122	3,062	74
2014–2015	4,559	640	5,199	3,919	75
2015–2016	3,930	471	4,401	3,460	79
2016–2017	5,454	445	5,899	5,009	85
2017–2018	5,518	414	5,932	5,104	86
2018–2019	7,766	508	8,274	7,258	88

(Source: Directorate General of Foreign Trade, Ministry of Commerce, Government of India)

Since 2002–2003, India has accrued an increasing trade surplus with Nepal. During the years 2010–2011 to 2018–2019, the average trade balance ratio climbed from 40 % to 76 %, demonstrating India's growing trade surplus (Table-2). Additional commerce between India and Nepal has been calculated as part of the study. Potential trade may be defined as the amount of commerce that could be achieved at a "optimum trade frontier" if existing trade, transportation and institutional technology or practices were used (Armstrong, 2007). Various social, political, and institutional variables may be interfering with actual trade's ability to reach the frontier of production, causing a discrepancy between potential and actual trade. Trade potential between nations must be understood to participate in negotiation procedures or implement changes to reduce or partially ameliorate the effect of current restrictive measures on trade growth.

(Table 3: India-Nepal trade as well as India's overall trade, the annual growth rate and CAGR)

Year	India-Nepal Trade	Annual Growth of India-Nepal Trade	India's Total Trade	Annual Growth of India's Total Trade
2002-03	5,31,907	-	1075,51,427	-
2003-04	8,96,584	68.56	1317,91,183	18.49
2004-05	10,86,949	21.23	1748,85,329	27.87
2005-06	12,22,488	12.47	2412,14,304	32.21
2006-07	12,43,571	1.72	2994,13,046	20.77
2007-08	17,06,888	37.26	3645,43,347	20.38
2008-09	23,28,500	36.42	4975,73,004	24.65
2009-10	17,43,701	-25.11	4431,66,589	-2.80
2010-11	24,10,609	38.25	5704,37,883	24.69
2011-12	30,68,124	27.28	7638,86,041	36.78
2012-13	28,94,451	-5.66	7785,41,147	-3.95
2013-14	35,52,923	22.75	8026,56,956	16.25
CAGR	16.40 %		20.87 %	

When India and Nepal signed a new trade agreement in 2002, Table 3 represented their real performance. Trade between India and Nepal grew at a compound annual rate of 16.40 percent, while India's overall trade increased at a rate of 20.87 percent during that time. This suggests that commerce between India and Nepal has performed worse than India's overall trade. The following section examines the development of Indian exports to Nepal.

5.3 India's Exports to Nepal

Indian exports to Nepal were shown in Table 4 as a percentage of total exports. In 2008-09, India exported \$ 16,96,405 thousand worth of goods to Nepal, however this volume decreased significantly to \$13,27,363 thousand in 2009-10 due to the global crisis. For this reason, India exported \$ 31,76,217 thousand dollars to Nepal in 2013-14. As a result, India's exports to Nepal went from \$ 2,65,495 thousand to \$ 31,76,217 thousand between 2002 and 2013. This means that India's exports increased by more than an order of magnitude during the same time span! However, in 2002-03, India exported just \$ 500,975,958 thousand worth of goods; in 2013-14, India exported \$ 3366, 11,389 thousand worth of goods. As a result, India's overall commerce grew by more than six times during this time, according to this data. As a result, India's exports to Nepal increased at a faster rate than India's overall exports did throughout the time cited.

(Table 4: India's Exports to Nepal Trends Analysis (US \$ Thousand)

Year	India's Exports to Nepal	India's Total Exports	Nepal Share in India's Total Exports (%)
2002-03	2,65,495	500,97,958	0.53
2003-04	6,05,088	593,60,659	1.02
2004-05	7,46,915	759,04,200	0.98
2005-06	8,37,027	1003,52,637	0.83
2006-07	9,25,675	1212,00,606	0.76
2007-08	12,37,100	1458,98,053	0.85

Year	India's Exports to Nepal	India's Total Exports	Nepal Share in India's Total Exports (%)
2008-09	16,96,405	1818,60,898	0.93
2009-10	13,27,363	1767,65,036	0.75
2010-11	19,04,912	2204,08,496	0.86
2011-12	25,59,910	3014,83,250	0.85
2012-13	25,87,086	2895,64,769	0.89
2013-14	31,76,217	3366,11,389	0.94

Table 4 also shows Nepal's contribution of India's overall exports as a percentage. It has been determined that Nepal's proportion in Indian trade in 2000-01 was 0.33 %. In 2003-04, this percentage rose to 1.02 %. It fell to 0.76 % in 2006-07, but then rose to 0.93 % in 2008-09. Because of this, save for 0.75 % in 2009-10, Nepal's share of the Indian export market has steadily increased to 0.94 % a year ago. So, Indian exports have risen in Nepal's market. Indian exports, on the other hand, require a complete examination of the composition of Indian exports to Nepal's market.

5.4 India's Imports from Nepal

Table 5 provided data on the number of Nepalese imports to India. In 2002-03, the volume of India's imports from Nepal rose steadily from \$ 2,66,412 thousand to \$ 6,32,095 thousand; in 2008-09, this volume fell to \$ 4,16,338 thousand because of the global economic slump. There was a steady rise in Indian imports from Nepal to \$ 5, 08,214 thousand between 2011 and 2012. Finally, in 2012-13 and 2013-14 the volume of exports reached \$ 3, 76,706 thousand dollars. India's imports from Nepal increased from \$ 2,66,412 thousand in 2002 to \$ 3,76,706 thousand in the span of just a few years. This suggests that India's imports from Nepal did not improve by more than a third throughout the aforementioned time frame. While India's worldwide imports fell from \$ 574,53,469 to \$ 4660,45,567 over the same time, exports rose. According to this, India's worldwide imports grew by more than 8 times over the period in question. Because of this, it may be argued that India imported a less amount of goods into Nepal than it imported into the rest of the world.

(Table 5: India's Imports from Nepal – Trends Analysis (US \$ Thousand)

Year	India's Imports from Nepal	India's Total Imports	Nepal Share in India's Total Imports(%)
2002-03	2,66,412	574,53,469	0.46
2003-04	2,91,496	724,30,524	0.40
2004-05	3,40,034	989,81,129	0.34
2005-06	3,85,461	1408,61,667	0.27
2006-07	3,17,896	1782,12,440	0.18
2007-08	4,69,788	2186,45,294	0.21
2008-09	6,32,095	3157,12,106	0.20
2009-10	4,16,338	2664,01,553	0.16
2010-11	5,05,697	3500,29,387	0.14
2011-12	5,08,214	4624,02,791	0.11
2012-13	3,07,365	4889,76,378	0.06
2013-14	3,76,706	4660,45,567	0.08

Table 5 also shows the percentage of India's total imports that come from Nepal. One percent of India's total 2000-01 imports were from Nepal, according to this study. However, it rose marginally from 0.18 % in 2006-07 to 0.21 % in 2007-08. That was followed by a steady decline in Nepal's share of the Indian import market, which peaked at 0.06 % in 2012-13 and then fell to 0.08 % in 2013-14.

5.5 India's FDI in Nepal

(Table 6: Sector-wise FDI in Nepal by India (Values in US\$ Million))

Sectors	Period 1 2008–2009 to 2012–2013		Period 2 2013–2014 to 2018–2019		Period 3 2008–2009 to 2018–2019	
	FDI	Share (%)	FDI	Share (%)	FDI	Share (%)
Manufacturing	20	39	30	49	50	44
Wholesale, retail trade, restaurants and hotels	14	28	5	8	20	18
Financial, insurance, real estate and business services	0	1	16	26	16	14
Electricity, gas and water	5	10	5	8	10	9
Construction	9	16	0	0	9	8
Community, social and personal services	3	6	4	7	7	6
Agriculture and mining	0	0	1	2	1	1
Transport, storage and communication services	0	0	0	0	0	0
Total FDI	52	100	61	100	113	100

The service sector accounted for 55% of India's overall investment in Nepal, while the industrial sector accounted for 44%. The amount of money that India has invested in agriculture has remained minuscule. We examined FDI data from 2008 to 2019, separating it into two time periods: 2008–2009 to 2012–2013 (period 1), and 2013–2014 to 2018–2019 (period 2). (Period 2). For example, during periods 1 and 2, the percentage of India's foreign direct investment (FDI) in finance, insurance, real estate, and business services has increased dramatically, from 1 % to 26 %. (Table 6). It might be linked to the State Bank of India's US\$14 billion investment in period 2. Between periods 1 and 2, the percentage of wholesale, retail, and restaurant and hotel businesses has decreased from 28 to 8 %. Additionally, the manufacturing sector's share of FDI increased from 39 to 49 % during the two periods.

It was a bilateral trade agreement that encouraged various Indian corporations to establish commercial operations in Nepal to take advantage of the investment–trade nexus, but that agreement has since expired. Due to their proximity and common historical and cultural roots, both countries have become more attractive to international investment (Adhikari, 2013). Because of Nepal's cheap labour costs and growing liberalization of its trade and economic policies, Indian enterprises have benefited from its low tariff rate structure (Jha, 2010). The

political uncertainty and slow growth of the Nepalese economy, on the other hand, posed a disincentive for investments. FDI flows from India to Nepal are subjected to various policy-related barriers, such as lack of harmony between different FDI governing authorities, problems concerning land acquisition, disruptive activities of labour unions, tax concerns such as no tax rebates on profits that get reinvested and rampant corruption, infringements of copyright and trademark of international Bilateral Investment Promotion and Protection Agreement between India and Nepal was signed by the two countries in 2011. (BIPA). By decreasing political risks and increasing bilateral investments, the agreement was designed to encourage international investment in the United States. The BIPA between India and Nepal, on the other hand, was viewed as a barrier to FDI and was never ratified by the two countries. BIT was ended by India in March 2017 when it unilaterally renounced the BIT. It was decided that India will replace the existing Bilateral Investment Promotion and Protection Agreements (BIPPAs) with a new BIT model in 2015 as the basis for the conclusion (BIPAs).

5.6 Balance of Trade

(Table 7: Balance of Trade of India- Nepal (US \$ Thousand)

Year	India's Exports to Nepal	India's Imports from Nepal	Balance of Trade
2002-03	2,65,495	2,66,412	-917
2003-04	6,05,088	2,91,496	3,13,592
2004-05	7,46,915	3,40,034	4,06,881
2005-06	8,37,027	3,85,461	4,51,566
2006-07	9,25,675	3,17,896	6,07,779
2007-08	12,37,100	4,69,788	7,67,312
2008-09	16,96,405	6,32,095	10,64,310
2009-10	13,27,363	4,16,338	9,11,025
2010-11	19,04,912	5,05,697	13,99,215
2011-12	25,59,910	5,08,214	20,51,696
2012-13	25,87,086	3,07,365	22,79,721
2013-14	31,76,217	3,76,706	27,99,511

Domestic producers benefit most from a trade surplus, as they are the ones responsible for exporting the goods. Domestic customers who pay higher costs for the exports would suffer as a result, though. Local producers who face competition from imports are the worst hit by a trade deficit, while domestic consumers who benefit from reduced prices on exports can also benefit from a trade deficit. Table 7 shows data on the trade balance between India and Nepal. In 2002-03, India had a deficit of \$ 917 thousand in its balance of trade, which was unfavourable. The trade balance between India and Nepal has been positive ever since during the time mentioned. Estimating the trade reciprocity index might be helpful in furthering our understanding of India's trade balance with Nepal.

(Table 8: Index of India-Nepal Mutual Reciprocity)

Year	Nepal's Exports to India	Nepal's Imports from India	Reciprocity Index
2002-03	2,65,495	2,66,412	1.00
2003-04	6,05,088	2,91,496	0.65
2004-05	7,46,915	3,40,034	0.63
2005-06	8,37,027	3,85,461	0.63
2006-07	9,25,675	3,17,896	0.51
2007-08	12,37,100	4,69,788	0.55
2008-09	16,96,405	6,32,095	0.54
2009-10	13,27,363	4,16,338	0.48
2010-11	19,04,912	5,05,697	0.42
2011-12	25,59,910	5,08,214	0.33
2012-13	25,87,086	3,07,365	0.21
2013-14	31,76,217	3,76,706	0.21

The indicator of Nepal-India trade reciprocity was shown in Table 8. In 2002-03, the trade reciprocity index reached its maximum point of 1.00. Thus, the Indian-Nepalese trade balance in the year 2002-03 was fully balanced. Since its peak in 2005, this index has been steadily declining, reaching a low of 0.51 in 2006-07. Since that time, it has risen to 0.55. In 2012-13, the value of the index steadily decreased to 0.21, and eventually stabilized in 2013-14. A trade reciprocity index that is getting closer to 0 indicates that trade is becoming entirely imbalanced.

Trade between India and Nepal: Prospects for the Future The following equations are used to estimate trend values.

$$y = \alpha + \beta\chi + u_t \tag{3}$$

Where, y = Nepal's Share in India's Total trade used as dependent variable. χ = Year used as an independent variable. α = Used as an intercept coefficient β = Variable intercept or slope u_t = Random variable

To find constants α and β , we use the following equations

$$\Sigma y = n\alpha + \Sigma \chi^2 \tag{4}$$

$$\Sigma \chi y = \alpha \Sigma \chi + \beta \Sigma \chi^2 \tag{5}$$

We arrive at by solving the equations $\alpha = 0.60$ and $\beta = -0.02$

Estimated trend equation is $\hat{y} = 0.60 + (-0.02)\chi$

Assumed future commerce between India and Nepal is as follows:

$$\hat{y} = 0.60 + (-0.02) 19 \text{ OR } \hat{y} = 0.24 \text{ Per cent}$$

India's entire trade with Nepal is projected to account for about 0.24 percent of the country's total commerce.

5.7 Trade Point, Kathmandu

Trade Point, Kathmandu is co-hosted by the Kathmandu College of Management (KCM) and the Federation of Nepalese Chambers of Commerce and Industry (FNCCI) to take advantage of KCM's management capabilities and FNCCI's database and larger user community in a synergistic manner. Kathmandu's Trade Point also has the capability of delivering training to young entrepreneurs who are interested in taking advantage of the Program. KCM would be responsible for setting up and managing the trade point, while FNCCI would assist in the establishment of the database and give complete and unrestricted access to the trade point capabilities both offline and online. It has been determined that KCM is a suitable place for hosting the trade point, which offers current and aspiring merchants and entrepreneurs with relevant information about trade prospects, possible clients and suppliers, and trade rules and needs.

FNCCI is an umbrella group for the private sector in Nepal and has played a vital role in promoting business and industry in the nation since its inception. It offers a variety of services to the business community and the government, including information, advice, consultation, marketing, and representation as needed for the development and implementation of business and industry-related policies and initiatives. In addition to district and municipal chambers of commerce and industry, as well as national chambers of commerce and industry, it represents nearly every national council and board. Business information, export and investment promotion guidelines and entrepreneurship promotion are all part of the organization's "One Stop" service for members. For this reason, FNCCI has been chosen as an excellent partner for KCM to host the trade point because of its current information and communication technologies (ICTs) and management capabilities, which are required for the trade point operation. According to the international format and criteria, it is possible to improve the usability of the existing enterprise databases. As a result, TPK's products and services would have to be tailored to meet the needs of both current FNCCI customers and the growing number of young entrepreneurs and management graduates. There will be greater exposure to foreign commerce and lower transaction costs because to the synergy that will be created between the two institutions hosting trade points. The Trade Point, Kathmandu's organisational structure and the background of its hosting institutions are illustrated in the figure below:

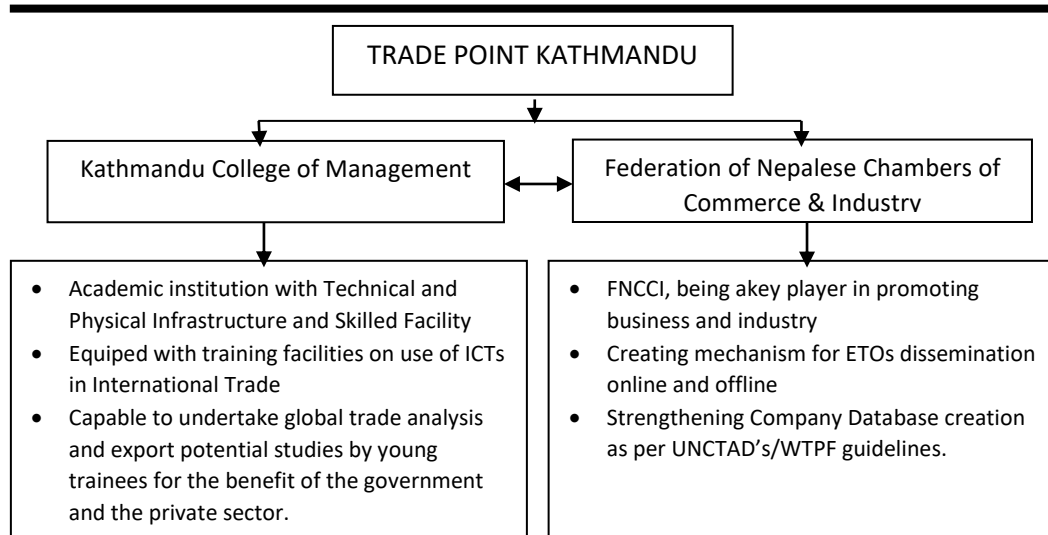


Figure 2: Trade Point Kathmandu

It is possible for KCM to play a significant role in the promotion of Nepalese exports. To raise public awareness about the potential of ICTs in international commerce, it might make use of its faculty and infrastructure. This might be an excellent way to enhance their offerings. For the sake of government policy development, entrepreneurs trained at KCM may also conduct global trade analysis and research on a variety of commodities with potential for exports. Additionally, these studies will aid young entrepreneurs in their efforts to serve the nation. Although FNCCI is currently promoting business and industry in the country, it may further enhance its services by giving trade leads through its regular publication in addition to offering the same information online. Statistical data, yearly reports, and a member directory are all currently available on the organization's website. Trade Point Kathmandu can provide value to these databases by adhering to UNCTAD/WTPF rules as one of the hosting organisations. As Trade Point Kathmandu partners, KCM and FNCCI can enhance each other's services even more.

The regions of interest are shown below.

- A wide variety of herbal and plant-based goods, including essential oils, traditional medicines, herbal tea blends, and other natural health care items, all use herbal extracts and/or oils as active components.
- Silk industry in the Kathmandu Valley and Dhading has enormous potential for sale to third nations.
- Kathmandu Valley's climate is ideal for cultivating oyster mushrooms and paddy-straw mushrooms all year round.

5.8 Indian Joint Ventures and Project Costs in Nepal

(Table: 9 Indian Joint Ventures and Project Costs in Nepal)

Status of Joint Ventures	Total No. of JVs	Total Project Cost NRs. Million	No. of Indian JVs	Project Cost of Indian JVs NRs. Million	India's Share in Total JVs (p.c.)	India's Share in Total Project Cost (p.c.)
Operating	401	47,062.28	118	16,644.97	29.43	35.37
Under Construction	327	20,430.41	49	8,015.31	14.98	39.23
Licensed	122	13,040.53	39	4,210.86	31.97	32.29
Approved	704	34,849.70	184	17,270.09	26.14	49.56
Total	1554	1,15,382.92	390	46,141.23	25.10	39.99

(Source: Compiled from information supplied by Federation of Nepalese Chambers of Commerce and Industry (FNCCI), Kathmandu)

There are 390 Indian joint ventures (JVs) in Kathmandu out of which 118 JVs are currently in operation, 49 are under construction, 39 are licensed and 184 have obtained approval from the Government of Nepal (Table 8). In totality, India's share in total numbers of JV and total project costs are 25.1 percent and 39.99 percent respectively.

5.9 Joint Ventures between India and Nepal by Industry

(Table: 10 Joint ventures between India and Nepal (Kathmandu) by Industry)

Sector	Agro Based	Construction	Energy Based	Manufacturing	Mineral	Service	Tourism	Total
No. of JVs	5	17	6	237	4	82	39	390
p.c.	1.28	4.36	1.54	60.77	1.03	21.03	10.00	100

(Source: Compiled from information supplied by Federation of Nepalese Chambers of Commerce and Industry (FNCCI), Kathmandu)

By types of industry, 60.77 percent Indian JVs are related manufacturing industry and 21.03 percent JVs are related to service industry. Of 390 Indian JVs, 4 JVs are related to mineral sector (Table 10). Available data shows that manufacturing and service industries are the most lucrative businesses for Indian JVs.

(Table: 11 Indian Joint Ventures in Nepal (Capital Basis)

Name of Establishment	Authorised Capital NRs. Million	Main Product	Scale	Indian Share (p.c.)	Indian Investor	Type of collaboration
Tara Gaon Regency Hotel Ltd	1510.0	Hotel service	Large	36	Mr. R. Saraff	Financial, Managerial
Spice Pvt, Ltd	457.0	Mobile Communication	Large	60	Midi Corp Ltd., Spice Cell Ltd	Financial
Hotel Yak and Yeti Ltd	454.6	Hotel service	Large	99	Mr. R. Saraff	Financial, Managerial

(Source: Compiled from information supplied by Federation of Nepalese Chambers of Commerce and Industry (FNCCI), Kathmandu)

Among Indian JVs in service sector, Tara Gaon Regency Hotel Ltd and Hotel Yak and Yeti Ltd are the five-star hotels in Kathmandu. These hotels are famous for hospitality business in Nepal which are not only providing 'A' class facility to the tourists and the corporate visitirs in the city but also helping enhance business relations between Nepali and Indian investors.

6. Conclusion and Suggestion

6.1 Conclusion

Increasing trade between India and Nepal has always been at the heart of these expanding ties. As has been shown in the parts that have come before it. Now more than ever, trade cooperation between nations is critical to build a viable and profitable plan for the growth of both countries. Although the Nepal-India relationship is unique, it is not merely a state-to-state connection that is important. These are ties that go all the way down to the local level. Furthermore, the two nations and their peoples have had a long history of social, religious, and cultural links. Nepal-India ties, on the other hand, have always been paradoxical. Changes in the political and social landscapes of India's immediate surroundings must influence the country's foreign policy.

For more than five decades, high-level visits between Nepal and India have been an important part of their relationship. These observations have led to some insightful conclusions. Because of

the size and growth of both nations' economies over the next decade, the two countries' bilateral trade looks promising. India had a positive trade balance with Nepal except for the year 2002-03. Compound annual growth rates for Indian exports to Nepal and Indian exports to the rest of the world were determined to be 16 % and 20 %, respectively, for the period studied. As a result of this, India-Nepal commerce rose at a rate of 16 percent, while India's worldwide trade grew by a rate of 20 percent. Currently, trade between India and Nepal is booming. In 2003-04, India had a 44.66 percent share of Nepal's export markets. Both countries' trade policies, as well as their borders, have an important impact on the development of trade ties. Only 0.24 % of India's overall commerce is expected to come from Nepal for future, according to this report. While Nepal's current contribution of India's overall trade is 0.44 %. It shows that India's trade with Nepal has limited potential for future. Trade with Nepal may be helped in the future by the recent opening of Prime Minister Narendra Modi's door to Nepalese business. Trade between India and Nepal might reach new heights if the above-mentioned issues can be resolved, however India-Nepal trade increased in an imbalanced manner. This needs to be balanced out.

6.2 Policy implications and suggestions

- To enhance the composition of trade between India and Nepal, a Research and Policy Group has been set up.
- Expansion of Joint Ventures.
- Trade Point investments made by various business sectors.
- Increased cooperation between business and industry organisations.
- Establishment of a Joint Task Force on Administrative Procedures Simplification.

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An Analysis of Effectiveness of One-School One-Nurse Program: A Case of Bharatpur Metropolitan City

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Abstract

School nurses are the front-line health care workers in public schools. The integration of students' health care needs as a part of educational program has become increasingly important for good health of children that rely on school nurses to deliver and coordinate health care needs of children and their families. The key objective of the study is to assess the effectiveness of services provided by school nurses to the secondary level students & teachers in Bharatpur Metropolitan City. A descriptive and cross-sectional research design was used for this study. Total of 105 respondents (Students-91& Teachers-14) were selected by using proportionate stratified sampling technique. The data were collected using structured self-administered questionnaire and 5-point Likert scale and was entered in Epidata and analyzed in SPSS by using descriptive and inferential statistics. The finding of the study is that the services provided by school nurses are effective.

(Keywords: School Nurse, Effectiveness, Students, Teachers)

1. Introduction

School nursing is a specialized practice of nursing that protects and promotes student health, facilitates optimal development, and advances academic success. School nurses are the leaders who bridge health care and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potential⁷

The practice of school nursing began in the United States to reduce absenteeism regarding healthcare needs related to communicable diseases & to implement evidence-based nursing care across the city. Now, school nurse's role has expanded greatly from its original focus, but the essence & goals of practice remains the same⁸. Students who are medically fragile or who deal

⁷ Strategic Plan and About the National Association of School Nurses [Internet]. [cited 2020 Jun 14]. Available from: <https://www.nasn.org/nasn/about-nasn/about>

⁸ School-nursing-history.pdf [Internet]. [cited 2020 Jun 14]. Available from: <https://www.sdcoe.net/student-services/student-support/Documents/Nursing/school-nursing-history.pdf>

with chronic health issues coming to school in increasing numbers, require complicated treatments commonly provided by the school nurse (Linebery & Ickes, 2014).

Worldwide school health services exist in 102 countries (Levinson et al., 2019). In Nepal, Bagamati province has launched “one school, one nurse” program in 13 districts in 2075 B.S (2018/ 19 AD). 19 nurses were appointed with the objective of providing emergency medical services to students and counsel female students on reproductive health and sex education & issues a vacancy notice for nurse in 2076/ 5/ 3, 101 school nurses will be recruited in each of the schools & Madhesh Province (earlier it was province 2) also announces vacancy notice for 80 nurses. Private schools must run the programme by appointing the nurse themselves⁹.

In United States, 60.8 % of the school nurse work as full-time worker, 14.5 % Part-time and 24.7 % doesn't consist of school nurse (Willgerodt et al., 2018). Appropriate school nurse staffing is directly related to better student attendance and academic success (AAP, 2008). Majority of the teachers agreed that preventive aspects are important to save the time and expenses related to infrastructure in health management & promotive aspects helps to bring positive changes on health. Similarly, School health services should be provided to promote student's health, control the epidemics and communicable diseases (Paudel, 2018).

In accordance with role of school health nurse, 90% of school principals agreed with five roles i.e provide first aid, evaluate hygiene, follow-up chronically ill students, provide health education and promote good health habits. And 80 % of them also agreed on role as participating in school educational staff meetings. Most of the principals disagreed or strongly disagreed on role as evaluating students with low academic performance (66 %), advising/training school educational staff for the management of students with low academic performance (59.1 %), and evaluating students with behavioural problems (46.5 %) (Al-Dahnaim et al., 2013).

Similarly, when investigating the effectiveness of school health services delivered by health care providers, vaccinations was identified as the most common type of intervention in schools (Levinson et al., 2019). Likewise, there was reduction in the chronic absenteeism from student's absent rate 35% to 40% and reached to 5% after School Nurse Program started (Kathleen et al, 2016).

Increasing numbers of students enter schools with chronic health conditions that required management during the school days. So, school nurse plays a crucial role in the provision of comprehensive health service to children & serve as a team member in providing preventive and screening services, planning/ coordinating health intervention for acute and chronic illness, injuries, emergencies & referrals to foster health and health educational success. School nurse is

⁹ Province 3 launches One School, One Nurse project [Internet]. 2020 [cited 2020 Jun 14].

Available from: <https://kathmandupost.com/miscellaneous/2018/12/19/province-3-launches-one-school-one-nurse-project>

the health care representative on site & there is a recognized relationship between health and learning, as well as between SN availability and student well-being and educational success (AAP, 2018).

Majority of teachers perceived as need of school nurse but only 6% of school consists of Nurse (Ardahan & Erkin, 2018). From 2075 (, Government of Nepal has indicated that every school compulsory should have a school nurse. Every district should employ at least 1 nurse per 750 students. Schools with high percentages of students with special health needs would require more intensive ratios of nurse to students; for example, 1 nurse per 225 students when students require daily professional nursing services or interventions, and 1 nurse per 125 when students have complex health needs.

With the presence of school nurse, principal gains nearly an hour per day and teachers an extra 20 minutes a day to focus on education instead of student health issues (Wang et al., 2014). SN positively influenced immunization rates, accuracy of student health records and management of school health concerns (Baisch et al., 2019). Furthermore, there is evidence that every dollar spent for school nursing, \$2.20 was saved in health care procedures and parent’s time away from work. They benefited in preventing excess medical costs and improved parent and teacher productivity (Wang et al., 2014).

Not availability of school nurses not only impacts chronically ill students, but also overall student performance as well as teachers’ roles has been challenging. Teachers are non-medical professional so they can’t handle emergency conditions & may arise life threatening consequences (EW, 2020).

Therefore, School health is one of the new emerging eras for nurses and they can play the crucial role in the physical, mental, social, and emotional health of children even though very limited research has been found regarding the school health nurse in the context of Nepal. So, Researcher was interested to assess the effectiveness of service provided at schools of Bharatpur Metropolitan city.

2. Methodology

A descriptive cross sectional study design was used to evaluate the effectiveness of service provided by school nurse among students & teachers. The schools with the facilities of school health nurse were chosen from Bharatpur municipality. Sample size was calculated using Cronbach’s formula, with a total of 105 (91 Students & 14 teachers) samples selected using proportionate stratified random sampling technique.

Shree Durga Seshkant Adhikari Secondary School, Bharatpur-16,	Narayani Model Secondary School, Bharatpur 10
Total no. of class 9 students = 140 Sample taken from Class 9 students = $140/1070 \times 105 = 14$	Total no. of Class 9 students = 380 Sample taken from Class 9 students = $380/1070 \times 105 = 37$
Total no. of Class 10 Students = 90	Total no. of Class 10 Students = 320

Sample taken from Class 10 students = $90/1070 \times 105 = 9$	Sample taken from Class 10 students = $320/1070 \times 105 = 31$
Total no. of teachers = 60 Sample taken from Teachers = $60/1070 \times 105 = 6$	Total no. of Teachers = 80 Sample taken from teachers = $80/1070 \times 105 = 8$

(Source: Field Survey)

Structured self-administered questionnaire was used after reviewing of related literatures. The questionnaire consisted of 2 parts, questions related to socio-demographic variable and questions related to effectiveness of service provided by school nurse, which was prepared by modifying freely available Rubric for evaluating North Carolina’s School Nurse & Professional School Nurse Performance Evaluation tools. Effectiveness was assessed by 3-point Likert scale as ineffective, unsure and effective. Validity of the research instrument was ensured by developing the tools on the basis of extensive literature review, consulting with the research advisor and subject experts and after pretesting in Narayani Model Higher Secondary School, Chitwan and excluding from the main study, necessary modification was done. Before the data collection, research approval was taken from the NPI-NSH college of nursing and formal permission was taken from concerned authorities of Government school. Each participant was allowed to have a voluntary choice for participation. Written informed consent was taken from all the respondent by explaining the objectives of the study before data collection. Anonymity was maintained by using code number instead of name & confidentiality was maintained by not disclosing the information with other and using the information only for study purpose. Respondents’ dignity was maintained by giving right to reject or discontinue from the research study at any time. Data was collected by distributing self-administered structured questionnaire by the researcher. Respondents wasn’t allowed to discuss the answers with each other to prevent data contamination. The collected data was checked, reviewed & organized for clarity, accuracy & completeness. Then, all the data was entered into the Epi Data 3.1 then exported to SPSS (Statistical Package for Social Science) version 20. All the data was analyzed and calculated e in terms of descriptive statistics and inferential statistics.

3. Results

Out of 91 students, majority of students (34.1%) were in age group 15 & least students (6.6 %) were in age group 13. More than half of the students (58.2 %) were Female & 41.8% were Male. Likewise, 56 % of the students were in grade ninth & 44 % were in grade tenth.

TABLE 1: Socio-demographic Characteristics of the Students (n=91)

Variables	Frequency	Percentage	Variables	Frequency	Percentage
Age			Gender		
13	6	6.6	Male	38	41.8
14	20	22	Female	53	58.2
15	31	34.1	Grade		

Variables	Frequency	Percentage	Variables	Frequency	Percentage
16	25	27.5	Ninth	51	56
17	9	9.9	Tenth	40	44
Mean age=15.12, Min=13, Max=17					

(Source: Field Survey)

Table No. 2: Socio-Demographic characteristics of Teachers (n=14)

Variables	Frequency	Percentage	Variables	Frequency	Percentage
Age			Educational Status		
21-25	1	7.143	Higher Secondary	2	14.286
26-30	3	21.428	Bachelor	4	28.571
31-35	2	14.286	Masters	8	57.143
36-40	1	7.143	Experiences		
41-45	2	14.286	less than 5	2	14.286
46-50	5	35.714	06-Oct	3	21.429
Mean age=37.29, Min=25, Max=47			Nov-15	3	21.429
Gender			16-20	1	7.143
Male	7	50	21-25	4	28.571
Female	7	50	26-30	1	7.143

(Source: Field Survey)

Out of 14 teachers, majority of teachers (35.7%) were in the age group 46-50 & very few (7.14%) were in age group 21-25 & 36-40. Regarding the gender (50%) teachers were male. Regarding the educational status, majority (57.1%) of the teachers were masters. Likewise, 28.57% had an experience of 21-25 years in teaching (Table 2).

Table 3: Effectiveness of service provided by school nurse on Collaboration among students

S. N	Variables	Effective	Unsure	Ineffective
1	Collaborate with the teachers and parents for student's improvement in health.	89(97.8%)	2(2.2%)	0
2	Collaborate with health organizations to conduct different health related programs	71(78.02%)	17(18.68%)	3(3.29%)
3	Collaborate with the principal for planning policies.	81(89%)	10(11%)	0
4	Collaborate with school administration for facilities, equipment, & supplies needed to carry out school health programs.	89(97.8%)	2(2.19%)	0

(Source: Field Survey)

Majority of students (97.8%) responded that school nurse collaborates with the teachers and parents for student’s improvement in health was effective. Similarly, 78.02% students responded that collaborate with health organizations to conduct different health related programs was effective whereas 3.29% responded it was ineffective. Most (97.8%) of the students agreed that collaborate with school administration for facilities, equipment, & supplies needed to carry out school health programs was effective (Table 3).

Table 4: Effectiveness of service provided by school nurse on collaboration among teachers

S. N	Variables	Effective	Unsure	Ineffective
1	Collaborate with the teachers and parents for student's improvement in health.	14(100%)	0	0
2	Collaborate with health organizations to conduct different health related programs	9(64.29%)	1(7.14%)	4(28.57%)
3	Collaborate with the principal for planning policies.	12(85.72%)	2(14.29%)	0
4	Collaborate with school administration for facilities, equipment, & supplies needed to carry out school health programs.	14(100%)	0	0

(Source: Field Survey)

All the teachers agreed that collaborate with the teachers and parents for student’s improvement in health was effective. Similarly, 64.29% teachers responded that collaborate with health organizations to conduct different health related programs was effective whereas 28.57% responded it was ineffective. Likewise, all teachers agreed that collaborate with school administration for facilities, equipment, & supplies needed to carry out school health programs was effective (Table 4).

Table 5: Effectiveness of service provided by school nurse on Leadership among students (n=91)

S. N	Variables	Effective	Unsure	Ineffective
1	Advising / training school staff for management of students with low academic performance.	68(74.73%)	19(20.88%)	4(4.39%)
2	Acts as a resource for coordinated school health programs.	88(96.7%)	0	3(3.29%)
3	Use data to determine needed changes to school nursing program.	63(69.23%)	16(17.65%)	12(13.19%)
4	Implement needed health program practice.	86(94.5%)	1(1.11%)	4(4.39%)
5	Identification and referral system for students at risk.	91(100%)	0	0

All students agreed identification and referral system for students at risk was effective. Most (96.7%) of the students agreed that school nurse acts as a resource for coordinated school health program. Similarly, 74.73% students agreed that nurses Advised/trained school staff for

management of students with low academic performance was effective. Likewise, 69.23% student responded nurse uses data to determine needed changes to school nursing program (Table 5).

Table 6: Effectiveness of service provided by school nurse on leadership among teachers (n=14)

S. N	Variables	Effective	Unsure	Ineffective
1	Advising / training school staff for management of students with low academic performance.	12(85.72%)	0	2(14.29%)
2	Acts as a resource for coordinated school health programs.	14(100%)	0	0
3	Use data to determine needed changes to school nursing program.	10(71.43%)	2(14.29%)	2(14.29%)
4	Implement needed health program practice.	13(92.86%)	0	1(7.15%)
5	Identification and referral system for students at risk.	14(100%)	0	0

Majority of the teachers (85.72%) agreed that nurses advised / trained school staff for management of students with low academic performance was effective. Likewise, all the teachers agreed that school nurse acts as a resource for coordinated school health programs & helps in identification and referral system for students at risk was effective. Meanwhile, 71.43% teachers responded Nurses uses data to determine needed changes to school nursing program. Majority of Teachers (92.86 %) agreed school nurse implement needed health program practice (Table 6).

Table 7: Effectiveness of service provided by school nurse on Communication among students

S. N	Variables	Effective	Unsure	Ineffective
1	Maintain good interpersonal relationship.	90(98.9%)	1(1.09%)	0
2	Acts as a liaison between the school personnel, students and parents.	90(98.9%)	1(1.09%)	0
3	Communicate with parents and make treatment plans or make referrals to physicians in case of emergency situations.	87(95.6%)	3(3.29%)	1(1.09%)
4	Provide counseling for students to manage mental health, chronic illness and other health related issues.	91(100%)	0	0
5	Conveys information clearly & concisely to students, families & school personnel	90(98.9%)	0	1(1.09%)

S. N	Variables	Effective	Unsure	Ineffective
6	Maintain effective health records.	77(84.6%)	10(10.9%)	4(4.39%)
7	Coordinate with teachers and administration in encouraging students for consistent and correct use of masks, social distancing and hand hygiene.	91(100%)	0	0
8	Coordinate with school administrators for separate counseling room, Safe Drinking water, Soap for hand washing.	89(97.8%)	1(1.09%)	1(1.09%)

Most of the students (98.9%) responded that school nurse maintains good interpersonal relationship & acts as a liaison between the school personnel, students and parents. Similarly, 100% of students agreed that nurse provides effective counseling for students to manage mental health, chronic illness, other health related issues as well as coordinate with teachers and administration in encouraging students for consistent and correct use of masks, social distancing and hand hygiene. Likewise, 84.6% students agreed that nurse maintains effective health records (Table 7).

Table 8: Effectiveness of service provided by school nurse on Communication among teachers.

S. N	Variables	Effective	Unsure	Ineffective
1	Maintain good interpersonal relationship.	14(100%)	0	0
2	Acts as a liaison between the school personnel, students and parents.	14(100%)	0	0
3	Communicate with parents and make treatment plans or make referrals to physicians in case of emergency situations.	14(100%)	0	0
4	Provide counseling for students to manage mental health, chronic illness and other health related issues.	13(92.85%)	0	1(7.14%)
5	Conveys information clearly & concisely to students, families & school personnel.	14(100%)	0	0
6	Maintain effective health records.	12(85.7%)	0	2(14.3%)
7	Coordinate with teachers and administration in encouraging students for consistent and correct use of masks, social distancing and hand hygiene.	14(100%)	0	0
8	Coordinate with school administrators for separate counseling room, Safe Drinking water, Soap for hand washing.	14(100%)	0	0

All the teachers responded that school nurse maintains good interpersonal relationship & acts as a liaison between the school personnel, students & parents. Most of the teachers 92.85 % agreed that nurse provides effective counseling for students to manage mental health, chronic illness and other health related issues. Similarly, 85.7% teachers responded that nurse maintains effective health records. Likewise, all the teachers agreed that nurse coordinates effectively with teachers and administration in encouraging students for consistent and correct use of masks, social distancing and hand hygiene (Table 8).

Table 9: Effectiveness of Health Services provided by school nurse among Students(n=91)

S. N	Variables	Effective	Unsure	Ineffective
1	Provides first aid in emergency situations.	91(100%)	0	0
2	Provides treatment in acute conditions of illness.	86(94.5%)	4(4.4%)	1(1.1%)
3	Provide nursing and/or medically prescribed interventions.	76(83.5%)	11(12.09%)	4(4.39%)
4	Help and motivate physically disable students to live quality of life.	72(79.12%)	8(8.79%)	11(12.09%)
5	Periodically carries out the screening of the students (eye, ear, dental and others)	83(91.2%)	4(4.4%)	4(4.4%)
6	Carry out school-oriented vaccination program.	86(94.5%)	1(1.1%)	4(4.4%)
7	Showing concern by asking level of menstrual pain/cramps & providing medicine and enough rest.	89(97.8%)	2(2.19%)	0
8	Helps to reduce Chronic Absenteeism rate.	88(96.7%)	3(3.29%)	0
9	Implement personal work plans of students suffering from chronic illness with the participation of guardians, staff and teachers.	72(79.12%)	16(17.6%)	3(3.29%)
10	Conduct programs related to health issues and drama etc. to develop positive thinking among the students.	62(68.13%)	11(12.09%)	18(19.8%)

All the students agreed school nurse provides first aid in emergency situations. Majority of students 94.5% responded that carry out school-oriented vaccination program by Nurses was effective. Most (91.2%) of the students responded that nurse periodically carries out the screening of the students (eye, ear, dental and others). Likewise, 97.8% students agreed that showing concern by asking level of menstrual pain/cramps & providing medicine and enough rest by school nurse was effective. Meanwhile, 19.8 % of students responded that conduct programs by school nurse related to health issues and drama etc. to develop positive thinking among the students was ineffective (Table 9).

Table 10: Effectiveness of Health services provided by school nurse among teachers (n=14)

S. N	Variables	Effective	Unsure	Ineffective
1	Provides first aid in emergency situations.	14(100%)	0	0
2	Provides treatment in acute conditions of illness.	14(100%)	0	0
3	Provide nursing and/or medically prescribed interventions.	13(92.9%)	0	1(7.1%)
4	Help and motivate physically disable students to live quality of life.	11(78.6%)	2(14.3%)	1(7.1%)
5	Periodically carries out the screening of the students (eye, ear, dental and others)	11(78.6%)	2(14.3%)	1(7.1%)
6	Carry out school-oriented vaccination program.	13(92.9%)	0	1(7.1%)
7	Showing concern by asking level of menstrual pain/cramps & providing medicine and enough rest.	14(100%)	0	0
8	Helps to reduce Chronic Absenteeism rate.	12(85.8%)	2(14.3%)	0
9	Implement personal work plans of students suffering from chronic illness with the participation of guardians, staff and teachers.	11(78.6%)	2(14.3%)	1(7.1%)
10	Conduct programs related to health issues and drama etc. to develop positive thinking among the students.	9(64.3%)	1(7.1%)	4(28.5%)

All the teachers responded school nurse provides first aid in emergency situations was effective. Similarly, 100 % of teachers responded that showing concern by asking level of menstrual pain/cramps & providing medicine and enough rest by the school nurses was effective. Majority of teachers (85.8 %) agreed that school nurses help to reduce chronic absenteeism rate of students. Meanwhile, 28.5 % of teachers responded that conduct programs by school nurse related to health issues and drama etc. to develop positive thinking among the students was ineffective (Table 10).

Table 11: Effectiveness of service provided by school nurse on Health Education & Training among students (n=91)

S. N	Variables	Effective	Unsure	Ineffective
1	Organize educational workshops on issues related to health awareness, good habits, positive health attitudes and good behaviors.	66(72.6%)	15(16.5%)	10(11%)

S. N	Variables	Effective	Unsure	Ineffective
2	Provides teaching on sex education & harmful effects of smoking, alcohol to the student.	90(98.9%)	1(1.1%)	0
3	Teaches the student about the epidemic, pandemic & endemic diseases.	90(98.9%)	0	1(1.1%)
4	Provide awareness to students and school employees against violence	87(95.6%)	2(2.2%)	2(2.2%)
5	Train school staff for the management of students with behavioural problems and chronic illness.	60(66%)	22(24.2%)	9(9.9%)
6	Teaches girl students about the proper use of sanitary pads and menstrual hygiene.	91(100%)	0	0
7	Conduct programs related to good nutrition and personal hygiene.	91(100%)	0	0

Most of students (98.9 %) responded that school nurse provides teaching on sex education & harmful effects of smoking, alcohol to the students was effective. Similarly, all students agreed that nurse teaches girls students about proper use of sanitary pads and menstrual hygiene. 11 % of students responded that school nurses organize educational workshops on issues related to health awareness, good habits, positive health attitudes and good behaviors was ineffective (Table 11).

Table 12: Effectiveness of service provided by school nurse on Health Education & Training among teachers

S. N	Variables	Effective	Unsure	Ineffective
1	Organize educational workshops on issues related to health awareness, good habits, positive health attitudes and good behaviors.	8(57.1%)	2(14.3%)	4(28.6%)
2	Provides teaching on sex education & harmful effects of smoking, alcohol to the student.	14 (100%)	0	0
3	Teaches the student about the epidemic, pandemic & endemic diseases.	14(100%)	0	0
4	Provide awareness to students and school employees against violence	14(100%)	0	0
5	Train school staff for the management of students with behavioural problems and chronic illness.	12(85.7%)	0	2(14.3%)
6	Teaches girl students about the proper use of sanitary pads and menstrual hygiene.	14(100%)	0	0
7	Conduct programs related to good nutrition and personal hygiene.	14(100%)	0	0

All the teachers responded that school nurse provides teaching on sex education & harmful effects of smoking, alcohol to the students was effective. Similarly, all teachers agreed that nurse teaches girls students about proper use of sanitary pads and menstrual hygiene. 28.6% of teachers responded that school nurses organize educational workshops on issues related to health awareness, good habits, positive health attitudes and good behaviors was ineffective (Table 12).

Table 13: Level of effectiveness of service provided by school nurse among students and teachers

S. N		Frequency	Percentage
Students: n (91)			
1	Effective	91	1
2	Ineffective	0	0
Teachers: n (14)			
1	Effective	14	100%
2	Ineffective	0	0

The effectiveness of service provided by school nurse was 100 % effective among students and teachers at Government schools who had school nurse (Table 13).

4. Discussion

Government of Nepal has launched “one school, one nurse” programme in 2075 B.S to provide emergency medical services and to generate health awareness among students at the local levels. In this study, effectiveness in providing health education and trainings by school nurse among students was (30.63±1.96) & among teachers was (31±2.25). Similarly, mean of collaboration factor was found among students was (17.55±1.46) & teachers was (16.86±1.56) which is supported by Temel AB et al., which revealed that health education & training was (8.03±1.37) & collaboration factor was (8.39+/-1.44) (Temel et al., 2017). Likewise, (92.85 %) teachers & (100 %) students agreed that nurse provides effective counseling which is supported by Muggeo et al., where 50% students agreed with effective counseling (Muggeo et al., 2017). This shows that in both developed and underdeveloped areas school health nurse counselling is found to be effective towards the reduction of any sorts of mental health problems.

This study showed that all of the respondents, (100 %) teachers & (100 %) students were agreed on menstrual hygiene management was effective which was consistent with the study of Muggeo et al., revealed that 90.5% of students agreed on menstrual hygiene management was effective (Muggeo et al., 2017). This study also revealed that only (68.13%) students & (64.3%) teachers agreed on role i.e school nurse provide health education and promote good health habits which is low as compared to the findings of Al-Dahnaim L et al., found that 90% of respondents agreed with that role (Al-Dahnaim et al., 2013). Approximately more than half of the students (74.73%) & (85.72%) teachers in the study were agreed or strongly agreed on advising/training school

educational staff for the management of students with low academic performance which was inconsistent with Al-Dahnaim L et al., where regarding than more than half of the respondents (59.1%) disagreed or strongly disagreed on advising/training school educational staff for the management of students with low academic performance (59.1%) (Al-Dahnaim et al., 2013). The findings revealed that there is still the need for training school educational staffs regarding the management of students on low academic performance so that conducive learning environment will be developed for every level of students.

In this study, students agreed on services provided by school nurse such as first aid (100 %) and administration of medications (83.5%), health screenings (91.2 %) and evaluation of emotional or behavioral problems (66 %). Similarly, teachers also agreed on services provided by school nurse such as first aid (100 %) and administration of medications (92.9 %), health screenings (78.6 %) and evaluation of emotional or behavioral problems (85.7%). This finding is consistent with the study done by Allensworth et al., (1997) which showed that, school nurse provided various services such as first aid (98.7 %) and administration of medications (97.1%), health screenings (86.8 %) and evaluation of emotional or behavioral problems (80%) (Allensworth et al., 1997). This study showed that all of the students (91) & teachers (14) agreed that health care services in overall were effective.

5. Conclusion

As the finding of the study, all the respondents agreed that services provided by school nurse were effective. Based on the finding of the study, there is need for conducting programs related to health issues and drama etc. to develop positive thinking among the students as well as collaboration with health organizations to conduct different health related programs. Hence, school administration should focus to maximize the collaboration & develop positive thinking.

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Godawari Marble Case: Passion for Public Interest Litigation or Just Academic Romanticism

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Abstract

The central issue in contemporary PIL (Public Interest Litigation) is the nature of relationship between the petitioners, law, courts and the public. The general trend is that writ petitioners file a PIL at the Supreme Court for any matter relating to public interest and concern. However, the disappointing fact is that some petitions are neither filed with the motive of social engineering nor the judge makes perfect justice. In fact, both parties act for academic pursuit, intellectual avidity, publicity, and "Academic Romanticism." The objective of this paper is to check whether there are traces of Academic Romanticism in this case or not. In addition to that, it aims to overview the philosophical underpinning and the approach of interpretation of the case behind the verdict of the court. The authors conclude that the PIL is a blank cheque to the judges and lawyers, but the system lacks creative judges and lawyers to cash the cheque.

1. Case Brief

1.1 Background of the case

The petitioners claimed that the respondents' industrial activities had seriously caused the environment of Godawari forest and its surroundings. In addition, the dust, minerals, smoke, and sands emitted by the respondents' factory had excessively polluted the nearby water bodies, land and atmosphere of the said area, thus posed danger to the property, life and health of the people. Thus the petitioners filed the writ petition seeking mandamus in the name of the respondents, to enforce the right of the people to live in a healthy environment referring the responsibility entrusted by the Articles 9 (b), (c) and (d) of the Constitution and Article 2, Article 10, Article 11 (1) (2) and Article 15 of the Constitution, under Section 10 of the Court Proceedings of the Country Code, Section 5 of the Forest Conservation (special provision) Act 2024 and in accordance with principles propagated by the Supreme Court

1.2 Legal Issues

The issue before the Supreme Court in the Godavari Marble case were:

- Whether NGOs or individuals are not directly affected by the environmental issue at hand could bring a case because of their interest in the environmental issue?

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- What is the relationship between the right to life and right to clean environment?
 - Whether mandamus should be issued or not?

1.3 Ratio of the case

- Article 11(1) of the Constitution of Nepal 2019 has guaranteed the right to save life in accordance with law. Godawari Marble Factory has polluted the environment, and consequently threatened the life, health and property of the people living in the surrounding areas. It is the legitimate right of an individual to be free from polluted environment. As the protection of environment is directly related to the life of people, it should be accepted that the matter is included in Article 11(1) of the Constitution of the Kingdom of Nepal 2047 (1990).
- In fact, an environmental problem is a matter of public interest and concern. And as such, the petitioner, involved in the environmental subject which has been proved to be of public interest, has a strong relationship with the subject of the present dispute. The promulgation of the Constitution of the Kingdom of Nepal 2047 (1990) repealed the then Constitution, and Article 88 (2) of the newly promulgated Constitution has protected the public interest. There was situation where the question whether the applicant has locus standi could be raised under the previous Constitution. However, as the present Constitution has established public interest as a protectable fundamental right, there is no question of locus standi.
- Since clean and healthy environment is an indispensable part of a human life, right to clean, healthy environment is undoubtedly, embedded within the Right to Life.
- It is clear that the constitutional perimeter in which the applicant had filed the writ petition, has been substantively changed from the commencement of Article 26 (4) of the Constitution of the Kingdom of Nepal 1990, because this Article has taken environmental conservation as one of the basic Directive Principles of the State. Thus, as the environmental conservation is one of the objectives of the applicant 'LEADERS Inc.', it needs to be accepted that the applicant has the locus standi for the prevention of the environmental degradation.
- It's no doubt, nothing can be properly managed without any law and for the systematic provision of the environment related crimes and subsequent punishment, and an appropriate law is indispensable. Without law it is not possible to issue an order for punishment and closure of the industry.
- As the present laws are currently in scattered forms and also inadequate and ineffective, an appropriate, separate law encompassing all aspects of the environment is deemed necessary to be formulated and promulgated as soon as possible.
- Though the Minerals Act 2043 B.S. and Clause 11 (a), added by the amendment of 2052/2/5 B.S. are important landmarks in safeguarding the environment, the

government has not yet promulgated the Act but the Act was amended on 2052-2-5. If the executive does not implement whatever the legislation has enacted by the legislature, it cannot be said that the executive has been performing its works in accordance with spirit of the legislature.

- The writ of mandamus is issued for the fulfilment of the legal responsibility. The petitioner has not been able to clearly point out a specific section of the law that has not been obeyed or followed, where someone claims that legal duty has not been fulfilled, such person needs to specifically indicate that such and such agency or official did not fulfill such and such legal duty. For the purpose of mandamus, legal duty must be definite and fixed. Therefore, mandamus cannot be issued on the basis of general claim that public interest has not been fulfilled in the absence of clear statement of respondents' legal duty.
- Taking into account the sensitive, humanitarian issue of national and international importance such as the protection of the environment of Godavari area, we found that effective and satisfactory corrective activity has not taken place. Therefore, it is appropriate to issue this directive in the name of respondents to enforce the Minerals Act 2042 (1985), enact necessary legislation for protection of air, water, sound and environment and to take action for protection of the environment of Godawari area.

1.4 Pleading of the legal practitioners

Petitioners' submission

- The dust and sand produced during the explosions which is being undertaken in the mining process has polluted the atmosphere and water of the area and caused deforestation. Due to the continuing environmental degradation and pollution created by the said industry, Right to Life of the people has been violated.
- The Supreme Court of India, while delivering its judgment in various environmental cases, has interpreted the constitutional provision that no person shall be deprived of his life except in accordance with law, liberally and established various precedents that where polluted environment is likely to damage life of individuals, any person can file writ petition.
- During mining of the marble, 1400 hectares land has been contaminated with soil, sand and lime thus reducing the productivity of said land. Because of the marble and bolder, the water source of the Phulchowki hill has declined a lot and the source of drinking water and irrigation has been drying up.

Defendant submission

- The writ of Mandamus is issued if HMG has not undertaken any of its responsibilities but the HMG, in the context of Godawari Marble Industry, has issued various directives to safeguard the environment of Godawari area and those directives have been

implemented.

- In case there has been environmental pollution due to the Godawari Marble Industry, the measures to safeguard environment should be implemented rather than closing the industry. If the latter be proceeded, the country will be industry-less in the future.
- The petitioner is an organization registered under the Companies Act. As only the affected party can file a writ petition, the aforesaid organization bears no locus standi at all. The petitioner has not been able to show the right that has been violated as alleged in the petition.

Holdings

The court did not issue the mandamus but gave the directive order to enforce the Minerals Act, 2042 enact necessary legislation for protection of air, water, sound and environment and to take action for protection of the environment of Godavari area.

2. Commentary and Analysis

2.1 Locus Standi utilized for academic romanticism

General rule is that right to move to the court is right whose fundamental right is violated. Supreme Court of Nepal has accepted the jurisdiction of PIL in Environment rights. In the "Ambassador Appointment Case", which is the 1st PIL of Nepal, the court laid down the following principles on the question of locus standi:

- There should be substantial interest ("Good faith and genuineness of petitioner") and meaningful relation.
- PIL cannot be used while the concerned groups remain reluctant.

In this PIL, there is no inclusion of any person who is affected by Godavari Marble Case, and mandate of the Godavari area has not been taken into consideration while filing this PIL. It is empirically realized fact that environment and the development both are for the people, and people participation is the most. In democratic society, any action which do not have democratic roots is characterized by anarchism. In this case, as per the defence submission filed by chairman of Godavari Village Panchayat, local people have not faced any inconvenience and insecurity because of the factory and Village Panchayat decided to allow industry to continue its operation. It proves that concerned group reluctant. Similarly, the good faith and genuineness of petitioner would be justified had they seek the operation of the Godawari Marble industry in the environment friendly manner and installation of mechanism to control pollution. This reflects the writ was simply filed for academic romanticism.

2.2 Petitioner intent is not for public interest.

A PIL petitioner is one who draws its attention to a grievance requiring remedial measures and having no personal stake in the matter. It expects her/ him to be conscious of her/ his obligation

to the cause being espoused and conduct herself/ himself accordingly. The petitioner should give utmost priority interest of justice irrespective of the interest of petitioners. But this writ petition has also been filed for academic romanticism and populism too. This is proved by the petitioner's lack of homework in this case. The petition has been filed seeking mandamus, but as per the general principle of writ, mandamus is only issued to impose legal duty and such duty must be clearly specified by law. However, the writ petitioner has failed to state clear legal provisions of law to oblige respondent. Additionally, the petitioner did not clearly mention precisely what sorts of standard should it follow. The petitioner simply has based the writ on report of some NGOs. The report of such NGOs was not verified by state apparatus. The credibility of petitioners would be high had the petitioner bought the report prepared by state mechanism. So, it is just a petition intended act for seeking academic benefits which paved the way for its closure. Although the court ordered for "enact necessary legislation for protection of air, water, sound and environment and to take action for protection of the environment of Godawari area", the petitioner again bought the writ in 2053 and "full bench ordered to close it permanently" in 2072. The intent of petitioners is only the academic satisfaction. In this regard, the psychological egoism states that "All human being act solely out of own self-interest." PIL demands the valuable role a socially conscious litigant who would play in taking risk as well as spending time and effort in filing genuine PILs. Justice Bhagwati made a comment to public spirited lawyer like M C Mehta in valiantly in Gujarati tone: *Bapdo Mehta mahenatkarinemari jay chhe* (poor Mehta really makes tireless effort). Therefore, the court should check the vested interest of the petitioners on the basis of required homework, argument basis and closest connection to the writ. Infact, relaxing the locus standi requirement has permitted privately motivated interests to pose as public interests. In *Ambassador Appointment Case*", the court turned to petitioner and uttered; "PIL is not for the intellectual avidity, fulfilling any unwanted aim and personal popularity." In public interest litigation court need to be careful to that whether petitioner has bona-fide interest or not? In *S. P. Gupta and others v. President of India*, case Justice P. N. Bagwati gave guideline about abuse of public interest litigation. He mentioned that '*But we must be careful to see that the member of public, who approaches the court in case of this kind, is acting bona-fide and not for personal gain, or private profit or political motivation or other oblique consideration the court must not allow its process, to be abused by politician and other.*' (S.P Gupta v. President of India, 1982)

Additionally, In Indian case *Janta Dal v. H. S. Chaudhari* case, petition was dismissed when the political interest was shown in the name of public interest litigation. There is a chance of public interest litigation as a political interest litigation or vested interest litigation or academic litigation Since the petitioner's intent was not for the broad public interest, so court also did not holistically interpret the case taking reference for potential technology. The situation can be rightly referred by saying of St. Thomas Aquinas: " If the hand does not move the stick, the stick will not move anything else." Metaphorically, the petitioner is the hand and the court is stick.

2.3 Effect of misdirection of petitioner to courts.

Although judiciary has been able to decide number of cases in favor of environmental justice, it has not been able to develop authoritative jurisprudence. The court ability to devise pragmatic solutions to the problem is challenged. The only reason is the petitioner's misdirection to the court focusing on their own vested interest. Indeed, court should not go on such misdirection followed by petitioners leading to the new problem and being in the vicious circle of the problem. In the "MC Mehta case v. Union of India" (Taj Trapezium case), in regards to the effect of pollution to the Taj Mahal, petitioner demanded close of factories nearby. In contrast, the court did not implicate on dry formalism sought by petitioner, but made an environmental pragmatic solution to problem by ordering to factories to install pollution control devices in area nearby Tajmahal. Mc. Mehata, a very hardcore environmental academican has been successfully neutralized by court.

As early as 1895 Justice Holmes had asserted that 'an ideal system of law should draw its postulates and its legal justification from sciences. Implicitly, focusing on "Jurimetrics" what he meant was that the techniques of physical sciences could solve the case considering the environment as well as development. Justice Bhagwati has pointed Role of Judge in above very beautifully crafted sentences: *"A judge must be a judicial statesman. Law does not operate in vacuum. It is intended to have a social purpose and an economic mission and a truly great judge must always, while interpreting the law, keep constantly in mind the hopes and aspirations of the people and the needs and requirements of society."* (Bhandari, 1999)

Some of very instrumental decisions in which judiciary took the aspiration of people as well as applied science irrespective of being influenced by petitioner are "Bhrikuti Paper Mills Case" where court order to install the dust collector in the "Bhrikuti Paper Mills" and "Effluent Purifier in Everest Paper Mills Case". However, court in the Godawari marble case does not specify the type of technology the Godavari marble should apply. The court could call for appointment of scientists for knowing about the potential technology to mitigate any its negative impacts to the environment. Glancing the international practice, rather than blasting in the marble mine area, the WIRE SAW TECHNOLOGY can be used for marble cutting, for prevention of "SILATION POND", ask the industry for "FUTURE PLAN APPRAISAL" to make it more environment friendly and order to use the "DURSING PLANT CYCLONE COLLECTOR" to prevent pollution. The court failed to devise the particular specific technology to use in mitigation of adverse environmental impacts caused by Godavari Marble Industry.

2.4 Accepted the academic colonialism of western world

The concept that right to clean environment is integral part of right to live genesis can be traced to eastern philosophy. However, neither petitioner nor the court whilst interpreting the constitution used the eastern philosophy. Often, this sort of petitioner and court attitude has

caused a misconception that environment conservation is the brain of western world. Court and petitioner must internalize that this sort of attitude will lead to extinguishment of our own literature. In Hindu Dharma, it has been expressly written in the Yajurveda that "the sacredness of God's creation means no damage may be inflicted on other species without adequate justification." Furthermore, Atharvaveda views that earth is not for human beings alone, but for other creatures as well. The Buddhist emperor Ashoka (273-236 BCE), promoted through public proclamations the planting and preservation of flora and fauna. In *Padmapurana*, *Bhoomikhananda*, it is mentioned that a person, who is engaged in killing creatures, polluting wells, and ponds and tanks, and destroying gardens, certainly goes to hell. Moreover, Hindu Dharma teach us that environment is an inseparable part of our existence, and they constitute our very bodies. The *Upanishads* explains the interdependence of space, air, fire, water and earth in relation to *Brahman*, the supreme reality. Pragmatically, it can be asserted that any disturbance in environment will be counter-productive for the survival of human being itself as the "Human Nose is Related to Earth, Tongue to Water, Eyes to Fire, Skin to Air and Ears to Space." (Tanwar, 2010) The entire basic of environment conservation in Hindu dharma rest on *Vedic* mantra: "पृथ्वीःशान्तिः, वनस्पतयःशान्तिः." The court failed to do such eastern ontological inquiry tracing the basic foundationalism for the vitality of conserving the environment mentioned in the eastern philosophy.

2.5 Anthropocentric Pragmatism

Pragmatism focus on the consequentialism. The consequentialism has to be understood in line with the public utility. Development is for public utility and environment is also directly linked with it. Pragmatically, the development cannot be done by the massive destruction of the environment because it is counter-productive to people. Therefore, the development should be in sustainable way causing the minimum harm to the environment. In this context, the Supreme Court of Nepal, stated that the environment protection and development should go together. Court held that, the development activities can be done by minimum hinderence to the environment. Environment is necessary for the human beings to uplift the life standards and the environment is directly linked with the right to live in pollution free environment. From the pragmatism perspective, the end of both environment protection and development is for the betterment of people, therefore, both are to be considered. Actually, the case focused on the anthropocentric approach on the environment conservation irrespective of ecocentric approach on environment. It implies that environment is simply protected for the survival of mankind irrespective of concern to other biological diversity. Focusing on the Anthropocentric attitude, William Baxter words is worth to quote: "*I reject the proposition that we ought to respect the "balance of nature" or to "preserve the environment unless the reason for doing so, express or implied, is the benefit of man. I reject the idea that there is "right" or "morally correct" state of nature to which we should return. The word nature has no normative connotation*" (William, 1974)

In debate between the environment and development, court implicitly upheld that "environment is for people, not people for environment" and "development is for people, not people for development. The case denounced the formalistic approach on environment conservation. Formalistic approaches of environment conservation are called as 'In situ conditions', whereas the environment should absolutely be protected.

3. Conclusion

The Godawari Marble PIL, which is assumed as lifesaving system in environmental jurisprudence, is just utilized for academic satisfaction both by petitioners and judges. In this PIL, court largely failed to offer any plan, scheme, and program engaging in creative interpretation. This proves that the beauty of this PIL is limited in the law report and academic writings of Nepal. It has not generated hope in public at large as it has not given a science for preservation of biodiversity of Godawari area nor legislate itself the model environment law as interim relief. It is very depressing that till now legal fraternity is appreciating this decision without any observation from legal philosophical dimension. At the end, PIL as a weapon should not be used to suppress people development endeavor.

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बागमती प्रदेशको कानून कार्यान्वयनको अवस्था र नयाँ कानूनको

आवश्यकता: एक संक्षिप्त अवलोकन

खिमलाल देवकोटा

वरिष्ठ अधिवक्ता

प्रल्हाद लामिछाने

सदस्य प्रदेश नीति तथा योजना आयोग, बागमती प्रदेश

(Paper Type: General Article)

१. भूमिका

बागमती प्रदेशको क्षेत्रफल जम्मा २०,३०० वर्ग किलोमिटर छ। पूर्वमा प्रदेश नं. १ पश्चिममा गण्डकी प्रदेश, उत्तरमा चीन र दक्षिणमा मधेश प्रदेश र भारतसँग सीमा जोडिएको छ। समुद्री सतहदेखि १४१ मिटरमा रहेको चितवनको गोलाघाटदेखि रसुवाको ७,२२९ मिटरको उचाइमा रहेको लाङटाङ हिमालसम्म फैलिएकोछ। यस प्रदेशमा १३ जिल्ला, ३ महानगरपालिका, १ उपमहानगरपालिका, ४१ नगरपालिका र ७४ गाउँपालिका गरी ११९ स्थानीय तह छन्। यसप्रकारको वस्तुस्थिति र अवस्थितिमा रहेको बागमती प्रदेशले नेपालको संविधान जारी भइ संविधानबमोजिम प्रदेश सभाको निर्वाचनमार्फत प्रदेश सभा गठन भएदेखि नै कानून निर्मात्री संस्थाका रूपमा आफना आवश्यकताका विभिन्न कानूनहरूको निर्माण र कार्यान्वयन गर्दै आएको छ। यसै सन्दर्भमा बागमती प्रदेश सरकारको ऐन र कानून कार्यान्वयनको अवस्था तथा निर्माण गर्नुपर्ने कानूनबारे अध्ययनका विषयमा केन्द्रित रही २०७८ मा प्रदेश मामिला समितिद्वारा गठित उपसमितिको लागि एक अध्ययन गरिएको थियो। प्रस्तुत लेख उक्त अध्ययन प्रतिवेदनमा आधारित छ।

२. विषय प्रवेश:

२.१ नेपालको राज्य संरचना र राज्य शक्तिको बाँडफाँट

२००७ देखि थाँती रहेको संविधानसभाको राजनैतिक आन्दोलन, निरन्तरको सङ्घर्ष, त्याग र बलिदानका बलमा मुख्यतः जनयुद्ध र जनआन्दोलनको संयुक्त बलमा २०६४ मा प्राप्त भई जननिर्वाचित संस्था संविधानसभाका माध्यमबाट २०७२ सालमा नेपालको संविधान जारी भयो। यो संविधानले सङ्घीय लोकतान्त्रिक गणतन्त्रात्मक शासन व्यवस्थाको माध्यमद्वारा दिगो शान्ति, सुशासन, विकास र समृद्धिको आकाङ्क्षा पूरा गर्ने सङ्कल्प गरेको छ। यो सङ्कल्प पूरा गर्न राज्यको संरचना र राज्यशक्तिको बाँडफाँटको विशेष व्यवस्था गरेको छ। संविधानको धारा ५६ ले सङ्घीय लोकतान्त्रिक गणतन्त्र नेपालको मूल संरचना सङ्घ, प्रदेश र स्थानीय तह गरी तीन तहको हुने र राज्यशक्तिको प्रयोग तीन तहको सरकारले संविधान तथा कानून बमोजिम गर्ने व्यवस्था गरेको छ।

संविधानले सङ्घ, प्रदेश र स्थानीय तहले नेपालको स्वतन्त्रता, सार्वभौमसत्ता, भौगोलिक अखण्डता, स्वाधिनता, राष्ट्रिय हित, सर्वाङ्गीण विकास, बहुदलीय प्रतिस्पर्धात्मक लोकतान्त्रिक गणतन्त्रात्मक सङ्घीय शासन प्रणाली, मानव अधिकार तथा मौलिक हक, कानुनी राज्य, शक्तिपृथकीकरण र नियन्त्रण तथा सन्तुलन, बहुलता र समानतामा आधारित समतामूलक समाज, समावेशी प्रतिनिधित्व र पहिचानको संरक्षण गर्ने गरी सङ्घ, प्रदेश र स्थानीय तहले पालना गर्नुपर्ने आधारभूत संवैधानिक सिद्धान्तहरूसमेत निर्धारण गरेको छ। नेपालको सङ्घीयता

समन्वय, सहकारिता र सहअस्तित्वको सिद्धान्तमा आधारित रहेको छ भन्ने कुरा संविधानको धारा २३२ ले प्रस्ट पारेको छ।

संविधानले राज्यशक्तिको बाँडफाँट गर्दै सङ्घको अधिकार संविधानको अनुसूची-५ मा उल्लिखित विषयमा निहित हुने गरी अधिकारको सूची ३५ ओटा निर्धारण गरेको छ। संविधानले सङ्घको अधिकारको अनुसूचीमा तोकिएका विषयहरूसँग सम्बन्धित अधिकारको प्रयोग गर्दा संविधान र सङ्घीय कानून बमोजिम गर्नुपर्ने हुन्छ। सङ्घको अधिकारको सूचीभित्र मूलतः रक्षा र सेनासम्बन्धी, परराष्ट्र र अन्तर्राष्ट्रिय सम्बन्ध, अन्तर्राष्ट्रिय व्यापार, मुद्रा, रेडियो फ्रिक्वेन्सीको बाँडफाँट, नागरिकता, राहदानी, भिसा, अध्यागमन र राष्ट्रिय महत्वका विभिन्न विषयहरू छन्। यसैगरी संविधानको अनुसूची-६ मा प्रदेशको अधिकार सूचीमा २१ ओटा विषय, सङ्घ र प्रदेशको साझा अधिकार सूची अनुसूची-७ मा २५ ओटा, स्थानीय तहको अधिकार संविधानको अनुसूची-८ मा २२ ओटा र सङ्घ, प्रदेश र स्थानीय तहको अधिकारको साझा सूची संविधानको अनुसूची-९ मा १५ ओटा विषयहरू निर्धारण गरिएको छ।

सङ्घले संविधानद्वारा निर्धारित अधिकार संविधान र सङ्घीय कानून बमोजिम प्रदेशले आफ्नो अधिकार संविधान र प्रदेश कानून बमोजिम, सङ्घ र प्रदेशको साझा अधिकार संविधान, सङ्घीय कानून र प्रदेश कानून बमोजिम, सङ्घ, प्रदेश र स्थानीय तहको साझा अधिकार संविधान, सङ्घीय कानून, प्रदेश कानून र गाँउसभा वा नगरसभाले बनाएको कानून बमोजिम प्रयोग गर्नुपर्ने संवैधानिक व्यवस्था रहेको छ। सङ्घीय कानून संविधानसँग बाझिने गरी बनाउन नहुने, प्रदेश सभाले बनाउने कानून संविधान र सङ्घीय कानूनसँग नबाझिने गरी बनाउनुपर्ने, यस्तै गाँउसभा वा नगर सभाले कानून बनाउँदा संविधान, सङ्घीय कानून र प्रदेश कानूनसँग नबाझिने गरी बनाउनुपर्ने व्यवस्था गरेको छ। यदि बाझिएमा बाझिएको हदसम्म अमान्य हुने व्यवस्था रहेको छ। कानून बाझिएको र अमान्य घोषणा गर्ने काम भने धारा १३७ बमोजिम संवैधानिक इजलाशले गर्ने संवैधानिक व्यवस्था छ। अवशिष्ट अधिकार भने धारा ५८ बमोजिम सङ्घमा राखिएको छ। अधिकारको सूचीमा उल्लेख नभएको वा संविधानमा कुनै तहले प्रयोग गर्ने गरी नतोकिएको विषयलाई अवशिष्ट अधिकार भनी बुझ्नु पर्दछ।

सङ्घ, प्रदेश तथा स्थानीय तहले आ-आफ्नो अधिकारभित्रको आर्थिक अधिकारसम्बन्धी विषयमा कानून बनाउने, वार्षिक बजेट बनाउने, निर्णय गर्ने, नीति तथा योजना तयार गर्ने र त्यसको कार्यान्वयन गर्ने गरी आर्थिक अधिकारको प्रयोग गर्न सक्ने व्यवस्था संविधानको धारा ५९(१) मा गरेको छ। सङ्घले साझा सूचीका विषयमा र आर्थिक अधिकारका अन्य क्षेत्रमा प्रदेशलाई समेत लागु हुने गरी आवश्यक नीति, मापदण्ड र कानून बनाउन सक्ने व्यवस्था ५९(२) मा छ। सङ्घ, प्रदेश र स्थानीय तहको वित्तीय अनुशासनसम्बन्धी व्यवस्था सङ्घीय कानून बमोजिम हुने धारा ५९(७) ले गरेको छ।

२.२ प्रदेश सभाले बनाउन पाउने कानूनहरू

प्रदेशले बनाउन पाउने कानूनहरूका बारेमा संविधानको धारा ५६ मा राज्य संरचना तथा राज्य शक्तिको बाँडफाँटका बारेमा प्रस्ट गरेको छ। प्रदेशको एकल अधिकारको सूची संविधानको अनुसूची ६ मा व्यवस्था गरिएको छ भने सङ्घ र प्रदेशको साझा सूचीका रूपमा अनुसूची ७ मा र सङ्घ प्रदेश र स्थानीय तहको अधिकार अनुसूची ९ मा तोकिएको छ। अनुसूची ६, ७ र ९ मा तोकिएका विषय प्रदेशको अधिकारका सूची हुन्। ती अधिकारको सूचीमा तोकिएका विषयमा कानून बनाउने र कर लगाउने अधिकार प्रदेशले राख्दछ। प्रदेशको अधिकारमध्ये पनि अनुसूची ६ एकल सूचीका विषयमा प्रदेशले आफ्नो आवश्यकतानुसार कानून बनाउन

सकदछ। खाली संविधान र सङ्घीय कानूनसँग नबाझिने हुनपर्दछ। साझा सूचीका रूपमा रहेका अनुसूची ७ र ९ का विषयमा सङ्घ र स्थानीय तहसँग साझेदारी गर्ने विषयहरू पर्दछन्। साझा सूचीका विषयमा पनि सङ्घले कानून बनाएको छैन भन्ने आधारमा प्रदेशले कानून नबनाई बस्नु पर्दैन। सङ्घ प्रदेश र स्थानीय तह(अन्तरसम्बन्ध तथा समन्वय) ऐन २०७६ले सो अस्पष्टता फुकाइसकेको अवस्था छ। पछि सोही विषयमा सङ्घले कानून बनाएको खण्डमा र प्रदेशको कानून सङ्घको कानूनसँग बाझियो भने बाझिएको हदसम्म बदर हुने हो। प्रदेशले बनाएको कानून सङ्घको कानूनसँग बाझियो भन्ने कुराको घोषणा भने संविधानको धारा १३७ बमोजिम गठित सर्वोच्च अदालतको संवैधानिक इजलाशले मात्र गर्न सकदछ।

यस सम्बन्धमा के कुरा स्पष्ट गर्न जरुरी छ भने अधिकारको सूचीमा समावेश भएका हरेक विषयमा कानून बन्ने होइन बरु त्यहाँ समावेश भएका हरेक सूचीले एकभन्दा बढी कानूनको माग गर्न पनि सकदछन् वा दुई वा सो भन्दा बढी विषयलाई समेटेर एउटै कानूनले आवश्यकता पूरा हुन पनि सकदछ। त्यसैले अधिकारका सूचीमा केन्द्रित रहेर त्यति बराबर कानून बन्ने हो र त्यति कानून बनाए पुग्छ भन्ने मान्यता सही होइन। सत्य के हो भने अधिकारको सूचीमा तोकिएका विषयलाई कार्यान्वयन गर्न ती विषयलाई सम्बोधन गर्न आवश्यक कानून बनाउन जरुरी छ। सारमा भन्दा समन्वय, सहकार्य र सहअस्तित्वको सिद्धान्तमा आधारित सङ्घीयताको मर्म र संविधानको अनुसूचीमा व्यवस्थित अधिकारलाई कार्यान्वयन गर्न आवश्यक पर्ने जति सबै कानून निर्माण गर्न हरेक प्रदेश सभा स्वतन्त्र छ।

२.३ बागमती प्रदेशको शासकीय संरचना

नेपालको शासकीय स्वरूप सुधारिएको संसदीय प्रणाली हो। सङ्घीय संसद् द्विसदनात्मक हुने तर प्रदेश संसद एक सदनात्मक हुने र सङ्घमा राष्ट्रपति र प्रदेशमा प्रदेश प्रमुख रहने बाहेक सङ्घ र प्रदेशको समान प्रकारको शासकीय स्वरूपको परिकल्पना गरिएको छ। सुधारिएको संसदीय प्रणालीका रूपमा शासकीय स्वरूपमा बहुमत प्राप्त दलको नेता मुख्यमन्त्री हुने भए पनि सङ्घमा प्रधानमन्त्रीले झै प्रदेशमा पनि मुख्यमन्त्रीले संसद विघटन गर्न सकदैनन्। अकालमा संसदको विघटन सम्भव छैन। प्रदेश सभाले सरकार दिनै नसक्ने अवस्थामा बाहेक संसद विघटन हुदैन। मन्त्रीको सङ्ख्याको निश्चितता निर्वाचनमा हारेको व्यक्ति सो कार्यकालभर मन्त्री बन्न नपाउने व्यवस्था जस्ता नयाँ व्यवस्थाहरू प्रदेश सभामा पनि लागु हुन्छन्। सुधारिएका व्यवस्थाहरू बाहेक बाँकी व्यवस्था संसदीय व्यवस्थाको रूपमा प्रदेशको शासकीय स्वरूप रहेको कुरा स्वीकार गर्न पर्दछ।

२.४ प्रदेशले अवलम्बन गरेका कानून निर्माण प्रक्रिया र प्रभावकारिता

कानून निर्माण प्रक्रियाका बारेमा सङ्घमा भएको प्रचलन मान्यता र कानूनी व्यवस्थाबमोजिम नै प्रदेशमा पनि अवलम्बन गरिआएको कुरामा विवाद छैन। सङ्घको कानून निर्माणको प्रभावकारितासँगै प्रदेशको कानून निर्माणको प्रभावकारिताका बारेमा पनि विचार गर्नु उपयुक्त हुन्छ। तथापि प्रदेशका बारेमा अनुभवको कमी, दक्ष कर्मचारीको अभाव, स्पष्ट परम्पराहरू बसिनसकेको अवस्था समेतका कारणले प्रभावकारितामा कहीं न कहीं प्रश्न उठ्न सकदछ।

कानून बनाउने प्रक्रियाले कानूनको प्रभावकारी कार्यान्वयनको झलक दिन्छ। कानून बनाउँदा अवलम्बन गरिएको सहभागिताको स्तरले अपनत्व र स्वामित्वको आत्मसात् गराउँछ। जति धेरै सहभागिता त्यति धेरै सामित्व र अपनत्व अनि जति धेरै स्वामित्व र अपनत्व त्यति धेरै कार्यान्वयन भन्ने निष्कर्षमा पुग्न सकिन्छ। कानून

बनाउनेलाई पनि कानून बनाएको हो कि होइन भन्ने बारेमा द्विविधा भए जस्तै पालना गर्नेहरूले र लागु गर्नेहरूले पनि प्रदेशको कानूनको प्रभावकारितामा द्विविधा खडा गरेको अवस्था छ भन्न सकिन्छ। कानून निर्माता र कानूनका सरोकारवालाहरूमा समेत द्विविधा भएकाले निर्माण प्रक्रियामा मात्रै होइन कार्यन्वयन प्रक्रियामा पनि यस प्रकारको समस्या देखा परेको छ।

एकीकृत र केन्द्रीकृत मानसिकताले घर गरिरहँदा सङ्घमा परम्परागत रूपमा प्रयोग गरेका अधिकार छोडन नचाहने प्रवृत्ति व्यापक रूपमा देखा परेको छ। उक्त व्यवहार नयाँ संविधान बमोजिम नयाँ बन्दै गरेका ऐनहरूमा पनि देख्न सकिन्छ। यसै गरी प्रदेश तहमा पनि सङ्घको नक्कल गर्ने, सङ्घको आदेश वा निर्देशन पर्खिने र सङ्घले औपचारिक वा अनौपचारिक अनुमति दिएका विषय बाहेक अघि नबढ्ने प्रवृत्ति पनि देखा परेको छ। अधिकार प्रत्यायोजनको विधिबाट होइन अधिकार निक्षेपणको विधिबाट अधिकार प्राप्त गरेको भन्ने पनि होइन बरु अधिकारको बाँडफाँटको तरिकाबाट अधिकार प्राप्त गरेको हो भन्ने कुराको हेक्का न सङ्घ न प्रदेश कतैतिर पनि देखिने गरी प्रष्फुटित हुन गाह्रो पन्यो। जति अधिकार र जुन विधिबाट सङ्घले प्राप्त गरेको छ सोही विधिबाट प्रदेशका लागि तोकिएका अधिकार प्राप्त गरेका हुन तसर्थ संविधानप्रति उत्तरदायी भए पुग्छ भन्ने शिक्षा र सन्देश पर्याप्त मात्रामा आत्मसात् हुन नसकेका कारणले प्रभावकारितामा असर परेको प्रस्ट देख्न सकिन्छ।

२.५ कानून निर्माण प्रक्रियामा चासो र जागरुकता

कानून शासन सञ्चालनको आधार हो। कर असुल्ने र खर्च गर्ने दुवै काम कानूनबमोजिम बाहेक गर्न पाइँदैन भन्ने सैद्धान्तिक मान्यतामा आधारित हाम्रो शासन प्रणाली भएका कारणले राजनैतिक इच्छाशक्तिको अभिव्यक्ति पनि कानूनबाट र जनताको अपेक्षाको परिपूर्ति पनि कानूनका माध्यमवाटै संरक्षित हुन जरुरी छ। यसका लागि संविधानले आफूलाई कानून बनाउन दिएको अधिकार प्रयोग गर्ने त छँदैछ कतै सङ्घले वा कतै स्थानीय तहले हस्तक्षेप वा अतिक्रमण त गरेको छैन भन्ने चासो र जागरुकता पनि त्यतिकै जरुरी छ। यस मामलामा प्रदेश तहबाट मिश्रित प्रकारको चासो राखेको पाइयो। सङ्घ प्रदेश र स्थानीय तह बिचको समन्वय र अन्तरसम्बन्धसम्बन्धी कानूनका बारेमा बागमती प्रदेशले राखेको चासो सराहनीय छ। यही चासोका कारणले कतिपय बन्दोबस्त कानूनमा हुन सकेको छ। यसै गरी उपत्यका स्तरको यातायात विषयको सङ्घीय ऐनका बारेमा भने प्रदेशको चासो मनग्य मात्रामा भएको पाइएन। यस बारेमा अन्तरक्रिया कार्यक्रममा पनि स्वीकारोक्ति नै रहेको पाइयो। सङ्घीय आर्थिक ऐनमार्फत ढुङ्गा, गिट्टी, बालुवासम्बन्धी अधिकार सङ्घले खोस्यो तैपनि यसलाई पुन प्राप्तिका लागि मनग्य प्रयत्न भएको पाइएन। यी त केवल इवाट्ट सम्झदा देखापरेका र अनुभूति गरिएका विषय हुन। तर बाँकी विषय त सबै ऐन कानूनको समग्र अध्ययन पश्चात् मात्रै थप कुरा भन्न सकिएला।

३. प्रदेश कानूनहरू र तिनको समीक्षा:

बागमती प्रदेशले ६२ ओटा ऐन बनाएको छ। ती मध्ये २० ओटा ऐन आर्थिक मामलासँग सम्बन्धित छन् भने एउटा ऐन केही प्रदेश ऐन संशोधनका रूपमा आएको छ। वातावरण संरक्षण र प्रदेश लोकसेवा आयोगसँग सम्बन्धित दुई ऐनहरू अध्यादेशका रूपमा आएर पछि प्रतिस्थापन विधेयकमार्फत प्रतिस्थापन भई ऐनको स्वरूप ग्रहण गरेको देखिन्छ।

अन्तर प्रदेशका बासिन्दाको समान सुविधा र व्यवहारसम्बन्धी ऐन, सूचनाको हक, युवा परिषद्, दूग्ध विकास बोर्ड, प्राविधिक तथा व्यवसायीक शिक्षा एवम् तालिम परिषद् स्थापना तथा सञ्चालन ऐन, औद्योगिक व्यवसाय ऐन, प्रादेशिक व्यापार व्यवसाय, जलचर संरक्षण र व्यवस्थापन, मदन भण्डारी स्वास्थ्य विज्ञान प्रतिष्ठान, लोकसेवा आयोग, विभूषण पदक, कृषि व्यवसाय प्रवर्धन, बालबालिका, सार्वजनिक निजी सहकारी साझेदारी, बिउ बिजन, राष्ट्रिय वन, सहकारी, सवारी तथा यातायात, स्वास्थ्य सेवा, संस्था दर्ता, सञ्चार माध्यम व्यवस्थापन, विपद् व्यवस्थापन, खेलकुद दूग्ध विकास बोर्ड, प्रशासकीय कार्यविधि नियमित गर्ने जस्ता ऐनहरू बनेको देखियो।

नियमावलीका हकमा मदन भण्डारी स्वास्थ्य विज्ञान प्रतिष्ठान पदाधिकारी व्यवस्थापन तथा सुविधा नियमावली बनाएको देखिन्छ भने युवा परिषद्, प्रदेश सभा, लोकसेवा, पूर्वाधार विकास साझेदारी कार्यक्रम, खेलकुद विकास, सञ्चार माध्यम व्यवस्थापन, सार्वजनिक खरिद, जिल्ला समन्वय समितिको अन्य काम, कर्तव्य र अधिकारसम्बन्धी नियमावली गरी जम्मा १५ ओटा नियमावली निर्माण गरेको देखिन्छ।

निर्देशिका र गठन आदेश नौ ओटा बनाएको देखिन्छ। जसमा प्रदेश सुशासन सञ्चालन केन्द्र स्थापना तथा कार्य सञ्चालन, प्रदेश नीति तथा योजना आयोग, मुख्य मन्त्री र मन्त्री, प्रदेश सभाका सभामुख उपसभामुख तथा सदस्यहरूको पारिश्रमिक र सुवधा र प्रदेशभित्रका अस्पतालहरूको सञ्चालन तथा व्यवस्थापन आदेशका रूपमा रहेको छ भने पाठ्यक्रम तथा पाठ्य सामग्री विकास, राजपत्र प्रकाशन निर्देशिकाका रूपमा निर्माण गरेको देखियो। पुरस्कार छनोट, एकीकृत बस्ती विकास, विपद् कोष सञ्चालन, कोरोना भाइरस सङ्क्रमण, रोकथाम, नियन्त्रण तथा उपचार सहयोग, जनता आवास कार्यक्रम, मुख्य मन्त्री जनता स्वास्थ्य परीक्षण कार्यक्रम सञ्चालन, सङ्गठन संरचना तथा दरबन्दी व्यवस्थापन, सङ्गठन संरचना तथा दरबन्दी व्यवस्थापन, जिल्ला समन्वय समितिलाई उपलब्ध गराइने बजेट तथा अनुदान रकम खर्च, प्रदेश निजामती कर्मचारीको पदस्थापन सुरुवा तथा काजसम्बन्धी कार्यविधि, मागमा आधारित अयोजना र एकीकृत अनुदान वितरण कार्यविधि गरी जम्मा १२ कार्यविधि र मन्त्री तथा पदाधिकारीहरूको आचार संहिता एकसमेत गरी जम्मा १३ ओटा दस्तावेज निर्माण गरेको देखिन्छ।

समयावधि, साधन स्रोतको उपलब्धता र सङ्घीयकरणको प्रक्रियाको थालनीको परिवेश समेतलाई मध्यनजर गर्दा बनेको कानूनको सङ्ख्या अत्यन्त उत्साहजनक छ। कानूनको गुणस्तरको कुरा गर्दा मध्यम छ र कार्यान्वयनको तहमा हेर्दा पनि धेरै निराशाजनक छैन। तसर्थ सङ्घीयतालाई मूर्त रूपमा अभिव्यक्त गर्ने प्रदेश तहबाट राज्यशक्तिको प्रयोगको दौरानमा बनेका कानून र तिन्को कार्यान्वयनको अवस्था हेर्दा प्रसंसनीय छ। कानून निर्माणको यो गति र कार्यान्वयनको यो इच्छाशक्ति अझै तीव्ररूपमामा अघि बढ्न सके राम्रो हुने देखिन्छ।

४. समीक्षात्मक टिप्पणी

४.१ प्रत्यायोजित विधायनको दृष्टिमा सोपानक्रमको परिपालना

संविधानका अधिनमा ऐन, ऐनले अख्तियारी दिएका विषयमा नियमावली बन्ने हो। नियमावलीका आधारमा निर्देशिका र कार्यविधि बन्ने कुरा सामान्य समझको कुरा हो। तर ऐनको अख्तियारी विनाका निर्देशिका र कार्यविधिहरू र नियमावलीहरू बनेको पाइयो। प्रत्यायोजित विधायनको मान्यताका आधारमा सारवान विषय ऐनले र कार्य विधिगत विषय मात्रै प्रत्यायोजित विधायनले व्यवस्था गर्न पर्नेमा कतिपय विषयमा कोष खडा गर्ने, पदाधिकारीको योग्यता र नियुक्ति, सुविधा र पारिश्रमिकसमेत नियममा तोक्ने कुरा देखियो। उदाहरणका लागि मदनभण्डारी स्वास्थ्य विज्ञान प्रतिष्ठान ऐन र सो अन्तर्गत बनेको नियम सान्दर्भिक छ। जम्मा ४७ दफाको ऐनमा

१८ ठाउँमा तोकिएबमोजिम भन्ने उल्लेख भएको छ। ती सबै अधिकार प्रत्यायोजन गर्ने दफा हुन्। विषयको हिसाबले प्रत्यायोजन गरिएका विषयहरू सारवान प्रकृतिका छन्। कार्यविधिगत विषयमात्रै प्रत्यायोजन गर्ने र नियमावलीमा कार्यविधिगत विषय मात्रै संलग्न हुनपर्नेमा सो हुन सकेको पाइएन। मदन भण्डारी स्वास्थ्य विज्ञान प्रतिष्ठान(पदाधिकारी व्यवस्थापन तथा सेवा सुविधासम्बन्धी) नियमावली २०७७ बनेको देखिन्छ। जसको नाम नै प्रत्यायोजित विधायनको सिद्धान्तसँग मेल खाँदैन। सो नियमावलीमा राखिएका पदाधिकारीको योग्यता, काम, कर्तव्य र अधिकार, सेवा सुविधा पारिश्रमिक लगायतका विषयहरूसमेत नियमले व्यवस्था गरेको छ। यसै गरी पाठ्यक्रम तथा पाठ्या सामग्री विकास निर्देशिका, २०७७ जारी गरिएको छ, जसको माउ ऐन शिक्षा ऐन होइन। प्रशासकीय कार्यविधि नियमित गर्ने ऐन, २०७७ को आधारलाई टोकिएको छ। प्रशासनिक र कार्यविधिगत विषयमा कार्यविधि बनाउन अनुमति दिने ऐनको प्रयोग सारवान विषयमा भएको पाइयो। एकीकृत बस्ती विकाससम्बन्धी कार्यविधि, २०७७ जारी गरेको छ। सोको आधार भने आवासको अधिकारसम्बन्धी ऐन, २०७५ लाई लिइएको छ। सङ्घीय ऐनको आधारमा नियम वा कार्यविधि वा निर्देशिका बनाउन मिल्ने होइन। आफ्नै ऐन र सोका आधारमा अन्य प्रत्यायोजित विधायनको बन्दोबस्त हुन पर्ने देखिन्छ। प्रदेश विपद् व्यवस्थापन ऐन, २०७५ को दफा ४५ ले दिएको अधिकार प्रयोग गरी प्रदेश सरकारले यो कार्यविधि बनाएको छ भन्दै प्रदेश विपद् व्यवस्थापन कोष सञ्चालन कार्यविधि २०७५ बनाएको सही छ। यसै आधारमा अरु प्रत्यायोजित विधायनको व्यवस्था गर्न उपयुक्त हुन्छ। प्रदेश निजामती कर्मचारीको पदस्थापन सुरुवा तथा काजसम्बन्धी कार्यविधि, २०७६ जारी भएको देखियो तर आधार भने प्रशासकीय कार्यविधि नियमित गर्ने ऐनको लिएको र कार्यविधिमा ऐन भन्नाले सङ्घको समायोजन ऐन सम्झनुपर्छ भन्ने उल्लेख भएको पाइयो। तसर्थ माउ ऐन, आफ्नै ऐन र सारवान मामला ऐनमा र कार्यविधिगत मामला प्रत्यायोजित विधायनमा समेट्नु पर्नेमा तदनुकुल भएको पाइएन।

प्रदेश निजामती सेवा र अन्य सरकारी सेवा एकल सूचीको पाँचौं नम्बरमा, प्रदेश तथ्याङ्क छैटौं नम्बरमा प्रदेश स्तरको विद्युत्, सिँचाइ र खानेपानी सेवा सातौं नम्बरमा, प्रदेश विश्वविद्यालय, पुस्तकालय र सङ्ग्रहालय आठौं नम्बरमा, प्रदेश लोकमार्ग बाह्रौं नम्बरमा, प्रदेश अनुसन्धान ब्युरो तेह्रौं नम्बरमा राखिएको भए पनि यससम्बन्धी ऐन बनाएको देखिएन। नीति र मापदण्ड सङ्घले नबनाएका कारणले बनाउन नसकेको भन्ने तर्क गर्न सकिइला तर प्रारम्भिक दिनमा सो समस्या रहे पनि हाल सङ्घ प्रदेश र स्थानीय तह (अन्तरसम्बन्ध तथा समन्वय) ऐन, २०७७ जारी भएको सन्दर्भमा सो समस्याको समाधान भईसकेको छ। प्रदेश प्रहरी प्रशासन र शान्ति सुरक्षा एकल सूचीको पहिलो नम्बरमा रहेको विषयमा यो ऐनसँगै प्रदेश प्रहरी ऐन बने पनि नियमावली निर्माण गरी कार्यान्वयनका लागि तदारुकता पाइएन। खानी अन्वेषण व्यवस्थापन, भाषा लिपि, संस्कृति, ललितकला र धर्मको संरक्षण र प्रयोग र गुठी व्यवस्थापनसमेतका विषयमा कानुन बनाएको देखिएन।

बनेका ऐनको कार्यान्वयनको अवस्था हेर्दा प्रदेशस्तरको प्रहरी र कर्मचारी प्रशासनको अभावमा राज्य शक्तिको प्रयोगको सन्दर्भमा प्रभावकारिता देखा नपर्नु स्वभाविकै हो त्यही समस्या प्रदेशको हकमा देखापर्दछ।

एकल सूचीमा रहेका विषयमा पनि सङ्घको कानुन पर्खिने र साझा सूचीका विषयमा सङ्घले कानुन नबनाएको भन्दै कानुन बनाउने तर्फ चासो नदिने गरेको पाइयो। साझा सूचीको विषयमा तदारुकता देखिएको पाइएन। यो कुरा शासकीय हिसाबले उपुक्त भन्न सकिइएन।

४.२ अनुसन्धानका आधारमा कानून निर्माण

कानून निर्माणका बखत कानूनको आवश्यकताको पहिचान गर्ने पहिचान गरिएको आवश्यकताका बारेमा अनुसन्धान गर्ने अनुसन्धानले पुष्टि गरेको अवस्था र विषयमा कानूनको निर्माण गर्ने सोका लागि विषयविज्ञ र सरोकारवालाहरूसँगको पर्याप्त परामर्श गर्ने तत्पश्चात् कानूनको मस्यौदा गरी संसदको प्रक्रियामा लैजाने सामान्य पूर्व विधायिकी चरण पार गर्नुपर्ने आवश्यकता हो। यसका अतिरिक्त कानून निर्माण गरे पछि सो कानून कार्यान्वयन गर्न आवश्यक पर्ने संरचना, जनशक्ति र साधन स्रोतको पूर्व आकलन गर्ने र यतिका प्रक्रिया पार गरे पछि बनेको कानूनको प्रभाव र उपलब्धि के हुन्छ भन्ने बारेमा समेत सजिव चित्र कानून निर्माताहरूका सामुन्नेमा देखा पर्नुपर्ने हुन्छ तब मात्रै त्यस्तो कानूनको प्रभावकारी कार्यान्वयन र कानूनले राखेको अपेक्षा पूरा हुने अनुमान गर्न सकिन्छ। प्रदेश स्तरको कानून निर्माण गर्दाका अवस्थामा पनि यी र यस्तै पूर्व सर्तहरू पालना गरेको पाइएन। जब यी पूर्व सर्तहरूको परिपालना नभईकन कानूनहरू बन्दछन् तब त्यसको प्रभावकारी कार्यान्वयनको केवल कल्पनासम्म गर्न सकिन्छ। त्यही अवस्था यो प्रदेशमा देखा परेको छ।

४.३. साधन स्रोतको सम्बन्ध

प्रदेशको आफ्नो साधन र स्रोतको अभाव र सङ्घकै साधन र स्रोतको भर पर्नुपर्ने कानून कार्यान्वयनले माग गर्ने पर्याप्त स्रोत व्यवस्थापन प्रदेशले गर्न सक्ने अवस्थाको अभावमा प्रभावकारी कार्यान्वयनको अपेक्षा गर्नु सर्वथा न्यायोचित देखिदैन। बन्नुपर्ने कानून बन्न नसकेको अवस्था एकातिर हो भने अर्कोतिर बनेका कानूनको पनि प्रभावकारी कार्यान्वयनको समस्या पनि चर्को छ। जे होस पहिलोपटक सङ्घीयताको महत्वपूर्ण अङ्गका रूपमा रहेको प्रदेशको स्थापना, सञ्चालन र संविधानले तोकेको अधिकारको प्रयोगका सम्बन्धमा कानून निर्माणको प्रयत्न सराहनीय मान्नुपर्छ।

सुझावका रूपमा प्रदेशसभाले कानून निर्माण गर्दा पूर्व विधायिकी चरणको अवलम्बन गर्ने, विधायिकी चरणमा खुला विधायिकी प्रक्रियाको अवलम्बन गर्ने र कानून निर्माण भईसकेपछि प्रभावकारी कार्यान्वयनको समीक्षा गर्न उत्तरविधायिकी प्रक्रियाको अवलम्बन गर्ने गर्न सकियो भने कानून निर्माण प्रभावकारी हुने र प्रभावकारी कानूनको कार्यान्वयन पनि सोहीस्तरमा हुने कुरामा विश्वस्त हुन सकिन्छ।

४.४ सरोकारवालाहरूको प्रतिक्रिया

प्रदेश कानूनका सम्बन्धमा कानून निर्माता, कार्यान्वयनकर्ता र उपभोक्ताहरूको मत र दृष्टिकोण समेत बनिसकेको अवस्था छैन। कानूनका बारेमा सम्प्रेषणको अभाव, कानून निर्माण प्रक्रियामा जनसहभागिताको न्युन प्रयोग र कानूनको प्राधिकारको अभाव सँगसँगै एकात्मक र केन्द्रीकृत शासन प्रणाली रहेकै बखत निर्माण भएका झन्डै ३५० कानूनहरूको सामान्य परिमार्जन गरेर तिनै कानूनहरू यथावत कार्यान्वयन भईरहेको अवस्था हुँदा विल्कुल कानूनको रिक्तता पनि नभएको र नयाँ कानूनको पहिचान गर्ने वैज्ञानिक र व्यवहारिक विधि र अभ्यास पनि विकास नभईसकेको सन्दर्भमा कानून निर्माता, कार्यान्वयनकर्ता र उपभोक्ता समेतमा पनि सोही प्रभाव देखापर्दछ। एकात्मक र केन्द्रीकृत शासन प्रणालीमा कानून निर्माण, कार्यान्वयन र उपभोगको आदतले घर गरिरहेका बखत एकाएक सङ्घीय सोच आउन समय लाग्ने निश्चित छ। सङ्घीयकरणको यो प्रक्रिया एक निरन्तर प्रक्रिया भएका कारणले आजका मितिसम्म कानून निर्माता, कार्यान्वयनकर्ता र उपभोक्ता समेतमा अवधारणा बनिसकेको छैन यस्तो एक प्रकारको सङ्क्रमणको स्थितिमा रहेका कारण सरोकारवालाहरूको दृष्टिमा सङ्घको कानूनको दाँजोमा

प्रदेशको कानूनको आधिकारिकता, कार्यान्वयनकर्ताको नजरमा त्यसको महत्त्व र उपभोक्ताहरूमा आवश्यक जागरुकताका स्तरमा नै दृष्टिकोण निर्माण हुने भएकाले आजै र अहिल्यै अपेक्षाकृत परिणाम हासिल भएन भनेर निराश हुनपर्ने देखिदैन।

४.५. नयाँ निर्माण र संशोधन गर्न पर्ने कानून बारे

फेरि पनि प्रदेशले बनाएका कानूनहरूमा संशोधन गर्नुपर्ने कानूनहरू र नयाँ निर्माण गर्नुपर्ने कानूनहरूको आवश्यकताका बारेमा विना गहन अध्ययन भन्नु उपयुक्त हुँदैन। तसर्थ कानूनको निर्माण वा भर्इरहेको कानूनको संशोधनको बोध सबैभन्दा पहिला सो कानून कार्यान्वयनकर्ता र उपभोक्ताले भन्ने कुरा हो। कार्यान्वयनकर्ता र उपभोक्ताले आवश्यक महशुस गरे पछि आवश्यक अनुसन्धान गर्ने सो अनुसन्धानले आवश्यकतालाई पुष्टी गर्ने, तत्सम्बन्धमा विज्ञ र सरोकारवालाहरूसँग परामर्श गर्ने त्यस पछि मात्रै नयाँ कानूनको आवश्यकता वा भर्इरहेको कानूनको संशोधनका बारेमा प्रक्रिया अघि बढाउन उपयुक्त हुन्छ। त्यसैले अहिले यसै प्रतिवेदनमा संशोधन गर्नुपर्ने कानून र नयाँ बनाउनुपर्ने कानूनका बारेमा उल्लेख गर्न सकिएन। तथापि संविधानको मर्म राज्यका तीनै तहले राज्य शक्तिको प्रयोग गर्ने भएका कारण सोको प्रयोजनका लागि प्रदेशको शान्ति सुरक्षाका लागि प्रदेश प्रहरी, प्रदेशको प्रशासनका लागि प्रदेश सेवा र विकासको चाहना परिपूर्तिका लागि आवश्यक स्रोत साधनको सङ्कलन वा प्राप्ति सम्बन्धी कानूनहरूको खाँचो पहिलो प्राथमिकतामा रहनु उपयुक्त हुन्छ। यतिका कानून बनेपछि प्रदेश सरकारको संरचना प्रभावकारी हुने अनुमान गर्न सकिन्छ। यस पछि प्रदेशका जनताका सेवा प्रवाहसँग सम्बन्धित कानूनको निर्माण दोस्रो प्राथमिकतामा राख्ने र त्यसपछि मात्रै जनप्रतिनिधिहरूको सेवा सुविधा केन्द्रित कानूनहरू निर्माण गर्न उपयुक्त हुन्छ। यसका लागि प्रदेश र स्थानीय तहविचको समन्वयसम्बन्धी कानून, प्रदेश सरकार सञ्चालन ऐन, प्रदेश सेवा गठन तथा सञ्चालन ऐन, प्रदेश निजामती सेवा ऐन, प्रदेश प्रहरी ऐन तथा नियमावली जस्ता केही शासकीय दृष्टिले अत्यावश्यक ऐनहरू प्राथमिकतासाथ बन्न जरुरी छ।

यी बाहेक पनि संविधानको अनुसूची ६ प्रदेशको अधिकारको सूचीमा राखिएका राष्ट्र बैकको नीतिअनुरूप वित्तीय संस्था सञ्चालनसम्बन्धी ऐन, केन्द्रको सहमतिमा वैदेशिक सहयोग अनुदानसम्बन्धी ऐन, प्रदेश तथ्याङ्कसम्बन्धी ऐन, प्रदेश विश्वविद्यालयसम्बन्धी ऐन, प्रदेश अनुसन्धान ब्युरोसम्बन्धी ऐन, भूमि व्यवस्थापन र अभिलेख, खानी अन्वेषण र व्यवस्थापन, भाषा लिपि संस्कृति ललितकला र धर्मको संरक्षण र प्रयोगसम्बन्धी ऐन, गुठी व्यवस्थापन, सरकारी कार्यालयको भौतिक व्यवस्थापन, प्रदेश लोकमार्गसम्बन्धी ऐन निर्माण गरेको देखिएन। संविधानको अनुसूचीमा लेखिएका विषयमा मात्रै कानून बन्ने होइन अर्थात् सूचीभित्र एउटा कानून बनेर पुग्ने पनि होइन यसका लागि कानूनको आवश्यकताका बारेमा नै अनुसन्धान हुन जरुरी छ।

५. अवसर र चुनौती

प्रदेश ऐन कानून निर्माण तथा कार्यान्वयनका प्रमुख अवसर तथा चुनौतीहरूका बारेमा चर्चा गर्दा प्रदेश सङ्घीयताको प्रथम पहिचान हो। सामान्यतः सङ्घ हिजो केन्द्रीकृत र एकात्मक शासन प्रणालीमा पनि थियो र कुनै न कुनै रूपको स्थानीय तह आफ्नो ठाउँमा काम गरेकै थिए। सङ्घीयताले नयाँ थपेको संरचना भनेको प्रदेश हो। अधिकारको बाँडफाँटका दृष्टिले प्रदेशसहित सङ्घ र स्थानीय तह पनि भिन्न भएका छन्। यस दृष्टिले हेर्दा प्रदेश तहको काम कारवाही र प्रदेश तहमा निर्माण हुने कानूनहरूका लागि पहिलो अवसर भनेको सङ्घीय संरचनाको पहिचान गराउने हो। यो अवसर न हिजोकालाई थियो न अब भोलिकाले नै प्राप्त गर्ने छ। तसर्थ

सङ्घीय संरचनाको चिनारी दिने अवसर यसै पटकको प्रदेशलाई मात्रै छ। यतिबेलाको प्रदेशले सङ्घीयता जे बुझ्यो जे कार्यान्वयन गन्यो र कार्यान्वयन गर्न जे जस्ता कानुन बनायो त्यही नै नेपालको सन्दर्भको सङ्घीयता हुने भएकाले गल्ती भयो भने सोको अवजस बोक्ने जिम्मा पनि यही प्रदेशलाई छ तसर्थ सङ्घीयता चिनाउने अवसर र गल्ती भए अवजस बोक्ने चुनौतीका बिचमा प्रदेश उपस्थित छ। प्रदेशका काम कारवाही र कानुन निर्माणको प्रक्रियालाईसमेत सोही अर्थमा बुझ्न जरुरी छ।

६. निष्कर्ष र सुझाव

६.१ निष्कर्ष

यो भन्न सकिन्छ कि सबै प्रदेशहरू त्यसमा पनि संघीय राजधानीसमेत रहेको प्रदेश भएका कारणले बागमती प्रदेश ऐन, कानुनहरूले सङ्घीयताको सबलीकरण र संस्थागत विकासमा गरेका अतुलनीय योगदान गरेको छ भन्न सकिन्छ। आरम्भमा शून्यबाट प्रदेश संरचनाको भौतिक व्यवस्थापन यसको उल्लेखनीय योगदान हो। भौतिक संरचनाको निर्माण पश्चात् शासन सञ्चालन गर्न आवश्यक पर्ने कानुनहरूको निर्माण गरेर वैधानिक रूपमा राज्य शक्तिको प्रयोग गर्ने थलोका रूपमा प्रदेशलाई स्थापित गर्ने कुरा अर्को ठुलो योगदानको कुरा हो। एकात्मक राज्य सङ्घीय संरचनामा जाँदा केन्द्र परिवर्तन हुँदा, नामाकरण गर्दा दुनियाँमा र नेपालकै पनि अनुभवहरू त्यति मिठा सहज र प्रेरणादायी छैनन्। यसका बाबजुद पनि प्रदेशहरूले त्यसमा पनि बागमती प्रदेशले सहज रूपमा नामाकरण, केन्द्र तोक्ने काम र राज्य शक्तिको प्रयोगका लागि आवश्यक पर्ने कानुनहरूको निर्माणमा गरेको अगुवाइ सराहनीय मात्रै होइन मुलुकको सङ्घीयकरणको प्रक्रिया र संविधान कार्यान्वयनको प्रक्रियाका लागि कोशे ढुङ्गा नै सावित भएको छ भन्न सकिन्छ।

९.२ सुझावहरू

सुझावका रूपमा केही कुरा भन्न पर्दा प्रदेश सरकारले बनाउने प्रभावकारी कानुन र तिनको प्रभावकारी कार्यान्वयनका लागि प्रदेश, सङ्घ र स्थानीय सरकारले गर्नुपर्ने कार्यहरूको लामो सूची दिन सकिएला तर यतिबेलाको प्राथमिकता सङ्घीयकरणको प्रक्रियालाई बिना कुनै अवरोध अघि वढाउनु नै आजको आवश्यकता हो। यसैगरी सङ्घीय गणतन्त्र नेपालको संविधानको कार्यान्वयन सङ्घीयताको कार्यान्वयनसँग जोडिएको छ। संविधानको कार्यान्वयन पनि प्रदेशहरूको सङ्घीयकरणको प्रक्रियामा सकारात्मक योगदान बिना सम्भव छैन। यिनै विषयहरूलाई मध्यनजर गरी निम्न सुझावहरू दिन सकिन्छ:

- खासगरी कानुन निर्माणबा बारेमा कुरा गर्दा अनुसन्धानका आधारमा कानुन बन्ने र बनेका कानुनको प्रभावकारी कार्यान्वयन हुने सुनिश्चितता गर्न सके मात्रै पनि धेरै ठुलो काम हुने छ।
- त्यसै गरी संविधान मातहत ऐन, ऐन मातहत नियम र नियम मातहत कार्यविधि र निर्देशिकाहरूको सोपानक्रमलाई आत्मसात गर्दै आफ्ना काम सम्पन्न गर्न सकियो भने धेरै समस्याहरूको समाधान हुन्छ।
- सारवान मामलाहरू ऐनले नै निर्धारण गर्ने, कार्यविधिगत मामला मात्रै नियम, कार्यविधि र निर्देशिकाका माध्यमबाट गर्ने स्थापित मान्यतालाई अवलम्बन गर्न सक्दा धेरै कुराको समाधान हुन्छ। यसतर्फ बागमती प्रदेशको विशेष ध्यान जान जरुरी छ।

- राज्य शक्तिको प्रयोग गर्ने कानून पहिलो प्राथमिकतामा, जनताको सेवा प्रवाहका कानून दोस्रो प्राथमिकतामा र विकासका अपेक्षा पूरा गर्ने लगायत पदाधिकारीका सेवा सुविधाका कानूनहरू पछिल्लो सूचीमा राखेर काम गर्न सके जनअपेक्षा पूरा हुने र समाजवाद उन्मुख संविधानको मर्म पनि पूरा हुने थियो भन्न सकिन्छ।
- बनेका कानूनको कार्यान्वयनको प्रभावकारिताका आधारमा नयाँ बनाउने कानूनहरूको सूची तयार गर्न र तदनुकूल कानून निर्माणको योजना बनाउनुनै वस्तुवादी हुन्छ। कानूनको कार्यान्वयनको प्रभावकारिताको अध्ययन गर्ने प्रयत्न यो नै पहिलो भए पनि यसको दुरगामी महत्व हुने। समग्रताको अध्ययनका साथ साथै एक एक कानूनको छुट्टै छुट्टै अध्ययन गर्ने र प्रभावकारितको मापन गर्ने प्रक्रियाको थालनी गर्न जरुरी छ।
- बनाएका कानूनको आवश्यकता र औचित्यका आधारमा ती कानून परिमार्जन संशोधन वा नयाँ कानूनको निर्माण गर्ने भन्ने योजना बनाए जस्तै यदि कानून कार्यान्वयन भएको छैन भने प्रयोजनहिन कानूनको लगत राखिराख्नुभन्दा खारेज गर्नु नै श्रेयस्कर हुन्छ तसर्थ कानून कार्यान्वयनको अध्ययन गरी निष्क्रिय कानूनहरू खारेज गर्न पनि प्रदेश सभा र सरकार तत्पर रहनुपर्दछ।
- नयाँ कानूनको खाँचो महसुस गर्ने कुरा भावनात्मक होइन अनुसन्धानमा आधारित वस्तुनिष्ठ हुन जरुरी छ। अनुसन्धानले आवश्यक ठानेर बनाएको कानून कार्यान्वयन भएन भने सोको कारण खोज्न र कारणको सम्बोधन गर्न जरुरी छ।
- अनुसन्धानका आधारमा बनेको कानून भए पनि तत्कालको आवश्यकता पुर्ति भईसकेका कारणले कानून निष्कृत रहन गएको भए सो कानून खारेज गर्न र परिमार्जन गर्नुपर्ने भए संशोधनको प्रक्रिया अघि बढाउनु पर्दछ। विना अनुसन्धान नयाँ कानूनको आवश्यकता र संशोधनको बारेमा अघि बढ्न हुदैन। त्यसका लागि खास कानूनका बारेमा नै अध्ययन गर्नुपर्दछ। समग्रताको अध्ययनका आधारमा त्यस्तो निष्कर्ष निकाल्न हुदैन।

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- नेपाल सरकार, सङ्घ प्रदेश र स्थानीय तह (अन्तरसम्बन्ध तथा समन्वय) ऐन २०७५,(२०७५) कानून न्याय तथा संसदीय व्यवस्था मन्त्रालय, कानून किताब व्यवस्था समिति, बबरमहल काठमाडौं।
- नेपाल सरकार, नेपालको संविधानको अनुसूची ५,६,७,८ र ९ मा उल्लेखित सङ्घ प्रदेश र स्थानीय तहको अधिकारहरूको कार्यविस्तृतिकारण सम्बन्धी नेपाल सरकार मं.पं.बाट स्वीकृत प्रतिवेदन(२०७२) मन्त्रीपरिषद् सचिवालय सिंहदरवार, काठमाडौं।
- नेपाल सरकार, मन्त्री परिषद् सचिवालय, अन्तर प्रदेश परिषद्को बैठकद्वारा गठित "सङ्घीयता कार्यान्वयन सहजीकरण उच्चस्तरीय कार्यदलको प्रतिवेदन २०७५", मन्त्रीपरिषद् सचिवालय सिंहदरवार, काठमाडौं।
- नेपाल सरकार, सङ्घीयता कार्यान्वयन तथा प्रशासन पुनःसंरचना व्यवस्थापन संयन्त्र गठनसम्बन्धी व्यवस्था २०७२, मन्त्रीपरिषद् सचिवालय सिंहदरवार, काठमाडौं।
- पौड्याल, लिलामणी (२०७३) सार्वजनिक प्रशासनको सङ्घीयकरण र सेवा प्रवाह: चुनौती र सम्भावना, (नेपाल सरकार र नेपाल प्रशासनिक प्रशिक्षण प्रतिष्ठानद्वारा नेपाल सरकारका विशिष्ट श्रेणीका अधिकृतका लागि आयोजित गोष्ठीमा प्रस्तुत, सङ्घीयता कार्यान्वयन तथा प्रशासन पुनःसंरचनासम्बन्धी डकुमेन्टसहरू - Office of the Prime Minister and Council of Ministers (opmcm.gov.np)।

देवकोटा, खिमलाल (२०७३) संविधान कार्यान्वयनको अन्तर्त्य, गोरखापत्र राष्ट्रिय दैनिक, २०७८ आश्विन ५ गते मङ्गलवार।

देवकोटा, खिमलाल(२०७८) संविधान र सङ्घीयता हिजो आज र भोलि, विधायन व्यवस्थापन समिति, राष्ट्रिय सभाद्वारा सातौँ संविधान दिवसका अवसरमा आयोजित राष्ट्रिय गोष्ठीमा प्रस्तुत कार्यपत्र।

देवकोटा, खिमलाल (२०७८), संविधान र प्रचलित कानून बमोजिम प्रदेशले स्थानीय तहका लागि बनाउनपर्ने कानून, पारस्परिक सम्बन्ध, जिम्मेवारी एवम् जवाफदेहीता बारे सङ्क्षिप्त प्रस्तुति, बागमती प्रदेश सभाद्वारा आयोजित प्रदेश समन्वय परिषद्को बैठकमा प्रस्तुत कार्यपत्र।

दाहाल, काशीराज(२०७२) सङ्घीयताको सन्दर्भमा कानून निर्माण र कार्यान्वयन, सङ्घीयता कार्यान्वयन तथा प्रशासन पुनःसंरचनासम्बन्धी डकुमेन्टसहरू- Office of the Prime Minister and Council of Ministers (opmcm.gov.np)।

ढुङ्गाना, टेक प्रसाद(२०७३) संविधान कार्यान्वयनको कार्ययोजना अनुरूप कानून तर्जुमा, सचिव कानून, न्याय तथा संसदीय व्यवस्था मन्त्रालयको प्रस्तुति, सङ्घीयता कार्यान्वयन तथा प्रशासन पुनःसंरचनासम्बन्धी डकुमेन्टसहरू - Office of the Prime Minister and Council of Ministers (opmcm.gov.np)।

गुरुङ महेन्द्रमान (२०७३) नेपालको संविधान २०७२ बमोजिम प्रदेश र स्थानीय तहको स्वरूप र व्यवस्थापन, सचिव सङ्घीय मामिला तथा स्थानीय विकास मन्त्रालय।

नेपाल सरकार प्रधानमन्त्री तथा मन्त्रीपरिषद् सचिवालय, सङ्घीयता कार्यान्वयन तथा प्रशासन पुनःसंरचनासम्बन्धी डकुमेन्टसहरू - Office of the Prime Minister and Council of Ministers (opmcm.gov.np)।

Sharma, T.M,& Dinesh Pant(२०७२) Administrative Restructuring in the Context of Federalization, Government of Nepal, extracted from सङ्घीयता कार्यान्वयन तथा प्रशासन पुनःसंरचनासम्बन्धी डकुमेन्टसहरू- Office of the Prime Minister and Council of Ministers (opmcm.gov.np)।

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ऐन | मुख्यमन्त्री तथा मन्त्रिपरिषद्को कार्यालय (bagamati.gov.np) बाट प्राप्त ऐन कानूनसहितका सूचनाहरू। प्रदेश सरकार, प्रदेश प्रहरी ऐन २०७७, अन्तरिक मामला तथा कानून मन्त्रालय, बागमती । प्रदेश प्रहरी ऐन, २०७७ र आन्तरिक मामिला तथा कानून मन्त्रालय (bagamati.gov.np) ।

प्रदेश सरकार, मदन भण्डारी स्वास्थ्य विज्ञान प्रतिष्ठान ऐन २०७६, अन्तरिक मामला तथा कानून मन्त्रालय, बागमती।

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मदन भण्डारी स्वास्थ्य विज्ञान प्रतिष्ठान ऐन, २०७६ र आन्तरिक मामिला तथा कानून मन्त्रालय।

पाठ्यक्रम तथा पाठ्यसामग्री विकास निर्देशिका, २०७७, आन्तरिक मामिला तथा कानून मन्त्रालय।

एकीकृत बस्ती विकाससम्बन्धी कार्यविधि, २०७७, मुख्यमन्त्री तथा मन्त्रिपरिषद्को कार्यालय।

प्रदेश विपद् कोष सञ्चालन कार्यविधि, २०७५, मुख्यमन्त्री तथा मन्त्रिपरिषद्को कार्यालय।

गाँजालाई लागु औषधमा नै सीमित नराख्ने कि ?

नारायण रूपाखेती

रा.नि.तथा वन्यजन्तु स. विभाग

(Paper Type: General Article)

१. परिचय

जीवहरूको जीवनको आधार हावा, पानी र खाद्य वस्तुहरू नै हुन्। ती वस्तुहरू प्रकृतिका उपज हुन्। मानिस जीवजगतभित्र पर्ने भएकोले उसले उपभोग गर्ने खाद्य वस्तुहरूको स्रोत पशुजन्य र वनस्पति जन्य उपजहरू नै हुन्। यसमा ठुलो हिस्सा वनस्पति जन्य उपजले लिएको छ। यसैले गर्दा वनस्पतिलाई मानिसले खाना, औषधि र आमोद प्रमोदको रूपमा उपयोग गर्दै आएको छ। औषधिमा प्रयोग हुने वनस्पतिका खास गरी जरा, डाँठ, बोक्रा, पात, मुना, फूल, फल र सारतत्त्व हुन्। मानिसहरूको बसोबास क्षेत्र, खेती गरिने जमिनको पाटा, कान्ला र सो आसपासमा पाइने गाँजा, भाङ हामी सबैले चिनेकै एकवर्षीय वनस्पति हो। CANNABACEAE (Hemp Family) प्रजातिमा पर्ने गाँजाको वैज्ञानिक नाम *Cannabis sativa* L. Hemp हो। बोलीचालीको भाषामा क्यानाबिस, हेम्प, भाङ, गाँजा, चरेस भन्ने पनि गरिन्छ। *Cannabis* शब्द ल्याटिन भाषाको *Canavas* शब्दबाट बनेको हो। मध्यएसियाको उष्ण, उपोष्ण र तल्लो शितोष्ण क्षेत्रमा २,७०० मिटरसम्मको उचाइमा यो पाइन्छ। यो वनस्पति कृषि जमिनको आसपास बाँझो, कान्ला, पाखो खेतीकै रूपमा पनि पाइन्छ।

यो एक वर्षे खडा हुने वासनादार खोटोयुक्त कोणात्मक काण्डसहित १.२ मिटर देखि १४.८ मिटरसम्म अग्लो हुन्छ। गाँजाको विरुवामा नै भाले र पोथी हुन्छ। भालेभन्दा पोथी विरुवा सामान्यतया अग्लो हुन्छ। यसको पातको आकार किनारा दाँते एवम् हल्केले स्वरूप, एकान्तर विपरीत र भेटनुसहित हुन्छ। डाँठको रङ हरियो हुन्छ। फूल हल्का पहेंलो हरियो र एकलिङ्गी हुन्छ। भाले फूल भेटनुसहित झुप्पो र गजुर पाँच पुष्प तरेली हुन्छ भने पोथी फूल भेटनुरहित, एक पुष्प तरेली र बन्द अवस्थाको गर्भाशय हुन्छ। गाँजाको दाना फिका सेतो दानादार १-३ मि.मि.सम्म व्यास भएको हुन्छ। यसको फूल फुल्ने समय साउन र भदौ हो भने फल लाग्ने समय असोज र कात्तिक महिना हो।

२. नशाको रूपमा प्रयोग र सजाय

गाँजाको बोटको काण्डबाट निकालिने खोटोयुक्त कालो पदार्थ चरेस, पातबाट गाँजा र फलबाट भाङ दाना प्राप्त हुन्छ। गाँजाको पातमा Flavonoid Glycosides, काण्डमा B-lectin, cannabidiol, cannabidoleic acid र cannabigerol पाइन्छ। यी तीनओटै उपजहरू नशालु प्रकृतिका हुन्छन्। गाँजाको बोटबाट प्राप्त हुने उपज नशालु प्रकृतिको हुने भएकोले लागु औषध नियन्त्रण ऐन २०३३, (पहिलो लालमोहर र प्रकाशन मिति २०३३।६।१० हो भने २०४३, २०४४, २०४८, २०५०, २०५५, २०६६, २०७२ मा संशोधित) दफा ३ को परिभाषामा विषय वा प्रसङ्गले अर्को अर्थ नलागेमा यस ऐनमा लागु औषध भन्नाले (१) गाँजा (२) औषधोपयोगी गाँजा र गाँजा भन्नाले (१) भाँड र सिद्धसमेत गाँजा मूलको जुनसुकै बोटको पात र फूल, (२) चरेस तथा गाँजाको बोटबाट प्राप्त गरिएको प्राकृतिक खोटो लिस्सा र चोब (३) माथि उल्लेख गरिएका मध्ये कुनै पदार्थ भएको सार, निस्सार निष्कर्ष, मिश्रण पेय तथा औषधोपयोगी गाँजा भन्नाले गाँजाको निस्सार वा निष्कर्ष सम्झनुपर्छ भन्ने बुझनुपर्छ भनिएको छ। त्यसै गरी, सोही ऐनमा "उत्पादन" भन्नाले गाँजाको बोटबाट गाँजा भाङ, सिद्ध वा चरेस

झिक्ने काम सम्झनुपर्छ भनिएको छ। सोही ऐनको दफा ४ मा गाँजाको खेती गर्न, उत्पादन गर्न, तैयारी गर्न, खरिद गर्न, विक्री वितरण गर्न, निकासी वा पैठरी गर्न ओसार पसार गर्न सञ्चय गर्न वा सेवन गर्न निषेध गरिएको छ।

दण्ड सजाय सम्बन्धमा सोही ऐनको दफा १४ उपदफा (१) मा ४ अन्तर्गत निषेध गरिएका कार्य गर्ने व्यक्तिलाई अपराधको मात्रानुसार सजाय हुने व्यवस्था छ। उदाहरणको लागि (क) गाँजा सेवन गर्ने व्यक्तिलाई एक महिनासम्म कैद वा दुई हजार रुपैयासम्म जरिवाना, तर चिकित्सा केन्द्रमा एक महिनासम्म उपचार गराउने गरी जिम्मा लिने व्यक्ति वा संस्थाले कागज गरी दिएमा त्यस्तो व्यक्तिको सम्बन्धमा पन्ध्र पन्ध्र दिनमा उक्त चिकित्सा केन्द्रबाट उपचार गराइरहेको प्रतिवेदन पेस गर्ने गरी मुद्दा हेर्ने अधिकारीले त्यस्तो व्यक्तिलाई सजाय नगर्न सक्ने व्यवस्था रहेको, (ख) पच्चिस ओटा बोटसम्म गाँजाको खेती गर्ने व्यक्तिलाई तीन महिनासम्म कैद वा तीन हजार रुपैयासम्म जरिवाना हुने, (ग) पच्चिस ओटा बोटभन्दा बढी गाँजाको खेती गर्ने व्यक्तिलाई तीन वर्षसम्म कैद वा पाँच हजार रुपैयादेखि पच्चिस हजार रुपैयासम्म जरिवाना हुने, (घ) गाँजा उत्पादन तयारी खरिद, विक्री वितरण निकासी वा पैठरी ओसार पसार तथा सञ्चय गर्ने व्यक्तिलाई:- (१) पचास ग्रामसम्मको भए तीन महिनासम्म कैद वा तीन हजार रुपैयासम्म जरिवाना, (२) पचास ग्रामदेखि पाँच सय ग्रामसम्मको भए एकमहिनादेखि एक वर्षसम्म कैद र एक हजार रुपैयादेखि दश हजार रुपैयासम्म जरिवाना, (३) पाँच सय ग्रामदेखि दुई किलोग्रामसम्मको भए छ महिनादेखि दुई वर्षसम्म कैद र दुई हजार रुपैयादेखि दश हजार रुपैयासम्म जरिवाना, (४) दुई किलोग्रामदेखि दश किलोग्रामसम्मको भए एक वर्ष देखि तीन वर्षसम्म कैद र पाँच हजार रुपैयादेखि पच्चिस हजार रुपैयासम्म जरिवाना र (५) दश किलोग्रामदेखि माथि जति सुकै भए पनि दुई वर्षदेखि दश वर्षसम्म कैद र पन्ध्र हजार रुपैयादेखि एक लाख रुपैयासम्म जरिवाना हुन सक्ने व्यवस्था छ।

३. गाँजाको उपयोगी पक्षहरू

हिन्दू धर्ममा गाँजाको महिमा भगवान शिवसँग जोडिएको छ। यसलाई अर्को अर्थमा शिवबुटी पनि भनिन्छ। शिवरात्रिको दिन उनका अनुयायीहरूले गाँजा र भाड दुध वा मिठाइमा मिसाएर घोडा बनाएर सेवन गर्ने गर्दछन्। तर गाँजाको केही व्यवहारिक उपयोगिता पनि छन्। जस्तै, गाँजाको मुना, पात, चरेश र दानाको प्रयोग मात्रा मिलाएर प्रयोग गरेमा औषधि विज्ञानको क्षेत्रमा उपयोगी मानिएको छ। हरियो पातलाई उमालेर तयार पारिएको झोल कपालको चायाँ हटाउन, कान दुखेको समयमा कानमा हाल्न, काटेको घाउ सफा गर्ने अर्क (Antiseptic) र पुरानो फोका उठेको घाउ सफा गर्न प्रयोग हुन्छ। त्यस्तै हरियो पातलाई पातलो सफा कपडामा राखेर हर्सा (Piles) को लागि पनि प्रयोग गर्न सकिन्छ। चरेश वा गाँजा औलो, अति टाउको दुखाइ (Migraine), लहरे खोकी, दम, आँउ, पखाला, दिमागी आनन्द (Insanity) र नशाको अति दुखाइमा प्रयोग हुन्छ। त्यस्तै गाँजा वा चरेशलाई भोग जगाउने (Appetizer) निद्रा लगाउने औषधिमा प्रयोग हुन्छ। गाँजालाई रक्त विषदि शुद्धीकरणमा पनि प्रयोग गर्न सकिन्छ। योगी तथा सन्तहरूले गाँजा चरेशलाई थकाइ मेटाउने र फुर्तिलो बनाउछ भनी सेवन गर्दछन्।

गाँजाको दाना घरायसी उपयोग अचारको रूपमा प्रयोग गरिन्छ। त्यस्तै दानाबाट निकालिएको दुध र तेल, सलाद, खाना पकाउन र मालिसमा पनि उपयोगी मानिन्छ। सामान्यतया भाडको दानामा २५% प्रोटीन, ३०% कार्बोहाइड्रेट, १५% अघुलनशील रेसा, क्यारोटिन, फोस्फोरस, पोटासियम, म्याग्नेसियम, सल्फर, क्याल्सियम, आइरन र जिङ्क जैविक रसायन तत्त्व पाइन्छ। त्यस्तै भिटामिनमा ई, सी, बी, बीवान, बीटु, बिसिक्स पनि पाइन्छ। त्यसैले भाडको दाना पूर्ण प्रोटीन र तेलयुक्त हुने भएकोले Lanolin / Linolenic अम्लियपना हुन्छ, जुन मानव खाद्यको पोषणयुक्त अवस्था हो। भाडको दाना सौन्दर्य प्रशाधन वस्तुहरूको कच्चा पदार्थ पनि हो। यसबाट परावैजनी

रोक्ने सौन्दर्य प्रशाधन वस्तुको उत्पादन हुन्छ। गाँजालाई लागु औषधको रूपमा लिइनु नै यसको पात तथा फूलमा पाइने Delta - Tetrahydrocannabinol (THC) हो। यसको सेवनले मनोद्विपतालाई बढाउँछ। THC को मात्रा सबै प्रकारका भाड गाँजाको बोटमा पाइन्छ। यसको बढी मात्रा भाले फूलहरूमा बढी हुन्छ। यो प्रतिशतको हिसावले २०-३०% सम्म हुन्छ। पोथी फूलमा जसको मात्रा न्यून हुन्छ। भाडको फल, दानाको तेल रेसा र डाँठमा THC को मात्रा न्यून हुन्छ। भाडको डाँठको भित्री भाग पुरा तौलको ७०% हिस्सा Hurd भन्ने तत्वले बनेको हुन्छ। यी भाग THC रहित हुन्छन। भाडको बोट वृद्धि हुँदाको बखत नै यसमा Silica / unsalted lime हुने भएकोले सिमेन्टजन्य जस्तै पदार्थको काम गर्दछ। तसर्थ यो आगो तथा पानी प्रतिरोधी हुन्छ। गाँजाको डाँठबाट निर्माण सामग्री Particle board, Partition board, ceiling board एवम् हल्का फर्निचर बनाउन सकिन्छ। यसबाट निर्मित सामग्री मुसा छुचुन्द्रा प्रतिरोधी पनि हुन्छ। भाडको डाँठबाट निर्मित कोइला र कोइलाको धुलो विषादी सोस्ने काममा प्रयोग हुन्छ। कोइलाको धुलो उच्च मधुमेह रोग नियन्त्रण गर्न र पेट सफा गर्ने काममा पनि उपयोग गरिन्छ। त्यस्तै भाडको डाँठ तथा रेसामा ७०% Cellulose भएकोले यसबाट निर्मित कागज तथा Card board अन्य वनस्पतिको डाँठ तथा रेसाबाट निर्मित कागजभन्दा गुणस्तरीय हुन्छ। एक एकडमा खेती गरिएको भाडबाट निर्मित कागजको परिमाण २ देखि ४ एकडमा वृक्षारोपण गरिएको रुखहरूबाट निर्मित कागजको परिमाणभन्दा बढी हुन्छ। भाडको बोटबाट निर्मित जैविक प्लास्टिक पनि उत्पादन हुन्छ। यसबाट पेन्ट एवम् बार्निसजन्य पदार्थसमेत उत्पादन हुन्छ।

गाँजाको बोटबाट प्राप्त हुने जैविक उपजमा बोक्रा तथा रेसा घरयासी एवम् व्यावसायिक काममा अन्य भागभन्दा बढी प्रयोगमा ल्याइन्छ। यसबाट गुणस्तरीय कागज बन्ने भएको हुनाले पाठ्यपुस्तक छापन प्रयोग गरिन्छ। रेसाबाट निर्मित डोरी घरयासी काममा प्रयोग हुने हुन्छ। भाडको रेसाबाट निर्मित डोरी पानी प्रतिरोधी सजिलैसँग चिसोबाट नसड्ने भएकोले जहाजमा अधिक उपयोगमा ल्याइन्छ। रेसाबाट, मानिसले लगाउने लुगा, झोला, जुत्ता, सजावटका सामग्रीहरू बनाउन सकिन्छ। भाडको रेसाबाट निर्मित कपडाको विशेष प्रयोग: यसबाट निर्मित विशेष किसिमको पोसाक जापानमा सम्म्राटले राज्यरोहण गर्दा लगाउने परम्परा रहेको छ।

गाँजाको केही उपयोगिताहरू तल प्रस्तुत गरिएको छ।

Oil	Seed Cake	Fibre	Shiv/ Hurd
Foods	Animal Feed	Paper	Animal Bedding
Cosmetics	Protein Powders	Textile	Building
Fuel	Gluten-free flour	Automotive	Fibre board
Paint	Beer making	Rope	Stucco\ Plaster
Lubricants		Caulking	Insulation
		Canvas	
		Carpets	
		Twine	
Agricultural Benefits			
Natural weed suppression, grown without pesticides or herbicides, pollen isolation, Soil improvement in crop rotation, Deep roots are natural soil aerator			

४. अन्य मुलुकमा भाडको व्यवसायिक खेती र उत्पादन

गाँजाको प्राकृतिक उत्पत्ति क्षेत्र हालको मध्यएसियालाई मानिन्छ। चिनमा गाँजाको खेती गर्ने, प्रचलन १०,००० (दश हजार) वर्ष पहिलादेखि नै हुँदै आएको देखिन्छ भने यसको खेती मानिसहरूले दुङ्गेयुग (Stone Age) देखि गर्दै आएको विश्वास छ। भाड वा गाँजाको खेती विगत दुङ्गेयुगदेखि नै हुँदै आएको मानि एतापनि अठारौँ शताब्दीको उत्तरार्धदेखि बिसौँ शताब्दीको मध्यसम्म अमेरिकामा कपडा उत्पादन गर्ने रेसाका लागि मुख्य बाली कै रूपमा उत्पादन गरेको देखिन्छ। अमेरिकामा हालका दिनहरूमा पनि औद्योगिक प्रयोजनका लागि गाँजाको व्यवसायिक खेती गर्दा नशाजन्य कार्यमा प्रयोग हुन नदिने गरी THC को मात्रा निर्धारण (न्यूनतम) गर्ने नियामक कार्य ऐनद्वारा नै व्यवस्थित गरिएको छ। पूर्व सोभियत सङ्घले पनि सन् १९५० देखि १९८० को दशकसम्म संसारकै सबै भन्दा बढी भाड उत्पादन गर्ने काम गर्‍यो। त्यस्तै भाडको भारी परिमाण उत्पादन गर्न अन्य मुलुकहरूमा चिन, हङ्गेरी, पूर्व युगोस्लाभिया, रोमानिया, पोलेपु फ्रान्स र इटाली पनि छन्। क्यानाडा, संयुक्त अधिराज्य बेलायत र जर्मनीले पनि सन् १९९० देखि यसको पुन उत्पादन सुरु गरेका छन्। भाडको बेलायती उत्पादनमा ज्यादाजसो घोडाको लागि सोत्तर, जर्मनीले फलेक (Panel) र कपडाका लागि रेसाको उत्पादन गर्दछ। क्यानाडा, संयुक्त अधिराज्य बेलायत, अमेरिका र जर्मनी भाडको दानाबाट खाद्य वस्तु र प्रशाधनका सामग्री उत्पादन गर्न केन्द्रित छन्। अन्य मुलुकहरू परम्परागत रूपमा नै प्रयोग हुने कपडा बुन्ने रेसा उत्पादनका लागि व्यवसायिक खेती गर्दै आएका छन्।

५. नेपालमा गाँजा भाडको व्यवसायिक खेतीको सम्भावना

नेपालमा गाँजा/भाडको विरुवा प्राकृतिक रूपमा नै पाइन्छ। अझ मध्यपहाडी र उच्चपहाडी भेगका कृषि जमिनको डिल कान्चामा प्रशस्त मात्रामा पाइन्छ। त्यस्तै खेती गर्न छोडिएको कृषि जमिनमा यसको प्राकृतिक विस्तार भएको देख्न सकिन्छ। भाड मध्यपश्चिम र सुदूरपश्चिमका पहाडी जिल्ला, दैलेख, कालीकोट, रुकुम, अछाम, बाजुरा, बझाङ जिल्लामा किसानहरूले व्यवसायिक खेती नगरे पनि घरयासी प्रयोजन दाना, अचार, तेलका लागि र थैलो (कोल्थो) बनाउन रेसाको लागि खेती गर्दै आएका छन्। भाडको व्यवसायिक प्रचुरता देखेर जापानिज नागरिक SHEY सन् १९९६ देखि यसमा प्रत्यक्ष र परोक्षरूपमा लागेका छन्। उनका अनुसार भाडको धागो नेपालको बजारमा प्रति के.जी. १०००। युरोपमा प्रति के.जी. ५० युरो, भाडको रेसाबाट निर्मित पकडा प्रति टुक्रा (ल.३.५ मि. चौ. ०.३५ मि.) का लागि नेपालमा रु. १,२००। र युरोपमा ३० युरोसम्म पर्दछ। व्यक्तिगत तवरमा नै भए पनि काठमाडौँको ठमेल र पोखराको ड्यामसाइटमा पर्यटन व्यवसायीहरूले भाडको रेसा उत्पादन हुने क्षेत्रबाट रेसा ल्याएर कपडा बुन्ने एवम् तयारी नै कपडा ल्याएर, कोट, आसकोट झोला, जुत्ता, मनिब्याग सङ्गित साधनका कभर बनाएर विदेशी पर्यटकहरूलाई बिक्री गरिरहेको पाइन्छ। यो पेसामा संलग्न व्यक्तिहरू उनीहरूको व्यवसाय सन्तोषजनक एवम् नाफामूलक नै रहेको बताउँछन्।

यसरी प्राकृतिक अवस्था र कृषि जमिनको डिल कान्चामा पाइने गाँजाको खेतीलाई उत्पादन र बजारीकरणको हिसाबले प्रशस्त सम्भावना भएको उद्योगको रूपमा लिन सकिन्छ। लागु औषध ऐनअनुसार भाडको बोटबाट उत्पादित पात, फूल र चोपमात्र लागु औषध मानिएको छ। युरोप र अमेरिकामा भाडको खेती गर्दा उत्पादनका बखतमै THC लाई तोकिएको मात्रामा सीमित राखेर व्यवसायिक खेती गर्न सकेमा, पहाडबाट तराईमा बसाइँ सरेर खाली रहेका मध्यपहाड र उच्चपहाडका व्यक्तिका हक भोगको जमिनमा संरक्षित क्षेत्र वरिपरि बसोबास गर्ने

कृषकहरूलाई यसको व्यवसायीकरण कार्यमा सरिक गराउन सकेमा आय आर्जनको बैकल्पिक स्रोत र मानव वन्यजन्तु द्वन्द्व न्यूनीकरणको एउटा प्रभावकारी बैकल्पिक उपायको सम्भावना रहेको क्षेत्र हो।

अतः गाँजालाई केवल लागु औषधमा मात्र सीमित नराखी बाँझो कृषि जमिनको भरपुर उपयोग, मानव वन्यजन्तु द्वन्द्व न्यूनीकरण, बैकल्पिक खेती र वन क्षेत्रको अनुत्पादक जमिन एवम् पहिरो गएका र जाने सम्भावना भएका स्थानमा व्यवसायिकरूपमा खेती गर्ने र यसको बोटको समग्र भाग विभिन्न कामका उपयोग गर्न सकिने भएकोले नेपाली जनजिब्रोमा रहेको भनाइ बाँसको जस्तै "सबै कुरा भलो, नहुने एक मात्र हलो" भन्ने उक्तिलाई भाडको बहुउपयोगबाट पनि चरितार्थ गर्न सकिन्छ।

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वन पैदावारमा आधारित उद्योगहरू: एक झलक

डा.स्वयम्भूमान अमात्य

(Paper Type: General Article)

सङ्क्षेप सार

नेपालमा वनमा आधारित उद्योगहरू विगतका वर्षहरूमा सञ्चालन भएको भए पनि हाल त्यस्ता धेरै उद्योगहरू अस्तित्वमा पनि छैनन्। चिउरीको फल, सालको बिउ, र सिमलको काठमा आधारित उद्योगहरू हाल सञ्चालनमा छैनन् भने खयर, सल्लाको खोटो आदिमा आधारित उद्योगहरू पनि राम्ररी चलेको बुझिदैन। सन् २००३ ताका झन्डै ३१३ ओटा हाते कागज उद्योग घरेलु तथा साना उद्योग विभागमा दर्ता भएको देखिए तापनि हाल जम्मा १७० ओटा उद्योगहरू मात्र चालु अवस्थामा रहेको तथ्याङ्कले औल्याएको छ। आवश्यक कच्चा पदार्थको निरन्तर आपूर्ति नहुनु, मजदुरहरूको असहयोग, उद्योगबाट हुनआउने प्रदूषण बारे प्रभावित छरछिमेकहरूको अवरोध, अनियमित विद्युत् आपूर्ति र उद्योगप्रति राजनैतिक हस्तक्षेप एवम् उद्योगका लागि उपयुक्त नयाँ प्रविधिको प्रयोगमा कमी हुनु, संलग्न जनशक्तिको समयानुकूल दक्षता वृद्धि हुन नसक्नु र गुणस्तर कायम गर्न निश्चित प्रक्रिया नअपनाउनु आदि रहेका देखिन्छन्। नेपालमा वन पैदावारमा आधारित उद्योगहरूको विकास र विस्तारमा नीतिगत र कानुनी व्यवस्थाहरू राम्रा भए तापनि तिनीहरूलाई व्यवहारमा उतार्न कठिनाइ रहेको देखिन्छ। एक अर्कामा बाझिएका ऐन नियमहरूबाट उत्पन्न बाधा अडचनलाई फुकाउनुपर्ने, कच्चा पदार्थको निश्चितता गरेरमात्र उद्योग इजाजत दिने व्यवस्था हुनुपर्ने, उत्पादित वस्तुहरूको गुणस्तर कायम गर्न निश्चित मापदण्ड तयार गरी कार्यान्वयनमा ल्याउनुपर्ने, उद्योग स्थापना पश्चात् हुने बस्ती विकासले कालान्तरमा उद्योग नै विस्तारित हुने सम्भावनालाई न्यून पार्न औद्योगिक क्षेत्रहरूको पहिचान गरेर मात्र कार्यान्वयनमा ल्याउनुपर्ने देखिन्छ।

१. पृष्ठभूमि

उद्योग नै देशको मेरुदण्ड हो र यसैबाट देशले आर्थिक विकासको गति लिन्छ। मुलुक सङ्घीय संरचनामा गइसकेको परिप्रेक्षमा प्रत्येक प्रदेशमा वन पैदावारमा आधारित उद्योगहरूको पहिचान र अवस्था जान्न जरूरी हुन आउँछ र प्रदेशको आर्थिक क्रियाकलापमा त्यस्ता उद्योगहरूले अहम् भूमिका खेल्ने हुनाले वन पैदावारमा आधारित हाम्रा उद्योगहरूको झलक बुझ्ने क्रममा यो सन्दर्भ तयार गरिएको हो। अध्ययन गर्ने सिलसिलामा पूर्वदेखि पश्चिमसम्म रहेका १६ ओटा विभिन्न उद्योगहरूको करिब तीन महिना लगाई स्थलगत भ्रमण गरीएको र यो आलेख नेपाल सरकार मन्त्री परिषद्बाट २०७३ साल फाल्गुण १७ गते गठित वन, कृषि तथा खनिज पैदावारमा आधारित उद्योगहरूको अध्ययन कार्यदलको प्रतिवेदनमा आधारित रहेको छ।

उद्योग मन्त्रालयको औद्योगिक तथ्याङ्कअनुसार नेपालमा आर्थिक वर्ष २०७०/७१ सम्म दर्ता भएका उद्योगहरूमध्ये कृषि तथा वनजन्य उद्योगहरूको सङ्ख्या ३७१ रहेको पाइन्छ। (स्रोत: औद्योगिक तथ्याङ्क, आ.व. २०७०/७१, उद्योग विभाग) त्यस्तै खोटोमा आधारित उद्योगहरूको सङ्ख्या ४५१, कत्थामा आधारित उद्योग सङ्ख्या ४२, हाते कागजमा आधारित उद्योगको सङ्ख्या १७०३, रबर उद्योगको सङ्ख्या ३६४, अलैंचीमा आधारित उद्योगको सङ्ख्या ४० जिल्लामा फैलिएको २ अहिलेको तथ्याङ्कले देखाउँछ। (स्रोत: १. क्षेत्रीय वन निर्देशनालय, (पोखरा, सुर्खेत, धनगढी), २. वन तथा भूसंरक्षण मन्त्रालय, ३. जर्मन प्राविधिक सहयोग, २००७, ४.

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२. वन स्रोतमा आधारित उद्योगहरू

२.१. खोटोमा आधारित उद्योग

वन पैदावारमा आधारित उद्योगहरूमा खोटो पनि एउटा महत्वपूर्ण उद्योगको रूपमा नेपालमा रहेको देखिन्छ। नेपालमा सामुदायिक वनहरूमा सल्लाको चोप (खोटो) मा आधारित उद्योगहरू (पश्चिमाञ्चल, मध्य पश्चिमाञ्चल र सुदुर पश्चिमाञ्चल) को सङ्ख्या ४५ रहेको प्रारम्भिक तथ्याङ्कबाट देखिन्छ। यी उद्योगहरूले सुदुर पश्चिमाञ्चल विकास क्षेत्रअन्तर्गतका सामुदायिक वन उपभोक्ता सङ्घहरूबाट सङ्कलन गरेको बाहेक वार्षिक २३,१४१.१९२ टन खोटो उत्पादन गरेको पाइन्छ।

२.२. कत्था उद्योग

विभिन्न स्रोतहरूबाट प्राप्त तथ्याङ्कअनुसार देशका चार जिल्लाहरू (बाँके, मोरङ, सुनसरी र बारा) मा हाल कत्था उद्योगहरू सञ्चालनमा रहेका छन्। ती उद्योगहरूको आफ्नै कच्चा पदार्थको स्रोत छैन। तिनीहरू सबै वन स्रोतमा आधारित भएका हुनाले पूर्ण क्षमतामा परिचालन हुन सकेका छैनन्।

२.३. हाते कागज

जर्मन प्राविधिक सहयोगले सन् २००७ मा गरेको अध्ययनअनुसार सन् २००३ ताका झन्डै ३१३ ओटा हाते कागज उद्योग घरेलु तथा साना उद्योग विभागमा दर्ता भएको देखिन्छ। दर्ता भएका उद्योगहरूमध्ये १७० ओटा उद्योग धन्दाहरू हाल चालु अवस्थामा रहेको उक्त प्रतिवेदनमा उल्लेख छ।

२.४. रबर उद्योग

नेपालमा वार्षिक करिब सात अरब मूल्य बराबरको कच्चा रबर तथा रबरजन्य सामग्री आयात हुँदै आएको पाइन्छ। नेपालमा ठुला, मध्यम र साना गरी तीन दर्जनको हाराहारीमा रबर उद्योगहरू छन्। वार्षिक १० हजार मेट्रिक टन प्रशोधित रबरको माग छ (अन्नपूर्ण पोस्ट, बुधवार चैत्र १६, २०७३)। देशमा हाल झापामा २ ओटा (सुधा फलरस र एग्रो फरेस्ट्री प्रोमोसन केन्द्र), मोरङमा एक (मोरङ क्यानिङ कम्पनी) र इलाममा चिया विकास निगमबाट रबर उद्योगहरू सञ्चालनमा आएको देखिन्छ। यी रबर उद्योगहरूको उत्पादन क्षमता बारे सूचना उपलब्ध छैन। यस विषयमा ठोस किसिमको ऐन, कानून तथा नीति नियम पनि देखिँदैन।

२.५. कोहिनुर प्लाइउड उद्योग

नेपालमा जम्मा जम्मी ७० प्लाइउड उद्योग रहेको देखिन्छ। ती उद्योगहरूले कच्चा पदार्थ देशका विभिन्न जिल्लाहरूबाट ल्याई उद्योग सञ्चालन गर्नेगरेका छन्। विराटनगरमा अवस्थित कोहिनुर प्लाइउडले कच्चा पदार्थ (उत्तिस काठ) धनकुटा, तेहथुम, सङ्खुवासभा, सोलखुम्बुबाट प्राप्त गर्ने गरेको देखिन्छ। यस उद्योगले प्रति महिना

४,५०,००० स्क्वायर फिट प्लाइउड उत्पादन गर्ने क्षमता भए पनि हाल कच्चा पदार्थको अभावले कम मात्रामा मात्र उत्पादन गर्दै आएको देखिन्छ।

२.३. कागज उद्योग

वि.सं. २०३९ सालमा स्थापित भूकुटी कागज कारखाना विगत छ वर्षदिखि बन्द भएको अवस्थामा रहेको छ। यो उद्योग बन्द हुनाको प्रमुख कारणमध्ये कच्चा पदार्थको अभाव, मजदुरहरूको असहयोग, उद्योगबाट हुन आउने प्रदूषण बारे प्रभावित छन्। छिमेकीहरूको अवरोध, अनियमित विद्युत् आपूर्ति र यो उद्योगप्रति राजनैतिक हस्तक्षेप आदि रहेको देखिन्छ। भारतबाट आयातित कागजको तुलनामा यो उद्योगले उत्पादन गरेको कागज महँगो हुन गई प्रतिस्पर्धामा समेत पछि परेको रहेछ। यो उद्योगले कपिलवस्तु, दाङ जिल्लाबाट कच्चा पदार्थ (सबाइ घाँस) ल्याउने गरेको र चितवन राष्ट्रिय निकुञ्जबाट काँस ल्याउने गरेकोमा निकुञ्जले वर्षको एक पटकमात्र खरखडाइको सुविधा दिने भएको हुनाले आपूर्ति पर्याप्त मात्रामा हुन नसकेको देखिन्छ। यस उद्योगमा रहेका दुई ओटा उत्पादन गर्ने मेसिनहरूमध्ये थोरै क्षमता भएको (चाइनिज इन्स्टलेसन) मेसिनबाट हाल पनि कच्चा पदार्थ उपलब्ध गराउने व्यवस्था भएमा सञ्चालनमा आउन सक्ने तर उक्त उद्योगलाई पुरानै अवस्थामा सञ्चालन गर्नका लागि नयाँ मेसिनरी पार्टपुर्जाहरूको व्यवस्था हुनुपर्ने देखिन्छ।

३. जडीबुटीमा आधारित उद्योगहरू

जडीबुटी खेतीलाई उद्योगकै रूपमा लिन सकिने सम्भावनाहरू प्रशस्तै रहेका छन्। हाम्रो देश नै एउटा जडीबुटीको भण्डार हो। यहा ७५० भन्दा बढी बोटविरुवाहरू औषधि र सुगन्धित तेलको उत्पादनमा प्रयोग हुँदै आइरहेको उल्लेख भएको पाइन्छ। उपलब्ध तथ्याङ्कअनुसार नेपालबाट वर्षेनी १० देखि १५ हजार मेट्रिक टन जडीबुटी भारत, श्रीलङ्का, पाकिस्तान, चिन, जर्मन आदि देशमा निर्यात हुँदै गरेको देखिन्छ (वन विभाग, २०७२)।

३.१. गजुरमुखी हर्बल, झापा

सन् २००३ मा स्थापना भएको यो उद्योगले तेजपात, चुत्रो र जटामसीलाई प्रशोधन गरी सुगन्धित तेल उत्पादन गरी विदेश निर्यात गरेको रहेछ। तेजपातको विकास विस्तार आफैले निजी वनका माध्यमबाट गरेको देखिन्छ भने चुत्रो र जटामसी मुलुकका विभिन्न ठाउँबाट ल्याई प्रशोधन गर्ने गरेको देखियो। यो उद्योगले सल्लाको सिम्टा, प्रति सिम्टा २५ पैसा तिरी ल्याएको र त्यस्ता सिम्टाहरूलाई छानी रङरोगन गरी सजावटको रूपमा प्रयोग गर्ने गरेको रहेछ। वनमा खेर गएका यस्ता सिम्टाको प्रयोग गर्ने गरेको सराहनीय देखिन्छ।

३.२. सिंहदरबार वैद्यखाना विकास समिति

यो वैद्यखाना ३६५ वर्ष पहिले मल्ल कालमा गुणस्तरीय आर्युवेदिक औषधि उत्पादन गर्ने उद्देश्यले स्थापना भई विभिन्न संस्थागत व्यवस्थामा सञ्चालन हुँदै वि.सं. २०५२ सालमा विकास समितिअन्तरगत रही निरन्तर सञ्चालनमा आएको छ। सार्वजनिक खरिद ऐनको बाध्यात्मक दफाहरूले गर्दा समयमा नै वैद्यखानालाई आवश्यक पर्ने कच्चा पदार्थहरू उपलब्ध गराउन नसकिने र कच्चा पदार्थ उपलब्ध गर्ने हालको प्रक्रियाले गर्दा निजी क्षेत्रसँग प्रतिस्पर्धा गर्न कठिनाई भएको जानकारी प्राप्त भयो।

३.३. जडीबुटी उत्पादन तथा प्रशोधन कम्पनी लिमिटेड, कोटेश्वर, काठमाडौं

यस उद्योगले विभिन्न प्रकारको जडीबुटीको सारतत्व निकाली औषधिजन्य पदार्थहरू उत्पादन गर्दै आएको पाइयो । यस उद्योगका लागि जडीबुटी उत्पादन गरी कृषकहरूको क्षमता विकास गर्न सकिएमा प्रत्यक्ष रोजगारी सिर्जना हुने देखिन्छ । यो उद्योग र औषधि व्यवस्था विभागसँग समन्वय गरी अघि बढ्नुपर्ने र साझा रुचि भएका संस्थाहरूसँग सहकार्य गरेमा जडीबुटीमा आधारित उद्योगहरूले अझै रोजगारी सिर्जना गरी राष्ट्रिय आयआर्जनमा थप टेवा पुऱ्याउने देखिन्छ । यस कम्पनीअन्तर्गत कतिपय ठाँउमा जग्गा नै बाँझो रहेको बुझिएकोले पूर्ण रूपले जडीबुटी खेती गरी कच्चा पदार्थको आपूर्तिमा सघाउ गर्नसक्ने देखिन्छ ।

३.४. गोरखा हर्बल कम्पनी प्रा.लि.

वि.सं. २०४० सालमा गोरखा जिल्लामा स्थापित गोरखा हर्बल कम्पनी प्रा.लि. फ्रान्स र नेपालीहरूको सयुक्त लगानीमा रहेको यो उद्योगले विभिन्न प्रकारका जडीबुटीलाई प्रशोधन गरी औषधिको रूपमा विक्री वितरण गर्दै आएको छ । उक्त कम्पनीले नेपालका विभिन्न जिल्लाका किसानहरूलाई अमला, हर्षो, बर्रो आदि ल्याउने तथा नेपालमा नपाइने तर औषधि उत्पादनका लागि आवश्यक पर्ने अश्वगन्धा, निशोथ, मरिङ्गा भारतबाट ल्याई औषधि उत्पादन गर्ने गरेको देखिन्छ । निशोथ नेपालमा उत्पादन नभएको तर अश्वगन्धाको बिउ मगाएर नेपालमै खेती गर्दै आएको पनि रहेछ । कुरिलो तथा अन्य जडीबुटीहरू नेपालबाट भारतमा लैजाने र पछि नेपालीहरूले नै महँगो शुल्क तिरेर किन्नुपर्ने बाध्यता परेको भनाई रहेको छ ।

३.५. डाबर नेपाल लिमिटेड

डाबर नेपाल प्राइभेट लिमिटेडले वन पैदावारमा आधारित विभिन्न प्रकारका उत्पादन गर्दै आएको औषधिहरूका लागि आवश्यक पर्ने कच्चा पदार्थहरूमध्ये बनेपामा ग्लिन हाउस स्थापना गरी किसानहरूलाई विभिन्न प्रकारका जडीबुटीका बोट बिरुवाका बेर्नाहरू उत्पादन गरी दिने र किसानहरूबाट खरिद गर्ने प्रकृया अपनाएको देखियो । सो कम्पनीको भनाईअनुसार औषधिजन्य उत्पादनका लागि चाहिने कच्चा पदार्थको कमी नभएको जानकारी भयो । डाबर नेपालले उत्पादन गर्ने च्यवनप्राशका लागि आवश्यक पर्ने पदार्थहरू : अमला, हर्षो बर्राको पेस्ट भारतबाट झिकाउने गरेको रहेछ । उद्योगले कच्चा पदार्थको सुनिश्चताका लागि सामुदायिक वन उपभोक्ताहरूसँग समन्वय गरी जडीबुटीहरू उत्पादन गर्ने गरेको देखिन्छ ।

४. अलैंची उद्योग

नेपालमा पूर्वी पहाडबाट सुरु भएको अलैंचीको खेती हाल ४० भन्दा बढी जिल्लाहरूमा फैलिएको छ । नेपालमा सबैभन्दा बढी अलैंची खेती गर्ने जिल्लामा ताप्लेजुड, (३,६४७ हे.), सङ्खुवासभा (३,२५९ हे.) पर्दछन् । जलवायु तथा भौगोलिक कारणले यसको खेती नेपालमा सम्भव भएको हो र खासरी अन्य खेतीबाली नहुने भिरालो जमिनमा अलैंची खेती राम्रो हुने भएकोले नेपालको पहाडी जिल्लाहरूमा यसको विकास र विस्तार भएको छ । हाल यसको खेतीमा करिब ८०,००० घर परिवार संलग्न रहेका छन् । जसका कारण अलैंची उत्पादनको क्षेत्रमा नेपाल विश्व बजारमा प्रथम स्थान ओगट्न सफल भएको छ ।

नेपालमा उत्पादित अलैंचीको बजार साउदी अरेबिया, यु.ए.ई, भियतनाम, सिरिया, बङ्गलादेश आदि हुन् । आयात गर्ने देशले अलैंचीलाई भन्सार सुविधा दिइएको छ । विगत वर्षहरूमा बजारमा सुकाएको अलैंचीको मूल्य रु २,२५० प्रति किलोसम्म पुगेको थियो भने हाल यसको मूल्यमा केही कमी आएको छ । हालै नेपाल अलैंची व्यवसायी

महासङ्घले यसको ग्रेडिङ गरी नेपाल अलैची ट्रेडमार्कको प्रयोग गरी विक्री वितरण गर्ने निर्णय गरिएकोले अब किसानहरूलाई अलैची खेतीबाट फाइदा हुने भएको छ।

५. उद्योग सञ्चालनमा हालको नीतिगत व्यवस्था

नेपाल सरकारले जडीबुटी तथा गैरकाष्ठ वन पैदावार प्रजातिका स्रोतहरूको उपयोग र व्यवस्थापन गर्न समय समयमा नीतिगत व्यवस्था गरेको छ। वन नीति २०७१ को नीति ५ मा निजी क्षेत्रलाई वन विकास तथा विस्तारमा संलग्न गराउँदै वनजन्य उद्यमको प्रवर्धन, उत्पादनको विविधीकरण र बजारीकरणबाट मूल्य अभिवृद्धि र हरित रोजगारी सिर्जना गर्ने, वन नीति २०७१ को रणनीति (घ) मा वनजन्य तथा वनजन्तुमा आधारित उद्यमको विकास गर्न निजी क्षेत्रलाई प्रोत्साहित गर्ने, रणनीति (ङ) मा सरकारी, सामुदायिक, निजी तथा सहकारी क्षेत्रको साझेदारीमा लगानी प्रवर्धन गरी वनजन्य उद्योग र व्यवसायको स्थापना, विकास र विस्तारलाई सहजीकरण गर्ने उल्लेख छ। वन नीति २०७१ को कार्यनीति (५) मा निजी क्षेत्रलाई निजी वन, वनजन्य उद्यम तथा व्यावसायिक नर्सरी प्रवर्धन गर्न आवश्यक प्रविधि, सहूलियतपूर्ण ऋण, अनुदान र बिमाको व्यवस्था गरिने, कार्यनीति (६), मा जडीबुटी तथा गैरकाष्ठ वन पैदावारको प्रशोधन गरी अन्तिम उत्पादन गर्न निजी क्षेत्रलाई प्रोत्साहान गरिने उल्लेख छ। उक्त नीतिको कार्यनीति (७) मा वन पैदावारमा आधारित उद्योगलाई काष्ठ र गैरकाष्ठ उद्योगमा वर्गीकरण गरी कच्चा पदार्थ सरल र सहज रूपमा उपलब्ध गराइने उल्लेख छ। नीति (८) मा आर्थिक वन (Economic Forestry) उद्योगका लागि छत्र घनत्व कम भएको वन क्षेत्र उपलब्ध गराइने छ भन्ने उल्लेख छ र कार्यनीति (८) मा वन क्षेत्रको विकास र वन उद्यम प्रवर्धनका लागि निजी, सार्वजनिक र समुदायविच सहकार्य र निजी क्षेत्र र समुदायका विच साझेदारीलाई प्रोत्साहान गरिने छ भन्ने उल्लेख भएका छन्।

नेपाल सरकारले हालै (वैशाख १०, २०७४) मा राजपत्रमा प्रकाशित गरी सङ्घटन वन्यजन्तु वा वनस्पति वा सोको नमुनाको कारोबारसम्बन्धी व्यवस्था गरी दुर्लभ वा लोपोन्मुख वन्यजन्तु वा वनस्पति वा सोको नमुनाको कारोबार वा व्यापार गर्न वा गराउन नहुने प्रावधान राखेको छ। यो प्रावधानले उच्च मूल्यका हिमाली भेगमा पाइने जडीबुटीहरूको व्यवसायमा असर पर्ने सम्भावना देखिन्छ।

जडीबुटी एवम् गैरकाष्ठ वन पैदावार विकास नीति २०६१, वनस्पति स्रोत अनुसन्धान कार्यविधि २०७० कार्यान्वयनमा ल्याएको छ। नेपालमा व्यावसायिक खेती गर्ने सम्भावना रहेका महत्वपूर्ण जडीबुटीहरूको सङ्ख्या ५० जति छन् (वन विभाग, २०७२)। त्यस्तै जडीबुटी एवम् गैरकाष्ठ वन पैदावार विकास नीति २०६१ ले र आर्थिक विकासका लागि ३० प्रजातिहरू सूचीकृत गरेको छ भने १२ प्रजातिका जडीबुटीहरूलाई खेती तथा अनुसन्धानका लागि तोकेको छ। खोटो सङ्कलनलाई व्यवस्थापन गर्न र खोटो सङ्कलनसम्बन्धी कामलाई सरल, सहज, व्यवस्थित र पारदर्शी बनाउने हेतुले वन तथा भूसंरक्षण मन्त्रालयले खोटो सङ्कलन कार्यविधि २०६४ तयार गरी लागु गरेको छ।

त्यस्तै २०७४ साल वैशाखमा वन, जडीबुटी र पर्यापर्यटन क्षेत्रमा निजी क्षेत्रको सहभागिता वृद्धि, वन पैदावारको सहज आपूर्ति र वन अतिक्रमण समस्या समाधानका लागि वन तथा भूसंरक्षण मन्त्रालयमा प्रस्तुत गरिएको प्रतिवेदनको समीक्षा गर्दा जडीबुटी उत्पादन तथा प्रशोधन निर्याततर्फ निजी क्षेत्रलाई आकर्षण गर्नका लागि प्रेरक र सुविधा उपलब्ध गराउने कार्यक्रम बनाए पनि कार्यान्वयन हुन नसकेको उल्लेख छ।

६. वनमा आधारित उद्योगहरूमा रहेका अवरोध तथा तथा चुनौतीहरू:

नेपालमा वनजन्य पदार्थहरूमा आधारित उद्योगहरू सञ्चालनमा आउन देशायबमोजिमका अवरोध तथा चुनौतीहरू रहेका देखिन्छन् :

- कच्चा पदार्थको निरन्तर उपलब्धतामा कमी
- उद्योगको नाममा प्राकृतिक रूपमा पाइने जडीबुटीहरूको दोहोनमात्र हुँदैरहेको र पुनरोत्थानका कार्यक्रमहरू नभएको हुनाले यस्ता जडीबुटीहरूको वंशनै लोप हुन सक्ने सम्भावना रहेको
- अधिकांश उद्योगहरूबाट उत्पादित वस्तुहरूको उत्पादन लागत छिमेकी देशको भन्दा बढी हुनु
- गुणस्तर कायम गर्न निश्चित प्रक्रिया नअपनाउनु
- उद्योगको बारेमा सम्पूर्ण जानकारी नहुँदै उद्योग खोल्नु
- व्यापार विकासका बारेको जानकारीमा कमी हुनु
- आफैँ स्वस्फुर्त रूपमा र सवल रूपमा उद्योग चलाउन नसक्नु
- परनिर्भरतामा उद्योग चल्नु
- नीतिमा फेरबदल भइरहनु र मौजुदा नियमहरूमा पनि एकरूपता नहुनु ।
- संलग्न जनशक्तिको समयानुकुल दक्षता वृद्धि हुन नसक्नु
- उपयुक्त नयाँ प्रविधिको प्रयोगमा कमी हुनु
- उद्योग स्थापना भए पश्चात् वस्ती विकास हुँदै जाने भएकोले उद्योगहरूबाट निस्कने धुलो धुवाँबाट नकारात्मक असर पर्न गई कालान्तरमा उद्योग नै विस्तापित हुनजाने अवस्था देखिनु।

७. अबको बाटो

जुन-जुन उद्योगहरूले उद्योग व्यवसायका लागि चाहिने कच्चा पदार्थहरूको जोहो आफैले गर्ने गरेका छन् त्यस्ता उद्योगहरू हाल सञ्चालनमा रहेको देखिन्छ। सम्भावनाको दृष्टिकोणले भविष्यमा द्रुत गतिले औद्योगिकीकरण गरी मुलुकको विकास गर्न र माथि उल्लेखित चुनौतीहरूलाई केही हदमा सम्बोधन गर्न देहायअनुसारका बुँदाहरूमा पहल गर्नुपर्ने देखिन्छ:

- वन स्रोतको दिगो व्यवस्थापन गरी उद्योगका लागि कच्चा पदार्थको रूपमा वन पैदावारको नियमित आपूर्ति बढाउने।
- निजी वनको उत्पादन विषयमा गाउँ/नगरपालिकाको सिफारिसमा कृषि क्षेत्रको उत्पादन सरह विक्री वितरण गर्न पाउने व्यवस्था भएको खण्डमा कच्चा पदार्थको अभावमा उद्योगहरूलाई पर्न जाने बाधा धेरै हदसम्म परिपूर्ति हुने देखिन्छ।
- उद्योग नियमित रूपमा सञ्चालन गर्न विभिन्न नियमन गर्ने निकायहरूसँग सम्पर्कमा रहनुपर्ने हालको व्यवस्थामा सुधार गरी एकद्वार प्रणालीको विकास भएमा उद्योगी व्यवसायी एवम् सरकारी निकायमा पनि पारदर्शी भई उद्योग सञ्चालनमा टेवा पुग्न जाने देखिन्छ।
- स्थानीय स्वायत्त शासन ऐन एवम् अन्य ऐन (वन, खनिज) मा एक अर्कासँग बाझिएका बुँदाहरूमा एकरूपता ल्याई कार्यान्वयन गर्नुपर्ने देखिन्छ। त्यसैगरी गुणस्तर नियन्त्रण गर्ने निकायहरूलाई थप सक्षम बनाउनुपर्ने आवश्यकता छ।

- जडीबुटी तथा गैरकाष्ठ वन पैदावार विकास नीति २००४, व्यापार नीति २००९ तथा औद्योगिक नीति २०११ सबैले व्यापार तथा उद्योगहरूमा द्वैधकर हटाउनुपर्ने उल्लेख भए तापनि कार्यान्वयनमा आउन सकेको छैन । एकद्वार प्रणालीबाट कर लिने कार्य भूमि, कृषि तथा सिँचाई क्षेत्रमा लागु भइसकेको परिप्रेक्षमा जडीबुटी तथा सुगन्धित तेलको सम्बन्धमा पनि लागु गर्नुपर्ने देखिन्छ ।
- उद्योगबाट निस्कासित हुने प्रदूषित पदार्थहरूले मानव स्वास्थ्य एवम् विविध प्रकारका जलचर, पशुपक्षीहरूलाई प्रत्यक्ष रूपमा नकारात्मक प्रभाव पर्ने हुनाले प्रदूषित पदार्थहरूलाई शुद्धीकरण गरेर मात्र निस्काशन गर्नुपर्ने देखिन्छ ।
- सरकारले प्रतिबन्धित जडीबुटीको सूचीमा राखेको तर औषधि उत्पादनका लागि आवश्यक पर्ने जडीबुटीहरू सुलभ रूपमा प्राप्त गर्न वन विभाग, वनस्पति विभाग, जडीबुटी प्रशोधन तथा उत्पादन केन्द्रसँग समन्वय गर्ने र जनावरहरूबाट प्राप्त गर्नुपर्ने औषधिजन्य पदार्थहरू जस्तै कस्तुरीको विना, भालुको पित्त आदि उपलब्ध गर्न गराउन राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण विभागसँग सम्बन्धित जनावरहरूको Wildlife Farming गर्न समन्वय गर्नुपर्ने ।
- उद्योगलाई आवश्यक पर्ने कच्चा पदार्थ निरन्तर रूपमा उपलब्ध गर्न निजी वन, सामुदायिक वन, कबुलियत वनमा भएको व्यवस्थालाई सरलीकरण गरी लागु गर्नुपर्ने ।
- निजी वनमा उत्पादन हुन सक्ने बोट विरुवाहरू(जडीबुटीसमेत) का लागि नमुनाकै रूपमा भए पनि बिमाको थालनी गर्नुपर्ने ।
- अधिकांश जडीबुटीहरू भारत निकारी भई प्रशोधित रूपमा पुनः स्वदेशमा भित्रिने परिपाटीको अलावा सम्भाव्यताका आधारमा जडीबुटीहरू स्वदेशमै प्रशोधन गर्ने गराउने व्यवस्था हुनुपर्ने ।
- जडीबुटीको गुणस्तर कायम राख्न उपयुक्त प्रविधि, प्रजातिहरूको विषयमा अध्ययन अनुसन्धान गरी खेती प्रणालीमा आवद्ध गरिनुपर्ने ।
- उद्योगि/व्यवसायीहरूलाई आवश्यकताका आधारमा समसामायिक ज्ञान र सिपको तालिम तथा अध्ययन भ्रमण गराई प्रोत्साहन दिन उपयुक्त हुने ।
- जडीबुटी निर्यात गर्दा आवश्यक पर्ने प्रमाणीकरणका लागि प्रयोगशालाको समुचित व्यवस्था गर्नुपर्ने ।
- खेती गरीएका टिमुर, रिठा, लप्सी, रुद्राक्ष, अमला आदि र सुगन्धित Medical and Aromatic Plant हरूलाई कृषि उत्पादन सरह मान्यता दिएमा यसको व्यापार अझै बढ्ने ।
- नेपालमा स्थापित उद्योगहरूलाई चाहिने जडीबुटीहरूको तथ्याङ्क लिई नेपालमै खपत भई बाँकी भएको उत्पादन मात्रै देशबाहिर निर्यात गर्ने सम्भावनाको पहल गर्ने ।
- वन जङ्गलमा नभएका बोटबिरुवा जस्तै: लहरे पीपल, मसलालाई कृषि उत्पादन सरह खुला रूपमा समावेश गरी प्रयोगमा ल्याउनुपर्ने ।
- कच्चा पदार्थको उपलब्धता एवम् सुनिश्चिताका आधारमा मात्र उद्योग दर्ता हुनुपर्ने ।

८. धन्यवाद ज्ञापन

वन पैदावारमा आधारित उद्योगहरूको अध्ययन कार्यदलमा सहयोग पुऱ्याउनुहुने वन तथा भूसंरक्षण मन्त्रालयका तात्कालीन सहसचिवद्वय श्री महेश्वर ढकाल र श्री चन्द्रमान डङ्गोल तथा कृषि विभागका सेवा निवृत्त महानिर्देशक श्री शिवसुन्दर श्रेष्ठ धन्यवादका पात्रहरू हुनुहुन्छ ।

सन्दर्भ सामग्री

अन्नपूर्ण पोस्ट, बुधवार चैत्र १६, २०७३।

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वन ऐन (२०४९), कानून किताब व्यवस्था समिति, नेपाल।

वन विभाग (२०७२), खेती तथा अनुसन्धानका लागि प्राथमिकता प्राप्त बार जडीबुटीहरू, बबरमहल, काठमाडौं।

वन नीति (२०७१), नेपाल सरकार, वन तथा भूसंरक्षण मन्त्रालय, सिंहदरबार।

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वन विभाग (२०६५) वन विभागसँग सम्बन्धित निर्देशकाहरूको सँगालो, बबरमहल, काठमाडौं।

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बागमती प्रदेशमा पोषणको अवस्था र सुधारका प्रयासहरू

पुरुषोत्तम अर्याल

प्रदेश संयोजक, बहुक्षेत्रीय पोषण योजना
प्रदेश नीति तथा योजना आयोग, बागमती प्रदेश

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१. परिचय

नागरिकको स्वास्थ्य अवस्थाले राष्ट्रको सामाजिक-आर्थिक पक्ष र जीवनका सम्भावनाहलाई प्रतिबिम्बित गर्दछ। स्वस्थ तथा पोषित जनशक्ति समृद्ध मुलुक निर्माणको महत्वपूर्ण आधार हो। स्वास्थ्य, पोषण तथा खाद्य सुरक्षा मानव जीवनको अनिवार्य आवश्यकता हो। नेपालको संविधानले नै नागरिकको मौलिक अधिकारको रूपमा स्थापित खाद्य सुरक्षा तथा पोषणका सवालहरू हालका दिनहरूमा आम जनसमुदायको साझा सवालका रूपमा स्थापित भई रहेको परिवेशमा यस सम्बन्धी यथार्थ चित्रण उजागर गराउनु आवश्यक रहेको छ। बागमती प्रदेशमा पोषण प्रवर्धनात्मक कार्यहरू विगत लामो समयदेखि सञ्चालनमा आएका विभिन्न तथ्यहरूका आधार तथा यस सम्बन्धी विभिन्न सामग्रीहरूको अध्ययनबाट पुष्टि हुन्छ। तथापि पोषणका क्षेत्रमा जति सुधारका अपेक्षा गरिएको थियो सो हासिल हुन नसकेको यथार्थता हामी सामु छ। नेपाल सरकारको लक्ष्य अनुसार देशका विभिन्न क्षेत्रमा देखिएका विभिन्न प्रकृतिका कुपोषणको अन्त गरी मानव पुँजीको विकासमा जोड दिने अभियानमा सरिक हुन कुपोषण मुक्त परिवार, बस्ती, वडा, स्थानीय तह, जिल्ला, प्रदेश हुँदै समग्र राष्ट्र नै पोषितो अभियानमा समर्पित हुनु पर्ने हुन्छ। राज्यको पुनर्संरचनासँगै प्रादेशिक रूपमा स्थापना भएका र हुने क्रममा रहेका पोषण सम्बन्धी संरचनाहरूको महत्वलाई ध्यानमा राखी तत्काल पूर्ण रूपमा कार्यान्वयनमा ल्याउनु पर्ने देखिएको छ।

२. अध्ययन सामग्री र विधि

यस सामग्री तयार गर्ने क्रममा:पोषण सुधारका सवालमा नेपाल सरकारका विभिन्न समयमा तयार पारीएका प्रकाशनहरू, प्रादेशिक रूपमा उपलब्ध विभिन्न अध्ययन अनुसन्धानात्मक सामग्रीहरूका साथै बहुक्षेत्रीय पोषण योजना अन्तर्गतका विभिन्न कार्यक्रमहरू कार्यान्वयनका क्रममा: विभिन्न स्थानीयतह तथा वडाहरूमा संचालन भएका कार्यक्रमहरूका अनुभव तथा सिकाइहरूलाई समेटेर तयार गरीएको छ।

३. नतिजा र छलफल

३.१ पोषणको अवस्था

पोषणको विश्लेषणको क्रममा: प्राय बुझाइ सधैं एकनास नै रहन्छ त्यो हो पोषण भनेको खाना हो र यो खानेकुराहरू संग सम्बन्धित रहन्छ । तर पोषणको बारेमा यति मात्र बुझनु भनेको अल्प बुझाइ हुन जान्छ। हालका दिनहरूमा पोषणको क्षेत्र बहुक्षेत्रीय हो र यसलाई बुझ्न तथा समस्या सामधानका लागि पनि बहुक्षेत्रीय आयामहरूको प्रयोग गरिन्छ भन्ने मान्यताबाट यो अगाडी वढेको छ । प्रदेशमा पोषण सुधारका प्रयासहरूलाई नियाल्दा विभिन्न तथ्याङ्कका आधारमा पोषणका अवस्थालाई विश्लेषण गरिएको छ। प्रादेशिक पोषणका तथ्याङ्कहरूलाई अध्ययन गर्दा प्रदेशमा औसत आयू ७२ वर्ष, बाल मृत्यु दर ३६(प्रति हजार जिवित जन्ममा), नवजातशिशु मृत्यु दर १७(प्रति हजार जिवित जन्ममा),मातृमृत्युदर २३९ (प्रति लाख जिवित जन्ममा), कुल

प्रजनन दर १.८, स्वास्थ्य संस्थामा प्रसुति दर ७१ प्रतिशत, तोकिएको खोप लगाउने १२ देखि २३ महिना सम्मका बालबालिका ८५ प्रतिशत रहेको देखिन्छ (प्रदेश आवधिक योजना)।

पोषणका प्रत्यक्ष सूचकका रूपमा रहेका महिला तथा बालबालिकाहरूका निम्न तथ्याङ्कहरूले प्रदेशको पोषणको अवस्थालाई दर्साउन प्रयास गरिएको छ। जसमा जन्मँदा अति कम तौल भएका शिशु ९.७ प्रतिशत रहेको पाइन्छ भने ६ महिना देखि ५९ महिनाका ४१ प्रतिशत बालबालिकामा र २९ प्रतिशत प्रजनन उमेरका महिलाहरूमा रक्तअल्पता देखिएको छ भने १५ देखि ४९ वर्षका प्रजनन उमेरका ३५ प्रतिशत महिलाहरूमा मोटोपन तथा १५ वर्ष माथिका १९.१ प्रतिशत महिला र २८.७ प्रतिशत पुरुषमा उच्च रक्तचापको समस्या रहेको छ। प्रादेशिक रूपमा औसत विवाहको उमेर पुरुषमा २१.७ वर्ष र महिलामा १९.७ वर्ष रहेको छ। पाँच वर्ष मुनिका २३ प्रतिशत बालबालिकामा पुङ्कोपनाको अवस्था रहेको छ भने, ४.७ प्रतिशतमा ख्याउटेपना र ११ प्रतिशतमा कमतौलको समस्या रहेको छ।

प्रस्तुत तथ्यांकको आधारमा नेपाल सरकारले दिगो विकास लक्ष्यमा पोषणका केहि सूचकहरूलाई समावेश गराइ अगाडी वढाएको छ। दिगो विकास लक्ष्यका १२ वटा क्षेत्रहरूमा पोषण सुधारका कार्यक्रमहरूले प्रत्यक्ष वा परोक्ष रूपमा सहयोग पुर्याउने यथार्थलाई आत्म साथ गर्दै सन २०३० सम्ममा प्राप्त हुनु पर्ने सूचकहरूलाई यसरी निर्धारण गरेको छ।

पोषण सुधारका क्षेत्रमा दिगो विकासका लक्ष्यमा संलग्न सूचकहरू

सि.न.	विवरण	पोषणको अवस्था (प्रतिशत)		सम्बन्धित दिगो विकास लक्ष्य
		राष्ट्रिय	बागमती	
१.	पुङ्कोपन	३२	२३	१५
२.	ख्याउटेपन	१२	४.७	४
३.	कम तौल	२४	११	१०
४.	रक्त अल्पता(६ देखि ५९ महिनाका बालबालिका)	५३	४३	१०
५.	रक्त अल्पता (१५ देखि ४९ वर्षका प्रजनन उमेरका महिलाहरू)	४१	२९	१०

स्रोत: Nepal Multiple Indicator Cluster Survey, 2019

यस तथ्यांकलाई विश्लेषण गर्ने हो भने दिगो विकास लक्ष्यमा निर्धारण भएको देशले हासिल गर्नु पर्ने लक्ष्य अत्यन्तै चुनौतिपूर्ण देखिन्छ। पोषण अवस्थाको हिसाबले केहि राम्रो स्थितिमा रहेको बागमती प्रदेशको पोषणको अवस्था त यस्तो स्थितिमा छ भने अन्य प्रदेश एव ग्रामिण क्षेत्रको अवस्था कस्तो होला भन्ने विषयमा सबैले बुझ्नका लागि त्यति गारो नपर्ला। यसका साथै प्रदेशमा पोषणका क्षेत्रहरू संग सम्बन्धित अन्य तथ्याङ्कहरूलाई तालिकामा प्रस्तुत गरिएको छ:

पोषणसंग सम्बन्धी राष्ट्रिय तथा प्रादेशिक विवरण

क्र. सं.	विवरण	पोषणको अवस्था (%)		क्र. सं.	विवरण	पोषणको अवस्था (%)	
		राष्ट्रिय	बागमती			राष्ट्रिय	बागमती
१	बच्चा जन्मेको १ घण्टा भित्र स्तनपान गराउने	५२	५६	७	खाद्य विविधता(६ देखि ९ बर्षका बालबालिका)	४७	५६
२	बच्चा जन्मनासाथ केहि खाना खुवाउने	२९	२६	८	खाद्य विविधता(किशोर किशोरि)	४३	५३
३	भिटामिन ए भएका खानाहरू खुवाएको (६ देखि २३ महिना सम्मका बालबालिका)	६३	८१	९	खाद्य विविधता(प्रजनन उमेरका महिला)	४९	५०
४	आईरन भएका खानाखाने (६ देखि २३ महिना सम्मका बालबालिका)	३५	५१	१०	माछा, मासु तथा पन्छी जन्म उत्पादनहरू उपभोग गर्ने प्रजनन उमेरका महिलाहरू	३४	४३
५	भिटामिन ए वितरण भएको र खुवाएको (६ देखि २३ महिना सम्मका बालबालिका)	८६	८७	११	जुकाको औषधि खुवाएको(१२ देखि ५९ बर्ष सम्मका बालबालिका)	७६	७५
६	१८० वा सो भन्दा वढी अइरन चक्कि खाने महिलाहरू	४२	५०	१२	कम BMI भएका प्रजनन उमेरका महिलाहरू १८.५ भन्दा कम	१७	१२

स्रोत: Nepal Demographic and Health Survey, 2016

बागमती प्रदेश भित्र सरकारीस्तरमा २७ अस्पताल, ४३ प्राथमिक स्वास्थ्य केन्द्र, ६४४ स्वास्थ्य चौकी, १३९ नगरस्वास्थ्य केन्द्र, ११४ सामुदायिक स्वस्थ्य इकाई तथा ६४ आयुर्वेद स्वास्थ्य संस्था, ३९८ बर्थिङ्ग सेन्टर, २४८२ खोप केन्द्र र १९८३ गाउँघर क्लिनिक सञ्चालित छन् । यस प्रदेश भित्र शहरी क्षेत्रमा सामान्य देखि विशेषज्ञ सेवा सहितका निजी साथै सामुदायिक स्तरका अस्पतालहरू र मेडिकल कलेजहरूले स्वास्थ्य सेवा पुर्याइरहेका छन् । यसै गरी ९५६१ महिला स्वास्थ्य स्वयंसेविका मार्फत समुदायमा स्वास्थ्य शिक्षा र जनचेतना अभिवृद्धि सम्बन्धी सेवा प्रदान गर्ने कार्य भइरहेको स्थिति छ । स्वास्थ्य क्षेत्रका यि भौतिक एंव मानविय जनशक्ति तुलनात्मक रूपमा अन्य प्रदेशको हिसावमा राम्रो अवस्थामा रहेता पनि पोषणका सवालमा प्रदेशले अपेक्षाकृत सफलता हासिल गर्न नसकिराखेको अवस्था देखिएको छ ।

नेपालले दिगो विकास लक्ष्य, २०३० प्राप्त गर्नको लागि अन्तर्राष्ट्रिय स्तरमा प्रतिवद्धता गरेको छ । दिगो विकासका १७ वटा लक्ष्यहरूमध्ये १२ वटा लक्ष्यहरूमा पोषणसँग सम्बन्धित सूचकहरू समावेश गरिएका छन् । जसमा लक्ष्य नं. १ गरिवीको अन्त्य गर्ने, लक्ष्य नं. २ भोकमरीको अन्त्य गर्ने, लक्ष्य नं. ३ स्वस्थ्य र समुन्नत समाज र लक्ष्य नं. ६ स्वच्छ पानी तथा सरसफाइ रहेको छ । दिगो विकास लक्ष्यमा समावेश भएका सूचकहरू प्राप्त गर्नका लागि सम्बन्धित प्रदेश तथा स्थानीय तहहरूको पनि गहन जिम्मेवारी रहेको छ ।

ख. प्रदेशमा पोषण सुधारकालागि भएका प्रयासहरू

विकासको बाधकको रूपमा रहेको सबै खालका कुपोषणहरू क्रमशः न्यूनिकरण गर्दै कुपोषणमुक्त राष्ट्रको रूपमा विश्वमान चित्रमा नेपाललाई स्थापित गर्नका लागि विभिन्न खालका प्रयासहरू प्रारम्भ भएका छन् । हुन त पोषणका क्षेत्रमा विकासको क्रमको इतिहास हेर्ने हो भने नेपालको छैठौँ पंचवर्षिय योजना देखि यस विषयलाई समावेश गरी अगाडी बढाएको पाइन्छ । विगतमा पोषणका क्षेत्रमा भएका सिकाइ तथा अन्तराष्ट्रिय विभिन्न सन्धी र संझौताहरूको पालना गर्ने क्रममा: नेपालले पनि हालका दिनहरूमा पोषणका विषयलाई प्राथमिकताका साथ नीति र कार्यक्रममा समावेश गराइ अगाडी बढाउने कार्यलाई अगाडी सारेको छ । राष्ट्रिय योजना आयोगको नेतृत्वमा नेपालवाट सबैखालका कुपोषणहरूको अन्त गर्नका लागि वि.स. २०६९ देखि बहुक्षेत्रीय पोषण योजना प्रारम्भ भई २०७४।०७५ सम्मको पहिलो बहुक्षेत्रीय पोषण योजना सफलताका साथ सम्पन्न भइ ०७५।०७६ — ०७९।०८० बहुक्षेत्रीय पोषण योजना — दोस्रो सञ्चालन भइ रहेको छ । जसमा प्रदेश स्तरमा प्रदेश नीति तथा योजना आयोगका सदस्यको सयोजकत्वमा बागमती प्रदेश स्तरीय पोषण तथा खाद्य सुरक्षा निर्देशक समिति गठन भइ प्रदेश नीति तथा योजना आयोगमा यसको सचिवालय व्यवस्थापन भएको छ ।

प्रदेश स्तरीय पोषण तथा खाद्य सुरक्षा निर्देशक समिति गठन भए पश्चात सञ्चालन गरीएका गतिविधिहरू:

- प्रदेश स्तरीय पोषण तथा खाद्य सुरक्षा निर्देशक समिति गठन भइ नियमित बैठक सञ्चालन
- प्रदेश स्तरमा पोषणका क्षेत्रमा कार्यरत विभिन्न साझेदार संस्थाहरूको पहिचान
- संज्ञिय तथा स्थानीय स्रोतहरूको परिचालन गरी संचलन भएका कार्यक्रमहरूमा प्राविधिक सहयोग
- पोषणको हिसावले न्यून अवस्थामा रहेका वासीन्दाहरूलाई पोषण सुधारका कार्यक्रमहरू संचालनका लागि पोषण तथ्यांक संकलन तथा अध्यावधिक गर्ने कार्य
- प्रादेशिक नीति तथा कार्यक्रमहरूमा पोषणका विषयवस्तुहरूलाई समावेश गराउने र विभिन्न मन्त्रालय।विषयगत कार्यालयहरूसंग समन्वयात्मक कार्यहरू

बागमती प्रदेशका सबै स्थानीय तहहरूमा यस आवको अन्तिम सम्म पोषणको अवस्थाको आधारमा बहुक्षेत्रीय पोषण कार्यक्रम विस्तार गरी सञ्चालन गर्ने लक्ष्यका साथ अगाडी बढेको छ । प्रदेशमा कार्यक्रमको विस्तारको चरण तथा प्रकृति यस प्रकार छ:

कार्यक्रमको किसिम	समावेश गरीएका जिल्ला	संचालन भएको आव
बहुक्षेत्रीय पोषण कार्यक्रम पूर्ण प्याकेज	सिन्धुली, दोलखा र सिन्धुपाल्चोक	०७७/०७८
बहुक्षेत्रीय पोषण कार्यक्रम आंशिक प्याकेज	रामेछाप, मकवानपुर, काभ्रेपलाञ्चोक, धादिङ, नुवाकोट र रसुवा	०७७/०७८ – ०७८/०७९
बहुक्षेत्रीय पोषण कार्यक्रम पोषण विशेष मात्र	काठमाण्डौ, ललितपुर, भक्तपुर र चितवन	०७७/०७८ (आंशिक प्याकेजको विस्तारमा रहेको)

पोषण प्रवर्धनात्मक कार्यक्रमहरू संचालनका क्रममा: प्रदेशका विभिन्न जिल्लाहरूलाई पोषण सूचकका आधारमा संज्ञिय सशर्त अनुदान मार्फत विभिन्न तिनवटा प्याकेजमा कार्यक्रमहरू विस्तार भएका छन् । जसमा प्रदेशका ३ जिल्ला अन्तर्गतका ३० स्थानीय तहहरूमा पूर्ण प्याकेजका कार्यक्रमहरू, ६ जिल्लाका ६१ स्थानीय तहहरूमा

आशिक प्याकेज र ४ जिल्लाका २८ स्थानीय तहहरूमा पोषण विशेषका मात्र कार्यक्रमहरू संचालन भइ रहेका छन्। पोषण विशेषका मात्र कार्यक्रम संचालन भएका ४ जिल्लाका स्थानीय तहहरूमा पनि पोषणको अवस्था तथा भौगोलिक विकटताको आधारमा वर्गिकरण गरी सघन कार्यक्रमहरू विस्तार गर्ने कार्यक्रम रहेको छ।

३.२ पोषण सुधार लागि गरीएका नीतिगत प्रयासहरू:

नेपालले पोषण सुधारका विषयमा विभिन्न समयमा विभिन्न खालका प्रयासहरू प्रारम्भ गरेको छ। यस सम्बन्धमा भएका विभिन्न प्रयासहरूको निम्नानुसार बुँदागत रूपमा प्रस्तुत गरीएको छ। राष्ट्रिय स्तरमा भएका प्रतिवद्धता अनुसारका कार्यक्रमहरू प्रादेशिक र स्थानीयतहहरूमा समेत स्थानीयकरण गर्दै अगाडी बढाउनु पर्ने देखिन्छ। जुन यस प्रकार छनः

राष्ट्रियस्तरमा भएका प्रयासहरू

भोकमरी र कुपोषण सम्बन्धी विश्वव्यापी घोषणा, १९७४

बालअधिकार सम्बन्धी महासन्धि (CRC), १९८९

पोषणसम्बन्धी सेवाहरूको विस्तार (Scaling Up Nutrition-SUN)

प्रादेशिक स्तरमा भएक प्रयासहरू

- प्रदेश स्तरीय पोषण तथा खाद्य सुरक्षा निर्देशक समिति गठन भइ प्रदेश नीति तथा योजना आयोगमा समितिको सचिवालय व्यवस्थापन भएको,
- प्रदेश अन्तर्गतका विभिन्न विषयगत मन्त्रालयहरूबाट पोषण प्रवर्धनका लागि नीतिगतरूपमा संबोधन भइ कार्यक्रमहरू तय गरिएको,
- प्रदेश भित्रका सबै स्थानीय तहहरूमा पोषण विशेष र पोषण संवेदनशिल कार्यक्रमहरू संचालनका लागि बजेट विनियोजन भएको,
- स्थानीय तहहरूबाट पोषणलाइ मुलप्रवाहिकरण गर्नका लागि आन्तरिक स्रोतबाट बजेट विनियोजन कार्य प्रारम्भ भएको,
- पोषण कार्यक्रमहरूको संचालनको प्रभावकारीताका लागि नियमित अनुगमन संयन्त्रको विकास भएको,
- प्रदेश स्तरीय पोषण तथा खाद्य सुरक्षाका क्षेत्रका कामगर्ने विकास साझेदारहरूको कार्यक्षेत्र र विषयगत क्षेत्रको तथ्याङ्क संकलन गरी नियमित रूपमा समन्वयात्मक बैठक संचालन गर्ने संयन्त्रको विकास भएको,
- प्रदेश स्तरीय पोषण तथा खाद्य सुरक्षा क्लस्टर गठन भइ चौमासिक रूपमा नियमित संमन्वय बैठक बस्ने गरेको,

पोषण सुधारका लागि गरिएका नीतिगत व्यवस्था

नेपालको संविधानमा स्वच्छ वातावरणको हक, शिक्षा सम्बन्धी हक, स्वास्थ्य सम्बन्धी हक, खाद्य सम्बन्धी हक, महिलाको हक, बालबालिकाको हक, सामाजिक न्यायको हक, सामाजिक सुरक्षाको हक लगायतका विषयहरू मौलिकहकको रूपमा रहेको छ । संविधानले स्वास्थ्य, शिक्षा, खानेपानी तथा सरसफाइ, लैङ्गिक समानता तथा सामाजिक समावेशीकरण, खाद्य सम्प्रभुता जस्ता विषयहरूलाई राज्यको प्राथमिकतामा राखी कार्यान्वयन गर्नुपर्ने प्रावधान राखी स्वस्थ र सुपोषित नागरिकको परिकल्पना गरेको छ । यसैगरी आधारभूत तथा माध्यमिक शिक्षा, आधारभूत स्वास्थ्य र सरसफाइ जस्ता विषयहरूलाई नेपालको संविधानमा स्थानीय तहको क्षेत्राधिकारको रूपमा

उल्लेख गरेको छ । सोको कार्यान्वयनको लागि नेपालको संविधान र अन्तरसरकारी वित्त व्यवस्था सम्बन्धी ऐन, २०७४ मा शिक्षा, स्वास्थ्य, खानेपानी तथा सरसफाइ जस्ता क्षेत्रमा विशेष अनुदान उपलब्ध गराउनु पर्ने व्यवस्था गरेको छ । प्रदेश स्तरमा पनि पोषण तथा स्वास्थ्य सुधारका विषयहरूलाई नीतिगत रूपमा समावेश गरी कार्यान्वयनका ल्याइ राखेको छ । प्रदेश सरकारका विगतका केहि नीतिगत निर्णय, कार्यक्रम तथा बजेटहरू पोषण सुधार उन्मुख रहेको देखिन्छ । राष्ट्रिय स्वास्थ्य नीति, २०७६, राष्ट्रिय पोषण रणनीति, २०७७, कृषि विकास रणनीति (२०१५-२०३५), खाद्य अधिकार तथा खाद्य सम्प्रभुता सम्बन्धी ऐन, २०७५, बहुक्षेत्रीय पोषण योजना (२०७५/७६ - २०७९/८०), पन्ध्रौं योजना (२०७६/७७ - २०८०/८१), बालबालिका सम्बन्धी ऐन २०७५ तथा बालबालिका सम्बन्धी नियमावली, २०७५, क्षेत्रगत योजनाको अवधारणा र बहुक्षेत्रीय पोषण योजना, स्थानीय सरकार सञ्चालन ऐन, २०७४ आदि पोषणका सवालहरूलाई सम्बोधनका लागि तय भएका राष्ट्रिय तथा प्रादेशिक स्तरका नीति तथा नीयमावली, ऐन तथा अन्य सान्दर्भिक सामग्रीहरू हुन् ।

४. निष्कर्ष र सुझाव

क) निष्कर्ष

पोषण विकासका सबै सवालमा अन्तर सम्बन्धित विषयको रूपमा आउने क्षेत्र हो । मुलुकको संघिय राजधानी सहितको प्रतिनिधित्व गर्ने यस प्रदेशको पोषणको हालको अवस्था त्यती सन्तोष जनक देखिदैन । बहुक्षेत्रीय सलगनताका आधारमा यस क्षेत्रकतौ सुधार गर्नु पर्ने देखिन्छ ।

ख) सुझावहरू

- प्रदेश स्तरमा पोषण सुधारका कार्यक्रमहरू नीतिगत रूपमा नै प्राथमिकताका साथ प्रदेशको कार्यक्रममा समावेश गरी अगाडि वढाउनु पर्ने ।
- पोषणका कार्यक्रमहरू संचालनमा समन्वय, सहभागिता र सहकार्यमा वढावा ल्याउनु पर्ने ।
- विकास साझेदार निकायहरूले संचालन गर्ने कार्यक्रमको सूचना समयमा उपलब्ध भइ क्षेत्रगत रूपमा प्रादेशिक बजेटमा समावेश हुनु पर्ने ।
- पोषणका कार्यक्रमहरू संचालन गर्नका लागि आधिकारीक र जिम्मेवार संरचना निर्माण हुनु पर्ने
- कार्यक्रम संचालनका लागि उपयुक्त जनशक्ति व्यवस्थापन हुनु पर्ने ।

धन्यवाद तथा आभार:

यस सामग्रीलाई पाठक समक्ष पुर्याउनका लागि यो अवस्था सम्मको पठन सामग्री तयार गर्नका लागि आवश्यक सहयोग पुर्याउनुहुने सम्बद्ध सबै पक्षहरू प्रति हार्दिक आभार प्रकट गर्न चाहन्छु ।

सन्दर्भ सामग्रीहरू

पन्ध्रौं योजनाको दस्तावेज (२०७६/७७ - २०८०/८१)

बागमती प्रदेश प्रथम आवधिक योजना

बहुक्षेत्रीय पोषण योजना दोस्रो- (२०७५।७६-२०७९।८०)

बागमती प्रदेश सामाजिक विकास मन्त्रालयका विभिन्न तथ्याङ्कहरू

बागमती प्रदेश भूमि व्यवस्था कृषि तथा सहकारी मन्त्रालयका विभिन्न प्रकाशनहरू

बागमती प्रदेश अन्तर्गतका विभिन्न स्थानीय तहहरूका प्रोफाइलहरू

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