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## **Military Modernization in Nepal under Jung Bahadur Rana (1846-77)**

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### **Abstract**

One of the major components of state power is the national army, which is the center of the institutions of all modern polities. The necessity and circumstance shaped the Nepali Army as it pursued modernization, making significant advances during the premiership of Jung Bahadur Rana. This qualitative research work relies on the evidence presented in the historical books, scholarly journals and research articles which are supported with the archival documents of Nepali Army Library. It analyzes the reformation projects of Jung Bahadur concerning the organization, recruitment, training and discipline, manufacturing of arms, infrastructure and administration with references to the military history of Nepal. His policies transformed the army into a centralized institution as it had been a feudal tradition. It strengthened the national defense and concentrated the political power of the country in the nineteenth century Nepal. It ensured internal stability and improved the foreign policy of Nepal. This paper presents the reforms of Jung Bahadur in terms of the modernization theory, and how the process of military modernization helped in strengthening the state and the development of the Nepal's national identity and strategic independence.

### **Keywords**

Military History, Nineteenth Century Nepal, Prithvi Narayan Shah, Rana Regime, Structural Reform

### **Introduction**

Modernization has been given different meanings. One of the orientations views it as a social change process (Huntington, 1968) and the other orientation believes modernization as a change process that emphasizes the ability of institutions to manage

or adapt to change (Eisenstadt, 1966). Such definitions can be associated with any security force modernization such as Army to enhance its institution.

Military modernization is a process that aims at minimizing the gaps in the current capabilities. It is accomplished through substituting much stronger technology connecting to the right organization, concept of operations, tactics, command and control systems and supporting infrastructure (Delzo, 2019). Moreover, military modernization implies the modifications of the doctrine, organization, training, material, leadership and education, personnel, facilities, and policy of the institution.

It is possible to trace the history of the Nepali Army development in the context of the broader political and social transformation in Nepal. Modernization theory presupposes a series of steps by which societies evolve, starting with the traditional ones and then going on to the modern ones (Portes, 1976, pp.55-84). This has been experienced in the Nepali Army which is regarded as a close section of the society. Since the clan-based militias and the principalities of the ancient and medieval times were fragmented, the army slowly evolved into a powerful tool of the state during the nineteenth century.

This paper argues that the military modernization of Jung Bahadur was a conclusive reform. His structure, enlistment, drill, manufacture of weapons, and development of infrastructure were not confined to administrative adjustment but were part of a structured modernization strategy. Furthermore, it was consistent with the general tendencies of military reform of the nineteenth century. By applying Jung Bahadur's policies within modernization theory, this article demonstrates how the Nepali Army transformed from a feudal force into a more professional institution that could sustain both national defense and authoritarian governance.

### **Objectives of the Study**

This study aims to trace the historical development of the Nepali Army from ancient to modern period. It critically analyzes the role of Jung Bahadur Rana in the modernization of the Nepali Army and assess the long-term effectiveness of his reforms. By examining the military initiatives introduced by Jung Bahadur, starting with structural changes and concluding with the infrastructural development, the research outlines how his reforms shaped not only the military framework but also the army's national identity and strategic independence.

### **Review of Literature**

Various scholars have documented the Nepali Army's evolution from feudal militias to a centralized force. Acharya (2024) and Joshi (2023) highlight Prithvi Narayan Shah's

organizational innovations but do not interpret them through the lens of modernization theory. Hasrat (1970) identifies Bhimsen Thapa's cantonments and barracks as early modernization efforts but does not analyze why his reforms failed to produce long-lasting institutional change. Whelpton (1991) and Adhikari (1984) recognize the military as the basis of his political strength, but they do not explore how his reforms were integrated into wider patterns of military modernization. Levy (1966) argues that modernization is a systematic transition from traditional to industrial and technologically advanced societies. Furthermore, Huntington (1968) assumes that military acts as a crucial, modernizing institution, shifting from radicals to guardians when civilian institutions are weak.

This article fills the gap by applying modernization theory to Nepal's historical course. It argues that Jung Bahadur's reforms were not only administrative but also a systematic transition of the army into a centralized, disciplined, and structurally regulated force. This theoretical framework describes the effectiveness of the military reform in terms of political consolidation, state building, and national identity construction.

### **Research Methodology**

The methodology adopted in this research is the qualitative research method. It uses content analysis to analyze the development of the Nepali Army under Jung Bahadur Rana. Major evidence is drawn from secondary sources like historical books, scholarly journals, and articles, which provide context and interpretation. The primary evidence about organization and administration is drawn from the archives of Nepali Army Library dated 1846. These sources combined facilitate triangulated analysis, balancing the narrative descriptions with the institutional records.

### **Finding and Discussion**

#### **Historical Background of the Nepali Army**

The Nepali Army passed through unique stages of development: ancient, medieval, and modern. Each stage indicates the overall change of the political and social development in the state. Its development shows how the organization of the military slowly developed into something less clan-based and more permanent and professional, thus providing the basis for numerous changes that were made later under Jung Bahadur Rana.

This antiquity of Nepal is also experienced in the classical Sanskrit literature. According to the Maheshwar Khanda of the Skanda Purana, Nepal consisted of one hundred thousand villages, and Nepal was one of the nations that Karna defeated during

his victory campaign as stated in the Mahabharata (Subedi, 2024, p.380). These sources emphasize the fact that Nepal was not a small country, and some form of organized armed force might have existed even in the ancient period, but there are no clear records of the military.

However, by the early medieval period, Nepal had been subdivided into several strong political centers, among them, Simraungadh, Jumla and Nepalmandal. Over time, the area developed as a mosaic of principalities, each maintaining its own armed forces. Moreover, the records indicate that the Baisi Rajya, the Chaubisi Rajya, the three kingdoms of the Kathmandu Valley collectively, and the Sen rulers of the eastern Koshi area had approximately 135,700, 40,500, 58,000 and 35,000 soldiers respectively (Subedi, 2055, pp.35-99). These figures hint at the political fragmentation of the time and the formidable martial capacity of medieval Nepal, where armies had been as key to power as the territory of command itself.

The modern period began with the unification process of King Prithvi Narayan Shah in the eighteenth century. Before this, Nepal did not have a permanent military structure. The army was recruited to participate in missions, and they were released after completion. The early Gorkhali Army relied on loyalty and bravery, and its primary weapon consisted of khukuris, swords, bows and arrows. A turning point came after the victory of the Gorkhalis against Mir Qasim's troops in the battle of Makawanpur, when captured firearms introduced guns into the army.

Following the constantly growing demand of stability, Prithvi Narayan Shah established organized military force, with two-armed companies: one dedicated to Siddha Gorakhnath, called the Shere Nath Company, and another dedicated to the goddess, Gorakh kali, known as the Kalibox Company. Every unit consisted of approximately one hundred soldiers, seven junior ranks, and sixteen sergeants (Acharya, 2024, p.390; Joshi, 2023, pp.28-29). This change caused the transition of the tentative militias to more permanent units of armed forces.

Prithvi Narayan went on to establish three more companies which included Sabuj, Gorakh and Bajrabani, bringing the number to five. This expansion program continued, and Bahadur Shah pushed the Nepal borders far east to Sikkim and far west to Garhwal hence necessitating the deployment of more troops. Arms were purchased from Awadh, Punjab, and European traders, while local manufacture of guns and cannons began with the assistance of French. The quality was insufficient, but this was a significant move toward self-sufficiency.

The companies significantly increased and reached sixty-eight under the rule of King Girvan Yuddha Bikram Shah (Sharma, 2049, pp.106-107). Bhimsen Thapa then reorganized the army along more modern lines, building cantonments and barracks, and even inviting a French general to train soldiers. However, with all these reforms, long marches wore down morale of troops. Commanders often prioritized personal luxury over the welfare of their troops. It led to desertion and many of the soldiers joined Sikh armies in the Anglo-Nepalese War. By the time of Bhimsen's fall, the standing army struggled to sustain discipline. These shortcomings set the stage for Jung Bahadur to take decisive initiatives in organization, infrastructure, and administration, laying the foundation for his consolidation of power.

### **Jung Bahadur's Rise and Military Consolidation**

Jung Bahadur became a prominent figure in the political-military history of Nepal. His return from Banaras dragged him into Kathmandu politics once again. In 1840, during the elephant hunt of King Rajendra Bikram Shah in the Tarai, Jung's bold act of overcoming a wild elephant earned him royal recognition. He was given the rank of Captain immediately. Whelpton stresses that this episode was an act of Jung Bahadur's exploitation, but Rana argues that it is reestablishment of merit after unfair dismissal (Whelpton, 2016, p.41; Rana, 2076, p.8). Jung Bahadur was assigned King Rajendra's bodyguard in November 1841, a more influential position. Such an assignment gave him the chance to develop an intimate relationship with Putali Nani, a palace maid who would often give him useful advice. This was invaluable in getting him appointed as Kaji at Kumari Chowk in December 1841 (Rana, 2076, p.16), further putting him in the middle of court politics.

The downfall of Mathbar Singh that occurred in 1845 acted as an additional indication of the prosperity of his rise. In the next court reorganization in July of the same year, he rose to the fourth position in the rank of the general. These were new roles such as commanding three battalions, overseeing army training and influencing in judicial appointments (Rana, 2076, p.28). Very soon, Jung Bahadur's calculated rise transformed into open consolidation of power by decisive and violent interventions. This was particularly after the Kot Massacre in September 1846: playing upon disorder and in the court's favor, he killed most of his opponents. He appeared in the Court as the minister and commander-in-chief, the sole survivor of the former government. Though he was not yet Prime Minister (Manandhar, 2023, p.24), he exercised full military control and started the systematic replacement of officials with loyal Kunwar allies, thus consolidating his position.

It is after the Bhandarkhal and Alau incidents that Jung Bahadur developed into an extraordinarily influential personality. His relationship with Queen Rajya Laxmi was from the beginning based on a mutual benefit that broke when Jung Bahadur opposed the queen's succession agenda. The war led to the assassination attempt at Bhandarkhal where the Basnet family was assassinated and Jung Bahadur became prime minister. Once the queen was sent into exile and King Rajendra had voluntarily moved to Banaras (Rose, 1971, p.106), Jung Bahadur's role as a guardian to Crown Prince Surendra gradually established his influence over the throne. Rajendra's counter-conspiracy from exile finally resulted in the Alau Parva of 1847, where rebel forces were defeated, and the king was forced to abdicate after being captured. This made Surendra a nominal monarch under the authority of Jung Bahadur. With civil and military power centralized, Jung Bahadur emerged not only as a court figure but as the de facto ruler of Nepal.

His path to power combined with tactical violence and institutional restructuring reinvented the politics of Nepal, where army was an instrument of Rana leadership. Through the Kot Massacre and the subsequent events, Jung Bahadur assumed an authoritarian role and embarked on making the army disciplined and centralized by initiating reform and institutionalizing the army.

### **Institutionalization and the Reformation of the Military**

The Conservative School assumes the occupation of the military is being a carrier of modernization. When it comes to military establishment, Levy (1966) explained that the institution was the most rational and effective in any bureaucratic organization to deliver economic growth, social reform, and modernization in the third world. In this respect, military intervention in politics is a desirable progressive aspect that can provoke social change. Levi (1966, pp.495-499) came to the pro-military argument through the following assumptions:

- During the initial stages of modernization, institutional and organizational competition are either weak or nonexistent
- The military provides available channels for social mobility to attract the talent of emerging societies
- The military is a rational organization with relatively sophisticated technological requirements and
- Military technology is not radically different from the technology that is, in general, characteristic of modernization. (Jackman, 1976, p.1078)

These assumptions were verifiable with the nineteenth-century Nepali Army. The Anglo-Nepal War trauma inspired the reform program of Bhimsen Thapa that sought to prevent colonial invasion and establish its sovereignty, which grew to focus on the creation of the standing army and fortresses and arsenals, albeit with little effort in modernization. Jung Bahadur realized that the reforms made by Thapa were inadequate.

Rapid Social modernization in developing countries without building political institutions results in chaos and when civilian institutions are weak, military acts as a crucial modernizing institution (Huntington, 1968). This theory was indeed applicable in 19<sup>th</sup> century Nepal. Jung Bahadur decided to initiate modernization process in Nepal from Nepali Army, after getting exposure to British India and having visited Europe in 1850. Along with the former army service, he had seen its underbelly and therefore attempted to come up with certain hierarchical systems, a standard recruitment policy and rooted loyalty by systematized training. His military reforms and centralization of the administration are analyzed in subsequent discussions.

### **Structural Reforms and Hierarchy**

The structural reforms in Nepali Army began with the rise of Jung Bahadur in 1846. It shifted from a dispersed system to a more organized structure, and formation of special units. In 1852, the army was divided into 3 groups that comprised Kampu, Paltan and Company. The largest was the Kampu, composed of 19 units, which was a regular army, and usually stationed in the capital (Sketches from the Nipal, Vol. I, p.171). Both Paltan and Company included 13 units each, with Kampu larger than Paltan and Paltan larger than Company. Further assimilation of the army into the civil government included creation of a new company, Bisnu Dal, which was placed under the judge of the Sadar Courts in 1854 (Ghati badhi namayesi, 1846). This was introduced by the structural reform that had a formal chain of command, specification of ranks, uniforms, and other distinct identities of regiments that fostered a sense of discipline and unity. Jung Bahadur reinstated the rank of jemadar, augmented the ranks of the lieutenants, colonels, and generals and a new rank of lieutenant colonel was introduced (Whelpton, 1991, p.208). This had a positive impact on the popularity of Jung Bahadur in the army.

Structural innovations continued under centralized command. Official documentation revealed variations in troop strength ranging from 18,971 soldiers in 1846 to 26,659 in 1863 (Ghati badhi namayesi, 1846). Men of various castes and communities were recruited in the army; Brahmans, Thakuris, Khas, Gurungs, Magars, and Kiratis (Oldfield, 1880a, p.167). Jung Bahadur formed caste-based regiments to enhance control

and proper handling in the event of mutiny (Cavenagh, 1884, p.119). The Nepali Army Headquarters source further confirms a varied command structure across regiments (Ghati badhi namayesi, 1846). For example, the Rifle Regiment, consisting of 886 men, was commanded by the commander-in-chief himself, whereas the Mahendra Dal Regiment, consisting of 1907 men, had a major captain leading it. Despite such variations, ultimate authority rested with the Rana generals, stressing the centralization of power within the military establishment. This restructured army enabled a swift, organized, and effective invasion of Tibet in Nepal-Tibet war (1855-1856).

### **Recruitment System**

In the days of Jung Bahadur, the recruiting was made through local administration. District governors, Rajas, Rajautas, Rai, Limbu Subbas and village headmen selected men aged between 20 and 50 years to serve as soldiers (Adhikari, 1984, p.163). These officials were continuously provided with written instructions to keep them reminded of their role in the recruitment of able-bodied personnel. The figures of these regiments and their strength, however, were determined by the the prime minister and the commander-in-chief. The government frequently re-trained former servicemen to cut down on the period of training required. This was a pragmatic recruitment practice that was applied to keep the military ready, which had centralized supervision and decentralized selection of personnel.

### **Training and Discipline**

The quality of the training in the army gradually declined after the Anglo-Nepal War. The standards of firing and drills of the Nepali Army were admiring. However, there was shortcoming of modern military capabilities. Which was emphasized in the sketch drawn by Campbell (Hasrat, 1970, p.229). Jung Bahadur made every possible effort to raise the training standard. As he was highly influenced by the British system of training, British practices were greatly emulated in the drills, maneuvers and words of command (cited in Adhikari, 1984, p. 166). To restore discipline and readiness, prior to the Nepal-Tibet War (1854–56), soldiers were given pre-deployment training.

There was, however, extreme strictness in discipline. Prior to the Nepal-Tibet war, a code of conduct was declared that an officer or soldier who deserted the front line would be executed and anyone who instigated a mutiny would be killed (Adhikari, 1984, p.169). This was well seen during the military support to British India. For instance, on 7 July 1857, a deserter from a regiment assigned to assist in the Sepoy Mutiny was publicly hung at Tundikhel to show the consequences of desertion (Oldfield, 1880b, p.25). During the

same year, a subedar of the Rudra Dhoj Regiment was executed in front of a parade of troops on grounds of mutiny (Whelpton, 1991, p.211). Such measures show the uncompromising discipline of Jung Bahadur's army.

### **Arms Procurement and Industrial Initiatives**

The recruitment and organizational reforms were supported by the work aimed at strengthening the procurement, manufacturing and storage of arms and munitions. As a part of Jung's European tour, he went to the well-known gun-manufacturing enterprise James Purdey and Sons thrice and bought several weapons and percussion caps to a total of £ 2,330 (Shrestha, 2018). This was evidence of his willingness to obtain modern weapons and ammunition. There was also a lot of focus on the production and stocking of war material, which saw the creation of about a dozen arsenals and magazines both inside and outside the Kathmandu Valley.

There were four magazines, Sundarijal Jangi, Tundikhel Jangi, Palpa and Pyuthan which were actively used as part of industrial strategy of production of arms (Adhikari, 1984, p.177). The Tundikhel, Palpa, Sundarijal magazines produced cannons, rifles, muskets, and cannonballs and the Pyuthan made various kinds of gunpowder and rifles. Bombs and lead cannonballs were also manufactured locally. Nepalese technical ability was upgraded as muskets manufactured in Tundikhel and Pyuthan were regarded as good quality.

European experts were hired to train Nepali workers (cited in Adhikari, 1984, p.179). The art of gunpowder manufacture had been introduced by a French gunner during the early nineteenth century, and by the time of Jung Bahadur, Nepal was manufacturing and storing gunpowder in sufficient quantities to meet military requirements. These developments prove his pragmatic approach of gradually developing Nepal's arsenals toward military modernization, combining foreign expertise and resources. This initiative enhanced the Nepali Army's effectiveness which was demonstrated during Nepal-Tibet War (1855-1856).

### **Military Infrastructure**

Jung Bahadur constructed barracks and cantonments not only within the Kathmandu Valley, but also on its periphery. The choice of site was his calculated diplomatic move. Swayambhu had two regiments to offer a symbolic and religious focus of the valley and another two at the British Residency at Thamel to project vigilance and deterrence against the British.

The barracks beyond the valley had just as great diplomatic importance. The objective of sending troops to strategic areas such as Palpa, Jumla, Doti and Pyuthan were to secure the western border of Nepal. This movement also displayed power in areas that were distant and demonstrated army's readiness at any time. Similarly, the presence of outposts at Ilam and Sindhuli strengthened eastern defenses, and Gorkha and Chisapani served a symbolic purpose of ancestry as well as clear strategic control. By locating regiments or outposts across these diverse terrains, Jung Bahadur ensured that Nepal's military presence was not limited to the capital but extended to contested frontiers. He turned infrastructure into a tool of diplomacy and statecraft.

### **Military Departments and Functions**

Nepali army under Jung Bahadur was quite hierarchical. The prime minister, who oversaw appointments, transfers, promotions and dismissal, was at the top in the army. The Commander-in-Chief, however, under him, fulfilled the functions of a civil rather than a military administrator. He was concerned with the distribution of khangri and cash salaries to the soldiers and dealing with those complaints that his juniors could not solve. He was assisted by four commanding generals (East, West, North, and South), who rendered both civil and military services.

Efficiency was achieved by the structuring of the Army Headquarters on functional lines (Adhikari, 1984, pp. 182-183). Jangi Adda was responsible for recruiting, training, operational planning, and administering court-martials. While Sadar Jangi Janch Adda controlled the military establishments in districts and managed the distribution of jagir. Similarly, Kot Khana and Top Khana were the storage facilities for guns, arms, and ammunition. To distribute cash salaries to soldiers Jangi Kot Tahvil was established. These military departments were introduced as part of modernization and adaptation in the Nepalese context.

### **Conclusion**

The development of the Nepali Army led by Jung Bahadur was a pivotal milestone in the military and political history of Nepal. The army, which was a feudal institution, once was transformed into a modern institution by military reforms. The process of modernization culminated with the accession of Jung Bahadur into power in mid nineteenth century. He consolidated power through military leadership and inculcating total transformation. His work transformed the organization, the army recruitment and training process, the industrial activities, and construction of barracks.

Jung Bahadur's policies strengthened Nepal's defense capacity and secured the political authority of the Rana regime, making the army both a symbol of national sovereignty and a pillar of state power. The modernized Nepali Army became a centralized institution which reinforced state authority across the country. The improved military capacity allowed Jung Bahadur to negotiate with British India from a position of strength. The Nepali troops participated in Sepoy Mutiny demonstrated Nepal's military reliability, securing favorable diplomatic recognition and autonomy in foreign policy. However, the modernization of the army provided Jung Bahadur with a trained, loyal and disciplined force that enabled him to suppress rival factions and secure autocratic rule over a century. Through the modernization theory, this transformation shows how military modernization played a significant role in the state formation of nineteenth-century Nepal and highlights Jung Bahadur's enduring role in shaping the country's institutions.

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