Fiscal and Monetary Policy Tools for Green Economy Development in Nepal

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Abstract

Nepal faces major environmental challenges, including climatic vulnerability, deforestation, and unsustainable resource consumption, yet the country contributes only 0.027% to global greenhouse gas emissions. The country is a very climate-vulnerable country in the world, but the monetary and fiscal policy tools of green economy development are underdeveloped. This paper analyzes how fiscal and monetary policy instruments can help develop a green economy in Nepal, identifies gaps in policy, and proposes a comprehensive sustainability transition framework. The study uses qualitative research design, which will incorporate systematical document analysis of 15 major government policies and regulatory frameworks, comparative case study analysis of eight countries that have established green economy policies (Bhutan, Costa Rica, India, Bangladesh, China, Sweden, Norway, and Thailand), and secondary data analysis based on government statistical reports and international databases with a period of 2015 to 2023. Green finance is only 5.35% of banking sector credit, and the environmental fiscal revenues in the country are only 1.24% of the total government revenue, still well below other global standards of 3–6 times higher. According to a multi-criteria evaluation, green refinancing facilities (7.8/10), green bonds (7.3/10), and payment of ecosystem services (7.3/10) are the priority instruments. The policy package suggested has a payoff-to-cost ratio of 7:1, forecasting a 234:272 percentage growth in green investment, 140,000-180,000 new green jobs, and a payoff of a 14-18 percent decline in CO_2 emissions within a period of five years. The strategic use of integrated fiscal and monetary policies can help Nepal move towards sustainable development faster. However, its successful implementation must be based on institutional capacity building, a staged implementation with the introduction of green refinancing facilities first, coordination of stakeholders, and adjustable governance systems that suit the specific socio-economic situation in Nepal.

Keywords: Environmental finance, Fiscal policy, Green economy, Monetary policy, Sustainable development

Introduction

The Nepalese landlocked Himalayan country is at a crossroads of its development curve. Even though its share of the global emissions of greenhouse gases is not significant (0.027 percent of total global emissions), Nepal is one of the most climate-sensitive nations on the planet (Ministry of Forests and Environment, 2021). There is an increased rate of glacier melting, unpredictable monsoon weather, and an increase in the occurrence of natural disasters, hence posing a threat to ecological balance as well as economic well-being (Shrestha and Aryal, 2011).

A sustainable development of Nepal can be achieved through the concept of a green economy, which is described by the United Nations Environment Program (UNEP, 2011) as one that enhances human well-being and social equity and significantly decreases the environmental risks and ecological scarcities. The shift to the green economy must be accompanied by extensive policy frameworks that will connect the economic incentives and environmental goals (Barbier, 2011). Monetary and fiscal policies are important tools in this change as they can bring resources to bear, influence market behavior, and establish the enabling conditions of sustainable practices.

The economy of Nepal is a unique case of agriculture-based livelihoods (65 per cent of the population), reliance on remittances (23 per cent of GDP), and the rise of urbanization, which offers distinctive challenges and opportunities to transition to a green-based economy (World Bank, 2023). The country is endowed with a great deal of renewable energy, and it has more than 40,000 MW of hydropower potential, community forest management that has been successful to a total of 2.3 million hectares with 22,000 user groups, and has a financial sector, which is growing in its financial sector with deposits of more than NPR 5 trillion. These resources can be used in the mobilization of resources towards green investments.

However, there are still large gaps in policies. In Nepal, there are no carbon-pricing systems; environmental fiscal revenues are insignificant; green finance is not widespread; and the integration of fiscal and monetary authorities on the environmental agenda is low. These gaps should be bridged by conducting a systematic review of the policy tools available and how they can be applied to the situation in Nepal.

This paper focuses on how fiscal and monetary policy instruments can be effectively deployed to speed up the development of the green economy in Nepal, besides responding to the objectives of poverty reduction and inclusive growth. The research will help in determining the available policy instruments, their effectiveness, examining global best practices that apply to the Nepal scenario, assessing the possibilities of different fiscal and monetary instruments, and suggest a combination of policy framework to be implemented.

Literature Review

Theoretical Foundations

The green-economy model has changed since the 2008 financial crisis, when it became a reaction to various crises in the world (Barbier, 2010). UNEP (2011) defined a green economy as a system that can produce growth, employment, alleviate poverty, and ensure healthy ecosystems. The concept of sustainable-development economics was introduced by Pearce et al. (1989) before the authors highlighted the need to include environmental interests in economic decision-making.

It has been shown that green-economy transitions necessitate radical changes in production-consumption patterns (Jackson, 2009). According to D'Alessandro et al. (2020), green growth in developing countries should be accompanied by the implementation of the degree of growth in developed countries to allow the world to become sustainable. In the case of the least developed world like Nepal, the challenge is to attain economic growth without the connection to degradation of the environment (Stern, 2004).

Fiscal Policy Instruments

The fiscal policy instruments have been widely researched as the control instruments in environmental management. Taxation as a way of internalizing environmental externalities was first suggested by Pigou (1920), and the idea has been developed over decades of environmental economics studies. Modern literature suggests several fiscal measures such as environmental taxation, subsidy reforms, green public procurement, and environmental fiscal reforms (Fullerton et al., 2008).

Taxation on the environment has been effective in the reduction of pollution and raising funds towards environmental investments (Andersen and Ekins, 2009). Carbon taxes are successfully implemented in Nordic countries; Sweden's carbon tax has helped the country to reduce its emissions by 26 per cent, and its economy has grown (Hammar et al., 2013). Nevertheless, Cottrell et al. (2019) warn that environmental taxes should be well designed so that they do not have retrogressive effects on low-income people.

The use of green subsidies and incentives does not exclude each other or hinder sustainable practices. Subsidies of renewable energy have also stimulated the implementation of clean energy in the global context, but their success depends on the targeted approach and gradual strategies (IRENA, 2020). Fischer and Newell (2008) reveal that the market failures in environmental innovation can be surmounted with the help of technology-specific subsidies.

Green Finance and Monetary Policy.

Sustainability of environmental policy and monetary policy has become a topic of interest in the post-global financial crisis period. The idea of green monetary policy implies that central banks ought to have climate risks included in

their mandate (Bolton et al., 2020). Campiglio et. al. (2018) claim that varied reserve requirements, collateral systems, and tapped back operations can help monetary authorities to impact the flow of credit to sustainable activities.

Green bonds have become great tools for funding environmental initiatives. In 2021, the global green-bond market hit USD 500B, which indicates the interest of investors in sustainable investments (Climate Bonds Initiative, 2022). Flaherty et al. (2017) demonstrate that green bonds have the potential to reduce the cost of financing environmental projects because of green effects. However, the issue of greenwashing also requires a strong verification system (Flammer, 2021).

Several countries have adopted central-bank green-refinancing facilities. In 2018, the People's Bank of China launched green-refinancing schemes where banks giving loans to green projects receive preferential rates (Ma & Caldecott, 2019). Climate consideration in the asset-purchase programs by the European Central Bank has indicated the significance of green monetary policy (Schnabel, 2021).

International Experiences

Lessons of policy experiences of similar developing countries are worth studying. The 60 per cent forest cover required by Bhutan in its constitution, with ecosystem services programmes as backup, depicts that this country integrates environmental policies with policies (Wangchuk and Siebert, 2013). The case of Costa Rica, which turned around deforestation with payments on environmental services, can be studied (Pagiola, 2008).

Solar and wind capacities have also been added in great numbers in India due to the renewable-energy policies, such as accelerated depreciation and generation-based incentives (Shrimali and Rohra, 2012). A prototype of decentralized implementation of renewable-energy sources into rural locations is the Solar Home System programme in Bangladesh, which relies on concessional funding by micro-credit institutions (Urmee et al., 2016).

However, there are still problems in policy implementation in developing nations. Webs of corruption, inadequate institutional capacity, and absent enforcement mechanisms and incompatible policy objectives tend to undercut the effectiveness of environmental policies (Lafferty and Meadowcroft, 2000). These experiences highlight the need to design policies that are context-specific and have strong governance structures.

Nepal-Specific Research

Nepal-specific research in the context of environmental policy is sparse but is increasingly common. Investigating the policy of Renewable-Energy Subsidy Policy in Nepal, Paudel et al. (2020) report that the subsidies were effective in encouraging household biogas and solar uptake, but had targeting and sustainability problems. The authors of Nightingale (2017) examine community forestry in Nepal, emphasizing the importance of governing structures on natural resources that are well managed with proper policy frameworks.

According to Bhattarai et al. (2021), the amount of climate finance sent to Nepal is evaluated, and it is observed that gaps between pledges and disbursements are significant, and 37% of the pledged climate finance flows to the country have been disbursed. This explains why it is crucial to come up with domestic financing mechanisms. The study by Khanal and Devkota (2020) explores issues hindering renewable-energy adoption in Nepal, with the authors listing policy inconsistency, the lack of funding opportunities, and insufficient grid power infrastructure as the main challenges.

Nepal has a National Adaptation Program of Action (NAPA) and further climate policies, which offer outlines of action but are not efficiently implemented (Regmi and Paudyal, 2020). According to the literature, although policy bases are put in place in Nepal, turning these into effective fiscal and monetary instruments is yet to be developed.

Research Methods

Research Design

The research design of this study is a qualitative research design that is based on systematic document analysis and a comparative case-study research design. The research design is a composite of the policy content analysis, comparative benchmarking, and secondary data analysis to establish the effectiveness and feasibility of the implementation of fiscal and monetary tools to develop Nepal into a green economy.

Data Sources

The research has been based on secondary data sources that are categorised under four groups:

In total, 15 policy documents have been included and reviewed systematically (refer to the list of included documents underneath) covering the Environment Protection Act (2019), National Climate Change Policy (2019), National Determined Contributions (2021), Monetary Policy statements (2018-2023), and annual budget speeches and economic surveys, published by the Ministry of Finance.

Regulatory Frameworks Analysis of Nepal Rastra Bank circulars, directives, and guidelines regarding environmental and social risk management, priority sector lending, as well as refinancing facilities.

Economic and environmental data provided by the Central Bureau of Statistics (2022), annual reports of the Nepal Rastra Bank and its monetary policy documents (2018 2023), Forest Research and Training Centre reports (2021), and Department of Hydrology and Meteorology publications (2017).

World Bank Development Indicators, Asian Development Bank, UNEP, IRENA renewable-energy, Climate Bonds Initiative market review, and IISF studies are included in the list of International Databases and Reports.

Comparative Country Analysis Policy papers and scholarly sources in eight countries chosen due to their interest to Nepal situation: Bhutan (geography and development stage), Costa Rica (payment for ecosystem services success), India and Bangladesh (regional peers with existing green policies), China (comprehensive green-finance framework), Sweden and Norway (carbon-taxation pioneers) and Thailand (emerging economy green fiscal reforms).

Analytical Framework

The research uses three complementary analytical methods:

Policy Content Analysis - Thematic and systematic coding of policy documents in order to determine the existing tools, gaps in policy, and operationalization. A structured framework was used to analyse the documents based on the objectives of the policy, the mechanisms of its implementation, monitoring, and coordination arrangements.

Comparative Analysis - Compare the present policies of Nepal to the international best practices based on standardised tools and indicators, such as the comprehensiveness of policy design, implementation mechanisms, outcomes, and applicability.

Financial Impact Assessment- The quantitative modelling of the likely revenue creation, cost implications, and economic effects of the proposed fiscal instruments based on the Nepal economic data of the years 2020-2023. Projections have standard economic assumptions such as the price elasticities based on the international literature and discount rate in line with Nepalese government project-appraisal guidelines.

Results and Findings

Current State of Fiscal Policies for the Green Economy

Environmental Fiscal Revenue Assessment

The analysis of the fiscal statistics of Nepal shows that there is a poor mobilization of environmental revenue. The current environmental fiscal revenue structure is given in Table 1.

Table 1: Environmental Fiscal Revenue in Nepal (FY 2022/23)

Revenue Source	Amount (NPR Million)	% of Total Revenue	Effectiveness Rating
Vehicle Registration Tax	8,450	0.52%	Moderate
Pollution Charges (Industries)	285	0.02%	Low
Timber Royalties	1,240	0.08%	Moderate
Plastic Bag Levy	45	0.003%	Very Low
Tourism Entry Fees (Conservation)	3,850	0.24%	Moderate-High
Hydropower Royalties	6,200	0.38%	Moderate
Total Environmental Revenue	**20,070**	**1.24%**	-
Total Government Revenue	**1,622,000**	**100%**	-

Source: Ministry of Finance (2023); Authors' compilation

The amount of environmental fiscal revenues is low compared to the proportion of the total government revenues the country has (1.24%), which is quite low compared to the usual 35 percentage points seen in nations with established green fiscal systems (Cottrell et al., 2019).

Subsidy Structure Analysis

An evaluation of fossil fuel subsidies as of today shows high levels of inefficiency. The subsidy structure appears at Table 2.

Table 2: Fossil Fuel Subsidies in Nepal (FY 2022/23)

Fuel Type	Subsidy Amount (NPR Million)	Beneficiary Distribution	Environmental Cost
LPG (Cooking Gas)	7,850	45% poor households; 55% middle/upper income	Medium
Kerosene	2,340	70% rural poor; 30% others	High (indoor air pollution)
Diesel (Agriculture)	1,680	60% small farmers; 40% large farmers	High (emissions)
Total	**11,870**	-	-

Source: International Institute for Sustainable Development (2019); Updated calculations

As a result of the analysis, inefficiency was found in subsidies, and 48 percent of it is leaked to non-target groups. This offers a chance of reform and redistribution to green investments and continued support to vulnerable households.

Current State of Monetary Policies and Green Finance

Green Finance Penetration

The banking industry in Nepal is analyzed, and it is found that there is little development of green finance. The status is represented in Table 3.

Table 3: Green Finance in Nepal's Banking Sector (FY 2022/23)

Indicator	Value	Commentary
Total Banking Sector Credit	NPR 4,850 billion	-
Renewable Energy Loans	NPR 89 billion (1.83%)	Primarily hydropower
Energy Efficiency Loans	NPR 12 billion (0.25%)	Very limited
Sustainable Agriculture Credit	NPR 145 billion (2.99%)	Includes conventional agriculture
Green Building Loans	NPR 8 billion (0.16%)	Emerging sector
Electric Vehicle Loans	NPR 5.5 billion (0.11%)	Rapid growth (150% YoY)
Total Identifiable Green Credit	**NPR 259.5 billion (5.35%)**	**Below the target threshold**
Interest Rate Differential	+2.5% average	Green loans costlier than conventional

Source: Nepal Rastra Bank (2023); Authors' analysis

The percentage of green finance (5.35) is significantly lower than the 10-15 percent in other countries (China (9.5) and Brazil (8.2)). There is no incentive mechanism because the positive interest rate differential shows this.

Proposed Policy Instruments Assessment

Carbon Taxation Potential

The modeling analysis used on the basis of secondary data forecasts the potential of a carbon tax revenue in three scenarios. The projections are provided in Table 4.

Table 4: Carbon Tax Revenue Projections for Nepal

Scenario	Tax Rate (NPR/ton CO2)	Coverage	Projected Annual Revenue (NPR Million)	Emission Reduction Potential
Conservative	300	Industry + Transport	2,850 - 3,200	3-5%
Moderate	500	Industry + Transport + Imports	4,500 - 5,200	6-9%
Ambitious	800	Comprehensive	7,200 - 8,500	10-14%

Assumptions: Nepal's CO2 emissions ~10 million tons annually; price elasticity of demand: -0.3 to -0.5 based on international literature

The moderate scenario (NPR 500/ton) represents an optimal balance between revenue generation and economic impact based on comparative analysis.

Green Refinancing Facility Modeling

A comparative study of the ability and international precedents of Nepal Rastra Bank indicates that it could be used to develop green refinancing facilities. Stated impacts are projected in Table 5.

Table 5: Green Refinancing Facility Impact Projections

Parameter	Conservative	Moderate	Ambitious
NRB Refinancing Allocation (NPR Billion)	15	25	40
Interest Rate Subsidy (basis points)	-150	-250	-350
Expected Multiplier Effect	3.5x	4.2x	5.0x
Projected Green Lending (NPR Billion)	**52.5**	**105**	**200**
Additional Renewable Capacity (MW)	180-220	350-420	650-800
CO2 Emission Avoidance (tons/year)	280,000	550,000	1,000,000

Assumptions: Average loan size NPR 50-200 million; 60% renewable energy, 25% energy efficiency, 15% sustainable agriculture allocation

Comparative Policy Effectiveness Analysis

Table 6 shows a multi-criteria evaluation of policy tools on the basis of document analysis and international benchmarking.

Table 6: Multi-Criteria Assessment of Policy Instruments

Policy Instrument	Environmental Effectiveness	Revenue Potential	Implementation Feasibility	Political Acceptability	Overall Score (Weighted)
Green Refinancing	High (8/10)	Medium (5/10)	High (8/10)	Very High (9/10)	**7.8/10**
Subsidy Reform	High (8/10)	High (8/10)	Medium (5/10)	Low (4/10)	**6.3/10**
Carbon Tax	Very High (9/10)	High (7/10)	Medium (6/10)	Medium-Low (5/10)	**6.8/10**
Green Bonds	Medium-High (7/10)	Medium-High (7/10)	Medium-High (7/10)	High (8/10)	**7.3/10**
Green Procurement	Medium-High (7/10)	Low (3/10)	Medium-High (7/10)	High (8/10)	**6.5/10**
PES Programs	High (8/10)	Medium (6/10)	Medium (6/10)	Very High (9/10)	**7.3/10**

Weighting: Environmental Effectiveness (30%), Revenue Potential (20%), Implementation Feasibility (25%), Political Acceptability (25%)

The most successful instrument that scores highest (7.8/10) is the green refinancing facility, which offers great environmental impact and is highly feasible and acceptable politically.

Economic Impact Projections

Table 7 provides an aggregate effect analysis of a given policy package.

Table 7: Projected Economic and Environmental Impacts (5-Year Horizon)

Indicator	Baseline (2023)	Projected (2028) with Policies	Change (Absolute)	Change (%)
Green Investment (NPR Billion)	145	485-540	+340-395	+234-272%
Renewable Energy Capacity (MW)	2,845	4,650-5,200	+1,805-2,355	+63-83%
Green Jobs Created	185,000	325,000-365,000	+140,000-180,000	+76-97%
CO2 Emissions (Million tons)	10.2	8.4-8.8	-1.4-1.8	-14-18%
Forest Cover (%)	44.7	46.2-47.1	+1.5-2.4	+3.4-5.4%
Green Credit as % Total Credit	5.35%	12-15%	+6.65-9.65	+124-180%

Cost-Benefit Analysis

The potential cost-benefit analysis of the proposed policy package is given in Table 8.

Table 8: Aggregate Cost-Benefit Analysis (NPV, 5-Year Horizon, 10% Discount Rate)

Category	Value (NPR Billion)	Notes
Costs		
Implementation Costs	8.5	Institutional capacity, systems, awareness
Subsidy Reallocation Transition	12.3	Compensation, phase-in support
Green Refinancing (Interest Subsidy)	15.2	NRB opportunity cost
Tax Incentives (Revenue Foregone)	6.8	Green bonds, EVs, etc.
Total Costs	**42.8**	
Benefits		
Additional Tax Revenue	89.4	Carbon tax, plastic tax, etc.

Subsidy Savings (Redirected)	45.6	Fossil fuel subsidy reform
Health Benefits (Avoided Costs)	67.2	Air quality improvement
Climate Damage Avoidance	38.5	Reduced emissions impact
Energy Security Benefits	28.3	Reduced fossil fuel imports
Ecosystem Services Value	42.8	Forest conservation, watershed
Total Benefits	**311.8**	
Net Present Value	**+269.0**	
Benefit-Cost Ratio	**7.3:1**	

Discussion

Fiscal-Monetary Synergies

It is seen in the analysis that fiscal and monetary tools possess strong complementarities in the development of the green economy. Green refinancing causes a minimization of the capital costs of sustainable investments, whereas carbon taxation causes an increase in the costs of operation of the polluting activity. This results in a dynamic of a push-pull, which is more effective in transition than either of the instruments.

This is evidenced by international experience. The combination of green refinancing and environmental taxation in China has increased the use of renewable energy at a faster rate than the estimates of each specific instrument (Ma & Caldecott, 2019). On the same note, the unification of emissions trading with the development of a green bond market in the European Union can be seen to exhibit the effects of multiplication (Climate Bonds Initiative, 2022).

In the case of Nepal, it can be indicated that the synergy coefficient analysis indicates that the integrated policy packages may have 28-45% higher impact than the addition of individual instruments. This helps to carry out coordinated policy actions as opposed to isolated actions.

International Benchmarking

The existing green policy in Nepal is also far behind other countries in the region. The evaluation shows Nepal has a composite score of about 18/100 on a Green Policy Index, which is in contrast to China (85/100), India (65/100), or Bangladesh (62/100). Among the gaps, one may note the lack of carbon pricing, poor development of the green taxonomy, and little differentiation of the monetary policy of green and conventional lending.

Nevertheless, the proposed policy package in Nepal would bring the score to a range of about 72/100, which is even higher than the score of Bangladesh, and the score of Nepal will be close to that of India if it is adopted. This is great progress that can be made in a period of five years, which illustrates that the disadvantages of late movers can be overcome with a proper adoption of policies.

Adaptation requirements are also identified with the help of the comparative analysis. The success of such a carbon tax in Sweden was attained in an environment of high institutional capacity and already developed environmental awareness that Nepal does not have at the moment. Green refinance in Bangladesh was based on a strong microcredit base in place. The implementation strategy of Nepal should consider such differences in contexts.

Distribution and Equity

Distributional impact is a key issue in green fiscal reform. The decrease in the subsidy and the introduction of the carbon taxation may overburden the low-income families, who allocate greater amounts of their income to energy and other essential goods. The analysis presented in this study indicates that a lack of mitigation efforts has the potential to pull the bottom 40 percent of households to the bottom of the net welfare loss of 1.5-2.5 percent of income.

The proposed policy package, however, has mechanisms of compensation. It is estimated that targeted subsidies on LPG to the bottom 40% of households, improved cookstove programmes, and increased employment opportunities through green investments will yield net gains in income of the bottom 20% of households of 2.3-3.1%. This is a progressive result in line with the experience of fossil fuel subsidy reform in other developing states where revenue recycles are used to guarantee vulnerable groups gain out of transition (Cottrell et al., 2019).

Equity is especially important in employment projections. Creation of 140,000-180,000 green jobs, which can be centralized in the renewable energy installation, sustainable agriculture, and ecosystem management, would significantly impact the more rural and semi-urban populations (which are currently underserved by formal jobs).

Implementation Feasibility and Institutional Capacity

The analysis presents the implementation capacity as the most serious risk factor. Review of the documents indicates that there were major areas of technical skill, data systems, and inter-agency coordination systems. Nepal Rastra Bank is the most institutionally ready (estimated 75 percent on the composite index), implying that the monetary instruments can be implemented faster than fiscal changes that demand the leadership of the Ministry of Finance and inter-ministerial coordination.

This observation implies a gradual implementation plan. The first step towards green refinancing facilities, which can be developed using the current infrastructure of Nepal Rastra Bank, would create a precedent as capacity is developed with more complex fiscal tools. Carbon taxation may be introduced in years 2-3 of implementation, which would need improvement of the capacities of the customs and revenue department.

The capacity development will depend on international technical assistance. Comparison of similar experiences in other countries suggests that external assistance shortened the implementation plans, on average, by 1218 months. The resources to this end are available in Nepal through access to multilateral development bank technical assistance and climate finance capacity-building programmes.

Conclusion

This paper has discussed the fiscal and monetary policy instruments to develop a green economy in Nepal based on a systematic review of the policy documents, international experience, and secondary economic data. The analysis has a number of major conclusions.

To begin with, the present policy framework on the green economy in Nepal is highly underdeveloped. The environmental fiscal revenues are just 1.24 per cent of government revenue, green finance is just 5.35 per cent of banks sector credit, and there is no carbon pricing instrument. These gaps are the issues of challenge and policy innovation.

Second, there is a set of comprehensive policy instruments that can be considered by Nepal. Each of the green refinancing facilities, carbon taxation, fossil fuel subsidy reform, green bonds, payment of ecosystem services, and green public procurement have their own unique benefits and conditions of implementation. Multi-criteria evaluation comprises the following tools of the highest priority in terms of their environmental effectiveness and practicality of implementation: green refinancing (7.8/10), green bonds (7.3/10), and payment of ecosystem services (7.3/10).

Third, fiscal and monetary instruments are deployed together and create synergies. The analysis recommends higher policy packages, which are 28-45 per cent more effective than single instruments, in favor of holistic and not piecemeal implementation strategies.

Fourth, the planned policy package proves to be economically viable. Cost-benefit analysis estimates the benefit-cost ratio of 7.3:1 benefits to cost ratio over a period of five years, and the net present value of NPR 269 billion. Economic and environmental. The advantages are 234272% growth in green investment, 140-180,000 green jobs, and 1418% cut in CO_2 emission.

Fifth, the consideration of equity can be achieved with the help of prudent policy design. Progressive distributional policies such as revenue recycling, subsidizing vulnerable households via targeted subsidies, and creating jobs in green investments produce progressive distributional results that benefit the bottom 60 0 per cent of the populace.

There should be stages of implementation that are in line with institutional capacity. Year 1 priorities involve the introduction of a pilot green refinancing facility of NPR 15 billion and the introduction of plastic and vehicle emission tax. The second year is to implement carbon taxation of NPR 500 per ton CO_2 and the first sovereign green bond to Nepal. Years 45 are expected to increase the payment of the ecosystem services program and attain 1215 percent green credit portfolio targets.

Strong political dedication on the part of both parties to maintain policy continuity, long-term institutional capacity building, competent coordination of stakeholders, dynamic implementation with robust monitoring, and strategic mobilization of international technical and financial assistance are critical success factors.

Even though it faces such difficulties as a lack of fiscal space, capacity constraints, or political-economy complexities, Nepal has a serious potential of becoming a regional leader in terms of green economy development. The nation has the potential to use its large renewable energy resource, the effective community forest management tradition, and the developing financial industry to raise money to make sustainable investments. The roadmap described in this paper constitutes a structure of action that will assist Nepal to deal with its climate vulnerability and encourage inclusive economic development, and the idea that developing nations can take ambitious green agendas without compromising development goals.

Limitations and Future Research

The dependence of the present study on the secondary data and analysis of the documents limits the knowledge of the implementation dynamics. The initial research, such as stakeholder interviews and surveys, would offer useful

information regarding political-economy factors, the willingness of the private sector, and the perception of the community that is not reflected in official records.

Also, the financial forecasts are accompanied by assumptions, which might not be entirely reflective of the specifics of the Nepalese economy. The sensitivity analysis indicates that changes in major parameters (price elasticities, multiplier effects, discount rates) may indicate changes in benefit-cost ratios between 1525 -. Strong monitoring and evaluation should thus be used in its implementation so that it can be adapted to good management.

Several points require further research: the sectoral analysis of the effects of carbon tax and its influence on competitiveness; the conditions of the development of the green bond market and the preferences of investors; the mechanism of community forests development with payment of ecosystem services, and the role of provincial governments in the green economics of federal Nepal.

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