



**A Summary of Recommendations
for
The High-Level Economic Reform Advisory
Commission (HLERAC), Nepal**

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Introduction

This report compiles the situational analysis and policy reform recommendations developed by six thematic teams of Nepali Academics of America (NACA) members. This report leverages the extensive expertise of NACA members on Nepal's pressing policy issues. It responds specifically to the call for inputs from the High-Level Economic Reform Advisory Commission formed by the Cabinet. It aligns with NACA's mission to enhance collaboration among academics and scholars affiliated with higher education and research institutions in the United States and globally.

Rather than offering a comprehensive analysis or detailed policy blueprint, the report provides a synthesis of situational contexts and general policy recommendations in thematic areas where NACA members have direct expertise. Each team engaged in independent deliberation, integrating innovative ideas and international best practices to propose actionable, forward-thinking reforms for Nepal. While there may be variations in coverage and format across thematic contributions, the leadership team—Drs. Gyan Nyaupane and Udaya Wagle—chose not to significantly modify individual reports to preserve the authenticity of inputs for the Commission. Some teams have also included additional resources for the Commission's review.

NACA appreciates the opportunity to contribute to these critical discussions and welcomes the Commission to utilize this report's insights across the six thematic areas. We are open to address any questions or collaborate further with the High Commission for Economic Development and implementing agencies to advance these recommendations.

Primary Production Sectors and Investment

A. Tourism

1. Situation Analysis

Tourism is vital to the national economy as it generates over 1,220,000 jobs (15.2% of total jobs), including employment by hotels, travel agents, airlines, restaurants, leisure, and guides. Tourism contributes about 327.3 billion NRs (6.1% of GDP) in the economy. With world-class natural and cultural heritage attractions, including four UNESCO World Heritage Sites, Nepal holds immense potential for tourism growth. However, Nepal's tourism performance is below the global and regional average. Further, tourism is primarily seasonal and concentrated in a few areas, including Kathmandu, Pokhara, Chitwan, Lumbini, and Sagarmatha. The primary challenges of tourism arise from a lack of infrastructure and limited product diversification. Although the nation wants to increase the number of visitors, there is a lack of capacity for tourism infrastructure, including aviation, road networks, accommodations, and other tourism services.

2. Options available to resolve the issues

- Investment in sustainable tourism infrastructure development
 - Reimagination of the aviation sector
 - Increase quality accommodation capacity
 - Promote public-private partnerships in new destinations
 - Encourage diaspora investment in tourism (See the Diaspora Theme)
 - Increase access and connectivity
- Product and market diversification
 - Promote diaspora visiting friends and relative (VFR) market (diaspora tourism needs are unique)
 - Minimize seasonality by offering season-insensitive tourism products
 - Disperse tourism to provinces 1, 2, 6 and 7.
 - Capitalize changing post-Covid tourism market (more tourists from India and Bangladesh)
 - Maintain high-value niche tourism unique to the Himalayan region.

3. High-Level Recommendations for Reform

- **Immediate (0-3 years)**
 - Policies for aviation safety, security, regulation, and international compliance
 - Policies to encourage diaspora investment in tourism
 - Study on diaspora tourism to understand this market better
 - Ensure that tourism activities remain unaffected by political instability or civil unrest by promoting a stable and secure environment for travelers

- Prioritize high-level diplomacy with neighboring countries to secure airspace access and develop cross-border regional tourism infrastructure
- **Midterm (3-5 years)**
 - Institutional reform to have a high-level coordinating institution among the Ministry of Tourism, Tourism Board, Ministry of Forest and Environment, Infrastructure Development, Home Ministry, and other related government agencies and private sector.
 - Revisit the structure of the Nepal Tourism Board to make it more effective and develop globally competitive tourism destination.
- **Long-term (5+ years)**
 - Developing long-term strategies for tourism development
 - Developing sustainable infrastructure and enhancing service capacity for long-term growth in tourism
 - Develop a strategy for globally competitive tourism workforce

4. Relevant Suggested References

- United Nations World Tourism Organization (UNWTO) Reports
- World Travel and Tourism Council (WTTC) Reports
- The Role of Tourism in Sustainable Development within Local-Global Dynamics
<https://doi.org/10.3727/154427223X16819417821813>

B. Energy

1. Situation Analysis

Nepal has made considerable progress in hydroelectricity in the last decade. Despite substantial progress in hydroelectricity, about 90% of the population is believed to have access to electricity, and only 35% have access to clean fuels for cooking. The average energy consumption per GDP and capita is 0.53 kWh and 1,608 kWh, respectively, in Nepal, which is significantly smaller than the average energy consumption per capita in India (7586 kWh), China (33267 kWh), and the USA (77028 kWh). The discrepancy in energy consumption between Nepal, two neighboring countries, and one of the most energy-consuming countries in the world shows that Nepal requires enormous energy sources to meet the potential future energy consumption demand (Ritchie & Roser, 2020). Despite considerable progress in hydroelectricity development, Nepal is importing electricity from India to meet its winter energy demand. Nepal has yet to develop a full potential to harvest and store excess water during the summer season. The consumption of energy is also expected to increase in the household and industrial sectors with the adoption of noble technologies such as electric vehicles and household appliances, as well as an increase in industrial activities, advancement of artificial intelligence, and use of powerful computers.

We propose utilizing two important resources—1) hydrogen and 2) solar energy—to produce energy to meet year-round energy demand in Nepal at national and local levels.

Excess water during the summer can be utilized to produce hydrogen and oxygen and stored to supply during the energy deficient winter season. Solar energy is an alternative, sustainable, and renewable energy resource to meet the household-scale demand for energy consumption in the hilly regions and industrial-scale demand in the Terai regions of Nepal.

1. Options available to resolve the issues.

Hydrogen as energy source

The thermochemical breakdown of water into hydrogen and water can be achieved using several pathways (Perret, 2011). USDOE explored more than 350 pathways out of which eight were considered relatively feasible pathways even though they possessed significant challenges such as elevated temperature and building stable thermochemical systems (USDOE, 2011). Fortunately, Nepal is bestowed with the primary raw materials for the hydrogen energy production—water and solar. Solar energy can be utilized to produce elevated temperatures for the thermochemical reactor by concentrating solar energy using mirrors (USDOE, 2011). Once the thermochemical stability and required temperature is achieved, the energy production process recycles chemical used in the production. A steady supply of water is required for continuous production of hydrogen (Perret, 2011; USDOE, 2011).

Solar energy as energy source

Solar energy production can be localized at various production scales. To help overcome transportation and grid expansion barriers imposed by high hills and mountains for hydroelectricity. Hydroelectricity and solar energy can complement each other in the energy sector. Solar energy can be integrated with the Nepali agricultural landscape. The agriculturally cultivable land remains fallow because of new opportunities opened by quality education, access to the internet, foreign employment, and a highly profitable service sector. Depending on the land parcel size, fallow agricultural lands can be installed to install small to large-scale solar energy production systems. Solar panels can be further integrated with irrigation channels, roads, urban planning, and housing codes. We recommend the following intervention to increase renewable energy production while utilizing agricultural land.

2. High-Level Recommendations for Reform

● Immediate (0-3 years)

- Study current and future energy needs for the country to achieve complete decarbonization, such as, but not limited to, techno-economic analysis, energy production, social, ecological, and environmental feasibility study, etc.
- Energy policy reform study to design policy incentivizing rapid adoption of clean and renewable energy-friendly technologies.

- Market feasibility studies include, but are not limited to, the cost of energy storage, transmission, and utilization, electric grid expansion, cost minimization, etc.
 - Thermo-chemical reactions, risk assessments, and pathways to achieve desired outcomes for hydrogen energy generation in laboratory setting.
 - Feasibility study for scalability to commercialize production, storage, and transportation of hydrogen with minimum risk and lower cost.
- **Midterm (3-5 years)**
 - Drafting national plans for complete decarbonization of the energy, household, and industrial sectors based on lessons learned from immediate-term feasibility studies and energy policy research.
 - Piloting household-scale, middle-scale, and large-scale solar energy projects in targeted sites in multiple locations throughout the country. Adjust the plan according to lessons learned from field implementation of solar energy projects.
- **Long-term (5+ years)**
 - Develop long-term policy, intervention, implementation, and regulatory mechanisms to increase nationwide adoption of solar energy and plan to achieve complete decarbonization to achieve at least net-zero carbon emission within another 2-3 decades.

3. Relevant Suggested References

Perret, R. (2011). *Solar Thermochemical Hydrogen Production Research (STCH) Thermochemical Cycle Selection and Investment Priority*. USDOE.

<https://www.energy.gov/eere/fuelcells/articles/solar-thermochemical-hydrogen-production-research-stch-thermochemical-cycle>

Ritchie, H., & Roser, M. (2020). *Nepal: Energy Country Profile*. Our World in Data.

<https://ourworldindata.org/energy/country/nepal>

USDOE. (2011). *Hydrogen Production: Thermochemical Water Splitting*. USDOE.

<https://www.energy.gov/eere/fuelcells/hydrogen-production-thermochemical-water-splitting>

C. Agriculture

Nepal's import bill for agricultural products has surged to an estimated Rs. 379 billion, up from Rs. 323 billion the previous year, highlighting a worrying trend for a country that was a food exporter just a few decades ago. Today, the nation faces critical challenges in its agricultural sector, jeopardizing food security and economic stability. Low agricultural productivity, compounded by climate change, inadequate infrastructure, and limited market access, has left a significant portion of the population food insecure, with rural communities being the hardest hit. Subsistence farming continues to dominate, restricting economic growth and failing to generate surplus production for commercialization. The absence of a comprehensive land-use policy has led to unregulated development, further diminishing fertile agricultural land. Additionally, land

fragmentation into smaller, economically unviable plots prevents mechanization, efficient irrigation, and investment in modern farming practices. Despite Nepal's rich diversity of crop germplasms, their commercial potential remains underutilized due to weak research efforts, poor market integration, and inadequate policy support.

1. Options available to resolve the issues

- Develop **commercial agriculture** by promoting proper farm mechanization, land consolidation, and utilizing the unique climatic and geographical conditions.
- Develop a suitable land use policy and implement it effectively. Land should be identified into various categories including agricultural, industrial, recreational, residential, and ecologically critical land. Agricultural land should not be used for other purposes. Land should be used for livestock (highlands), fruits (mid-hills), and cereals and vegetables (low-hills and Terai).
- Develop the land consolidation policy and implement it properly without killing small farm holders and their subsistence living.
- Promote unique crops (orange, tea, Yarsha Gumba, medicinal plants, etc.) for commercial purposes. Promoting vegetable seed industry and organic agriculture can be a very good source of income in the long run. Declare certain regions of the country as '**organic zones**' to promote organic farming.

2. High-Level Recommendations for Reform

- Immediate (0-3 years):
 - Initiate import substitution by promoting existing agriculture produce
 - Initiate vegetable seed production and export to various Asian countries.
 - Encourage locally grown foods in all restaurants, schools, and government funded programs. Private companies, financial institutions, NGOs and INGOs can follow it. This will promote our local food production.
 - Develop policies related to organic agriculture and implement it effectively. Declare organic agriculture zones and begin exporting high-value organic products to middle eastern countries.
- Midterm (3-5 years):
 - Develop and implement the land use policy effectively.
 - Establish fruits and vegetable processing facilities.
 - Ensure 'quality seeds of improved varieties of all crops with assured year-round irrigation.
- Long-term (5+ years):

- Establish a 'chemical fertilizer' factory in the country and be independent.
- Become 'food-independent' in all aspects including cereals, dairy, eggs, fruits, meat, seeds, and vegetables.
- Gain the status of 'net-exporter' in 5-10 years.
- Keep all rivers clean all the way from east to west (Mechi to Mahakali) with 'zero soil erosion' by implementing effective soil conservation measures.

D. Entrepreneurship

1. Situation Analysis

Decades of research shows that new ventures will be started, and existing ventures will flourish when a country has fewer procedures to start a business, youths are equipped with entrepreneurial mindset and skills, and businesses get appropriate support to succeed and flourish. Such favorable conditions are also important to attract foreign investment.

2. Options and Recommendations

Create Conducive Environments for Entrepreneurial Ventures

Given Nepal's conditions, priority areas for targeted efforts for new venture creation and success could be in three key areas. All of these will reduce dependence on India and open direct access to international markets. These will not only help develop the specific sectors and generate internal revenue but will also generate revenue through export.

- Tourism-based services and handicrafts
- Agro-businesses with focus on high value-added products
- Tech-based business for international markets

Recommendations for Fundamental Reforms:

- Intensify Efforts for Domestic Job Creation: Promote entrepreneurial ventures and generate gainful employment opportunities to reduce reliance on migrant workers' remittances.
- Facilitate Private Sector Growth: Ease investment barriers, streamline regulatory processes, and offer incentives to attract both domestic and foreign investments.
- Ensure Transparent Governance: Demonstrate genuine commitment to implementing reforms in an objective and unbiased manner, free from political influence.
- Combat Corruption: Enforce strict anti-corruption measures at all levels of governance, backed by accountability mechanisms and independent oversight bodies.

3. Relevant Suggested References

Environments for entrepreneurship development: key dimensions and research implications. *Entrepreneurship theory and practice*, 18(4), 43-62.

<https://journals.sagepub.com/doi/abs/10.1177/104225879401800403>

Institutional dimensions and entrepreneurial activity: an international study. *Small business economics*, 42, 703-716.

<https://link.springer.com/article/10.1007/s11187-013-9523-7>

The Role of Nepali Diaspora

1. Situation Analysis

Whereas the population census of 2021 estimates 2.2 million Nepalis living abroad temporarily, millions more make up a large Nepali diaspora from many countries in Asia, Australia, Europe, and North America. In today's age of digital, economic, and cultural interconnectivity worldwide, the diaspora population has helped bring the world to Nepal and Nepalis regardless of the countries of their residence or legal nationality. Furthermore, a significant part of the diaspora population away from Nepal as the first or second-generation immigrants feels unified by their shared Nepali identity and culture, with the collective interest and progress of Nepal and Nepalis in their hearts. Highly diverse in background, education, skills, and abilities, this part of the Nepali diaspora can provide formidable intellectual, technical, economic, and cultural resources for Nepal. While limited examples of direct connections and involvements of the Nepali diaspora exist, this resource has largely been untapped when it comes to the way they could be a part of the national development strategy in Nepal. To the extent the Government has worked with the diaspora groups collaboratively, they have been riddled with political favors in a way that alienates a large swath of the diaspora groups and members. Creating an appropriate institutional and policy environment can allow interested diaspora groups and members to directly engage and make contributions to the cultural, economic, and social development of Nepal.

2. Options available to resolve the issues

- Institutional and Policy Frameworks: Dual citizenship laws can be offered for interested diaspora Nepalis from a strategically selected group of countries, providing a legal framework to capitalize on the diaspora community broadly. The current NRN Citizenship doesn't provide the full legal status for the country to take advantage of the diaspora human capital. For example, a world-class diaspora athlete, artist, scientist, or intellectual cannot be claimed as Nepali legally without dual citizenship.
- Nepali Diaspora Investment Fund: Establish a designated Fund as a quasi-government entity (government-owned corporation) that attracts deposits and investments from the Nepali diaspora globally, invests funds in key infrastructure and social development priority areas, and guarantees a minimum rate of return (say 8%) with additional returns distributable through dividends. This is an area where best practices from the work of African diaspora can be examined.
- Diaspora Entrepreneurship in Nepal: Develop policies and cutting-edge social and technical infrastructures to attract diaspora entrepreneurship in Nepal. This is an area where best practices can be learned and applied from India.
- Diaspora Involvement in Cultural, Educational, and Scientific Activities: Initiatives on facilitating, funding, hosting, and recognizing short-term

involvements of the diaspora community in projects focused on cultural, educational, and scientific development of Nepal.

3. High-Level Recommendations for Reform

To ensure the diaspora's intellectual and technical resources are effectively utilized to drive innovation, build capacity, and foster sustainable development in Nepal, we provide the following recommendations:

Immediate (0-3 Years)

- Develop a Comprehensive Diaspora Engagement Framework
 - Formulate a National Diaspora Engagement Policy aligned with Nepal's development priorities.
 - Establish a Diaspora Affairs Office to coordinate diaspora-related initiatives.
- Enhance Access to Information and Services
 - Launch a one-stop digital platform to centralize diaspora resources, such as investment opportunities and government schemes.
 - Set up diaspora service desks at embassies and consulates globally for legal, economic, and social support.
- Strengthen Diaspora Representation and Amplify their Voice
 - Include diaspora representatives in advisory councils and other policymaking platforms.
 - Host an Annual Global Nepali Diaspora Conference to foster dialogue and collaboration.
 - Launch Cultural Ambassador Programs to recognize diaspora contributions and promote Cultural Diplomacy

Intermediate (3–5 years)

- Facilitate Remittance Utilization for Development
 - Develop mechanisms to channel remittances into productive sectors, such as infrastructure and small enterprises.
 - Provide financial literacy programs for remittance-receiving families.
- Encourage Philanthropic Contributions and Investments
 - Create a framework for diaspora philanthropy in sectors like healthcare, education, and disaster relief.
 - Establish a Diaspora Philanthropy Matching Fund to amplify contributions to community projects.
- Promote Skills Transfer Initiatives and Return Migration Programs
 - Introduce incentives for skilled professionals to return, including fast-track visa processing and research grants.

- Facilitate public-private partnerships to create employment and skills-sharing opportunities for returning diaspora professionals in high-demand sectors.
- Develop temporary or rotational return programs allowing diaspora professionals to contribute their skills for a fixed period without permanently relocating.
- Establish frameworks for remote skills transfer where diaspora members can mentor or train Nepali professionals through virtual platforms.
- Launch a Diaspora Skills Transfer Program to encourage professionals to share expertise through workshops, virtual mentoring, or on-site training in sectors like healthcare, technology, and education.
- Organize industry-focused skills exchange initiatives that pair diaspora experts with local professionals to enhance technical and managerial capacities.
- Facilitate sector-specific diaspora mentorship programs for youth and early-career professionals in Nepal.
- Establish Visiting Faculty and Expert Programs
 - Create visiting faculty positions at Nepali universities and research institutions to attract diaspora professionals for short-term or long-term teaching and mentoring roles.
 - Offer incentives such as subsidized housing, research funding, and teaching stipends for visiting diaspora experts.
 - Develop partnerships between Nepali and international universities to facilitate collaborative research, teaching and knowledge exchange.

Long-Term Recommendations (5+ years)

- Strengthen Data Collection and Research on the Diaspora
 - Encourage studies on Nepali diaspora
 - Conduct comprehensive diaspora mapping study to analyze their skills, interests, and global distribution
 - Collaborate with academic institutions to study the long-term impact of diaspora engagement policies
- Expand Youth and Second-Generation Engagement
 - Develop programs targeting second-generation diaspora members through internships, exchange trips, and heritage camps.
 - Establish a Global Nepali Youth Network to empower young diaspora leaders.
- Incentivize Regional and Local Engagement
 - Encourage diaspora involvement in their regions of origin through funding local development projects or scholarships.
 - Work with local governments to integrate diaspora engagement into development planning.

Social Development including Education, Health, and Social Security

A. Education

1. Situation Analysis

Nepal's education system exhibits a dual narrative of progress and challenges. On the one hand, primary education has shown improvements in completion rates and gender parity, while on the other, upper secondary school completion remains a challenge, with rates between 20-40% depending on regions and demographics [1][2]. Infrastructure deficiencies, reliance on traditional teaching methods, and limited access to technology continue to hinder progress, particularly in rural areas [3]. Additionally, inclusivity for students with disabilities remains a pressing concern, with autistic students often excluded from schools due to inadequate resources and advocacy [4][5]. It is prudent to note the political interference in education – the influence of political actors and entities on educational policies, governance, administration, and decision-making processes in academic institutions – in Nepal has long been a barrier to progress and quality in academic institutions. Political interference in academic institutions disrupts autonomy, affecting leadership quality and decision-making processes [6]. Furthermore, the growing outmigration of students for education abroad without significant return rates highlights a critical brain drain issue, further weakening the education and employment ecosystem [7].

2. Summary of Issues

1. Completion Rates and Equity

- Alarmingly low upper secondary school completion rates, particularly in rural areas, with only 20-40% of students completing this level [1][2].
- Inequities in access to education due to geography, socioeconomic status, and disabilities [4].

2. Infrastructure and Technology

- Poor access to basic facilities such as drinking water, electricity, and sanitation, particularly in rural schools [3][8].
- Lack of technological integration in classrooms limits modern learning opportunities [9].
- Lack of Appropriate Databases and Academic Infrastructure: Academic institutions in Nepal suffer from inadequate databases for managing student data, curriculum content, and academic research. This absence of centralized data systems hampers the ability to track educational outcomes, monitor progress, and evaluate the efficacy of reforms. Furthermore, the lack of investment in technological infrastructure, such as e-learning platforms, digital libraries, and research databases, limits access to global knowledge, professional development opportunities for teachers, and collaborative research networks [9][12].

3. Accessibility and Inclusivity in Education

- Inadequate support for students with disabilities, with limited policies and programs for autistic students [4][5]. Schools often lack specialized classrooms, trained staff, and assistive technologies for inclusive education. Many children with disabilities are either excluded from school or placed in segregated systems with limited integration opportunities.
- Stigma surrounding disabilities, including autism, hampers societal understanding and advocacy efforts. Teachers lack training in inclusive education, limiting the ability to address diverse student needs effectively.

4. Brain Drain: Mass Exodus of Nepali Youth for Higher Education

- A significant number of students migrate abroad for higher education but do not return, exacerbating a lack of skilled professionals [7][10]. The outflow of educated youth has negatively impacted Nepal's economic growth, innovation, and development due to the lack of a qualified workforce [21].
- The phenomenon of Nepali youth migrating for higher education abroad is often discussed in fragmented ways, with limited empirical research that holistically explores the issue through a multidimensional lens (e.g., economic, social, political, and psychological factors) [25].

5. Political Interference

- Political interference in higher education has compromised the autonomy of universities, with leadership roles often filled based on political affiliation rather than academic merit [6][15]. This has led to inefficiency in administration, poor governance, and a stifling of academic freedom [16].
- Faculty members in Nepali universities have reported concerns over political pressure influencing research outputs and hiring processes, which undermines the quality of education and research. A 2020 case study illustrated how political appointments to key administrative positions led to a series of reforms that prioritized political interests over academic concerns, resulting in reduced faculty autonomy and the dilution of academic programs.
- Political influence also affects curriculum development and teaching methods, where content may be altered to align with political ideologies rather than academic rigor, undermining the integrity of education and stifling critical thinking [20]. The politicization of research funding and academic appointments has led to stagnation in research output, particularly in fields requiring long-term investment such as science, technology, and social sciences [18].
- The long-term consequences of political interference are profound, leading to a deterioration of institutional credibility, diminishing student enrollment, and exacerbating the brain drain problem.

6. Teacher Training and Curriculum Modernization

- Insufficient professional development for secondary and higher education teachers has led to outdated teaching methods that prioritize rote memorization over critical thinking and creativity [12]. Teachers often lack the skills and training to implement modern pedagogical approaches, such as student-centered learning and digital literacy [19]. This gap in professional development results in curricula that fail to equip students with the skills needed for the 21st century workforce.
- Modernizing the curriculum to incorporate digital literacy, contemporary pedagogies, and skill-based learning is essential to ensuring students are prepared for global challenges. However, the lack of investment in teacher training and curriculum modernization has hindered progress in aligning Nepal's education system with international standards [9][12].

7. Need for Increased Research Investment

- Research in education is underfunded, with only 0.3% of the national GDP allocated to research and development [13]. This limited investment hinders the development of evidence-based policies and teaching methods.
- Countries investing in research, such as India and Bangladesh, have seen improvements in educational outcomes, demonstrating the potential impact of research-driven interventions [14].
- There is a clear gap in comprehensive, evidence-based studies on Nepali youth migration for education, particularly when viewed through a multidimensional lens. While anecdotal reports and media discussions abound, they fail to offer the systematic, empirical insights needed to shape effective policies or provide a deep understanding of this complex issue. Further research incorporating diverse perspectives (economic, social, psychological) and longitudinal data is necessary to develop a nuanced understanding of this migration phenomenon [22][23][24][25].

3. High-Level Recommendations for Reform

Immediate (0-3 Years)

- Ensure basic infrastructure improvements, including access to water, sanitation, and electricity in schools [3][8].
- Develop policies and implement teacher training programs for inclusiveness, particularly for students with disabilities, focusing on autism awareness [4][5].
- Standardize merit-based appointments to academic leadership positions to limit political interference [6][11].
- Modernize curricula to include digital literacy, skill-based learning, and contemporary pedagogy, ensuring that teacher training programs emphasize student-centered learning and critical thinking [9][12].
- Increase investment in educational research to inform policy, improve teaching methods, and address regional disparities [13]. Initiate a large-scale, longitudinal national study that explores the multifaceted reasons for Nepali youth migrating abroad for higher education. This study should adopt a multidimensional

framework, including economic, social, psychological, and political factors, to provide a comprehensive understanding of the phenomenon.

Action Points:

- Ensure that the study is aligned with national educational and migration policies, allowing for actionable insights that inform policy decisions, curriculum development, and investment in youth retention strategies.
- Ensure that the data gathered is publicly accessible, allowing policymakers, researchers, and institutions to track trends, predict future patterns, and design targeted interventions.

Midterm (3-5 Years)

- Build partnerships with industries to align higher education programs with market demands [7][10].
- Introduce nationwide awareness campaigns to reduce stigma around disabilities and advocate for inclusive education [4][5].
- Establish competitive research grants and incentives for professionals returning to Nepal to address brain drain [7][10].
- Create a national research agenda in education to direct funding and resources toward critical areas of need [14].
- Policy interventions that create attractive conditions for Nepali youth to return as well as create lucrative opportunities for returning professionals could help retain skilled individuals in the country [26]. Nepali diaspora engagement policies need to be cohesively intersected with education and employment policies.
- Evaluate Pedagogical Practices and Longitudinal Outcomes: Urban and private schools should assess not only graduation rates but also student satisfaction and long-term employment outcomes to ensure holistic success. For Example: Secondary education in Singapore explicitly aims for well-rounded student outcomes, such as: Character development; Self-management skills; Social and cooperative skills; Literacy and numeracy; Communication skills; Information skills; Thinking and creativity; Knowledge application skills. New Addition: Digital/media literacy skills (e.g., Finland's model). *Employment outcomes data can be sourced from Singapore's Education Statistics Digest 2023 (Pages 23-26).*
- Introduce Flexibility in Secondary Education
 - Incorporate technical and vocational training options starting in grades 7-9 to:
 - Smoothly transition students to paths suited to their interests and abilities.
 - De-stigmatize technical/vocational education and provide early exposure to these career options.
 - Suggested Structure for Secondary Schools: Express Stream: Accelerated path for high-performing students; Normal Stream: General academic curriculum; Normal-Technical Stream: Vocationally oriented education for specific student needs.
 - Specialized Independent Schools: Cater to students struggling in traditional academics based on primary school performance.
 - Suggested Structure for Post-Secondary Schools: Junior Colleges: Academic pathway for higher education; Polytechnics: Work-based learning for highly

qualified students; Institutes of Technical Education (ITEs): Practical training for less academically inclined students; Arts Institutions: Focused education for creative and artistic talents.

- Global Examples: These recommendations draw on successful models from high-performing systems, such as Singapore, to structure education systems tailored to diverse student needs.

Sources: Brief on High-Performing Systems: Singapore (Page 8); Education Statistics Digest 2023 (Pages 23-26)

Long-Term (5+ Years)

- Promote institutional autonomy in academic governance, ensuring merit-driven leadership appointments [6][11].
- Expand higher education access in rural areas by establishing regional campuses and providing scholarships for marginalized groups [3][8]. Foster global research partnerships and establish innovation hubs to position Nepal as a regional knowledge center [9][12]. Develop robust vocational and technical education systems to provide alternative pathways and reduce reliance on international education [10][13].
- Increase sustained investment in research across the education sector to monitor progress, evaluate policy impact, and refine educational practices [13].
- Addressing Political Interference in Education: To mitigate the negative impacts of political interference, several reforms can be implemented:
 - Merit-based Appointments and Transparent Leadership Selection: Establishing a transparent and merit-based process for appointing academic leaders would help restore institutional autonomy and ensure leadership is focused on academic excellence.
 - Strengthening Institutional Autonomy: Amend existing laws to protect academic institutions from political influence, including independent boards of governance and decision-making bodies.
 - Promoting Academic Freedom and Critical Thinking: Policies should protect educators from political retaliation and safeguard open discourse.
- Encouraging International Collaboration: Nepal should focus on building strong international academic partnerships to foster research-driven growth and innovation.

References

1. Adhikari, M., Shrestha, S., & Pandey, A. (2023). The impact of political interference on the quality of higher education in Nepal. *Journal of Educational Administration*, 32(1), 45-60.
2. Acharya, P. (2022). A review of education system reforms in Nepal: Progress and challenges. *Asian Education Review*, 8(3), 199-213.
3. Asian Development Bank (ADB). (2021). Nepal: Education sector analysis. Retrieved from <https://www.adb.org>.

4. Bashyal, K., & Yadav, R. (2020). An analysis of the education system in Nepal: Challenges and strategies for improvement. *Nepal Journal of Education*, 12(2), 35-45.
5. Bhattarai, S. (2021). Barriers to inclusive education for students with disabilities in Nepal. *Journal of Special Education*, 14(3), 117-130.
6. Driscoll, D. (2021). The influence of political forces on Nepalese education policies. *International Journal of Educational Policy*, 28(4), 43-56.
7. Ghimire, S., & Poudel, P. (2022). Migration for education: A case study of Nepali students studying abroad. *Migration and Development*, 31(2), 88-102.
8. International Labour Organization (ILO). (2020). Nepal's youth migration and the brain drain: Challenges for the education system. Retrieved from <https://www.ilo.org>
9. Jha, B. (2021). Technological gaps in Nepal's education system: Opportunities for modernization. *Nepal Education Review Journal*, 16(1), 75-86.
10. Khatri, A. (2021). Political appointments and academic autonomy in Nepali universities. *Asian Journal of Higher Education*, 9(1), 18-30.
11. Ministry of Education, Science, and Technology. (2021). Nepal Education Sector Plan 2021-2030. Kathmandu: Government of Nepal.
12. Pandey, P., & Sharma, R. (2021). Teacher professional development in Nepal: Needs and challenges. *International Journal of Teacher Education*, 10(2), 76-89.
13. Poudel, D., & Sijapati, B. (2020). A critical review of educational research funding in Nepal. *Education and Development Journal*, 5(2), 109-121.
14. Shrestha, S. (2020). Educational disparities in Nepal: A review of socioeconomic and geographic challenges. *Nepal Journal of Sociology*, 17(3), 49-61.
15. Shrestha, R., & Kumar, P. (2022). Political interference in education governance: Evidence from Tribhuvan University. *Nepal Political Review*, 11(2), 99-112.
16. Subedi, M., & Bista, P. (2021). Improving access to education in rural Nepal. *Journal of Rural Development*, 25(2), 45-58.
17. UNESCO. (2021). Education for Sustainable Development in Nepal. Paris: United Nations Educational, Scientific and Cultural Organization.
18. Upreti, B. (2022). The challenges and opportunities for inclusive education in Nepal: A systematic review. *Asian Journal of Special Education*, 14(1), 54-66.
19. World Bank. (2020). Nepal: Education sector reform and modernization. Retrieved from <https://www.worldbank.org>.
20. Yadav, B., & Shah, A. (2021). Policy responses to the education crisis in Nepal. *Journal of Education and Policy Analysis*, 19(4), 150-165.
21. myRepublica, 2020. "Brain Drain: A Concerning Trend in Nepal." Retrieved from: <https://myrepublica.nagariknetwork.com/news/brain-drain-a-concerning-trend-in-nepal>
22. International Organization for Migration, "Youth Migration: Understanding the Dynamics and Impacts in Nepal," 2022.
23. Acharya, B. (2020). *Education and Migration: The Multidimensional Causes and Effects of Nepali Youth Migration*. Kathmandu: Academic Journal of Migration Studies.
24. World Bank, Nepal: Addressing the Impact of Brain Drain on Development (2021).
25. Bista, M., & Aryal, S. (2021). Youth Migration for Education in Nepal: A Qualitative Perspective. Kathmandu: Nepali Studies Journal.
26. The Kathmandu Post, 2023. "Reversing Brain Drain: Policy Interventions for Retaining Skilled Professionals." Retrieved from: <https://kathmandupost.com/columns/2023/08/26/reversing-brain-drain-1693070873>.

B. Health

1. Situation Analysis

Nepal's healthcare system has shown notable improvements over the years, yet significant challenges persist, particularly in rural and underserved regions. Healthcare infrastructure remains disproportionately concentrated in urban centers, leaving rural populations with limited access. Over 40% of rural residents must travel more than two hours to reach healthcare facilities, exacerbating health inequities and delaying interventions for acute and chronic conditions [4][10][15]. The country faces a dual burden of diseases. While communicable diseases (CDs) such as tuberculosis and diarrheal illnesses remain a concern, non-communicable diseases (NCDs), including hypertension, diabetes, cardiovascular conditions, and cancer, now account for 60% of total deaths in Nepal. This epidemiological transition is driven by rapid urbanization, lifestyle changes, and aging populations [3][12]. Despite this, the healthcare system is inadequately prepared to address NCDs, with limited infrastructure and trained personnel to manage these growing challenges [12][14]. Maternal and child health (MCH) indicators underscore systemic issues. While reductions in maternal and infant mortality have been achieved, neonatal deaths and unmet family planning needs remain high. The 2022 Nepal Demographic and Health Survey (NDHS) reported neonatal mortality at 21 deaths per 1,000 live births, with rural and disadvantaged populations disproportionately affected [15]. Similarly, over 24% of women face unmet contraceptive needs, particularly in remote areas, limiting progress in reproductive health [13][15].

Mental health is critically underdeveloped, with approximately 30% of Nepalis experiencing at least one psychiatric disorder. However, over 90% of these individuals lack adequate treatment, reflecting severe systemic gaps. The sector suffers from stigma, a dearth of trained professionals, and underfunding, with only 0.2% of the national health budget allocated to mental health services [5][8]. Key social determinants of health (SDH), including poverty, gender disparities, education, and migration, significantly influence health outcomes. Marginalized groups—such as refugees, women, and labor migrants—bear the greatest burden, reflecting systemic inequities [7]. Furthermore, natural disasters, such as the 2015 Gorkha earthquake and the COVID-19 pandemic, have exposed vulnerabilities in the healthcare system, disrupting services and straining already limited resources [18][20][22].

2. Summary of Issues

1. Limited Access to Quality Healthcare Services:

- Rural and remote regions experience a severe shortage of healthcare facilities, necessitating long travel times and delaying care. This urban-centric healthcare model amplifies inequities [4][10][15].
- Quality of service remains a huge gap. Data suggest that an estimated 27,541 deaths could have been prevented in Nepal by population-level interventions, while another 46 400 deaths could have been averted through better health care services in 2019 [23]. Around 57.0% of all the deaths preventable through health care could be averted by improving the quality of service and the remaining 43.0%

by increasing service utilization [23]. In 2019, approximately 1 114 000 years of life were lost due to poor quality of service in Nepal [23]. Together with the expansion of service, these findings point out the need to improve the quality of service.

2. Dual Burden of Diseases: While CDs persist, NCDs now dominate morbidity and mortality. However, the healthcare system remains ill-equipped to address this dual burden due to inadequate infrastructure and policies [3][12].

3. Maternal and Child Health Gaps: High neonatal mortality rates and unmet contraceptive needs persist, particularly in rural areas, due to limited access to antenatal and postnatal care services [13][15].

4. Mental Health Challenges: Rising rates of mental health disorders, compounded by stigma, funding shortages, and a lack of trained professionals, highlight critical care gaps [5][8].

5. Inadequate Focus on Social Determinants of Health (SDH): Poverty, gender inequality, and social exclusion disproportionately impact marginalized groups, limiting equitable health outcomes [7].

6. Impact of Disasters on Health: Events like earthquakes and pandemics severely disrupt healthcare services, highlighting the need for improved disaster preparedness and response [18][20][22].

7. Underinvestment in Health Research: Insufficient funding for health research limits evidence-based policymaking and the understanding of disease patterns and SDH impacts [12][14].

3. High-Level Recommendations

Addressing Nepal's health challenges requires a multifaceted approach that integrates infrastructure development, workforce training, and systemic reforms. Strengthening health systems to ensure equity and resilience will improve outcomes across all sectors while safeguarding against future crises.

Immediate (0–3 Years)

- **Expand Healthcare Access in Rural Areas:** Build new healthcare facilities and introduce mobile health units in underserved regions [4][10].
- **Strengthen Maternal and Child Health:** Scale up antenatal and postnatal care programs and ensure universal access to family planning resources [13][15].
- **Enhance Mental Health Services:** Allocate emergency funding for mental health infrastructure, implement culturally responsive suicide prevention programs, and combat stigma through awareness campaigns [5][6].
- **Disaster Preparedness and Response:** Develop disaster resilience plans for health systems and train healthcare workers in disaster management [18][20][22].

Intermediate (3–5 Years)

- Integrate NCD Management into Primary Healthcare: Train healthcare workers in NCD screening and management and promote health campaigns focusing on lifestyle changes [3][12].
- Expand the Mental Health Workforce: Develop training programs for mental health professionals and integrate services into primary healthcare [6][8].
- Invest in Health Research: Prioritize research funding linking SDH with health outcomes and strengthen partnerships with academic and international organizations [12][14].
- Nepal's federal structure, comprising 753 local governments, presents an opportunity to gather context-specific data for informed decision-making. Integrating research into government and non-government sectors can foster knowledge sharing and enhance capacity building, bridging the gap between research and policymaking. Additionally, adopting technologies like telemedicine could improve service quality in remote areas [24].

Long-Term (5+ Years)

- Develop Sustainable Health Financing Models: Establish equitable health insurance schemes and dedicated funding streams for NCD prevention and mental health services [7].
- Strengthen National Health Policy Frameworks: Update policies to address NCDs, mental health, and SDH comprehensively [5][12].
- Enhance Surveillance Systems: Build robust data systems to track health trends, inequities, and intervention outcomes [12][15].
- Disaster Preparedness: Formulate a comprehensive health emergency framework, leveraging lessons from past disasters, and fund research on disaster health impacts [20][22].

References

1. Ministry of Health and Population (MoHP). (2022). Nepal Health Sector Strategy (NHSS): Progress Report. Kathmandu, Nepal: MoHP.
2. World Health Organization (WHO). (2020). Global Health Observatory Data: Nepal Health Statistics. Geneva: WHO.
3. Bhandari, G. P., & Angdembe, M. R. (2018). Epidemiological Transition in Nepal: Implications for Public Health. *Journal of Nepal Health Research Council*, 16(2), 140–145.
4. Department of Health Services (DoHS). (2022). Annual Health Report 2021/22. Kathmandu, Nepal: DoHS.
5. Kohrt, B. A., & Harper, I. (2008). Navigating Diagnoses: Understanding Mind-Body Relations, Mental Health, and Stigma in Nepal. *Culture, Medicine, and Psychiatry*, 32(4), 462–491.

6. Jordans, M. J., Luitel, N. P., & Komproe, I. H. (2016). Barriers to Mental Health Care in Low-Income Countries: Lessons from Nepal. *The Lancet Psychiatry*, 3(10), 1006–1012.
7. Adhikari, R., & Pandey, P. L. (2018). Socioeconomic and Cultural Determinants of Health Inequities in Nepal. *Public Health Review*, 39, 2–11.
8. Nepal Mental Health Foundation. (2021). *Mental Health and Psychosocial Wellbeing in Nepal: A National Report*. Kathmandu, Nepal: NMHF.
9. Giri, B. R., & Shrestha, S. (2020). Gender Inequities and Health Outcomes in Nepal. *BMC Public Health*, 20, 1–11.
10. Aryal, K. K., Mehata, S., & Dhimal, M. (2019). Status of Primary Health Care in Nepal. *Nepal Medical Journal*, 11(3), 145–151.
11. UNFPA Nepal. (2021). *Maternal Health in Nepal: Progress and Challenges*. Kathmandu, Nepal: UNFPA.
12. Nepal Non-Communicable Disease Alliance (NNDA). (2021). *Annual Report on NCDs in Nepal*. Kathmandu, Nepal: NNDA.
13. Ministry of Health and Population (MoHP). (2022). *Nepal Demographic and Health Survey (NDHS)*. Kathmandu, Nepal: MoHP.
14. Bhattarai, R., & Khanal, P. (2019). Research Priorities in Nepal: Bridging Gaps in Health Equity. *Journal of Public Health Policy*, 30(1), 34–49.
15. Sharma, S., & Regmi, K. (2020). Healthcare Accessibility in Rural Nepal: An Urgent Need for Policy Reforms. *International Journal of Equity in Health*, 19, 11–22.
16. United Nations Development Programme (UNDP). (2022). *Social Determinants of Health in Nepal: A Holistic Perspective*. New York: UNDP.
17. Shrestha, N., & Mishra, S. R. (2018). Chronic Diseases in Nepal: Challenges and Opportunities. *The Lancet Global Health*, 6(2), e177–e178.
18. Government of Nepal, National Planning Commission (NPC). (2015). *Post-Disaster Needs Assessment: Gorkha Earthquake 2015*. Kathmandu, Nepal: NPC.
19. CARE Nepal. (2021). *COVID-19 Impact on Health Systems in Nepal: Lessons Learned*. Kathmandu, Nepal: CARE Nepal.
20. World Bank. (2022). *Health Emergency Preparedness and Resilience in Nepal: A Situational Analysis*. Washington, DC: World Bank.
21. International Organization for Migration (IOM). (2020). *The Health and Wellbeing of Migrant Workers in Nepal: A Report*. Geneva: IOM.
22. Save the Children Nepal. (2021). *Disaster-Resilient Health Systems: Strategies for Nepal*. Kathmandu, Nepal: Save the Children.
23. Kruk ME, Gage AD, Joseph NT, Danaei G, García-Saisó S, Salomon JA. Mortality due to low-quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries. *Lancet*. 2018;392:2203-12.
24. Pandey AR. Health financing reforms in the quest for universal health coverage: Challenges and opportunities in the context of Nepal. *J Glob Health*. 2023 Apr 28;13:03021.

C. Social Security

1. Situational Analysis

Nepal's social security or social protection system is in its nascent stages evolving from government budget speeches without a strong legal foundation. However, the 2015 Constitution established a legal basis for social protection, recognizing fundamental rights to social security, employment, education, health, food, and housing. Key laws such as the Right to Employment Act (2018) and the Social Security Act (2018) support programs like the Prime Minister's Employment Programme and cash transfers, while the Contribution-Based Social Security Act (2017) introduces new contributory schemes. Despite progress, the lack of a cohesive and comprehensive social protection policy framework has resulted in fragmented implementation of existing laws and programs. This fragmentation, especially in health-related schemes, exacerbates inefficiencies and overlaps, hindering the system's overall impact [12].

Nepal has more than 70 social security programs, but only about one third of the population has access to them. Approximately 20.1 million Nepalis remain without any form of social protection [11]. The Social Security Fund (SSF), introduced in 2010, has made strides in covering formal sector workers but remains inadequate for informal sector workers, who constitute approximately 80% of the labor force [1]. The SSF provides benefits such as workplace injury compensation, medical care, and pensions but has not effectively addressed the needs of vulnerable populations.

Demographic shifts, including an aging population, exacerbate the system's sustainability challenges. By 2050, the population aged 65 and older in Nepal is projected to triple, intensifying the demand for pensions and healthcare services [2]. Vulnerable populations, including persons with disabilities, women, and elderly individuals in rural areas, remain disproportionately excluded from the system due to socio-economic barriers and lack of infrastructure. The government acknowledges these gaps but needs substantial policy reforms to create a more inclusive and sustainable social security system.

2. Summary of Issues

1. Limited Coverage for Informal Sector Workers: Despite being the majority workforce, informal sector workers remain largely outside the social security system. Limited access to formal employment contracts prevents these workers from enrolling in the SSF. Less than 15% of informal workers in Nepal have access to social security benefits [1].

2. Inadequate Social Protection for Vulnerable Groups: The existing social protection framework provides minimal support for marginalized populations.

- Only 3.2% of people with disabilities and fewer than 9% of elderly individuals receive any form of social security [3, 4].
- Most elderly Nepalis rely on family support rather than pensions, with only 15% of retirees receiving formal pensions [4].

3. Lack of Awareness and Access to Benefits: Administrative barriers, coupled with low literacy rates and insufficient awareness campaigns, hinder workers' ability to access available benefits. Studies have shown that rural workers often do not register for benefits due to lack of information or logistical difficulties [5].

4. Pension System Gaps: Nepal's pension system predominantly benefits government employees and other formal sector workers, leaving rural and informal workers unprotected.

5. Sustainability Concerns: The SSF faces financial risks due to limited contributions from a narrow base of formal workers. The projected rise in dependency ratios poses further threats to system solvency. By 2030, the Nepal Rastra Bank (NRB) estimates a funding gap of over 20% of GDP in pension liabilities [6].

6. Comprehensive policy framework. Nepal has a strong constitutional and legal foundation for social protection, with several laws and programs designed to implement the constitutional rights to social security, employment, education, health, food, and housing. However, there is a need for a comprehensive policy framework to effectively integrate these laws and programs. While social protection spending has increased significantly, challenges persist in targeting the poor and vulnerable, with limited coverage and impact on poverty reduction. Additionally, social assistance spending is largely focused on the elderly, limiting its potential for human capital development. There are gaps in coverage, particularly for children and the working-age poor, and many programs operate in isolation, reducing their overall effectiveness. To improve outcomes, there is a need for greater coordination among programs, especially those targeting early childhood development, and for a focus on economic inclusion to maximize the impact of social protection efforts.

High-Level Recommendations

Immediate Recommendations (0–3 Years)

- **Improve Awareness of Social Security Programs**
 - Launch targeted campaigns to educate workers, especially in rural and informal sectors, on their rights and benefits under the SSF.
 - For Example: Community-driven initiatives have successfully increased enrollment in India's *Rashtriya Swasthya Bima Yojana (RSBY)* program [7].
- **Streamline Registration and Claims Processes**
 - Invest in digital platforms to reduce administrative hurdles and enable remote registration and claims processing.
- **Expand Pension Coverage to Rural Areas**
 - Introduce non-contributory pension schemes for elderly individuals in underserved regions, modeled on social pension programs in countries like South Africa [13]. Evidence from South Africa's social pension system demonstrates that non-contributory pensions significantly reduce poverty among elderly populations, particularly in rural and underserved areas. South Africa's program, which provides a universal, means-tested social pension, has been credited with substantially

reducing income inequality and improving the quality of life for older citizens in remote regions [13].

- In Nepal, a similar approach could address the significant coverage gaps for the elderly, particularly those who are not covered by contributory schemes due to informal work or economic vulnerabilities. Current social assistance programs in Nepal, such as the elderly cash transfer program, are skewed toward urban areas and often exclude marginalized populations in rural or remote areas. By implementing a national non-contributory pension system, Nepal could enhance financial security for older individuals in underserved regions, ensuring a more equitable distribution of social protection benefits [15][16]. Evidence suggests that non-contributory pension programs not only improve income security but also stimulate local economies, as recipients often spend their pension on goods and services within their communities, thus supporting broader economic development. Therefore, introducing non-contributory pension schemes in Nepal would contribute to reducing poverty, enhancing social inclusion, and supporting sustainable economic growth [13][14][15][16].

- **Introduce Emergency Social Support Mechanisms**

- Provide temporary cash transfers to protect informal workers during economic crises, drawing lessons from Brazil's Bolsa Família program [8]. The Bolsa Família program, a conditional cash transfer initiative, provides financial assistance to low-income families, with the goal of improving their well-being and providing them with resources to weather economic disruptions.
- Drawing lessons from Brazil's Bolsa Família program, which has been credited with reducing poverty and inequality during economic crises, Nepal could develop a similar emergency social support mechanism targeted specifically at informal workers.
- Potential Benefits for Nepal could include:
 - **Poverty Alleviation:** Emergency cash transfers can directly reduce poverty, particularly for informal workers who may lack savings or safety nets. By providing immediate financial relief during crises, the program would help to stabilize household income and prevent people from falling deeper into poverty.
 - **Economic Resilience:** During times of economic shock, temporary cash transfers can serve as an economic stabilizer by maintaining consumption levels in vulnerable communities. This, in turn, supports local economies, as recipients tend to spend cash within their communities, stimulating demand for goods and services.
 - **Social Inclusion:** Informal workers, often excluded from formal social protection programs, would be able to access the same level of support as those in the formal economy. This inclusion reduces inequalities and ensures that everyone in the labor market, regardless of their formal employment status, is protected during times of economic hardship.
 - **Building Trust in Government Programs:** When governments provide direct financial support in times of need, it can improve public trust in social protection systems. By demonstrating the government's commitment to supporting

- vulnerable populations during crises, Nepal can foster stronger civic engagement and trust in future social support policies.
- **Public Awareness and Outreach:** Effective communication campaigns would be necessary to ensure informal workers are aware of their eligibility for emergency cash transfers and understand how to apply. This could involve partnerships with community organizations, local authorities, and mobile technology platforms to reach those in need.

Intermediate Recommendations (3–5 Years)

- **Design Inclusive Social Security Programs**
 - Develop programs tailored to the informal workforce, such as contributory schemes with flexible payment options.
 - Thailand's Universal Coverage Scheme (UCS) expanded social security to informal workers by allowing voluntary enrollment [9].
- **Strengthen Social Protection for Vulnerable Populations**
 - Establish special assistance programs for persons with disabilities and elderly women, ensuring equitable access to health and social care.
 - This could include considerations for Universal Basic Income (UBI) and Conditional Basic Income (CBI) Programs as integrated social security system [17].
 - UBI offers a form of universal income security that can act as a safety net for individuals not covered by other social security programs, such as unemployment or pension schemes. It can be seen as a modern adaptation of social security to provide a universal baseline income.
 - CBIs complement traditional social security by incentivizing investments in education, health, and well-being, thus contributing to long-term human capital development and ensuring greater security for families and vulnerable groups.
 - UBI and CBI programs have shown good evidence on impact across different countries, including the Asia Pacific Region [17][18].
- **Increase Pension Coverage for Marginalized Groups**
 - Adopt targeted subsidies for women and rural elderly, addressing gender and geographic disparities.
- **Invest in Social Security Infrastructure**
- Develop robust data systems to track enrollment, contributions, and disbursements effectively.

Long-Term (5+ Years)

- **Implement Universal Social Security Coverage**
 - Introduce a universal social protection framework to include informal workers, rural populations, and marginalized groups.
 - The Philippines' social health insurance program provides universal health coverage, incorporating informal sector contributions [10].

- **Sustainability of Social Security Programs**
 - Develop long-term financial models involving multi-stakeholder contributions, including taxes, employer levies, and public-private partnerships.
- **Evaluate and Improve Social Protection Impact**
 - Establish monitoring mechanisms to assess program outcomes, enabling iterative policy adjustments based on data insights. To improve outcomes, there is a need for greater coordination among programs, especially those targeting early childhood development, and for a focus on economic inclusion to maximize the impact of social protection efforts.
- **Comprehensive national social protection policy framework**
 - To enhance the effectiveness and reach of Nepal's social protection system, it is essential to establish a comprehensive and integrated national social protection policy framework [12].
 - While the 2015 Constitution and subsequent legislation have laid a strong foundation for social security and related programs, the lack of coordination between various laws, ministries, and
 - programs has led to fragmented implementation and coverage gaps, particularly for vulnerable groups such as the working-age poor [12]. The government should prioritize the finalization and implementation of the National Social Protection Framework to unify existing legal and programmatic structures under a cohesive policy. This framework should align the diverse social protection laws, such as the Right to Employment Act (2018), Social Security Act (2018), and Contribution-Based Social Security Act (2017), ensuring their complementary operation. Additionally, it should create a coordinated institutional structure for monitoring and delivering social protection services across all sectors, with a specific focus on reducing overlaps and addressing gaps in health-related schemes. By establishing clear institutional responsibilities and a unified approach, the policy framework should aim to maximize the coverage and adequacy of social protection programs, particularly targeting the economically vulnerable populations. It should also ensure flexibility to adapt to shocks and emergencies while fostering economic inclusion through linking beneficiaries to employment, skills development, and access to credit opportunities. This integrated approach will improve efficiency, reduce fragmentation, and enhance the impact of Nepal's social protection system.

References

1. International Labour Organization (ILO). (2021). Social Security and Informal Workers in Nepal.
2. World Bank. (2021). Aging and Social Security in Nepal: Policy Directions.
3. Asian Development Bank (ADB). (2020). Pension System Reforms in Nepal: Current Gaps and Future Directions.
4. UNDP. (2020). Social Protection and Disability in Nepal.
5. Sharma, S., et al. (2018). Socioeconomic Barriers to Social Security Access in Rural Nepal. *Public Health Reviews*, 39(2), 19–30.

6. Nepal Rastra Bank (NRB). (2021). Challenges in the Sustainability of Nepal's Pension System.
7. Das, J., et al. (2016). RSBY Health Insurance: Enrollment and Impact. *Journal of Health Economics*, 45, 67–81.
8. UNDP. (2021). Bolsa Família: A Social Safety Net for Economic Crises.
9. Tangcharoensathien, V., et al. (2020). Universal Coverage Scheme in Thailand: A Model for Extending Social Security. *Global Health Action*, 13(1), 1811473.
10. PhilHealth. (2019). Universal Health Care in the Philippines: A Progress Report.
11. International Labour Organization. (n.d.). *New report on the state of social protection in Nepal*. International Labour Organization. Retrieved January 10, 2025, from <https://www.ilo.org/resource/news/new-report-state-social-protection-nepal#:~:text=There%20are%20more%20than%2070,any%20form%20of%20social%20protection>
12. Pandey, D. R. (2021). *Social Protection in Nepal: A Review*. *Journal of Social Protection*, 2(1), 19-34. Retrieved from <https://www.nepjol.info/index.php/jsp/article/view/43774>
13. Ardington, C., Case, A., & Hosegood, V. (2009). The impact of social pensions on poverty reduction in South Africa. *The Journal of Development Studies*, 45(8), 1391-1404.
14. World Bank. (2018). South Africa Social Protection and Labor System Review. World Bank Group.
15. HelpAge International. (n.d.). The universal social pension in Nepal: An assessment of its impact on older people in Tanahun district. HelpAge International. Retrieved from <https://www.helpage.org/silo/files/the-universal-social-pension-in-nepal-an-assessment-of-its-impact-on-older-people-in-tanahun-district.pdf>
16. Speck, S. (2021). Barriers to accessing social pensions in rural Nepal. ZORA, University of Zurich. Retrieved from https://www.zora.uzh.ch/id/eprint/206594/1/2021_Speck_6.1.6-Barriers-to-accessing-social-pensions-in-rural-Nepal.pdf
17. United Nations Development Programme (UNDP). (2024, October 2). Universal basic income in Asia and the Pacific: A pragmatic policy choice or unattainable utopia? Retrieved from <https://www.undp.org/asia-pacific/publications/ubi-in-asia-and-the-pacific?>
18. Timsina, T. R., et al. (2024). Contribution of Janata Awash Grant for poverty reduction in Makwanpur, Nepal. *Historical Journal*, 15(2), 83

Poverty, Migration, and Employment

1. Situation Analysis

Nepal continues to face significant challenges with extreme poverty and high unemployment rates. Even though poverty has decreased from 30% in the early 2000s to below 20% by 2023, poverty reduction has not happened homogenously across the geographical regions and different population groups. The unemployment rate is fairly low around 10%, but a significant portion of the population is underemployed as they are engaged in the agricultural sector, which remains primarily subsistence and suffers from low productivity. Consequently, a significant proportion of working-age individuals have migrated abroad looking for better job opportunities and higher wages. Every day, an estimated 2000 Nepalis migrate to foreign countries for employment, with a total of 2.2 million Nepalis currently abroad. Remittances are vital to Nepal's economy, as they contribute to the national GDP growth, poverty reduction, and household consumption. Despite the critical contribution to the economy through remittance, labor migration faces critical challenges due to high social and psychological costs, unequal access to opportunities, and poor working conditions for migrants. More importantly, Nepal's economy remains highly vulnerable to economic shocks in migrant-receiving countries, which could impact remittance inflows and, consequently, Nepal's economic stability.

2. Options available to resolve the issues (why and how)

Option 1: Understand the local context and problems better. This is important because most policy solutions are far from the ground reality making the solutions offered less attractive to the beneficiaries. This can be done by enabling the local municipalities to collect ground data on reasons for migration, poverty, and unemployment. People should be asked to specify their needs to resolve the issues.

Option 2: Improve local capacity/human capital. This is important because poor local capacity and inadequate human capital have long been major drivers of low productivity, high un/under-employment, and poverty. This could be done by offering technical training, vocational education, and other skill-enhancement training to working-age individuals and government employees. A multi-layered cost structure could be used to offer free or low cost to resource-poor individuals and higher costs to others. Local governments can employ high-skilled returnee migrants to run these programs.

Option 3: Encourage local innovation and entrepreneurship. This is important to generate employment, reduce the country's dependence on remittance, and ultimately reduce poverty. This could be done by providing targeted policy support to start-ups. Policy support may consist of low-interest loans, tax breaks, streamlined registration and renewal processes, and facilitation of investments from migrants and non-resident Nepalis (e.g. create a diaspora investment fund). The government could also expand credit access and tax incentives for business investment using remittances and by returnee migrants.

Option 4: Expand public assistance (social safety net) programs. This is important to address poverty and vulnerability (potentially due to unemployment) in the short run. This could be done through conditional cash transfers and cash-for-work programs, but the implementation should be delegated to the local municipalities.

3. High-Level Recommendations for Reform

Immediate (0-3 years)

- Encourage local municipalities to explore and identify ground problems and potential solutions for their locality using a participatory approach.
- Expand public assistance programs (such as cash-for-work, conditional cash transfers, etc.) to address the extreme vulnerability, generate employment, and support children, elderly, and disabled populations.
- Categorize returnee migrants into different skill levels based on their work experience and practical knowledge and use their expertise at the local level.

Midterm (3-5 years)

- Employ high-skill returnee migrants to provide skills and training to working-age individuals (the would-be migrants).
- Utilize community schools as technical and vocational education centers and hire returnee migrants to train local students who will be job-ready when they graduate.
- Streamline the migration process by making public resources accessible to poor and vulnerable families too.

Long-term (5+ years)

- Revise policies (laws and bylaws) to streamline the registration and renewal process for start-ups.
- Formulate targeted support policies to incentivize NRNs and returnee migrants to make investments in productive activities in Nepal.

Public Finance, Governance, Federalism, & SDGs

1. Situation Analysis

A decade after the adoption of the federal structure of governance, institutionalizing fiscal federalism remains a challenge as a matter of both policy and practice. Despite developments in identifying the broader constitutional rights and responsibilities of the central, provincial, and local governments, the fiscal system of revenue collection and sharing, and allocation and expenditure of public resources have yet to be fully operationalized. The lack of good governance and rampant corruption have prevented the different levels and branches of government from syncing their structures and operation toward the broader national goals including maintaining law and order, identifying the national and subnational priorities, and providing critical public services. In the context of Nepal's imminent graduation in 2026 from the category of LDC based on its progress on social development, institutionalizing the structure of federalism and good governance and setting a clear path toward achieving the SDGs (2024 index score: 67; ranking 95/166; 29% on track) have become a top priority. Further plans and actions are needed not just to demonstrate institutional progress but to improve the social and economic conditions of people and communities. The idea of public service needs to be embedded in the entire governance system, improving efficiency, removing waste, and developing the culture of serving the public.

2. Options available to resolve the issues

- **Good Governance:** Create an effective, efficient, equitable, and transparent public service system; establish a competent government workforce deeply rooted in improving public service; enhance the capacity to plan, execute, utilize resources, and improve public service accountability; and pursue strategies to remove corruption and rent-seeking.
- **Fiscal Federalism:** Establish (in law and practice) a clear demarcation of authorities and responsibilities of different levels and branches of government in generating and managing public revenues (income, property, sales, and other taxes); and create a transparent and formula based allocation of public resources; and operationalize a fully decentralized system of planning and expenditures.
- **SDGs:** Develop and implement a scorecard to track progress toward SDGs at the provincial and possibly district or local government level; conduct a periodic review of the progress with provincial and other local governments; and develop policies to address any glaring gaps from the national performance.

References

Sachs, J.D., Lafortune, G., Fuller, G. (2024). *The SDGs and the UN Summit of the Future: Sustainable Development Report 2024*. Dublin University Press. 10.25546/108572 (Summary country profiles reported here: <https://dashboards.sdgindex.org/profiles>).

Acharya, K. K. (2018). The capacity of local governments in Nepal: From Government to Governance and Governability? *Asia Pacific Journal of Public Administration*. 40. 186-197. <https://doi.org/10.1080/23276665.2018.1525842>

Smoke, P. (2015). Rethinking decentralization: Assessing challenges to a popular public sector reform. *Public Administration and Development*, 35(2), 97–112. <https://doi.org/10.1002/pad.1703>

Natural Resources and Environmental Balance

1. Situation Analysis

Challenges facing the natural resources and environment sector in Nepal have direct and indirect impacts on households and regional economy. Depletion of natural resources including surging river pollution along protected areas, forest degradation on government or community managed forests, and overpopulation of nuisance wild animals in the mid-hills have threatened biodiversity, forest industry, farm economy and the entire agro-ecosystem. Lack of readiness in management responses to these disturbances could have cumulative effects in the society in just a few years out. Despite abundant forest resources in the country, inefficiency in management of forest resources (national and community forests) due to poor silvicultural /utilization practices led to increase in imports of timber and other wood products in recent years. Increasing forest fire incidences, both natural and anthropogenic, have resulted in insurmountable loss of physical and natural capital. While the high-valued medicinal plants and non-timber forest products such as Yarsha Gumba have potential to promote rural entrepreneurship, lack of targeted management plans and marketing strategy remains a barrier. Poor monitoring and enforcement of sand and other resource extraction for development supply, especially with more erratic and intense weather events have threatened human settlements as well as the wildlife habitat, which is vital in supporting the tourism industry. Statutory conflicts in protected area governance (new laws vs. old laws) demonstrate the need for seeking synergy in laws and regulations. The ongoing contest over the bufferzone management, along with the collection, sharing and allocation of the national park revenue is an example among many others.

The environment and natural resource sector of the nation continues to depend on unstable, erratic and poorly tracked foreign aid. While the new structure of government has provided local government units with the power, mandate and flexibility in raising and allocating funds, local units still lack capacity in fully understanding the ongoing and anticipated impacts of disasters and disturbances (e.g., climate change, wildfire, nuisance animals) on local livelihoods and potential mitigation strategies.

1. Recommendations for Reform

Recommended measures to address the issues identified above [multiple measures align with multiple issues listed above]. Some measures are non-economic in nature but are integral to broader societal and economic sustainability.

Short-term:

- Remove policy and market hurdles for timber harvesting, consumption and exports
- Re-envision forest resources with importance-based zoning (ecologically, culturally, economically) for management; with economically important zones set aside for production to meet market needs.

- Acceleration of SFM implementation in economically important zones with aggressive public engagement, outreach, and securing public “buy in”
- Revise wildlife relief protocols to make it inclusive of all nuisances’ wild animals
- Invest in population control measures immediately (perhaps through a separate agency with nuisance wildlife and pest management mandate)
- Revise the PA benefit sharing model (national basket, more on relief or HWC prevention tools/skills, instead of infrastructure development, incentives for maintaining carbon sink that takes into account local livelihoods)

Medium-term:

- Conduct risk assessments in hazard-prone areas to understand possibilities and challenges of future fiscal investments; vulnerable settlements need alternatives for place-based livelihoods beyond outmigration
- Educate outside laborers working in environmental issues affecting the places that they are hired to work in
- Establish a broader monitoring mechanism at the municipal level to reward or punish environmental actions/consequences
- Promote bio-based responsible business focusing on domestic production and marketing
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- Invest in capacity building of community forest user groups, promote joint investment/cost share options for technical, managerial capitals of communities
- Tap into various global schemes of payment for ecosystem services such as carbon markets, biodiversity credits, build on positive interactions of community forestry with local governance of natural resources and incentivize these practices on the local level

Long-term:

- Provide capacity building and incentives for local stakeholders to govern natural resources and stay in their ancestral homes as well as integrate this system into decentralized governments
- Promote models of landscape level forest management and conservation for economic and ecological efficiency
- Incentivize private industrial forestry for timber and non-timber products
- Follow circular bio- economy (Reduce, Recycle, Reuse),
- Invest on research of fast-growing timber to promote value-based private/farm forestry on abandoned farmlands
- Design and implement watershed health programs, primarily with consideration of protected areas in peril (Narayani, Rapati, Karnali, Babai etc.)
- Invest in bio-based entrepreneurship for healthy/working community forests

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