

Modernization Efforts Undertaken by the Nepali Army

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Abstract

This article also discusses the achievements of Gehendra Shamsher (1871–1906), a firearms designer, inventor, and high-ranking officer of the Nepalese Army, as a role model for Nepal's modernization efforts. After Gehendra Shamsher, the Nepali Army has undertaken several modernization initiatives. The main objective of this paper is to discuss some modernization efforts done by the Nepal Army using science and technology. The material is taken from various sources, such as Tribhuvan University's Central Library in Kirtipur, the Army Central Library, the Military Museum in Kathmandu, and national and international literature." *One of the nation's oldest organizations is the Army of Nepal. The development of Nepal's modern nation has been greatly aided by the armed forces. The ultimate responsibility for protecting, maintaining, and safeguarding the nation's independence has fallen on the Nepali Army. Science and technology are used for the development of the armed forces in China and India. Against this backdrop, Nepal experiences cyber-attacks, environmental degradation, pandemics, and ethnic, racial, or religious conflicts, among other things. The people of Nepal have faith in the Nepal Army since they are involved in various service-*

related activities. However, Nepal has a poor economy, it lags far behind in the modernization of the national army. Based on the study, the current strength and technical resources available to the Nepali Army to handle different types of challenges have been investigated. In this article, the Nepali Army's struggles to adapt to a new political system and the initiatives it has made to modernize itself are mostly discussed. With the changing nature of modern warfare, tactics, and situations, some changes have been necessary for Nepal's Army on the front of training, habitats, equipment, and technology.

This article also discusses the achievements of Gehendra Shamsher (1871–1906), a firearms designer, inventor, and high-ranking officer of the Nepalese Army, as a role model for Nepal's modernization efforts. After Gehendra Shamsher, the Nepali Army has undertaken several modernization initiatives. The main objective of this paper is to discuss some modernization efforts done by the Nepal Army using science and technology. The material is taken from various sources, such as Tribhuvan University's Central Library in Kirtipur, the Army Central Library, the Military Museum in Kathmandu, and national and international literature."

Keywords

Army, Nepal, Gehendra Shamsher, Modern warfare, Science and technology.

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1 Introduction

Nepal's Army is one of the oldest organizations in the country. In Nepal, armed forces have played vital roles for the formation of modern Nepal. Eventually, the Nepali Army has been undertaking greatest responsibilities in defending, preserving and ensuring the country's independence. In 1979, Shaw shared the view that soldiers serve selflessly for the nation's good and are its greatest assets [1]. There are many complex emergencies threatening peace and security, including poverty, unemployment, inequality, and criminality. The military is primarily tasked with protecting people against threats to peace and security, including not only warfare [2].

Nepal Army's main responsibility is to protect the nation's sovereignty, developing international relations is the only way to ensure national security and territorial integrity as well as modernization of military capabilities in today's world, while economic growth is crucial to both of these goals. For a country to maintain its status as a global power, its economy and development must grow exponentially. The economy should grow rapidly, paving the way for an increase in national power [3].

Nepal is sandwiched between two of Asia's most powerful nations, India and China, which are bitter rivals. The border clashes between China and India almost created an unavoidable situation for the South Asian countries to withdraw in June 2020 [4]. Nepal is thus located between two powerful nations in Asia-India and China-which are highly antagonistic toward each other. Science and technology are used not just for the public but also for the development of the armed forces in these two countries. The advanced army of China and India uses the latest versions of the technology. On the other hand, Nepal is committed to nonalignment and neutrality [5]. Nepal's neutrality was increasingly important to China, according to India [6].

However, a new map row connecting two countries with open borders has raised concerns in Kathmandu [7]. New Delhi has also rejected Nepal's repeated diplomatic efforts to resolve the India-Nepal border issues [8]. Surprisingly, such geopolitical benefits from deeper ties with China are mostly focused against reducing Indian influence in Nepal. Growing unhappiness with New Delhi drove Nepal's efforts to diversify its trade, as well as the rail projects with China [9]. Nepal has a long history of managing relations with its two immediate neighbors in order to maximize economic progress and maintain political stability [10].

On a geopolitical level, Nepal's fate is closely linked to the fates of its two surrounding nations. For Nepal's economic development, both countries are equally vital. Because Nepal's geostrategic lo-

cation between India and China is a key source of concern for its security and stability [11], Nepal's survival strategy also benefits from equidistant foreign policy economically and geopolitically [12].

Nepal's foreign policy is shaped by its Panchasheel, non-alignment policy, UN charter, and world peace values. Nepal's national and international policies and actions, as the birthplace of Lord Buddha, are dedicated to peace, cooperation, nuclear disarmament, equality, and justice. In this way, we enjoy good ties with every country on the planet, including diplomatic ties with 168 nations. In light of these circumstances, Nepal is able to use the Nepal Army more effectively in the development sector, reducing the likelihood of wars and threats to Nepal's security. Moreover, this situation facilitates the importation of new technologies and directions for developing human resources from other countries, which will be beneficial to completing megadevelopment projects by the Nepal Army. For Nepal's growth to be accelerated in this serene and peaceful environment, the Nepal Army needs to focus on reform, modernization, and role expansion.

Protecting the sovereignty of Nepal, national pride, and territorial integrity is the main goal of the Nepal Army. We no longer have the means to achieve this with Khukuris, Bhalas, and guns, as we once did with our brave blood. Today, the country can only be preserved through economic development and improved international ties, both of which need a high degree of economic interdependence. Nepal, on the other hand, has a low economy and is lagging behind in terms of national army modernisation. The current world's advanced army employs the most up-to-date technology. Based on the study, the current strength and technical resources available to the Nepali Army to handle different types of challenges have been investigated.

In the first world, when the scientific-economic revolution was emerging, our country had to suffer the self-centered detention of a short-sighted ruler. Indeed, the technological achievements of Gehendra Shamsheer (1871-1906) that needs to inspire and motivate Government of Nepal to invest in research activities for the welfare of making Nepal Army technically sound. The Nepalese ruler after that period was fond of playing catch with the British Queen and enjoying the British colorful world. They never used the policy in the scientific development of the country whereas the Japanese Emperor Meiji, who came to power in 1924, started the transformation of the country on the basis of science and technology by collaborating with Europe.

Because of this, today we are forced to be the undeclared servants of countries that have made economic leaps on the basis of close cooperation in science and technology development. Even today,

the development of science and technology has been limited to speech by corrupt politics.

The focus of this article is also on the Nepali Force's issues in a new political system, as well as the actions made by the army to modernize itself to meet the changing environment. Because of the changing nature of modern combat, tactics, and conditions, Nepal's Army has had to make certain adjustments in terms of training, environment, equipment, and technology. In poor economic condition of our country, the Nepal Army has undertaken various modernization efforts using science and technology to enhance its capabilities and effectiveness. Some of these efforts include:

1. Acquisition of Modern Weapons and Equipment:

The Nepal Army has been acquiring modern weapons and equipment to replace outdated ones. For instance, it has acquired helicopters, armored personnel carriers, modern rifles, and communication systems.

2. Use of Drones for Surveillance:

The Nepal Army has been using drones for surveillance purposes. The drones can provide real-time intelligence and surveillance, which is useful for both internal and external security operations.

3. Training with Simulation Technology:

The Nepal Army has been using simulation technology to train its soldiers. This technology allows soldiers to train in simulated environments that mimic real-life situations, enabling them to develop their skills and techniques in a safe environment.

4. Cyber Security:

The Nepal Army has also been focusing on cyber security to protect its data and information systems. It has established a Cyber Security Directorate to safeguard against cyber-attacks and enhance its capabilities in this area.

5. Medical Facilities:

The Nepal Army has also modernized its medical facilities to provide better healthcare to its soldiers. It has established modern hospitals and clinics equipped with the latest medical technologies to provide better care to its soldiers.

Overall, these modernization efforts have enabled the Nepal Army to enhance its capabilities and effectiveness, making it better equipped to handle the security challenges facing the country. With the support of national army modernization, the Nepal Army would be able to play a critical role in boosting the economy, power, sovereignty, and development of Nepal in the future.

2 Methodology

2.1 Research Design

Despite the fact that exploratory research begins with no specific problems or hypotheses, its findings can often provide new insight and ideas into them [13]. There are numerous examples of the Nepal Army being used in short-term and project-based upgrading efforts. However, because the concept of Nepal's modernity is new, it is an exploratory study in character, and inductive reasoning is used. The use of a qualitative research strategy is being employed to gain a better understanding of the role of Nepal army modernization in the setting of Nepal.

Information can be collected from publishing journal articles, research articles, books, monographs, newspapers, online news, and government supported publications. Article writing is conducted in an ethical manner. The purpose of this research is to reconsider what a highly proficient Nepal Army can achieve for Nepal's modernisation if it is utilised to its full potential.

3 Discussion and Analysis

Foreign policy analysts consider Nepal's non-alignment and neutrality with regards to China-Indian relations to be a survival strategy. The question is, however, "would Nepal be worried about losing its strategic space as China and India get closer?" [14]. China and India continue to compete for influence in the region. The Sino-Indian competition, however, has strategic benefits for the US beyond the immediate region. Since India and China's reputation as responsible nations may deteriorate, it strengthens US assertiveness in the region. The Indian government is uneasy about American aggression in its backyard, despite being drawn to the Indo-Pacific Strategy led by the United States [6]. U.S. involvement in South Asia has never been popular in China, either. A US military conflict in the region will be dangerous for China, which has made great efforts to entice countries across the region to participate in its Belt and Road Initiative projects.

Former President Trump offered to mediate and resolve the burning border dispute, but both sides rejected his offer [15]. The offer was rejected by both disputing parties. China and India, on the other hand, claim that the issue can be resolved on their own [16], pointing to the bilateral agreement reached in 2017 over the Doklam crisis. Zhao Lijian, spokesman for China's Foreign Ministry, said that intervention from third parties was not needed [17]. In addition, the Indian Ministry of External Affairs stated that the country has direct contact with China via established channels [16]. However, India has demonstrated its willingness to work with

the US in order to restrain China [18]. For India, this is not a good policy. Such policies will hurt not only India and China, but Nepal and South Asia as well. Instead of the United States, Nepal can play a more effective role in balancing China and India, which can only be accomplished by modernizing the Nepal Army. Failure to do so will cause it to happen again in the future, as small nations like Nepal are fearful of being caught up in great power rivalries. When U.S. financial support was given to Tibetan fighters in Nepal in the early 1970s, China was mainly provoked [19].

In order to develop our Nepal Army, we need to modernize using science and technology. At the time of Gehendra Shamsher's leadership, the Nepal Army was powerful. At that time, however, the government was ruled by one man who was jealous and removed from power, spoiling his technological achievements. Nepal's political system has completely changed and now belongs to the people. A new provision was included in the Army Act of 2006, which provided for a special selection process for the Chief of Army Staff and created a new connection between military institutions and government agencies. By virtue of the fourth amendment to the interim Constitution, the king's role as Supreme Commander-in-Chief of the Nepal Army was transferred to the president. The Nepal Army was also placed under the direct control of the parliament as part of this process [20]. Nepal Army senior officers now have the flexibility to establish foreign ties with their counterparts abroad. For instance, Nepal's Army Chief Purna Chandra Thapa visited Beijing in June 2019 and met with Chinese defense officials. On the occasion of the meeting, China reiterates its willingness to continue strengthening bilateral military ties, increase long-term planning and design, and enhance the ties between the two militaries. In addition to sending a heavy mechanical bridge, explosive ordinance disposal equipment, rescue supplies, and financial assistance, the Chinese People's Liberation Army (PLA) also agreed to send a heavy mechanical bridge. Following China's grant of access to four seaports and three land ports, Nepal decided not to participate in the BIMSTEC military exercise in September 2018. On the other hand, Nepal participated in the Sagarmatha Friendship-2 exercise, which was held in the south of China in Sichuan and ended on the same day. Taking border security seriously with neighboring nations like Nepal is part of China's response to the willingness of some foes outside the country to sow discord in Chinese society [21]. It is critically important for China to understand Nepal's political reality and the steps it is taking to stop anti-China forces in Nepal. Nepal must balance its relations with China and India at all times [22]. Now, the government of

Nepal needs to inspire the Nepal Army by taking Gehendra Shamsher as the role model.

An inspiration from Gehendra Shamsher's technology

Gehendra Shamsher (1871-1906) was a firearm designer, inventor, and highranking officer of the Nepalese Army. His father Bir Shumsher, the third Prime Minister of the Rana Dynasty, inspired him to become a proficient weapon designer. He used the money to make an automatic machine gun with the help of his father, Bir Shamsher JB Rana, who gave him 6 lakh Nepali rupees. This happened in 1898/99 AD. Even though machine guns were around for decades, that was the first one built in Nepal. It is for this reason that he is regarded as the first scientist in Nepal. The gun he invented became known as "Bir gun." Other inventions he made include rice mills and water pumps to draw underground water. He was the first in Nepal to generate hydroelectricity.

Gehendra Shamsher used to encourage each and every individual. For example, Purna Man Chitrakar (c. 1863-1939) was a well-known early photographer who was favored by Dambar Shamsher and Gehendra Shamsher, the son of Bir Shamsher, according to Heide [23, 24]. From the Ford Company in the UK, Gehendra Shamsher imported Nepal's first car. Silver was twisted around it, and a lamp was connected to it to make it glow. Having painted the exterior silver and connected the lights to the vehicle, he named it 'Dashnarayan'. The entire experiment was carried out in Jamal's laboratory in Kathmandu with the help of Buche Vastaj, Kancha Kaligarh, Dasnarayan, etc. Gehendra's father Bir Shamsher gave the car to Prithvi Bir Bikram Shah Dev with Gehendra's consent. When Gehendra was working at Jamal factory, he used to generate electricity using a windmill. The weapons he built during his short life include the Gehendra Rifle, Gay Gun, the Bir Gun (named after his father) and the Dhir Gun (named after his father Dhir Shamsher Rana), Cannon, Machine Gun, Bullet, Cartridge, Charnale Cannon.

Additionally, he established a paddy mill, an air-driven mill, and a leather processing factory in Balaju. At that time, he miraculously lit an underwater electric lamp and surprised the Nepalese.

Gehendra took a pistol he had made to Singha Durbar as a gift for Chandra Shamsher: very powerful prime minister of Nepal, who had come to power after Dev Shamsher. After saluting Chandra, pocket's pistol fell to the ground, and Chandra was frightened, so he told Gehendra to go home. Gehendra's death is said to have been caused by drinking mild poison in his kitchen, when he was 36 years old.

When Chandra ordered Gehendra to stay away from regular work and stay at home, he turned to

alcohol intoxication. After being brutally beaten by the so-called first scientific power of the country, he was killed by the same poison as alcohol mixed with tears of humiliation. The government sent Guns' barrel invented by Gehendra to make Tundikhel's wall after he was killed. In this case, the jealousy for Nepal's Army history was evident [25].

Gehendra Shamsheer is credited with modernizing the Nepal Army. The Bir gun bears his father's name. In his own style, he made a machine gun similar to the Gardner. He is also credited with modifying Gehendra Martini, a double-barreled machine gun. If he had lived longer, he would have made more contributions to developing technology and science in the country. In the National Museum at Chhauni in Kathmandu, all inventions and creations by Gehendra are preserved. We will always remember him for his contributions. Government of Nepal granted permission to publish "Social Studies and Population Education Book 7, 2077 Edition" as Gehendra Shamsheer: The first scientist of Nepal.

From Gehendra's story of success about scientific discoveries, we can learn a great deal of inspiration. It is now time for Nepal Army to be uplifted with training and research support by providing research funds. The Nepal Army needs the Defence Research and Development Organisation (DRDO), Nepal's primary RD agency, for quick upliftment. We should not worry about such jealousy as Gehendra faced anymore since the political system has altered and the system is already in the hands of the people.

1. Mechanised firearms manufacturing

In the 1890s, traditional artisanal methods were used to manufacture firearms in Nepal. At that time, the Martini-Henry Francotte rifle was the official military rifle. Because the product was produced locally, it posed a risk of catastrophic failure in use. Both arms and ammunition were mechanized at Gehendra's expense. Imported manufacturing machines came from Britain, but others were built locally. In spite of General Gehendra's subsequent removal from authority, Gehendra rifle production continued. Nine machines from the 19th century used for making weapons and ammunition can be seen at the Nepalese Army Military Museum in Chhauni, Kathmandu. Almost all display notices are translated into English as follows: "The machine was purchased by General Gehendra Shamsheer Rana, a scientist and innovator, in 1953 so that he could manufacture weapons in Jamal, Kathmandu".

2. Firearms manufacturing machines

Kathmandu's Military Museum, established and curated by Dr. Prem Basnyat, salvaged the machines after they were removed from the Sundarijal Arsenal and left in the open for many years.

Most of these specialized machines are not immediately apparent from their purpose or function, with the exception of one that is a lathe and another that is a roller mill. At the Nepalese Army Museum compound, the display labels on manufacturing machines are largely the same.

Several thousand Gehendra rifles were made by General Gehendra's arms manufacturing enterprise and were considered his most successful product. While there is no evidence that the Gehendra was used during actual combat, the shooting of the rifle did enable Nepal to become self-sufficient in the production of a military rifle at a time when many other small nations were dependent entirely on the importation of weapons from abroad [26].

As in China, India, and the USA, the Office of Scientific Research and Development (OSRD) must be created and the funds must be provided to Research and Development for Nepal Army. Three of these nations are among the wealthiest, most militarily powerful, and most scientifically and engineering knowledgeable in the world [27]. Despite having a large biodiversity, the road transportation system in our country is still difficult. So, we must equip Nepal Army's air force to ensure the safety of the needy people during natural disasters. Only then can we develop our army into something like the Israeli army, which became powerful through the use of science and technology. The world can be united if we have strong internal security and strong international relations.

International Relations and Internal Security

Though Nepal shares borders with India and China, as well as a growing interest by the United States in Nepal's internal affairs, the peace process has had a significant impact on Nepal. Nepal's future political structure should include elements of the monarchy according to all three superpowers. Nepal's precarious geopolitical situation provides an appropriate context in which to evaluate Security Sector Reform (SSR) because its discussion is so closely related to the monarchy. Among the most important aspects of the monarchy's history are its numerous and long-established ties to Indian political interests and the colonial power of Britain, as well as the country's 1751 km of open border with India, as well as the 1950 Memorandum of Peace and Friendship between the two countries. Having lost its place in the political system, Nepal's monarchy sought support from India's Hindu nationalist Bharatiya Janata Party (BJP) and its religious affiliates.

The Indian government historically considered Nepal to be an anti-Chinese buffer zone. The Indian government allowed the Nepalese Maoists to operate from bases in Indian territory until 2001, and it maintained an indifferent policy towards them. Nepal began supporting the communist rebellion in

India once the Maoists started playing a major role in it, but it quickly adapted to new circumstances towards the CPN-M when it began accusing it of working to undermine the country's internal security. Despite their long open border, Nepal's Maoist insurgency has a greater impact on domestic strife in India. In Nepal, the United States' increasing involvement and its designating the CPN-M a terrorist organization complicate peace-building efforts and conflict resolution.

Contrary to the nonviolent protests of civil society in Nepal, the Maoist insurgency has harmed internal security and increased external involvement. India and the United States were convinced that the Maoists were terrorists after the CPN-M withdrew from peace talks in 2001. As a result, the army was armed to wage war against its own people with political and military support, which was counterproductive to peacekeeping efforts. Foreign military support was expected by the government to be sufficient to defeat the Maoists, but the Maoists countered with large offensives and captured modern weapons from the army, bolstering their military might. While security conditions worsened, Washington began to see Nepal as a vital counterbalance to India's and China's emerging power centers. Having the desire to maintain political, economic, and security supremacy over Nepal and South Asia, the United States constructed a sophisticated infrastructure for the embassy in Kathmandu.

As anti-King Gyanendra protests gained momentum, Beijing began withdrawing from the royal regime in early 2006. Even though China plays a passive role in the region, it is nonetheless concerned about ensuring the safety and stability of its immediate neighbors and preventing Indo-American interference. The monarchy is regarded as a symbol of national unity by international actors such as the United States, the United Kingdom, India, and even China in this impoverished and largely illiterate culture where King Gyanendra's forefather was venerated as the embodiment of Hindu Lord Vishnu. The religious perspectives of a part of Nepalese society and most Hindus in India are waning, especially since the murder of the king at the palace in June 2001.

The monarchy continues to play a political role in several other countries to safeguard their interest in Nepal's affairs. The king could be removed by some international actors directly or indirectly, in order to move the country toward a democratic republic, as almost all Nepalese parties seek [28].

A look at China, India, and the U.S. science and technology futures

China and India are regularly mentioned as emerging superpowers. Combined, both countries have the abilities to absorb and adapt to repeated invasions, and their cultural reach make them re-

emerging superpowers. In addition to being eligible for that status at the height of the Roman Empire, it continued to be available until the 17th century. It wasn't until the 20th century, when Europeans and Americans began to invade in greater numbers, that they began to be questioned about their standing. A sequence of brief vignettes depicting political, economic, and scientific milestones for China, India, and the United States demonstrates the three countries' domestic evolution and ties since the middle of the 20th century. Our next discussion presents highlights in the development of science and higher education in China and India, as well as in the United States, from the Constitutional Convention in 1787 up until the present day. This section presents a brief description of their respective government science policy systems, followed by a quick comparison of RD spending in 1991 (the first year for which relative comprehensive, accurate data is available). The following two snapshots, one from 1995 and one from 2004, provide details about RD investments and human resources in the three countries during those years.

Finally, we attempt to predict China's, India's, and the United States' future status over the next half century. Will they remain superpowers? Can their science policies contribute to their superpower status? Are their superpower statuses likely to enable them to improve their science and technology systems and produce economic and military outputs of global importance? [27].

Due to the growing geopolitical importance of the Indian Ocean region, India's traditional maritime policy has evolved from "net security provider" to "leading power." Through collaboration with China and other maritime players, India is developing a maritime policy that boosts regional connectivity, enhances maritime cooperation, and ensures successful efforts in the Indian Ocean to provide humanitarian assistance and disaster relief [29].

Historical, cultural, ethnic, and people-to-people ties best describe India's relations with these tiny South Asian countries, but China's active involvement opens up a new spectrum of opportunities for the South Asian small countries and India. India and China should avoid geostrategic blunders and geoeconomic traps by focusing on their security and strategic goals at the same time. The goal of the India-China strategic partnership, according to this pragmatic approach, is to create enough diplomatic space for both countries to maintain and protect their strategic autonomy. The two countries are indeed confident enough to cooperate on issues such as energy security, trade negotiations, climate change, maritime security, and maritime piracy, among others. There is a level of confidence between the two countries that allows them to coop-

erate on matters such as energy security, business negotiations, environment change, maritime security, and maritime piracy, among others [30].

In summary, both India and China should tailor their investment and connection programs to compliment one another. As the multipolar world order continues to grow, social change and economic growth will take place. We face a pressing issue today: building a more interconnected Asia based on widely recognized international norms, laws, and practices. In terms of freedom of navigation, the threat or use of force, and resolving conflicts through peaceful means, the UN Charter should provide guidance. This raises an important question: Does national interest dictate how a sovereign nation acts and communicates, or does it the other way around? The solution to this question is likely to be found in both states' mutual need. In order to resolve any inconsistencies in their diplomatic relations as soon as possible, they must reconcile domestic priorities with exterior priorities, which requires strong political will, prudence, and civilisational wisdom [31].

Utilization Nepal Army as Development Army

Building up a sustainable development foundation can be easier with Development Army. Specifically, the Development Army is a new branch of the Nepali Army that specializes in developing human capital, building highways, and generating mega hydroelectricity, to achieve the 15th periodic plan.

Those traits, which are lacking in the private, political, and bureaucratic sectors of the world today, ensure that it is the best fit for executing development projects. These include discipline, honesty, hard work, selflessness, courage, patriotism, non-resistance to commands, and decency. They work selflessly for the national interest and are the nation's greatest asset.

The military participates in development activities for national development in countries such as Israel, Iran, Turkey, Burma, Pakistan, and South Africa [1]. Currently, the Nepal Army's major responsibility is the defense of sovereignty, national security, and territorial integrity; this can only be achieved by developing international relations and developing military capabilities, and economic development is the prime prerequisite.

For Nepal to safeguard its independence, sovereignty, territorial integrity, and national unity, the Nepal Army is an inclusive organization that is committed to upholding the highest standards of national unity. Besides these two works, it can also be mobilized by the Nepalese government in other areas such as construction, development, and disaster management [32]. Military duty is to safeguard people against threats to peace and security, not merely combat; complex emergencies include

poverty, unemployment, inequality, and criminality, all of which pose threats to peace and security [2].

The main challenge for the country is not the lack of budget for infrastructure construction, but the inability to meet the allocated budget on time. The budget is frozen every fiscal year and capital expenditures are minimal. On development sites, delays are one of the most prevalent problems, leading to increased costs, a decrease in productivity, and a loss of revenue [33]. Construction costs have risen due to the inability of contractors to complete projects on time, and a generation has been denied access to services. A drinking water facility would have been provided to the people of Kathmandu valley many years ago, if the Nepal Army was initially given responsibility for the Melamchi Drinking Water project [3].

Failure to address the internal and external challenges

Nepal, however, struggles to confront the challenges it faces internally and externally because state actors lack the necessary mandate for change. In times of crisis or during transition periods, the political and bureaucratic institutions cannot support the state actors. This complicates conflict dynamics and undermines the legitimacy of politicians, whether in power or in opposition. People aren't getting the services they've promised and the actors don't keep their promises.

The premise that they are in power is questioned and challenged. A number of dirty tricks are used by political actors to deal with these challenges, which further erodes legitimacy [34]. In Nepal's phase of democratic transition, politicians are committing dirty tricks that deny social forces and identity groups a voice. Similarly, the peace process that began after People's Movement II in April 2006 also suffers from similar shortcomings. In Nepal, the peace process is being dominated by an elite, with little participation from ordinary people and ethnic minorities, in particular. In addition to the election of the Constituent Assembly, the people had the opportunity to vote. Nevertheless, numerous identity groups claim that they are not represented in the Constituent Assembly since they were still forming their organizations at the time of the elections. These shortcomings indicate that, to a certain extent, the legitimacy of the peace process has been eroded [35].

The geography of Nepal makes it vital to India, China, and world powers are its immediate neighbors. In recent years, Nepal has only become more important in both the geopolitical and geostrategic landscapes. Among the reasons for this are China's rising power and its assertive foreign policy initiatives both at home and abroad. Interestingly, as the US appears to be responding to Chinese aggressions throughout the Asia-Pacific region,

including in Nepal, as part of its broader Indo-Pacific Strategy framework, India has been using soft and hard power resources to maintain its influence over Nepal in the same way. Nepal's peace process, which helped then Maoist rebels from the shadows now participate in national politics, is still unfinished, and major political forces are locked in internecine battles. India, China and the United States continue to intensify their engagement with the military to protect their vital interests in Nepal as the country's political situation remains fragile. However, this has led to tense competition between China, India, and the United States. Due to this, Nepal has transformed into a strategic epicenter in a rapidly changing strategic landscape. In recent years, with China's ascent and aggressive foreign policy, major world powers now compete strategically in the Asia Pacific region. Because of its unique location between China and India, Nepal has become a strategic hub for powerful nations in recent years. It is for this reason that Millennium Challenge Corporation (MCC) was established in Nepal by the United States [36].

There is no other explanation for their desire to deepen their engagement with the Nepalese army than their competing strategic interests in Nepal are in conflict with one another. To this end, when receiving military assistance from one of these countries, the military and government must establish a Red Line. As a military institution, the army should be able to avoid foreign influence in order to carry out its mission effectively. To ensure that their decisions are taken in line with Nepal's principled foreign policy goal of "Amity with all, Enmity with none," these assistances should reflect Nepal's principled foreign policy goals [37]. At present, Nepal is also addressing national security issues related to economics, socio-culture, environmental care, human rights, and cyber security. To account all aspects of Nepal's national security, the National Security Policy, 2016 has comprehensively integrated the national security of Nepal. In view of the importance of national security, government officials and policymakers are worried about the rapid implementation of these provisions [38]. A centralized reform mechanism has been adopted by China's military, as well as the army has been equipped with technologically advanced ammunition enabling it to build a "World Class Army." Nepal must rethink its security preparedness policy in response to such a powerful buildup in the northern front in order to deter the spillover effect of conflict between the great powers in the region [39]. According to Kjelle Goldman, "the higher the tension between the great powers, the weaker the power of the small ones" [40]. When a great power faces a security dilemma, it seeks influence over a small power. By injecting military offense in Ukraine, Rus-

sia is responding to NATO and the United States' heightened security dilemmas. If we do not become serious on national security, then our country may face same situation like Ukraine.

4 Conclusion

Based on the critical analysis of the study's debate, the following conclusions were drawn. A number of factors make Nepal an attractive development destination, such as its sufficient resources, its demographic dividend, and the economic growth of the immediate surroundings. With proper management of the Nepal Army's specialized units and by providing more facilities to produce more modernization for the Nepal Army through various research projects and equipment, the Nepal Army can achieve more modernization. It is possible for Nepal to achieve long-term economic growth, stability, and development. Politics and bureaucracy have an inefficient and unproductive organizational culture. In order to change the current system and keep it on track, it will take several years to change the organizational culture. Economic development in Nepal is vital. Nepal's development has looked like a jigsaw puzzle in which the Nepal Army, young people, and untapped development areas are the missing pieces. These include hydropower production, infrastructure development, and modernizing Nepal's armed forces with financial support. Only if these aspects are managed properly can Nepal achieve its dream.

References

- [1] A. D. Shaw. The military as a contributor to national development. *Scientia Militaria: South African Journal of Military Studies*, 9(3):38-45, 1979.
- [2] S. B. Ramokgadi. Exploring the military role in support of development in southern africa. *Journal of Military and Strategic Studies*, 20(4):1-16, 2019.
- [3] B. Gayawali. Importance of the development army in the context of nepal. *Unity Journal*, 2:41-53, 2021.
- [4] S. Zheng. China-india border dispute may force south asian neighbours to pick a side. *South China Morning Post*, 2020.
- [5] B. Ghimire. As india and china fight, nepal should stand neutral. *Republica*, 2020.
- [6] S. Gupta. In nepal's map tactics, a reflection of china's growing footprint in kathmandu. *Hindustan Times*, 2020.

- [7] The Times of India. Border row with india: Nepal's parliament approves new map. *The Times of India*, 2020.
- [8] Republica. India continuously ignoring nepal's call for holding talks to resolve border issues: Fm gyawali. *My Republica*, 2020.
- [9] B. Sangraula. To decrease its dependence on india, nepal eagerly awaits china rail plan. *The Japan Times*, 2019.
- [10] H. Kissinger. *World Order*. Penguin Group, London, 2014.
- [11] R. Bhattarai. *Geopolitics of Nepal and Internal Response to Conflict Transformation*. FFP Publications, Kathmandu, 2005.
- [12] J. D. Schmidt and M. Thapa. The great himalayan game: India and china rivalry in nepal. *Contemporary South Asia*, 20(1):19–36, 2012.
- [13] G.P. Adhikari. *Social Research for Thesis Writers*. Makalu Publication House, Kathmandu, 2008.
- [14] S.D. Muni. Trilateral engagement between india, china and nepal. In Promod Jaiswal and Geeta Kochhar, editors, *India-China-Nepal: Decoding Trilateralism*, page 8. GB Books, New Delhi, 2016.
- [15] D. Chiacu and S. Miglani. Trump offers to mediate 'raging' india-china border dispute. *Reuters*, 2020.
- [16] R. H. Laskar and S. Patranobis. India, china reject us bid to mediate on border issue. *Hindustan Times*, 2020.
- [17] A. Krishnan. No need for u.s. intervention, says china on border row. *The Hindu*, 2020.
- [18] BBC. Us-india 2+2: Crucial defence deal signed. <https://www.bbc.com/news/world-asia-india-54655947>, 2020.
- [19] P. Adhikari. *China, Threat in South Asia*. Lancer International INC., 2012.
- [20] S. Ghimire. Military and democracy in nepal. by indra adhikari. *Pacific Affairs*, 90(2):388–390, 2017.
- [21] B. P. Sharma. Nepal-china security issue in the context of belt and road program implementation. *Open Journal of Social Sciences*, 9(8):91–107, 2021.
- [22] Y. Sangroula. Nepal-china relations. *Nagariknews Daily*, 2016.
- [23] S. V. D. Heide. *Changing Faces of Nepal*. Ratna Pustak, Kathmandu, 1997.
- [24] P. Onta. A suggestive history of the first century of photographic consumption in kathmandu. *Studies in Nepali History and Society*, 3(1):181–212, 1998.
- [25] C.L. Gajurel and K. Vaidya. Nepal's old scientists & technology, April 1979.
- [26] M' Ray. Nepalese arms manufacture and general gehendra. *The Journal of the Historical Breechloading Small Arms Association*, 8(1):5–9, 2016.
- [27] J. T. Ratchford and W. A. Blanpied. Paths to the future for science and technology in china, india and the united states. *Technology in Society*, 30(3-4):211–233, 2008.
- [28] S.K. Dhungana. Security sector reform and peacebuilding in nepal: A critical reflection. *Journal of Peacebuilding & Development*, 3(2):70–78, 2007.
- [29] A.B.R. Chaudhury, P. Basu, and S. Bose. *Exploring India's Maritime Connectivity in the Extended Bay of Bengal*. Observer Research Foundation, 2019.
- [30] M.T. Fravel. China's strategy in the south china sea. *Contemporary Southeast Asia*, pages 292–319, 2011.
- [31] S. Kumar. India-china competitive coexistence: A new era of strategic partnership. *Journal of Social and Political Sciences*, 3(1):13–22, 2020.
- [32] Government of Nepal. *The Constitution of Nepal*. Law Books Management Board, Kathmandu, 2018.
- [33] J. D.-O. Owolabi. Causes and effect of delay on project construction delivery time. *International Journal of Education and Research*, pages 197–208, 2014.
- [34] Joel S Migdal. *State in society: studying how states and societies transform and constitute one another*. Cambridge University Press, Cambridge ; New York, 2001.
- [35] B. Sapkota. The nepali security sector: An almanac. *Centre for the Democratic Control of Armed Forces; Brambauer*, 2009.
- [36] H.P. Chand. Trilateral engagement in nepalese geopolitics: Soft power approach in nepal's foreign policy. *Nepal Public Policy Review*, pages 138–156, 2021.

-
- [37] K. R. Koirala. Managing national security interests amidst military major powers' military engagements. *Unity Journal*, 1:66–73, 2020.
- [38] R. R. Paudel. Dimensions of national security and development of nepal. *Unity Journal*, 2:190–202, 2021.
- [39] H.S. Karki. Navigating china's military modernization. *Unity Journal*, 4(01):31–51, 2023.
- [40] K. Goldmann. Tension between the strong and the power of the weak: Is the relation positive or negative? In *Power, Capabilities and Interdependence*. Sage Publications, 1979.