# सुरक्षा जर्नल

(A Journal of Security Affairs)



वर्ष ५ अङ्ग १ २०८२ असार





नेपाल सरकार

रक्षा मन्त्रालय

सिंहदरबार, काठमाडौ

## सुरक्षा

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## सुरक्षा

#### (A Journal of Security Affairs)

#### संरक्षक

श्री रामेश्वर दंगाल - सचिव

#### सम्पादक मण्डल

श्री ज्ञान प्रसाद ढकाल. सहसचिव. रक्षा मन्त्रालय — संयोजक श्री हरि बहादुर विश्वकर्मा, महासेनानी, नेपाली सेना - सदस्य श्री झनक कुमार खत्री, उपसचिव, रक्षा मन्त्रालय – सदस्य श्री अनुप के.सी., उपसचिव, रक्षा मन्त्रालय – सदस्य श्री सविता अर्याल, उपसचिव, रक्षा मन्त्रालय – सदस्य श्री नवराज श्रेष्ठ, सेनानी, राष्ट्रिय सुरक्षा परिषद्को सचिवालय – सदस्य श्री सुशिल रावल, कम्प्युटर अधिकृत, रक्षा मन्त्रालय सदस्य श्री शोभा पाण्डे बस्याल. शाखा अधिकत. रक्षा मन्त्रालय सदस्य सचिव

#### कम्प्युटर टाइप/सेटिङ

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फोन नं.: ४२११२८९

वेबसाइटः www.mod.gov.np

आवरणः रक्षा मन्त्रालय भवन, सिंहदरबार

आवरण डिजाइन/फोटोः प्रा.जम. श्री ईश्वर कार्की

ISSN: 2795-1928 मुद्रित प्रति: २४०

मुद्रकः मुद्रण विभाग, सिंहदरबार, काठमाडौँ ।

(स्वघोषणाः यस जर्नलमा सङ्गृहीत लेख रचनाहरू सम्बन्धित लेखकका निजी विचारहरू हुन् र तिनले नेपाल सरकार, रक्षा मन्त्रालयको आधिकारिक धारणाको प्रतिनिधित्व गर्दैनन्।)

(Disclaimer: The views and opinions expressed in the articles compiled in this journal are those of the authors and do not necessarily represent the official views/opinions of the Ministry of Defence, Government of Nepal.)





#### शुभकामना

मुलुकको स्वतन्त्रता, सार्वभौमसत्ता, भौगोलिक अखण्डता, स्वाधीनता र नेपालीको हकिहतको सुरक्षा लगायतका विषयमा रक्षा मन्त्रालयले महत्त्वपूर्ण भूमिका निर्वाह गर्दै आइरहेको छ। कुनै पनि मुलुकका लागि सुरक्षा सर्वोपिर महत्त्वको विषय हो। अतः मुलुकलाई आन्तरिक तथा बाह्य रूपमा सुरक्षित राख्दै विकास र समुन्नतिको यात्रामा अघि बढाउन राज्यका सबै अङ्गहरूले एक आपसमा उचित समन्वय र सामञ्जस्य कायम गर्दै सहकार्य गर्न आवश्यक छ।

रक्षा मन्त्रालयले विगत केही वर्षयता राष्ट्रिय सुरक्षाका विभिन्न विषयहरूमा केन्द्रित भई सुरक्षा विज्ञ, कूटनीतिविद्, इतिहासकार, अनुसन्धानकर्मीहरूद्वारा लिखित लेख, रचनाहरूको सँगालोको रूपमा "सुरक्षा जर्नल" प्रकाशन गर्दै आएको छ। यस शृङ्खलामा पाँचौँ अङ्क प्रकाशन हुन लागेकोमा मलाई खुसी लागेको छ। अन्त्यन्त महत्त्वपूर्ण विषय भएर पिन राष्ट्रिय सुरक्षासम्बद्ध विषयमा मुलुकमा यथेष्ट अध्ययन, अनुसन्धान र प्रकाशनको काम हुन नसकेको सन्दर्भमा यो जर्नलले त्यो खाँचोलाई केही हदसम्म पूर्ति गर्ने अपेक्षा लिएको छ।

यस जर्नलमा समावेश भएका लेख, रचनाहरूले नेपालको सुरक्षा र प्रतिरक्षा क्षेत्रका विभिन्न विषयहरूमा सर्वसाधारणलाई सत्यतथ्य सूचना र जानकारी सम्प्रेषण गर्न सहयोग पुऱ्याउने आशा गरेको छु । साथै, बदलिँदो सुरक्षा चुनौतीहरूलाई उचित तवरमा सम्बोधन गर्दै मुलुकको सुरक्षा प्रणालीलाई थप सुदृढ तुल्याउँदै जानुपर्ने क्रममा राज्यले अङ्गीकार गर्नुपर्ने नीति तथा रणनीतिहरू सम्बन्धमा नीति निर्माण तहमा काम गर्ने जोकोहीलाई पनि यो जर्नलमा समेटिएका विषयहरू उपयोगी हुने विश्वास लिएको छु।

यो पित्रकाले मुलुकको सुरक्षा र प्रतिरक्षा क्षेत्रका चुनौतीहरूको विश्लेषण गर्दै समग्र राष्ट्रिय सुरक्षा प्रणालीलाई सुदृढ गर्ने सम्बन्धमा तथ्यपरक एवं विचारमूलक जानकारीहरू प्रदान गर्नेछ । साथै, राष्ट्रिय सुरक्षा तथा राष्ट्रिय एकताको भावनालाई थप सबल बनाउन सकारात्मक योगदान दिन, राष्ट्रप्रति समर्पित, निष्ठावान र दायित्वबोध गर्ने नागरिकको निर्माण गर्न समेत सहयोग पुन्याउने अपेक्षा लिएको छ।

अन्त्यमा, यस जर्नलका लागि लेखरचना उपलब्ध गराउनुहुने सम्पूर्ण विषय विज्ञहरू, पित्रकाको सम्पादनमा संलग्न सम्पादक मण्डलका सबै सदस्यहरूका साथै सम्बद्ध कर्मचारीहरू तथा प्रकाशन कार्यमा सहयोग पु-याउनु हुने सबैलाई हार्दिक धन्यवाद व्यक्त गर्दछु। राष्ट्रिय सुरक्षा र प्रतिरक्षाजस्तो महत्त्वपूर्ण विषयमा अनुसन्धानमूलक लेख, रचनाहरू समेटी वार्षिक रूपमा प्रकाशन हुने यो जर्नल एक पठनीय र संग्रहणीय अध्ययन सामग्रीका रूपमा निरन्तर प्रकाशन हुँदै जाओस् भन्ने शुभकामना व्यक्त गर्दछु।

मानवीर राई (रक्षा मन्त्री)

सिंहदरबार, काठमाडौं । २०८२ असार



#### नेपाल सरकार रक्षा मन्त्रालय सिंहदरबार, काठमाडौं नेपाल शुभकामना



राष्ट्रिय सुरक्षा तथा प्रतिरक्षासम्बन्धी नीति तर्जुमा र कार्यान्वयन, मुलुकको अन्तर्राष्ट्रिय सिमानाको सुरक्षा तथा नेपाली सेनाको व्यवस्थापन लगायतका महत्त्वपूर्ण जिम्मेवारी सम्हाल्दै आएको रक्षा मन्त्रालयले मुलुकको समग्र सुरक्षा व्यवस्थापनमा महत्त्वपूर्ण भूमिका निर्वाह गर्दे आइरहेको छ। सबै किसिमका सुरक्षा चुनौतीहरूलाई सम्बोधन गर्दे मुलुकको सार्वभौमसत्ता, भौगोलिक अखण्डता, राष्ट्रिय एकता र स्वाधीनता लगायतका राष्ट्रिय हितहरूको संरक्षण र संवर्द्धन गर्न मन्त्रालय प्रतिबद्ध र क्रियाशील रहँदै आएको छ।

राष्ट्रिय सुरक्षा एक संवेदनशील र अन्तरसम्बन्धित विषय हो। राज्यका सबै अङ्ग तथा नागरिकहरू समेतको सिक्रयता, तत्परता र सचेतता तथा सबै पक्षबीच उचित समन्वय भएमा मात्र राष्ट्रको समग्र सुरक्षा प्रणालीलाई सुदृढ र प्रभावकारी बनाउन सिकने हुन्छ। राष्ट्रिय सुरक्षालाई सुदृढ बनाउने सन्दर्भमा एकातिर हाम्रा सुरक्षा चुनौतीहरू के के हुन् तिनलाई वस्तुनिष्ठ ढङ्गले विश्लेषण गर्न जरुरी हुन्छ भने अर्कातिर बदलिँदो विश्वभूपरिवेशसँगै हामीले के कस्ता नीति, रणनीति तथा उपायहरू अवलम्बन गर्न समीचीन हुन्छ; निरन्तर अध्ययन, अनुसन्धान र चिन्तन-मनन गर्न आवश्यक हुन्छ। खासगरी राष्ट्रिय सुरक्षालाई सबल बनाउने सन्दर्भमा राष्ट्रिय सुरक्षासम्बन्धी विषयमा हामी सबैको साझा बुझाइ र एकीकृत धारणा निर्माण हुन आवश्यक हुन्छ।

यसै तथ्यलाई मध्यनजर गरी रक्षा मन्त्रालयले विगत पाँचवर्षदेखि यो जर्नलको प्रकाशन गर्दै आइरहेको छ। यस जर्नलमा मुलुकको सुरक्षासम्बद्ध आन्तरिक तथा बाह्य चुनौतीहरू, सुरक्षासम्बन्धी विषयमा सरकारले कार्यान्वयनमा ल्याएका नीति तथा कार्यनीतिहरू, हाम्रा सुरक्षा व्यवस्थापन र सुरक्षा सरोकारका विषयहरू, सीमा सुरक्षा, साइबर सुरक्षा, अन्तर्राष्ट्रिय शान्ति स्थापना, सामरिक तथा ऐतिहासिक लगायतका विषयहरूमा सम्बन्धित क्षेत्रका विज्ञ, विद्वान्-विदुषीहरूबाट प्राप्त लेखरचनाहरू प्रकाशन गरिँदै आएको छ। यस जर्नलमा प्रकाशित लेखरचनाहरू मुलुकको सुरक्षा, प्रतिरक्षा लगायतका विषयमा चासो राखे, मुलुकको सामरिक तथा ऐतिहासिक विषयमा अध्ययन, अनुसन्धान र विश्लेषण गर्ने सबैका लागि पठनीय रहँदै आएको छ। यो जर्नललाई आगामी दिनमा थप स्तरीय र ज्ञानवर्द्धक बनाउन सुरक्षा क्षेत्रमा अध्ययन, अध्यापन तथा अनुसन्धान गर्ने विद्वत्जन, अनुसन्धाता, सुरक्षा तथा कूटनीतिविद लगायत सबैको सहयोग प्राप्त हुने अपेक्षा लिएको छु। साथै, प्रबुद्ध पाठकवर्गबाट समेत रचनात्मक सुझाव र सल्लाहको अपेक्षा गर्दछु।

अन्त्यमा, सुरक्षा जर्नलको यस अङ्कका लागि आफ्ना महत्त्वपूर्ण लेखरचनाहरू उपलब्ध गराई सहयोग गर्नुहने विषयविज्ञ लेखकहरूप्रति रक्षा मन्त्रालयको तर्फबाट हार्दिक आभार प्रकट गर्दछु। साथै, जर्नलको नियमित प्रकाशनका लागि खट्नुभएका सम्पादन मण्डलका सबै सदस्यहरूसहित जर्नल प्रकाशनमा आ-आफ्नो स्थानबाट सहयोग पुऱ्याउने सम्पूर्ण राष्ट्रसेवकहरूलाई धन्यवाद सहित जर्नलको पाँचौँ अङ्क प्रकाशनको लागि हार्दिक शुभकामना व्यक्त गर्दछु।

रामेश्वर दंगाल

२०८२ असार

सचिव

#### सम्पादकीय

नेपालको स्वतन्त्रता, सार्वभौमसत्ता, भौगोलिक अखण्डता, राष्ट्रियता, स्वाधीनता, स्वाभिमान, नेपालीको हक-हितको रक्षा, सिमानाको सुरक्षा, आर्थिक समुन्नित र समृद्धि लगायतका विषयहरू नेपालका राष्ट्रिय हितका आधारभूत विषयहरू हुन्। राष्ट्रिय हितका यी आधारभूत विषयहरूको संरक्षण र संवर्द्धन गरी मुलुकमा शान्ति, स्थिरता र सुशासन कायम गर्न तथा समग्र राष्ट्रिय सुरक्षा प्रणालीलाई सुदृढ बनाउन राज्यका सबै अङ्ग तथा निकायले Whole of the Government को अवधारणामा कार्य गर्न आवश्यक छ।

सुरक्षा मुलुकको राष्ट्रिय हितको संरक्षण र संबर्द्धनसँग प्रत्यक्ष रूपमा गाँसिएको विषय भएकोले यसलाई राज्यले उच्च प्राथमिकतामा राखेको छ। मुलुकमा चुस्त र भरपर्दो सुरक्षा प्रबन्ध नभई विकास निर्माण लगायतका कार्यले गति लिननसक्ने हुँदा सुरक्षा सुशासन र विकासको आधारशिला पनि हो। मुलुकको सुरक्षा राज्यको कुनै एउटा अङ्ग वा निकाय विशेषको मात्र नभई राज्यका सबै संयन्त्रहरू र सबै नागरिकको साझा जिम्मेवारी र दायित्वको विषय हो। सुरक्षा एक परिवर्तनशील र बहुआयामिक विषय भएकोले यस क्षेत्रमा निरन्तर अध्ययन, शोध र विचार-विमर्श भइरहनु जरुरी हुन्छ। सुरक्षाको विषयमा आम नागरिकलाई सुसूचित गर्नु र राष्ट्रिय सुरक्षा प्रणालीमा सबै नागरिकहरूको सहभागिता, स्वामित्व र अपनत्व सिर्जना गर्नु राज्यको दायित्व हो।

यसै तथ्यलाई हृदयङ्गम गरी राष्ट्रिय सुरक्षा र प्रतिरक्षाका विभिन्न पक्षमा सर्वसाधारण सबैलाई जानकारी तथा सूचना प्रवाह गर्ने उद्देश्यले यस क्षेत्रका विज्ञ तथा अनुभवी पूर्व प्रशासक एवं सुरक्षाविद्हरूको विचारलाई समेटी विगत पाँच वर्षदेखि रक्षा मन्त्रालयले आफ्नो स्वीकृत वार्षिक कार्यक्रम अन्तर्गत सुरक्षा जर्नलको निरन्तर प्रकाशन गर्दे आइरहेको छ। यो पत्रिका मुलुकमा सुरक्षा क्षेत्रका नवीन, ऐतिहासिक तथा अनुसन्धानमूलक विचार तथा सामग्रीहरूलाई एकै ठाउँमा पस्कने एउटा महत्त्वपूर्ण जर्नलको रूपमा रहेको छ।

यस अङ्कमा विगतमा झैं सुरक्षा तथा प्रतिरक्षा क्षेत्रमा लामो समय काम गरी विशिष्ट ज्ञान र गिहरो अनुभव हासिल गर्नुभएका विषयविज्ञ, शोधकर्मी तथा इतिहासविद्हरूद्वारा लिखित महत्त्वपूर्ण लेखरचनाहरू समावेश गरी पाठकवर्गसमक्ष पु-याउने प्रयास गरिएको छ। यस अङ्कमा प्रकाशित लेखरचनाहरू सुरक्षा र प्रतिरक्षा विषयमा रुचि र चासो राख्ने सबैका लागि उपयोगी, पठनीय र सङ्ग्रहणीय पाठ्यसामग्री हने अपेक्षा हामीले लिएका छौं।

यस अङ्कमा प्रकाशित लेखरचनाहरू सम्बन्धमा तथा जर्नलको समग्र पक्षमा पाठकवर्गको कुनै सुझाव, प्रतिक्रिया वा रचनात्मक धारणा भए निःसङ्कोच उपलब्ध गराई दिनहुन सबैमा हार्दिक अनुरोध गर्दछौँ। यहाँहरूबाट प्राप्त हुने महत्त्वपूर्ण सुझाव, सल्लाह र प्रतिक्रियाले आगामी दिनमा सुरक्षा जर्नललाई अझ गुणस्तरीय र पठनीय बनाउन तथा यसलाई सुरक्षा क्षेत्रको एउटा प्रतिष्ठित जर्नलको रूपमा स्थापित गराउन सहयोग पुग्ने अपेक्षा हामीले लिएका छौँ।

अन्त्यमा, सुरक्षा जर्नलको यस अङ्कका लागि आफ्ना अमूल्य लेखरचनाहरू उपलब्ध गराई हामीलाई सहयोग गर्नुहुने सम्पूर्ण लेखक महानुभावहरूका साथै प्रत्यक्ष अप्रत्यक्ष रूपमा जर्नल प्रकाशनमा सहयोग पु-याउनुहुने सबै महानुभावहरूप्रति हार्दिक कृतज्ञता व्यक्त गर्दछौँ। साथै, आगामी दिनमा पिन यस जर्नलको प्रकाशनमा सबैको रचनात्मक साथ, सहयोग र सद्भाव निरन्तर प्राप्त भइरहने अपेक्षा लिएका छौँ।

२०८२ असार सम्पादक मण्डल

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## From Catastrophe to Creativity: Redirecting the Potentialities of Nuclear Energy



\*Anu Arya

#### Abstract

Nuclear energy is powerful yet inherently neutral, as it can be channeled toward both constructive and destructive outcomes. Historically, its catastrophic potential was most devastatingly demonstrated in the nuclear bombings of Hiroshima and Nagasaki. Even today, while nuclear weapons pose a global threat, many conventional wars continue to escalate through modern technologies such as artificial intelligence, cyber warfare, and hybrid combat strategies. Despite pressing global challenges such as hunger, gender inequality, child and women's safety, and declining happiness indices, many developed nations continue to allocate massive budgets toward militarization.

This study explores the evolution of warfare, with a focus on the history and costs of nuclear conflict, and in the context of the Russia-Ukraine war and India-Pakistan tensions, analyzing their economic and human impacts. It also examines non-violent approaches to global leadership, highlighting the UK Parliament's integration of mindfulness and mental health programs for policymakers. These efforts aim to cultivate empathy, reduce stress, and encourage more humane decision-making.

Furthermore, this study emphasizes the constructive potential of nuclear energy in advancing sustainable development through clean electricity, low-carbon emissions, poverty reduction, and climate action. It also considers its innovative applications in creative fields such as fashion, agriculture, space exploration, and environmental technologies. In this way, this study aims to shift the perspective of nuclear energy from catastrophe to creativity.

**Keywords:** Nuclear, combat, catastrophe, creativity, mindfulness

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#### Introduction

The atomic nucleus, which consists of protons and neutrons, forms the central part of an atom. The energy released from this nucleus is known as nuclear energy. This energy can be produced through two main processes: fusion, where atomic nuclei merge, and fission, where a nucleus splits into smaller parts (Galindo, 2024).

In both nuclear fusion and fission, a mass difference, represented as  $\Delta m$ , exists between the reactants and the products. This mass loss is converted into energy according to Einstein's well-known equation:

 $E = \Delta m \times c^2$ , where:

- E is the energy produced
- Am is the amount of mass lost
- c is the speed of light in a vacuum (approximately  $3 \times 10^8$  m/s)

Using this relationship, one kilogram of mass can be transformed into roughly  $9 \times 10^{16}$  joules of energy, or about  $25 \times 10^9$  kilowatt-hours (kWh). This is roughly equal to the energy generated by burning three million tons of coal.

Nuclear fission takes place when a uranium-235 (U-235) atom absorbs a slow-moving neutron, becoming an unstable uranium-236 (U-236) nucleus. This nucleus then splits into barium-139 (Ba-139) and krypton-94 (Kr-94), releasing three neutrons and a substantial amount of energy. Approximately 0.2 atomic mass units (u) are lost in the process and are converted to energy through  $E = \Delta m \times c^2$ , producing around 200 MeV of energy per fission reaction.

Nuclear fusion involves the combination of a deuterium (<sup>2</sup>H) nucleus with a tritium (<sup>3</sup>H) nucleus to create an alpha particle (<sup>4</sup>He<sup>2+</sup>) and a neutron, along with 17.6 MeV of energy. About 80% of this energy is carried by the neutron, which is used to heat water that powers turbines to generate electricity. The remaining energy helps maintain the extremely high temperatures required for the fusion process. One of the major obstacles in achieving sustained fusion is managing temperatures above 100 million degrees Celsius. Under these conditions, the fuel becomes a plasma, which must be kept suspended and away from any solid surface, as no material can endure such heat (Freude, n.d.).

A nuclear weapon is an explosive device that derives its destructive power from nuclear fission, fusion, or both. Fission-based weapons are commonly referred to as atomic bombs, while those using fusion are called hydrogen or thermonuclear bombs. The energy output from such weapons is extraordinarily high. For instance, the 1945 detonation over Hiroshima, Japan, used only 64 kilograms (140 pounds) of highly enriched uranium but unleashed energy equivalent to approximately 15 kilotons of conventional explosives. The explosion generated an intense shock wave, extreme heat, and dangerous ionizing radiation (Cochran & Norris, 2025).

The first detonation of a nuclear device occurred on July 16, 1945, in New Mexico, when the United States conducted its initial atomic bomb test. Only weeks later, atomic bombs were dropped on Hiroshima and Nagasaki, resulting in over 200,000 deaths. Japan surrendered on August 14, effectively bringing World War II to an end. In the subsequent years, countries like the United States, the Soviet Union, and the United Kingdom carried out numerous nuclear tests. In 1954, Indian Prime Minister Nehru advocated for a ban on nuclear testing, initiating one of the first global disarmament campaigns. By 1958, around 10,000 scientists had petitioned the United Nations to halt such testing. France and China became nuclear powers in 1960 and 1964, respectively. In 1995, the UN formally supported disarmament efforts aimed at a world free of nuclear arms. Regional agreements such as the Bangkok and Pelindaba Treaties established zones without nuclear weapons in Southeast Asia and Africa. The Comprehensive Test Ban Treaty (CTBT) was adopted in 1996, and although the United States initially signed it, the Senate rejected its ratification in 1999. India conducted five nuclear tests in 1998, prompting Pakistan to respond with six of its own. These actions were widely condemned and resulted in international sanctions, which were later lifted in 2001 following both nations' support for U.S.-led anti-terrorism campaigns. North Korea entered the nuclear arena in 2006, conducting its first successful test and asserting that its missiles could reach targets across Asia and even the United States. At present, over 30 nations possess drone technology capable of delivering weapons of mass destruction, though only the United States has missile systems capable of striking anywhere on the globe (Asia Society, n.d.).

Nine countries currently possess nuclear weapons: the United States, Russia, China, France, the United Kingdom, India, Pakistan, Israel, and North Korea. Although the global stockpile has decreased from the Cold War peak of around 60,000 warheads to approximately 13,000 today, the existential threat these weapons pose remains significant. For example, a

single U.S. submarine armed with nuclear warheads carries a destructive capacity seven times greater than all the bombs used in World War II, including those dropped on Hiroshima and Nagasaki. Typically, ten such submarines are active in the U.S. naval fleet. Additionally, several nuclear powers-including China, Russia, and the United States-are currently expanding the size or sophistication of their arsenals, contributing to a renewed arms race (Nuclear Weapons Worldwide, n.d.).

A single nuclear explosion has the potential to cause hundreds of thousands of deaths and bring about severe humanitarian and environmental consequences. If one were detonated over New York City, it is estimated that approximately 583,160 people would die. Around 12,000 nuclear warheads are held collectively by the nine nuclear-armed nations, most of which are many times more powerful than the Hiroshima bomb. Beyond those states, 32 other nations are involved in the nuclear landscape-six possessing nuclear weapons and 28 supporting their use. Russia maintains the largest confirmed stockpile with over 5,500 warheads, followed by the United States with 5,044, including those deployed in Germany, the Netherlands, Belgium, Italy, and Turkey. Together, Russia and the United States control roughly 90 percent of all nuclear weapons. The exact number of warheads owned by Israel and North Korea remains unclear. Israel is believed to have enough fissile material for up to 200 nuclear bombs, with around 90 possibly deployed, while North Korea is estimated to possess materials sufficient to produce between 40 and 50 warheads (International Campaign to Abolish Nuclear Weapons, n.d.).

Globally, around 9,500 nuclear warheads are currently stored in military facilities. A single one of these could annihilate a city, and a full-scale nuclear war would have disastrous consequences. Implementing firm policies, such as adopting a "no-first-use" doctrine, could significantly reduce the risk of accidental or rash deployment. At present, U.S. policy allows for nuclear retaliation in response to non-nuclear attacks from countries like China, Russia, or North Korea, a stance that many argue could raise the risk of escalation. Preventing nuclear conflict among the nine nuclear-armed states requires enforceable treaties, global cooperation, and reforms in national security policies. Historical disarmament efforts have seen success: U.S. and Soviet arsenals dropped from 64,000 weapons in the 1980s to about 8,000 today. However, such progress is now under threat. The New START treaty, recently extended by the Biden administration until 2026, remains the final major arms control agreement between the U.S. and Russia. Renewing this treaty-or replacing it-is crucial for maintaining global strategic

balance. Meanwhile, China has indicated interest in contributing to key agreements like the Comprehensive Nuclear Test Ban Treaty and a Fissile Material Cutoff Treaty, both of which could enhance global security (Nuclear Weapons Worldwide, n.d.).

In modern warfare, artificial intelligence (AI) has played a growing role, particularly in conflicts such as those in Gaza and between Russia and Ukraine. AI-enhanced weapons systems have demonstrated greater targeting precision, which may help reduce civilian casualties and damage. However, there are ongoing concerns about errors in judgment and ethical misuse. To address these risks, an international legal framework is necessary-one that enforces ethical standards, mandates human oversight in automated decision-making, and ensures compliance with humanitarian principles. Periodic evaluations and transparent reporting could further strengthen accountability (Future for Advanced Research and Studies, 2024).

Hybrid warfare, which blends traditional military tactics with cyberattacks, economic coercion, and propaganda, has also become a key feature of modern conflict. The ongoing Russia-Ukraine war is a prime example, combining physical aggression with digital and information warfare since the annexation of Crimea in 2014. This approach obscures the boundary between war and peace, demanding adaptable and multi-layered defense strategies. As technology remains central to hybrid warfare, effective responses depend on quick decision-making and strategic flexibility (Ball, 2023b).

#### Statement of the Problem

Nuclear energy holds tremendous potential, yet it is often associated with its use in warfare rather than with constructive purposes. The devastating consequences of nuclear war, as historically exemplified by Hiroshima, demonstrate its long-term and multi-dimensional costs, including loss of life, economic decline, environmental degradation, and famine. While the law of conservation of energy in physics states that energy cannot be created or destroyed but only transformed, this concept can metaphorically guide us to redirect nuclear energy from catastrophe to creativity.

Instead of allocating vast financial and technological resources to nuclear weapons, nations could invest in promoting gender equality, improving the safety of women and children, reducing world hunger, and enhancing overall societal well-being. This study aims to examine the cost of nuclear war and explore the lagging global development indicators, such as the

happiness index and gender equity, in countries engaged in nuclear armament. It also strongly presents the utilization of nuclear energy in various creative fields, thereby highlighting the constructive potential of nuclear energy.

#### Research Methodology

This study follows a qualitative research approach based on secondary data analysis. Information was collected from academic publications, international agency reports, official websites, and historical records related to nuclear warfare, global defense budgets, and human development indices. The study applies content analysis to identify themes around the costs of nuclear war and the potential for redirecting such resources toward creative and developmental goals such as gender equality, child safety, and improved well-being. Due to its reliance on secondary sources, the study may not reflect real-time budget updates and does not include primary data collection such as surveys or interviews.

#### The US Nuclear Funding and AI in Global Modern Warfare

The U.S. Department of Defense proposed allocating \$28.9 billion in its fiscal year 2021 budget to modernize the country's nuclear weapons infrastructure, nearly twice the amount requested the previous year. This substantial increase reflects the Trump administration's strategic emphasis on strengthening nuclear capabilities. The proposal covers significant investments in new nuclear delivery systems, including an upgraded intercontinental ballistic missile (ICBM), the Columbia-class ballistic missile submarine, and the B-21 bomber. The largest portion of the modernization budget (\$ 7 billion) is designated for enhancing the nation's nuclear command, control, and communications (NC3) systems. These systems are crucial for notifying national leaders of potential threats and enabling the president to authorize the launch of nuclear weapons. The funding aims to defend against escalating cyber threats and to replace outdated technologies with more secure and efficient systems. Additionally, Pentagon planners are pushing for increased automation of these operations, a move that promises greater speed and precision but also raises profound concerns about the possibility of machines deciding the outcome of future nuclear engagements (Arms Control Association, n.d.).

In modern times, many countries have incorporated technologies into the war. The swift integration of artificial intelligence into military operations has marked what many refer to as the "Oppenheimer moment" of our time, highlighting the profound implications and global

reach of AI in defense. Reports indicate that around 60 countries have already developed national AI strategies, with another 15 progressing toward that goal. These frameworks often guide the formulation of military AI policies. Global military expenditure on AI is projected to surge to \$38.8 billion by 2028, rising from \$4.6 billion in 2022 to \$9.2 billion in 2023. A relatively small cluster of nations leads the development and deployment of AI in military contexts, with the United States, China, and Russia recognized as the most advanced in terms of scale and technological capability. The U.S., for example, allocates nearly \$2 billion annually to military AI, along with an additional \$1.7-3.5 billion for autonomous and unmanned systems. China's investment is believed to be on a comparable level. Although Russia's financial outlay is lower and less transparent, the government has approved a 30% increase in military spending for 2025. President Vladimir Putin has emphasized the strategic importance of AI in closing the technological gap between Russia and the West, seeing it as critical to national security and global influence. A global survey of 25 countries shows that the militarization of AI is accelerating, reshaping traditional defense industries. Substantial investments are enabling nimble start-ups and smaller tech firms to compete with longestablished defense contractors and state-owned arms manufacturers-especially in countries such as France, Germany, India, South Korea, and the United Kingdom (Villanove, 2025).

#### The Current War Scenario between Russia and Ukraine

In the present context of war, Russia's ongoing war against Ukraine, now extending beyond 500 days, has triggered far-reaching economic consequences not only for the countries directly involved but also for the global economy, particularly due to fluctuations in commodity markets. Russian exports, which stood at \$588.3 billion in 2022, are forecasted to drop to \$465.9 billion in 2023, with a modest rebound to \$484 billion in 2024 and \$496.2 billion in 2025. In contrast, Russian imports-valued at \$280.4 billion in 2022-are expected to rise steadily, reaching \$313.8 billion in 2023, \$332.8 billion in 2024, and \$347.4 billion by 2025.

Also, the United Nations anticipates that over four million Ukrainian refugees will soon require humanitarian aid and protection in neighboring countries. According to the Kiel Institute, international aid pledged to Ukraine-including military, economic, and humanitarian assistance-totaled €165 billion between February 25 and the end of May. Ukraine's military spending saw a dramatic increase in 2022, multiplying 7.4 times to hit \$44 billion, which accounts for 34% of the nation's GDP, as reported by the Stockholm International Peace Research Institute (SIPRI).

Adding to these, the war has also caused devastating losses to Ukraine's healthcare, education, and social welfare sectors, with damage estimated at \$83 billion. Recovery and rebuilding in these areas are projected to cost nearly \$69 billion. Overall, the World Bank estimates that Ukraine will need more than \$400 billion for a full national recovery. The scale of devastation is staggering-with total expenditures approaching \$300 billion, more than 150,000 lives lost, and over 10 million people displaced (Craw, 2025).

According to the UN Human Rights Monitoring Mission in Ukraine (HRMMU), April 2025 marked the deadliest month for Ukrainian civilians since September 2024, with at least 209 civilian deaths and 1,146, the highest casualty count recorded during that period (Ukraine, 2025). As of January 2025, military losses have been heavy on both sides. Russia reportedly has over 700,000 soldiers killed or wounded, with 48,000 missing. Ukraine's armed forces have suffered approximately 400,000 casualties and around 35,000 missing personnel. Civilian casualties are disproportionately higher in Ukraine, with about 12,500 deaths, compared to 388 civilian deaths in Russia, highlighting the war's severe human cost (Russia Matters, 2025).

Furthermore, based on a factual analysis, a RAND Corporation report estimates the substantial economic costs Russia faces from its invasion. By September 2022, military spending was around \$40 billion. Russia's GDP losses for 2022 ranged between \$81 billion and \$104 billion, with capital destruction estimated at \$322 billion. By the end of 2024, direct military expenditures could approach \$132 billion. Even if the conflict ends in a stalemate, Russia's economy and living standards are predicted to decline, relying heavily on oil and gas revenues for economic stability. Despite these burdens, RAND researchers concluded that Russia could sustain these losses for several more years (Shatz & Reach, 2023). The invasion has caused dire consequences for Ukraine's population and economy. Since early 2022, poverty increased by at least 1.8 million people, bringing the total impoverished to 9 million. The February 2025 Rapid Damage and Needs Assessment (RDNA4) projects that Ukraine will need at least \$524 billion over the next decade to repair and rebuild-about 2.8 times the country's estimated 2024 nominal GDP (Overview, n.d.).

Additionally, the financial cost is staggering. March 2023 joint assessment by Ukraine's government, the World Bank, the European Commission, and the UN estimated reconstruction and recovery costs at \$411 billion (€383 billion). However, some forecasts suggest the total could exceed \$1 trillion (€911 billion), depending on the war's duration and intensity (EU Reporter, 2025).

Concurrently, Russia has intensified its nuclear rhetoric amid the Ukraine conflict. In September 2024, President Vladimir Putin suggested Russia might deploy nuclear weapons in response to conventional attacks, lowering the threshold for nuclear use and raising global fears of escalation (Faulconbridge & Kolodyazhnyy, 2024).

#### A New Chapter in the India-Pakistan Clash

While in other side of the world, war has taken a new phase between India and Pakistan. In a separate but intense episode, a brief but catastrophic conflict between India and Pakistan lasting less than 87 hours has left a lasting mark on South Asia. The war began with India's surprise aerial strike, "Operation Sindoor," at 1:05 AM on May 7, escalating rapidly beyond conventional warfare and severely impacting both countries' economies. India's economy suffered shocks including stock market losses (Nifty and Sensex) totaling nearly \$82 billion. The closure of Northern India's airspace caused daily aviation losses of \$8 million. The suspension of the Indian Premier League (IPL) led to \$50 million in lost revenue. Defense costs included \$400 million due to downed Rafael fighter jets and \$100 million in increased military spending. Disruptions in logistics and trade added over \$2 billion to the damage. The conflict's use of advanced weapons such as missiles and drones inflicted both physical and cyber harm to India's economy. Pakistan incurred roughly \$4 billion in losses, including \$2.5 billion from the Karachi Stock Exchange downturn, \$10 million from the Pakistan Super League (PSL) suspension, and \$20 million from restricted airspace. Military expenditures, including drone and missile operations, added another \$300 million to Pakistan's total financial burden.

In May 2025, military tensions between India and Pakistan escalated sharply in the Kashmir region, involving missile strikes and drone attacks. The confrontation nearly triggered a full-scale conflict between the two nuclear-armed states but paused later on.

#### If a War Goes Nuclear, Can Anyone Survive?

Estimating the Devastating Potential of Nuclear War, we can assume such possible threat to humankind. Since the 1980s, scientific research has explored the vast, long-lasting impacts of nuclear war on Earth's climate and ecosystems. Early models predicted that smoke from nuclear fires could trigger a "nuclear winter," drastically cooling land areas and crippling global agriculture. A single modern nuclear warhead (300 kilotons) could kill over a million people in a city like New York and severely injure millions more within 24 hours. Survival near ground zero would be nearly impossible.

In a full-scale nuclear war, thousands of warheads might be launched within minutes. A regional conflict between India and Pakistan using 100 small warheads (15 kilotons each) targeting urban centers could cause 27 million immediate deaths. A global exchange between Russia and the U.S., involving over 4,000 warheads, could kill at least 360 million people almost instantly-surpassing the entire U.S. population. Additional nuclear powers like the UK, China, France, Israel, India, Pakistan, and North Korea collectively possess over 1,200 warheads, increasing the risk of escalation.

These estimations are not enough, we can assume that the immediate human toll would be catastrophic, but the aftermath could be even more devastating. Severe climate disruptions, radiation spread, and societal collapse could lead to famines killing up to ten times more people than the initial blasts within two years. In essence, nuclear war would threaten life worldwide, with no safe refuge (Gaulkin, 2024).

#### **Connecting Peace, Mental Health, and Mindfulness**

Peace is often perceived in binary terms-as simply war or its absence, known as Negative Peace. While this definition helps understand the importance of reducing violence (with over 60% of the global population worried about violent crime), it falls short of capturing peace's full complexity. True peace involves fostering trust, cooperation, and inclusivity, which are crucial for societal resilience amid unprecedented global challenges. Without this positive peace, it is difficult to build the social, political, and economic frameworks needed for sustainable development (Killelea, 2021).

Contemporary peacebuilding often follows Western models emphasizing economic equity, low corruption, and strong institutions. However, lasting peace requires addressing the psychological scars of violence. The United Nations Development Programme (UNDP) now promotes Mental Health and Psychosocial Support (MHPSS), including counseling, group therapy, and trauma-informed care. Integrating traditional Indian practices like yoga and meditation can further foster emotional resilience and nonviolent communication, essential for healing and reconciliation (Apte, 2023).

Mindfulness, increasingly popular worldwide, offers tangible benefits for stress management and interpersonal relationships. In the UK, where 15% of adults practiced mindfulness by 2018, the government has incorporated mindfulness training for Members of Parliament. Research shows such practices help politicians manage stress, reconnect with

themselves, include empathy in their decision making and improve collaboration, advocating for broader institutional adoption (Simonson et al., 2021; Creswell, 2017; Tay & Varker, 2023).

#### Global Nuclear Weapons Spending vs. Global Hunger

While exploring the Global Nuclear Weapons Spending and Strategic Posturing, it shows that the International Campaign to Abolish Nuclear Weapons (ICAN) reports a sharp 34% increase in global nuclear weapons spending over five years, rising from \$68.2 billion to \$91.4 billion annually, totaling \$387 billion. This surge is criticized as a threat to global security rather than an enhancement. In 2023, the nine nuclear-armed states- China, France, India, Israel, North Korea, Pakistan, Russia, the UK, and the US-spent \$91.4 billion on nuclear arsenals, averaging \$173,884 per minute. The United States accounted for \$51.5 billion, more than the combined spending of all others, responsible for 80% of the year's increase. China spent \$11.8 billion, Russia \$8.3 billion, and the UK's spending rose 17% to \$8.1 billion (Schlein, 2024). ICAN emphasized that this funding could alternatively provide wind power for over 12 million homes or close 27% of the global climate finance gap. In just one minute of nuclear weapons spending, a million trees could be planted, and over five years, the funds could feed 45 million chronically hungry people (Schlein, 2024).

One of the area of sustainable development goals is global hunger, addressing global challenges like hunger requires urgent investment and reprioritization, David Beasley, Executive Director of the UN World Food Program, estimated that ending world hunger by 2030 would necessitate \$40 billion annually for emergency aid, agricultural improvements, and sustainable food systems (World Food Program USA, 2022). Yet, in stark contrast, the International Campaign to Abolish Nuclear Weapons (ICAN) reported a 13% increase in global nuclear weapons spending, reaching a record \$91.4 billion in 2023 (International Campaign to Abolish Nuclear Weapons, 2024). This disparity underscores calls to reallocate military budgets-especially nuclear weapons expenditures-toward critical global priorities such as public health, climate protection, and sustainable development (Tass, 2024).

#### **Creative Uses of Nuclear Energy beyond Weapons**

While shifting the perspective, there are various areas of the creative fields where nuclear energy can be used for sustainable development. There is a pivotal role of nuclear energy in sustainable development, as Ontario, Canada, has embarked on constructing its first

small modular nuclear reactor (SMR) as part of an ambitious plan to build four reactors by 2030. Each SMR is expected to power approximately 300,000 homes, highlighting the growing interest in compact, scalable nuclear technologies (McDermott, 2025). Reflecting this momentum, private equity and venture capital investments in the advanced nuclear sector surged to \$783.3 million in 2024-a thirteenfold increase from the previous year-underscoring investor confidence in next-generation nuclear solutions (Private Equity Flows to Advanced Nuclear Companies, 2025).

Furthermore, Nuclear energy is vital for advancing the United Nations' Sustainable Development Goals (SDGs), offering reliable, low-carbon electricity crucial for economic growth, poverty alleviation, healthcare, infrastructure, and environmental conservation. Unlike intermittent renewable sources, nuclear power provides consistent energy that supports industrial and social development while contributing significantly to climate action by minimizing greenhouse gas emissions (Nuclear Energy and Sustainable Development, n.d.).

One of the entertainment industries, like the fashion industry, responsible for nearly 10% of global carbon emissions, is exploring nuclear energy as a solution for decarbonization. In particular, the textile sector is adopting electron beam technology, a nuclear-based method, to eliminate harmful substances such as dyes, starches, acids, salts, and detergents from wastewater. These electron beams break down the molecular bonds of pollutants, enabling the treatment and reuse of water within textile production. For example, a textile plant in Southern China uses this approach to conserve approximately 4.5 million cubic meters of freshwater each year, the same amount typically used by around 100,000 people. Meanwhile, the energy demands of cryptocurrency mining and blockchain transactions, which require continuous computing power, are prompting companies to turn to greener energy sources. Nuclear power, with its stable and carbon-free output, is becoming a key option. For instance, Oklo has signed a 20-year deal with Compass Mining to supply entirely carbon-free electricity for mining operations. Similarly, Energy Harbor has partnered with Standard Power to provide nucleargenerated electricity to a bitcoin mining facility in Ohio. Furthermore, Talen Energy plans to build a nuclear-powered data and crypto-mining center next to its Susquehanna nuclear power plant. (Nuclear Energy Institute, 2025)

Building on its contributions to terrestrial industries, nuclear energy has also played a foundational role in space exploration for several decades. Looking ahead, the sector is now advancing innovative technologies to support the next phase of space missions. These include

early unmanned spacecraft, Earth-orbit satellites, permanent lunar installations, and potential crewed missions to Mars. Companies such as Zeno Power, X-energy, and Ultra Safe Nuclear Corporation are developing next-generation radioisotope power systems to extend the range and longevity of probes and spacecraft. Concurrently, NASA is investigating nuclear thermal propulsion, which has the potential to reduce travel time significantly, thereby making longdistance human spaceflight more feasible. In addition to space applications, nuclear technologies are increasingly relevant in addressing the environmental challenges of modern agriculture and industry. They offer low-carbon alternatives for energy-intensive processes by enabling hydrogen production for zero-emission ammonia and supplying direct process heat for synthetic fertilizer manufacturing. Moreover, nuclear innovations are enhancing agricultural resilience by supporting the development of crop varieties that are more droughtresistant and better adapted to changing climatic conditions. Nuclear-powered desalination systems can also expand irrigation in arid areas, helping to mediate water conflicts among agricultural, commercial, and residential sectors. Furthermore, nuclear techniques provide environmentally friendly pest control methods and improve food safety through irradiation, which effectively eliminates pathogens such as E. coli, Listeria, and Salmonella, thereby extending the shelf life of perishable goods (Nuclear Energy Institute, 2025).

A shared perspective among industry, academia, and government highlights that modernizing the nuclear workforce through technologies such as digital twins, artificial intelligence, and integrated big data could lead to lower operating costs, improved safety, fewer human errors and related incidents, and better employee recruitment and retention. Further trial runs at facilities like the Mechanisms Engineering Test Loop (METL) may also benefit the gaming industry. These practical industrial tests and applications could extend the technology's use beyond entertainment, advancing manufacturing processes and improving facility operations and maintenance. (Dean, 2023)

Moreover, nuclear radiation is employed in food treatment processes. It is used to eliminate bacteria, insects, and parasites that may pose risks to human health. This method not only improves food safety but also extends the shelf life of perishable products without the use of chemical preservatives. Looking toward the future of decentralized energy solutions, microreactors offer promising applications for healthcare infrastructure. These small-scale nuclear reactors are capable of supplying clean, uninterrupted power to hospitals, either as standalone units or as part of localized microgrids. Their portability by land, air, or sea makes

them especially valuable in remote or disaster-affected regions where access to stable electricity and medical services is often limited. In such contexts, microreactors can ensure that essential healthcare facilities remain operational regardless of broader grid conditions. (Nuclear Energy Institute, 2025)

Furthermore, nuclear energy has its creative use in a startup from China, which has developed a novel battery that is said to generate electricity continuously for 50 years without the need for recharging or upkeep. The company, Beta Volt, located in Beijing, asserts that its nuclear battery is the world's first to successfully miniaturize atomic energy by incorporating nickel-63 isotopes into a device smaller than a coin (Cuthbertson, 2024). Also, the research activities at the University of Bristol's Cabot Institute introduced a nuclear battery concept called the diamond battery during their annual lecture on November 25, 2016, held at the Wills Memorial Building. This battery is designed to generate small amounts of electricity for thousands of years by utilizing the radioactivity of waste graphite blocks, which were formerly used as neutron moderator material in graphite-moderated reactors. The battery functions as a beta voltaic cell that uses carbon-14 in the form of diamond-like carbon as the source of beta radiation. Additional layers of normal carbon and diamond-like carbon create the semiconductor junction and encapsulate the carbon-14 material (Wikipedia contributors, 2025).

Equally important is the role of nuclear power in public health. For instance, during the COVID-19 pandemic, nuclear reactors were instrumental in producing Cobalt-60, a radioisotope used to sterilize billions of pieces of medical equipment. This contribution highlights the broader potential of nuclear technology to support healthcare systems on a global scale. In addition to their industrial and agricultural applications, nuclear technologies play a vital role in advancing modern healthcare. Radioisotopes, which are by-products of nuclear power generation, are widely used in the diagnosis and treatment of various medical conditions, particularly cancers. Companies such as Bruce Power and Ontario Power Generation are actively involved in collecting and processing these isotopes for global distribution. As medical technology progresses and the need for advanced diagnostic tools increases, the demand for radioisotopes continues to rise (Nuclear Energy Institute, 2025).

#### Conclusions

Philosopher Osho Rajneesh famously divided human history into two eras: one marked by war and the other by preparations for war (Osho International, 2021). Similarly, warning of the alarming consequences of war, renowned physicist Albert Einstein stated, "I know not with what weapons World War III will be fought, but World War IV will be fought with sticks and stones," underscoring the catastrophic potential of modern warfare, particularly nuclear conflict (Alligee, 2021).

War is never a solution, yet it seems inevitable in human history. Among various forms of war, nuclear war poses one of the greatest threats to humanity. This study explores the concept of nuclear energy and its devastating use in warfare. It also shows how the high defense budgets of powerful nations reflect their ongoing interest in conflict preparedness, now incorporating new dimensions such as artificial intelligence, hybrid warfare, and modern combat technologies.

This study also highlights recent conflicts, including the war between Russia and Ukraine, which have resulted in significant humanitarian, environmental, and economic losses. The mental, physical, social, and emotional well-being of those affected by war is often immeasurable and overlooked. In the context of South Asia, the tense standoff between India and Pakistan in May 2025, although short-lived, generated widespread fear. Both nations continue to allocate substantial military budgets while failing to adequately address urgent social issues such as hunger, happiness, gender equity, and the safety of women and children.

This study presents the promising efforts for peace like by the United Nations Development Program (UNDP) promoting Mental Health and Psychosocial Support (MHPSS), offering services like counseling, group therapy, and trauma-informed care and by the UK parliament introducing mindfulness training to the Members of Parliament to help leaders cope with stress, cultivate greater empathy, self-awareness, and cooperative decision-making and also imply same in their institutional environment.

Also, this study highlights the catastrophes caused by the destructive use of nuclear energy, addresses the unresolved social challenges faced by populations, and explores creative applications of nuclear energy. These creative applications include environmentally friendly and economically beneficial uses in agriculture, medicine, space exploration, fashion, and low-carbon technologies. At its core, the study advocates for redirecting the potential of nuclear

energy from catastrophic purposes toward creative applications that support sustainable development.

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#### Late-Life Mental Health Among Older Combat Veterans: A Forgotten Population



🖎 Anuka Limbu

#### Abstract

Elderly veterans, who had experienced combat, are an understudied population with specific mental health problems in old age. Although mental health problems among activeduty military members are well-documented, less is known about perceptions of stigma and other barriers to mental health help-seeking among older veterans. A secondary research approach is used in this paper to conduct a review of literature published between 2000 and 2025 to explore the effect of military culture, stigma, and systemic barriers on late-life mental health care use among elderly combat veterans. Results underscore how robust military norms of strength and endurance foster continued stigma that inhibits many veterans from seeking mental health assistance, even though high rates of PTSD, depression, and related syndromes suggest strong needs for these services. Social support, leadership orientation, and gender differences have been found to significantly affect help-seeking behavior. Effective approaches to decreasing stigma and enhancing access to care include psycho-education, peer-led programs, mental health-provider integration in primary care, and technology interventions designed for older adults. Nonetheless, considerable challenges exist in meeting the range of needs of older veterans, and culturally-sensitive, evidence-based, multi-level interventions are required that address policy reform, educational, and peer support strategies. Such wideranging initiatives are necessary to improve mental health, acknowledge the contributions of older combat veterans, and build resiliency in this overlooked group.

**Keywords:** Older combat veterans, late-life mental health, stigma, help-seeking behavior, military culture, mental health interventions

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#### Introduction

Soldiers' mental health issues have been well established for decades; active-duty soldiers in particular are exposed to the many distinct and intense stressors that combat molds into our lives. Emerging work has suggested that combat veterans are more likely to suffer from worse mental health outcomes, including posttraumatic stress disorder (PTSD), anxiety, and depression, compared with individuals without combat exposure (Campbell et al., 2021). Not only are these psychological ailments common, but they also result in much greater levels of military separation, where soldiers simply cannot press on with service life, so crippled are they with PTSD, anxiety, and depression symptoms (Dalton et al., 2021). Numerous factors contribute to these problems, including combat exposure and injury or death, and what's known as moral injury when soldiers feel they have transgressed their moral or ethical code. Notably, combat-related injuries can be more psychologically debilitating than non-combat injuries, given the context in which they occur, and are more distressing psychologically for veterans.

The mental health of active-duty personnel has been a focus of research; however, older wartime veterans have often been ignored in military mental health discussions, and certainly in research. This population experiences distinct and frequently complex mental health issues that continue with age as psychological & social changes, in addition to the physical, present a more complex view of mental health in their later years. After soldiers leave the battlefield, the memory of its horrors haunts them and impacts their lives in ways more insidious than we realize. Attachment styles, couple communication and family functioning are three important determinants of the mental health of older veterans. These relations that are cultivated in the military context tend to last even after people have retired from the military (Riggs et al., 2020; Sharifian et al., 2023). The impact of military culture and experiences may impact relationships and family, and some veterans find reintegration into civilian life difficult. These difficulties are augmented by specific health behaviors (i.e., obesity, poor sleep quality, and less physical activity), which are known to be strongly associated with mental health symptoms in later life. Noteworthy, these health behaviors and psychological issues may also invoke the reciprocal relationships between each other; they agitate each other, and some of them develop a vicious cycle; the increase of psychological problems will further lead to a decline of personal wellbeing (Hruby et al., 2021). Furthermore, there are additional complications associated with racial, ethnic, and sex-related disparities in mental health outcomes in older combat veterans. These are a wide variety of factors that can impact on presentation and management of mental health difficulties, making pharmacological and psychological treatments challenging to apply. Evolving views Historically, veterans of different generations have had access to different levels of care, stigma and there even exist disparities in acknowledgment of what mental health issues they explicitly face. There is a need to redress these disparities between different groups of older veterans in order to accurately assess their mental health requirements and provide them with appropriate and equitable care.

Despite these enormous difficulties experienced by veterans, of concern is that only a small number of veterans, that is, about 29% of all post-9/11 deployed veterans from Iraq and Afghanistan, present with the first-year post-mental health symptoms (Hom et al., 2021). Multiple obstacles prevent veterans from receiving the mental health care they need: stigma, job concerns, and practical challenges. One of the most present and enduring barriers to accessing treatment for both our older and younger veterans is that of stigma. Public stigma and self-stigma are two powerful barriers to veterans seeking care (Shortridge et al., 2007), and each of these factors is linked to veterans not getting the help that they need for mental health problems (Rao, 2012). It is this fear that prompts many military personnel to avoid seeking help for fear of being treated differently or appearing weak, and 40-44% believe there will be professional implications associated with having a mental health problem, such as harm to their future career (Sharp et al., 2015). Besides public stigma, self-stigma has been found to affect the association between societally held attitudes and veterans' nonservice seeking. This is particularly a concern for junior ranks who may perceive an obligation to live up to the standards of strength and stoicism (Wade et al., 2015; Langston et al., 2010). The military's culture, marked by machismo and pride in physical fortitude and emotional hardness, can reinforce stigmatizing attitudes toward seeking help.

Veterans might not be receiving the support they need and could feel like they are all alone, viewing mental illnesses as a lack of personal strength instead of a health condition that needs to be addressed and taken care of (Hernandez et al., 2014). This is made worse for preexisting mental conditions in veterans, the problems are generally added to until you just feel like even more of a failure. Military veterans navigating longer-term mental health issues may face increased stigma, from themselves and others, that further hinders them from accessing the care they require. This double-stigmatizing leaves them feeling more alone and damages their psychological well-being overall, contributing to a cycle that is hard to break (Gould et al., 2010). Furthermore, it should be followed up by tailored interventions that

recognize the specific needs and life experiences of older combat veterans, including an appreciation of intersectionality with factors such as age, gender, race, and previous military service.

The relationship between stigma and the use of mental health services is complex and not necessarily a linear one. While much research suggests that stigma acts as a significant barrier to treatment seeking for veterans, research on the degree to which veteran stigma hinders use of mental health services remains mixed (Sharp, Kinman, & Gishoma, 2015). These findings question the linearity of stigma and the myriad influences stigma may have on an individual's treatment-seeking behavior. Therefore, mental health interventions targeting older combat veterans need to address the complex attitudes towards stigma, promoting education and peer support to deny access to it (Ben-Zeev et al., 2012). Stigma reduction is, after all, more than just about shifting individual attitudes, but is also about needing more widespread cultural and organizational change. We need to create an environment where veterans can openly discuss mental health concerns and not fear the prospect of recriminations or judgment. This can include mental health literacy, understanding that we are not alone in struggling with our mental health, and living in communities that seek to dismantle the silence and isolation that too often supports silence and isolation. Doing so, we can also let older veterans — and the rest of us living in reality — know that needing assistance is not a testament to weakness, but of strength; that they have the type of care they deserve. Cross-disciplinary collaboration among veterans, mental health practitioners, and policy makers will be needed, however, along with the creation of a welcoming, supportive environment that confronts stigma and promotes the mental well-being of this underserved population.

This study aims to address the mental health of an older age group (veterans who are older than 65 years), characterized by the older combat veteran, where there is a particular complexity and worsening of the mental health burden. While there has been an increased focus on the health of veterans, there has been less attention given to health-related phenomena of elderly combat veterans in research studies. The current study seeks to raise awareness around the mental health needs of these older veterans by reviewing in detail the literature on stigma, barriers to care, and well-being. It is also an effort to orient culturally sensitive policies and programmes to reflect the specific needs of this population. The mental and emotional well-being of our older veterans matters in its own right, and in honoring their service and helping

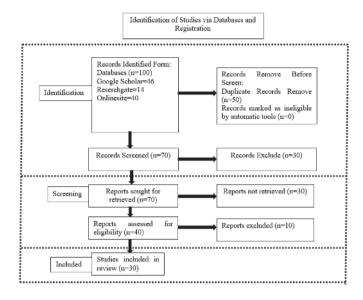
to ensure they can live their later years with dignity and respect. These are moral issues when we want to honor the service of older veterans and to care for them as they deserve.

#### Methodology

The present study used secondary analysis to examine mental health problems among older veterans who served in the military concerning stigma and help-seeking behavior later in life. Secondary research is a process of collecting and analyzing the already published data and literature in a systematic manner to generate new understanding. This is a lens that allows us a wide, evidence-informed view of the ways in which stigma affects the help-seeking behaviors of older adults as framed through studies, reports, and reputable sources in the population. This type of model is especially beneficial for studying understudied populations, like older combat veterans, when data collection and direct observation may be limited. Secondary research sets the knowledge base and is a mechanism that we can use to inform next-stage research for policy and intervention initiatives in a timely and cost-effective way.

#### **Data Collection**

Data were collected from established scholarly databases (JSTOR, Google Scholar, Science Direct, Research Gate) for peer-reviewed journal articles, books, government reports, and conference proceedings on stigmatization, mental health, and late-life military veteran populations. The review covers academic literature, official reports such as the Defense, Veterans Affairs, and World Health, and academic theses that address the mental health of older veterans. Eligibility criteria Prioritization included sources from 2000 through 2025 to account for the most recent evidence and context of policy. The studies fit within stigma, attitudes to mental health, help seeking and cultural values in veteran combatant populations and across allied military systems globally.



#### **Ethical Considerations**

Ethical approval was not necessary since the current study is a secondary analysis of existing data. However, the Authors remain anonymous and all the sources are well known, while the absolute anonymity of the persons referred to is not disclosed. The factbook complies with the ethical guidelines of the APA.

#### Framework of Analysis

The literature was critically reviewed and organized into a thematic framework targeting fundamental issues relevant to stigma in older combat veterans, including its nature and roots in aging, cultural and systemic hurdles that inhibit the use of mental health services, the mental health impact of stigma in late life, and the best practices in reducing stigma and promoting the use of mental health services within the aging combat veteran community.

#### **Discussion and Analysis**

Studies related to late-life mental health for older veterans provided more nuanced and complex data regarding the influences of aging and prior combat upon mental health outcomes. A number of veterans also exhibit impressive psychological resilience, using positive coping as well as the resilience that they developed while in the army. But a large portion of the veterans have significant mental health problems, including Post Traumatic Stress Disorder

(PTSD), depression and anxiety. Past trauma exposure, extended social disengagement, and close peer network loss after leaving the military are key predictors of mental health for older veterans (Ureña et al., 2020; and Stein et al., 2020). These are all contributors to increasing vulnerability among ageing veterans. Not all veterans suffer from mental health issues, and some are more at risk of developing enduring mental health conditions as a consequence of trauma exposure. It emphasizes that there are wide-ranging experiences among veterans and thus, individualized care and support are required.

Post-traumatic growth (PTG) has been institutionally reviewed in the literature in decorated veterans (Levine, 1999). Significant differences were reported between veterans with and without combat awards and decorations who report higher PTG and lower psychiatric distress (Stein et al., 2020). Being the recipient of a combat decoration might be related to a sense of achievement and appreciation, which can lead to feelings of higher resilience among veterans. This perspective may serve as a protective factor for the prevention of psychiatric conditions by reinforcing veterans' meaning and self-assurance. Contrastingly, some non-augmented veterans may feel inferior by being overlooked or underrecognized, which could develop into deeper trauma and hopelessness. This dichotomy is particularly poignant in that it appears that military awards and personal accomplishments can influence mental health in later life, indicating that external validation (even in the form of military awards) may have enduring emotional consequences that continue long after the service has ended.

But any potential resilience effect should not distract attention from the profound influence of exposure to combat throughout much of the following life. For a lot of veterans, the mental scars of war take much longer to heal, and in many cases, never do. According to Spiro et al. (2024), individuals of an older generation served in the Vietnam War, and they too suffer from long-term symptoms of post-traumatic stress long after the trauma has occurred. These lasting effects tend to amplify as veterans get older, with psychological suffering exacerbated by other issues people deal with when they get older, such as physical illness, having no one to talk to, or the loss of close, military-connected communities. PTSD symptoms in older veterans may thus exacerbate comorbid mental health problems like depression, anxiety, and Substance Use Disorder (SUD), resulting in a tangled skein of psychological morbidities.

Research by Edwards et al. (2020) and Williamson et al. (2022) highlights the increased risk in veterans who seek treatment, many of whom have complex PTSD. This severe form of

PTSD extends beyond the classic re-experiencing of trauma and hypervigilance, and includes a wider set of psychological disturbances, including dissociation, emotional numbing, and problems related to the construction or maintenance of stable relationships. These concurrent, co-occurring mental health problems form a vicious cycle, one condition causing the next and so forth, so that those with a single condition are now dealing with other mental health challenges as well. Because these problems are relatively chronic, an interdisciplinary approach to management is warranted by integrating neuropsychological and physical interventions. With the ageing of these veterans, the development of comprehensive care programmes that can address complex multi-morbidities also becomes increasingly important. Integrating these types of care is crucial to improving aging veterans' health-related quality of life and helping them access the assistance needed for successful management of issues surrounding mental health in late life.

#### Stigma and Military Culture

Military cultural elements, including resilience, toughness and stoicism, are enshrined in the military ethos and are important for mission readiness and effectiveness. These characteristics are critical for service members to not only withstand the physical and emotional stresses of serving in the military but also to thrive when put to the test. And yet, these are the very cultural values that can drive a stigmatized view of mental health issues, especially for older servicemembers. Psychological problems such as post-traumatic stress disorder (PTSD) or depression are seen as signs of weakness in a military culture that values mental toughness and being able to bounce back from adversity, no matter the cost. A number of veterans might also perceive discussing mental health as being in direct opposition to the prototype of the strong, resilient and durable soldier. Therefore, they may suppress their emotional issues, not turning to support because of the stigma of thinking that they are less professional or incapable of completing their job (Sharp et al., 2015). The attitude has made it harder to get the mental health support needed.

The effect of this self-stigma is even more marked in older veterans, as they have carried these attitudes with them throughout the years of their post-service experiences. Many veterans are afraid to open up about mental health challenges, fearing they will be deemed unfit or weak by their peers or society, even years after they have left the military. This fear is also increased by the knowledge that mental health issues, such as PTSD and depression; are often more common in veterans as they get older, popping up or getting worse due to life changes, the

death of friends they served with or collateral from effects from combat over a significant period of time. The fear of looking weak or admitting an inability to handle the ups and downs of life prevents many older veterans from seeking the mental health care they require. Their resistance to help-seeking, which is driven by self-stigma, not only aggravates their emotional and psychological pain, but the lack of support they receive also isolates them from others who have not shared their experiences (Sharp et al., 2015). Thus, undermining these cultural determinants and challenging the stigma of mental illness is important, if those in older age can expect needed care and requisite support to improve their quality of life as veterans.

#### **Help-Seeking Behavior**

Even though they were less likely to experience mental health stigma in general compared to civilians, older veterans of war (or veterans who had served in war areas) still chose not to receive care for mental health issues. There are several major barriers to this ongoing reluctance, one of which is fear of the judgments of friends, family and society as a whole, and a further concern about their privacy and treatment success are other obstacles. Older veterans may lose the belief that mental health can help and may just give up on getting better. This skepticism is frequently ingrained after years of internalizing the values of military culture, which prioritizes self-reliance and resilience. The act of asking for help, for some, is a betrayal of the very principles that once defined them as soldiers. However, personal and social support from both family members, fellow veterans, or their physician is important to encourage the older veteran to access care. The empathy and support provided by these supportive communities can also lessen the emotional impact of stigma, making it easier for veterans to seek help when they need it. Leadership attitudes and community cultural norms also exert a strong impact on help-seeking practices by older veterans. Veteran organizations have reported that de-stigmatization and willingness to address mental health can reduce negative perceptions and promote service-seeking. Likewise, when veterans are immersed in silence and negativity, mental health treatment can feel all the more out of reach. This culture fosters a vicious cycle of continuing stigma and unnecessary barriers for veterans to receive care they need, and that may be essential to their future health (Britt, Zulman & Boyd, 2017). Further, sex differences in help-seeking remain, where female veterans are more likely to engage in mental healthcare as compared to male veterans. This implies a need for sex-based mental health care to cater to the unique needs of older veterans. Such measures could help female veterans, who in some ways have unique challenges, and it could tackle specific barriers men experience in accessing care. Obtaining such a balance is critical to making mental health services available and effective to the broad population of veterans

#### Interventions to Reduce Stigma

Some of the stigma reduction strategies demonstrate encouraging potential for increased access to mental health care among elderly combat veterans by addressing emotional barriers and practical barriers. Such interventions include psychoeducation initiatives that seek to raise consciousness and knowledge of psychological experience in veterans, on the one hand, and programs offering peer-led mutual support, which may foster warmth and shared experience on the other hand. Furthermore, peer support groups can be especially helpful, allowing veterans to interact with others who have been in their shoes, which in turn may help reduce isolation and encourage dialogue about mental health. This is something that may be especially useful for decreasing of self-stigma and enhancing help-seeking (Mittal et al., 2013). And having mental health services available in conventional settings, such as the offices of primary care physicians, could also help overcome a number of people's barriers to mental health care. Since older adults are increasingly in contact with primary care, the inclusion of mental health screening and services within these sites can help 'normalize' mental health care and reduce stigma, as well as address privacy concerns.

Moreover, technology-delivered interventions (Tele Mental Health Care and Mobile Apps) offer novel strategies to engage veterans who are resistant to pursuing traditional face-to-face mental health care. These options allow veterans to get mental health care without even leaving their home — and that's particularly important for a veteran who has physical difficulty moving around or who stigmatizes in-person care. Tele-mental health care has been particularly helpful for older veterans, some of whom have embraced the convenience and the anonymity that can overcome resistance to more traditional care. Similarly, mobile apps can provide veterans with continued support, reminders, and coping mechanisms, all promoting ongoing connection with mental health treatment, as well as de-stigmatizing mental health help-seeking. These technology-based options not only remove logistical obstacles but also provide the privacy and freedom to access and continue care without shame, making it easier for veterans to seek out and remain in care (Sherman, 2021). Such unified interventions could be instrumental in increasing access to care and overall quality of life for elderly veterans with combat exposure.

#### **Gaps and Future Directions**

Even though the mental health needs of older war veterans are becoming increasingly acknowledged, there is still a big gap in reducing stigma and meeting the mental health needs of these men and women. Though promising, current interventions and approaches have much ground to cover. An important target of intervention is the development of tailored treatments for the subgroups of this population, including differences in military rank, ethnicity, and traumatic deployment. Veterans' mental health needs can be significantly different depending on their branch of service and it's essential that we address these differences to improve the precision and success of their health care. Such barriers may also be different between veterans of different ethnic backgrounds or members with different service ranks or deployment histories (e.g., different acceptability of care/stigma or impact of trauma). Consequently, treatment approaches should be personalized by taking these factors into account, and each subgroup can obtain the optimal therapy. Finally, additional studies are needed to examine the duration of the impact of the anti-stigma interventions on the mental health and well-being of elderly military veterans. While some early intervention programs have been demonstrated to be effective, little is known regarding the long-term effects of these types of interventions and continued mental health care needs and well-being after deployment (Hom et al., 2012). A long-term assessment of the actual impact these interventions have on veterans could offer valuable lessons about what works best and what can be modified to continue meeting evolving needs.

Similarly, future studies should account for intersectional dimensions (gender, race, and sexual orientation) that are expected to have an impact on the mental health of veterans. The experiences of women veterans and LGBTQ+ veterans are frequently shaped by additional layers of social and cultural context that may not currently be fully addressed through such programming. By examining these intersectional factors, this work can be used to guide the design, implementation, and evaluation of more comprehensive and efficacious methods to address complex identity-related concerns in the lives of older combat veterans. It is about how we offer mental health in a way that isn't just accessible, but that is relevant and supportive across the spectrum of our veterans, acknowledging and posing critical questions around the different narratives and challenges they might experience.

#### Conclusion

Now, it is commonly accepted that stigma is the greatest barrier of all keeping older combat veterans from accessing mental health treatment. This barrier is based on long-held military cultural values, institutional practices, and beliefs about strength, resilience, and vulnerability that persist long into postmilitary life. These trends pose challenges that require coordinated, multidimensional programming that includes psychoeducation, the lived example of veterans, peer support, and the reform of policies to protect confidentiality and the dignity of veterans, and with their consent, access to care in their final years. Promotion of culture in which psychological health is recognized as an integral part of overall well-being and quality of life for older Veterans may improve psychological health and honor service (Mittal et al., 2013). This study contributes to the growing literature and may be used to develop targeted interventions and intervention policies that aim to reduce disparities in mental health experiences of older combat veterans and to foster resilience and stigma mitigation.

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# Unmanned Vehicles and Artificial Intelligence: A New Revolution in the Army



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#### **Abstract**

The integration of unmanned vehicles (UVs) and artificial intelligence (AI) is fundamentally reshaping modern armies, ushering in a new revolution in military operations. This transformative shift presents unprecedented capabilities in areas such as reconnaissance, combat, logistics, and force protection, enhancing efficiency and reducing risks to personnel. However, this revolution also introduces significant ethical, legal, and strategic challenges, particularly regarding autonomous decision-making, accountability, and the future role of human control. Nations must navigate this evolving landscape by developing appropriate doctrines, regulations, and safeguards to harness the immense potential of UVs and AI responsibly, ensuring these technologies serve strategic objectives while adhering to ethical principles and international norms in modern military operations.

**Keywords.** Military, Technology, Unmanned Vehicles, Unmanned Aerial Vehicles, Unmanned Land Vehicles, Artificial Intelligence, Missiles, Warfare

#### Introduction

This research explores the evolving role of military technology in contemporary defense systems, with a particular focus on the integration of unmanned vehicles and artificial intelligence. It examines how these technologies have reshaped operational effectiveness, communication, intelligence gathering, medical support, and ethical considerations in warfare. Emphasizing the Nepali Army's modernization efforts, the study discusses the challenges and opportunities faced by developing militaries in adapting to these advancements. Through comparative insights from global military practices and Nepal's unique geostrategic position,

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the paper highlights the critical need for balanced development in technology, ethics, and strategic policy. It concludes that responsible and ethical integration of military technology is essential for national security and international peacekeeping efforts in the 21st century, ensuring these advancements align with both strategic objectives and international norms (Bhattarai, n.d.).

#### The Army: Its Role, Organization, and Modern Challenges

The army stands as a vital institution in the defense architecture of any sovereign state. It embodies an organized, disciplined force tasked with preserving national sovereignty, ensuring the safety of its citizens, and promoting peace and stability (Bhattarai, n.d.). Armies are composed of individuals from diverse backgrounds, unified under a shared purpose and commitment to national service. In Nepal, this diversity is reflected in the Nepali Army, which draws recruits from the country's rich mosaic of ethnicities and regions, fostering national cohesion and unity (Upreti, 2020).

One of the army's principal roles is to protect national borders and maintain territorial integrity (Baniya, n.d.). This task demands extensive training, strategic deployment, and the acquisition of modern defense technologies. The Nepali Army continues to build on its historical legacy of sovereignty protection by adapting to evolving geopolitical and security dynamics, maintaining readiness through nationwide strategic positioning and continuous training programs (Thapa, n.d.). In addition to safeguarding borders, armies contribute significantly to internal security. Whether during civil unrest, natural calamities, or public emergencies, military forces assist civilian institutions by restoring order and delivering emergency aid. In Nepal, the army's rapid response during the 2015 earthquake demonstrated its crucial role in disaster relief and humanitarian operations (Upreti, 2020).

Beyond domestic responsibilities, modern armies engage in international diplomacy through peacekeeping missions. These missions, typically coordinated under the United Nations, help de-escalate conflicts, protect vulnerable populations, and lay the foundation for long-term global stability. Nepal's active and respected participation in global peacekeeping reflects both the professionalism of its military and the country's broader commitment to peace (Bhattarai, n.d.).

In addition to defense and peacekeeping, armies also serve as engines of development. Through infrastructure construction, community outreach, and welfare projects, the military contributes to nation-building, especially in regions neglected by civil administration. The Nepali Army has played a prominent role in building roads, bridges, and schools in remote and conflict-affected regions, strengthening state presence and social integration (Thapa, n.d.).

To fulfill these varied roles, armies must remain adaptive and technologically competent. Today's defense challenges demand proficiency in both conventional and non-conventional warfare. The integration of unmanned aerial systems (UAS), artificial intelligence, and cyber warfare capabilities is transforming the modern battlefield (Marshall, 2011; Mitchell, 2019; Andress & Winterfeld, 2013). The Nepali Army, while rooted in tradition, is increasingly embracing these innovations to remain relevant in the contemporary strategic environment. Regular training ensures that soldiers are not only physically and mentally prepared but also equipped with knowledge of modern tactics, systems, and security technologies (U.S. Department of Defense, n.d.).

Alongside technical training, military institutions instill values such as discipline, integrity, loyalty, and service to the nation. These principles shape the character of soldiers and build an ethical foundation critical to the effective and just application of military force (Clausewitz, 1832). It is this synthesis of professionalism, technological readiness, and moral grounding that enables armies like Nepal's to meet the complex demands of national and international security.

In conclusion, the army today represents more than a combat force; it is a multifaceted institution that ensures sovereignty, supports civil society, advances national development, and engages in global peace initiatives. The Nepali Army stands as a prime example of such transformation, rooted in tradition yet evolving to meet modern challenges with honor and resilience.

#### **Understanding Technology: Its Impact on Our Lives**

Technology has become an indispensable force in modern society, profoundly changing how we live, work, and communicate. It encompasses a vast array of tools, systems, and innovations that apply scientific knowledge to solve problems, enhance efficiency, and improve quality of life. From everyday appliances to global digital networks, technology has fundamentally reshaped human progress (Mitchell, 2019).

One of technology's most significant impacts is on communication. Early methods like letters and face-to-face interactions have evolved into instantaneous, global connectivity. Telecommunication advancements—such as the telephone and radio—enabled real-time dialogue across distances. Today, the internet and mobile devices have further revolutionized this field. Social media platforms connect continents in seconds, while video conferencing enables seamless collaboration for businesses worldwide. These advancements have broken down geographical barriers, fostering an interconnected global community, much like how the Nepali Army utilizes satellite communication to maintain contact across its diverse terrain.

Technology has also reshaped industries, redefining the nature of work. Automation and robotics have streamlined manual processes, increasing productivity, reducing costs, and improving workplace safety. Modern manufacturing depends on precise automation for mass production, while healthcare has witnessed groundbreaking progress in diagnostics, treatment, and patient care. Innovations like telemedicine and remote monitoring allow medical professionals to deliver timely, personalized care regardless of location.

In daily life, technology enhances convenience and connectivity. Smartphones serve as gateways to information, services, and entertainment, while IT-enabled smart homes automate tasks like lighting and security. As technology continues to evolve, it reshapes traditional practices, unlocking new possibilities across healthcare, agriculture, education, and beyond. Its transformative power underscores the need to explore key areas where innovation drives meaningful change in how we work, interact, and thrive.

## The Technological Transformation of Key Sectors

Technology has spurred significant transformations across various key sectors, revolutionizing practices and outcomes. In healthcare, advanced technologies like MRI and CT scans provide detailed internal visualization, allowing for more accurate diagnoses (Mitchell, 2019). Robotic-assisted surgery and minimally invasive techniques have enhanced precision, reducing recovery times, while the adoption of Electronic Health Records has improved data management, ensuring seamless sharing of information among healthcare providers and better patient outcomes (Marshall, n.d.).

The education sector has undergone a digital transformation, integrating technology in ways that deliver more personalized, multimedia-rich learning experiences. Interactive whiteboards, tablets, and e-learning platforms cater to various learning styles, while online

education has democratized access to knowledge globally (Andress & Winterfeld, 2013). Immersive technologies such as Virtual Reality (VR) and Augmented Reality (AR) enable students to explore historical sites and conduct virtual experiments, significantly enhancing the educational experience (Vance, 2015).

Transportation systems worldwide are being reshaped by technological innovations. Electric vehicles (EVs) provide an eco-friendly alternative to traditional combustion engines, reducing carbon emissions, while autonomous vehicle technologies promise safer and more efficient mobility solutions (U.S. Department of Defense, n.d.). Ride-sharing platforms and smart navigation apps optimize commuting through real-time data, a technology that parallels how the Nepali Army utilizes GPS for logistical operations in challenging terrains (Bhattarai, n.d.).

Modern agriculture has adopted precision farming technologies like drones, satellite imagery, and soil sensors, enabling real-time monitoring of crop health and environmental conditions (Mitchell, 2019). Automated machinery streamlines planting and harvesting, while data analytics offers predictive insights for yield optimization and disease prevention, empowering farmers with data-driven decision-making tools. These technologies, though primarily agricultural, have parallels with military reconnaissance, as seen in the use of UAVs by the Turkish Armed Forces (Marshall, n.d.).

The entertainment industry has also been transformed by digital innovation. Streaming platforms have revolutionized media consumption, offering on-demand access to a wide array of global content (Andress & Winterfeld, 2014). VR and AR technologies enhance gaming and storytelling experiences, while social media has democratized content creation and distribution. Though distinct from military operations, VR technology used for immersive simulations in entertainment is similarly employed in military training, as demonstrated by the South Korean Army's use of VR for combat training (Vance, 2015).

As technological advancements accelerate, addressing challenges like data privacy, cybersecurity, and ethical concerns becomes increasingly important. The Nepali Army, like modern military forces worldwide, prioritizes protecting its digital infrastructure, a concern shared by digital leaders like Estonia, a recognized leader in cybersecurity (U.S. Department of Defense, n.d.). By responsibly harnessing technology, we can build a more connected,

efficient, and sustainable future, ensuring that innovation continues to benefit both civilian and military sectors alike.

## How is Technology used in Today's Military?

Technology has fundamentally reshaped modern warfare, enhancing military capabilities through advanced systems and strategic innovations (U.S. Department of Defense, n.d.). Contemporary armed forces globally leverage cutting-edge solutions across multiple operational domains: weapons systems, surveillance and reconnaissance, secure communication networks, cybersecurity, autonomous systems, and logistical support (Marshall, n.d.; Thapa, n.d.; Andress & Winterfeld, 2014). These technological integrations provide strategic advantages while raising important questions about ethical deployment and international security frameworks (Clausewitz, 1832).

#### Advanced Weaponry Systems

Modern militaries have made significant strides in weapons development, particularly in missile technology, aircraft, and naval systems (Thapa, n.d.). Precision-guided munitions—including smart bombs and guided missiles—offer unprecedented targeting accuracy while reducing collateral damage. Unmanned Aerial Vehicles (UAVs), or drones, have transformed surveillance and reconnaissance by delivering real-time intelligence without endangering personnel (U.S. Department of Defense, n.d.; Marshall, n.d.). These UAVs can also be armed for precision strikes in high-risk zones, combining surveillance with offensive capability. In Nepal, drones are increasingly used for surveillance in difficult terrain, reflecting global military trends (Thapa, n.d.).

#### **Enhanced Communication and Information Systems**

Military communications have undergone revolutionary improvements through secure, encrypted networks that facilitate real-time coordination while safeguarding sensitive data (Andress & Winterfeld, 2014). Satellite technology enables precise global positioning and navigation, improving asset tracking and mission planning. Artificial Intelligence (AI) optimizes decision-making by rapidly analyzing data, evaluating threats, and forecasting strategies (Mitchell, 2019). The Nepali Army similarly relies on secure satellite and radio communication in remote mountainous areas, aligning with global network-centric warfare trends.

#### Intelligence and Surveillance Capabilities

Technological advancements have dramatically enhanced military intelligence. Highresolution satellite imagery and UAVs are used to monitor enemy movements and identify strategic targets (U.S. Department of Defense, n.d.). Advanced radar and sensor systems provide early threat detection, enhancing situational awareness. Additionally, machine learning algorithms analyze vast intelligence datasets, extracting patterns that inform both tactical responses and broader strategic planning.

## Cyber Warfare and Security

Cybersecurity has emerged as a crucial military domain. Armed forces now invest heavily in both offensive and defensive cyber capabilities to disrupt enemy communications, protect digital infrastructure, and counteract data breaches (Andress & Winterfeld, 2014). As cyber operations can cripple critical infrastructure, strong cybersecurity measures are vital to safeguard military networks and maintain operational integrity. Nepal's digital defense mechanisms are also developing in line with this evolving domain (Upreti, n.d.).

#### Autonomous Systems and Logistics

Autonomous systems are transforming both combat and logistical operations. Alpowered drones and unmanned ground vehicles carry out reconnaissance, resupply missions, and high-risk tasks, significantly reducing risks to human personnel (Marshall, n.d.; Mitchell, 2019). Predictive maintenance technologies help ensure military hardware remains operational, adapting AI solutions commonly used in the civilian sector for battlefield resilience.

## Military Medical Advancements

Combat medicine has greatly benefited from technological innovation. Portable field hospitals and telemedicine systems now allow for emergency care directly on the battlefield (Subedi, 2010). Robotic-assisted surgeries provide minimally invasive solutions even in combat zones. Moreover, advanced prosthetics and rehabilitation technologies aid in the recovery of wounded soldiers, helping them regain function and reintegrate into service or civilian life.

## Considering the Moral and Legal Sides of Military Technology

The integration of advanced technologies into military operations presents multifaceted ethical and legal challenges that demand serious global attention. Autonomous weapons systems—capable of machine-based lethal decision-making—have raised serious concerns about accountability and moral responsibility in warfare (Mitchell, 2019). These ethical dilemmas are not without precedent, echoing historical debates over disruptive military technologies, such as the introduction of gunpowder or chemical weapons (Clausewitz, 1832). Today's concerns focus particularly on artificial intelligence (AI) in combat systems, with unresolved questions regarding decision-making autonomy, proportionality in engagement, and adherence to the principles of international humanitarian law (Subedi, 2010).

Global efforts are underway to develop responsible frameworks for military technology deployment. These include international treaties, guidelines, and multilateral discussions on ethical technology use. Notable examples are the United Nations' Convention on Certain Conventional Weapons, which discusses lethal autonomous weapon systems, and the International Committee of the Red Cross's evolving guidelines on emerging technologies. Many of these initiatives seek to ensure accountability mechanisms for AI-driven platforms and address data privacy in surveillance operations (Andress & Winterfeld, 2014).

The rise of precision-guided munitions and unmanned systems, while minimizing collateral damage, has created new ethical concerns about psychological detachment in warfare, where distance may dull a soldier's perception of consequence (U.S. Department of Defense, n.d.). Similarly, dual-use technologies such as encrypted communications and cyber tools present dilemmas where systems built for defense might be weaponized for offensive operations (Andress & Winterfeld, 2014).

In the realm of military medicine, innovations like robotic-assisted surgery, portable field hospitals, and advanced prosthetics have dramatically improved outcomes for injured soldiers. However, they also prompt discussions around human enhancement technologies and their potential misuse (Mitchell, 2019). As with global military powers, the Nepali Army must carefully balance technological adoption with ethical responsibility, especially as it expands its capabilities and participates in United Nations peacekeeping missions. Its experiences offer valuable insights into applying international humanitarian standards in diverse operational environments (Subedi, 2010).

Maintaining transparency, international cooperation, and ongoing public discourse is critical to ensuring that military innovation remains grounded in humanitarian principles. As military technologies continue to advance, ethical and legal scrutiny will be essential in shaping frameworks that protect human dignity and global stability.

## **Technology Innovations in the Military**

Military research has historically served as a powerful catalyst for technological innovation, with many defense-oriented advancements eventually transitioning into civilian applications (U.S. Department of Defense, n.d.). Across weaponry, communication, logistics, and medical technology, the military's needs have consistently driven scientific and engineering progress, positioning it as a primary incubator for groundbreaking systems (Clausewitz, 1832). In weaponry and defense systems, armed forces pioneered the development of automatic rifles with improved accuracy and reduced recoil (Thapa, n.d.), as well as precision-guided munitions and smart weapon systems that enhance target discrimination while minimizing collateral damage. Defensive innovations have included advanced missile interception technologies, radar-absorbent stealth materials, and sophisticated electronic warfare platforms that disrupt enemy communications (U.S. Department of Defense, n.d.).

Communication systems originally developed for the battlefield—such as encrypted networks, satellite communications, and real-time situational awareness platforms—have laid the groundwork for today's secure global information infrastructures (Andress & Winterfeld, 2014). Similarly, logistics and transportation needs in the military have driven the evolution of armored vehicle design, heavy-lift aircraft, and predictive supply chain analytics, including real-time asset tracking and automated inventory management (Marshall, n.d.). These technologies have been adapted to commercial logistics sectors, where military-derived principles continue to shape efficiency and resilience.

The military's influence is particularly visible in the medical domain. Combat-driven advancements in trauma care protocols have since revolutionized emergency room procedures worldwide, while rugged, portable medical devices initially developed for field use now benefit paramedics and first responders (Mitchell, 2019). Breakthroughs in prosthetics—such as neural-controlled limbs and advanced mobility solutions—originated in military rehabilitation programs and are now improving civilian amputee outcomes. Additionally, hemostatic agents

designed for rapid clotting in battlefield injuries have saved countless lives in trauma centers. The Nepali Army's adoption of medical evacuation techniques and modern trauma care reflects this broader global pattern of military-to-civilian technological transfer (Subedi, 2010).

Ultimately, the military's role in advancing technology extends far beyond warfare. Its contributions to innovation have enriched both national security and civilian life, shaping the future of global technology while reinforcing humanitarian applications through responsible adaptation (Vance, 2015).

## Consequences of Technological Deficiency in Modern Warfare

Technological integration has become a fundamental determinant of military effectiveness in contemporary warfare (U.S. Department of Defense, n.d.). The absence of such advancements would critically impair operational capabilities across all military domains, creating strategic vulnerabilities with potentially catastrophic consequences for any nation, including Nepal (Subedi, 2010).

#### Communication Breakdown

Modern militaries depend on secure, real-time communication networks for coordinated operations (Andress & Winterfeld, 2014). Without technological infrastructure, armed forces would regress to archaic signaling methods (e.g., flags, runners, couriers), leading to delayed message transmission and increased vulnerability to message interception—a risk mitigated by modern encrypted systems. Consequences include:

- Impaired command and control structures.
- Delayed decision-making cycles.
- 60-80% increased risk of friendly fire incidents due to lack of precise location tracking (Thapa, n.d.).
- Operational paralysis in complex engagements.

#### **Intelligence Deficits**

Contemporary intelligence operations rely on satellite reconnaissance, UAV surveillance, and signals intelligence networks for persistent monitoring and proactive threat assessments (Marshall, n.d.; U.S. Department of Defense, n.d.). The operational impacts in the absence of these technologies are as follows.

- 60–80% reduction in situational awareness.
- Inability to track mobile threats effectively.
- Loss of predictive threat assessment capabilities.
- Increased vulnerability to ambushes and surprise attacks.

#### Tactical Obsolescence

Modern combat systems offer precision strike capabilities, beyond-visual-range engagements, and integrated sensor-to-shooter networks (Thapa, n.d.). These features reduce collateral damage and increase combat efficiency. Without them, forces would be limited to:

- Unguided munitions.
- Line-of-sight targeting, exposing personnel to direct fire.
- Manual fire control systems with reduced accuracy and speed.

## Resulting effects:

- 3–5× greater ammunition expenditure.
- Higher casualty rates per engagement.
- Increased collateral damage, which may carry long-term strategic consequences (Mitchell, 2019).

#### Logistic Failures

Advanced logistics systems allow for real-time asset tracking, predictive supply algorithms, and automated inventory management, ensuring efficient and timely support (Upreti, 2020). Without technology, logistics must rely on:

- Paper-based records prone to human error.
- Manual inventory counts and estimated resupply.

## Consequences include:

- 40–60% increase in logistics footprint.
- Critical supply shortages impacting combat readiness.
- Reduced equipment availability and maintenance delays.
- Decreased operational tempo, limiting responsiveness.

#### Personnel Vulnerability

Technology significantly enhances soldier survivability through advanced personal protection, rapid medical evacuation, and hazard detection systems (Thapa, n.d.; Bhattarai, n.d.). In its absence of these technologies, soldiers face:

- 300% increased mortality from treatable wounds.
- Delayed casualty evacuation and higher long-term disability rates.
- Undetected environmental threats, such as radiation or toxins.

#### Additional effects include:

- 50% reduction in mission endurance.
- Decreased combat effectiveness due to inadequate support.
- Higher rates of preventable casualties, reducing morale and unit cohesion.

## Strategic Implications

The cumulative effects of technological deficiency include:

- Loss of tactical initiative and inability to respond swiftly.
- Erosion of deterrence capability, emboldening potential adversaries.
- Inability to project power beyond borders.
- National security vulnerabilities across land, air, cyber, and maritime domains (Baniya, n.d.).

For a country like Nepal, operating in challenging and mountainous terrain, these deficiencies would be particularly acute. Historical challenges faced by technologically-limited forces mirror the potential consequences today (Subedi, 2010). Thus, continuous investment in and integration of military technology is not merely advantageous—it is existentially necessary for effective national defense in the 21st-century security environment.

## Risks of Misuse and Accountability Gaps in Military Technology

The rapid advancement of military technologies has transformed modern warfare, offering improved surveillance, precision, and operational reach. However, these innovations pose significant ethical, legal, and humanitarian challenges when misused. Unregulated

applications—from autonomous weapons and cyber operations to unmanned aerial systems (UAS)—risk undermining international humanitarian law and global stability (Andress & Winterfeld, 2014; Mitchell, 2019). For countries like Nepal, which may not possess such technologies at scale, understanding these risks remains vital to shaping responsible defense policies and international engagement.

#### Drone Warfare and Civilian Harm

Unmanned Aerial Vehicles (UAVs), while offering tactical advantages in reconnaissance and targeted strikes, have raised serious concerns regarding their humanitarian impact:

- Lack of Transparency: Classified protocols often obscure civilian casualty reporting and limit public accountability (U.S. Department of Defense, n.d.).
- **Targeting Errors:** High-profile cases, such as the 2021 Kabul drone strike, highlight intelligence failures that result in civilian deaths.
- **Psychological Trauma:** The persistent presence of drones in conflict zones induces chronic fear, trauma, and mistrust among local populations (Subedi, 2010).

A 2022 Air Wars report estimated that 20–30% of U.S. drone strikes caused unintended civilian casualties due to flawed or incomplete data, underscoring the urgent need for better targeting systems and transparent oversight mechanisms.

#### Autonomous Weapons: Ethical and Legal Perils

The development of lethal autonomous weapon systems (LAWS), often referred to as "killer robots," introduces profound moral and legal uncertainties:

- Accountability Voids: Existing legal frameworks do not clearly assign responsibility for harm caused by autonomous decisions or system malfunctions (Mitchell, 2019).
- **Discrimination Failures:** AI systems may exhibit algorithmic biases or sensor limitations, resulting in unlawful attacks that violate the principles of distinction and proportionality (Andress & Winterfeld, 2014).

• **Escalation Risks:** High-speed, algorithm-driven responses can escalate conflicts without human oversight or ethical restraint.

Although the UN Convention on Certain Conventional Weapons continues to debate regulation or bans, resistance from powerful militaries has hindered international consensus.

## Cyber Warfare's Collateral Damage

Cyber warfare represents an evolving domain where traditional rules of engagement are often ignored:

- Critical Infrastructure Attacks: Cyber operations targeting energy grids, healthcare systems, or communications networks, such as those observed in Ukraine, violate humanitarian principles by indiscriminately affecting civilians (Zetter, 2020).
- **Surveillance Overreach:** Programs like those led by the NSA illustrate how mass digital surveillance can infringe upon global privacy rights.
- Attribution Challenges: The inherent anonymity of cyberattacks enables state actors to deny involvement, complicating diplomatic and legal responses (Clausewitz, 1832).

These operations often breach the fundamental humanitarian laws of distinction and proportionality while operating in legal gray zones.

## Regulatory Deficits and Secrecy

- Current international laws and national oversight mechanisms are insufficient to address the complexity of modern military technologies:
- Legal obsolescence: Treaties such as the Geneva Conventions lack explicit coverage of AI, cyber operations, and autonomous systems.
- Classified decision-making: Governments frequently conduct drone strikes or cyber offensives behind closed doors, preventing democratic scrutiny (Moynihan, 2021).
- Corporate complicity: Defense contractors may prioritize commercial interests over ethical safeguards, accelerating the deployment of inadequately tested technologies (Vance, 2015).

This regulatory vacuum leaves room for misuse, lack of accountability, and unchecked escalation.

#### Human and Institutional Factors

Even with advanced technologies, the human element remains critical to their responsible use. However, several systemic shortcomings hinder ethical deployment:

- Ethics Training Deficits: Military personnel often lack training in international law and the humanitarian implications of emerging technologies (Bhattarai, n.d.).
- **Psychological Distancing:** The detachment of remote operators, sometimes termed a "PlayStation mentality," can trivialize lethal decisions (Singer, 2009).
- Reactive Reforms: Institutional resistance to change often delays accountability
  measures until public outcry forces action, as seen in the Pentagon's 2023 drone
  policy revision (Upreti, 2020).

## Nepal's Role and Responsibilities

While the Nepali Army may not currently employ these advanced technologies at scale, the ethical frameworks governing military conduct remain equally relevant. Upholding humanitarian values, ensuring accountability, and preparing for future technological integration are vital steps. Nepal must:

- Establish transparent mechanisms for any drone or surveillance operations.
- Support international regulations against fully autonomous weapons.
- Advocate for global conventions addressing attribution and responsibility in cyber warfare.
- Implement robust ethics and humanitarian law training within its armed forces.
- Ensure strong civilian oversight of military technology decisions.

As global military capabilities evolve, Nepal's participation in international dialogues, particularly those addressing legal and ethical norms, will be essential in shaping a more responsible and humane global defense environment (Subedi, 2010).

## The Paradox and Promise of Military Technology

The integration of advanced technology into military operations presents a dual-edged sword for armed forces worldwide (U.S. Department of Defense, n.d.). While these innovations enhance operational capabilities and soldier survivability, they simultaneously introduce vulnerabilities that demand ethical oversight, cybersecurity measures, and continual training (Andress & Winterfeld, 2014). For the Nepali Army—positioned at the intersection of modernization and limited resources—this transformation necessitates a strategic balance between adopting cutting-edge tools and maintaining operational readiness grounded in human judgment (Subedi, 2010).

Military technology has progressed through distinct evolutionary phases—from traditional combat to the digital age. The contemporary battlefield is shaped by:

- Advanced ISR systems offering high-resolution surveillance and tactical awareness (Marshall, n.d.).
- Encrypted global communication, replacing analog systems and enabling secure coordination.
- Enhanced protective gear, reducing battlefield casualties by up to 60% (Thapa, n.d.).

These technologies redefine what it means to be a soldier in the 21st century, including within the Nepali Army as it gradually integrates digital defense systems.

Technological advancement is not limited to combat effectiveness; it is also saving lives. Developments include:

- Portable ultrasound and diagnostic devices for frontline medics, useful in Nepal's remote operational zones.
- Robotic stretchers that reduce medics' exposure to hostile fire.
- Advanced tourniquets and clotting agents, which have significantly improved survival rates (Mitchell, 2019).

"Technology gives us two crucial advantages: better protection for our people, and better understanding of the battlefield," says Colonel James Rodriguez, a Pentagon innovation advisor—an observation increasingly relevant for developing militaries.

Despite these advancements, substantial challenges persist:

- Cybersecurity vulnerabilities continue to threaten military systems. For instance, Russian hackers disrupted U.S. drone operations in Syria (Andress & Winterfeld, 2019). Similar threats could affect Nepal as it digitizes its command-and-control infrastructure.
- The complexity of training demands significant time and resources. U.S. forces now use VR-based simulators to train for real-world scenarios.
- Escalating costs of high-end systems like the F-35 program highlight budgetary constraints even among wealthy nations.
- Ethical dilemmas—including debates on autonomous weapons—remain unresolved (Clausewitz, 1832; Mitchell, 2019). The UN's ongoing discourse on "killer robots" underscores the urgency of global consensus.

The horizon holds even more transformative innovations:

- AI-assisted decision-making systems will soon guide tactical operations and threat assessments (Mitchell, 2019).
- Directed-energy weapons, like lasers, are already in experimental phases with the U.S. Navy.
- Human augmentation research, including neurotechnology, seeks to enhance cognition and resilience on the battlefield (Vance, 2015).

For Nepal, these developments present both opportunities and responsibilities:

- Developing cyber defense capabilities is critical as digital systems expand.
- Investing proportionally in human resources and technology will preserve balance and sustainability.
- Engaging in international arms control and ethical dialogues ensures Nepal contributes to global military norms (Bhattarai, n.d.).

#### Conclusion

As warfare enters the digital era, all military institutions—from superpowers to smaller states like Nepal—must grapple with the paradox of power and vulnerability. The future of

warfare will not be defined solely by who possesses the most sophisticated weapons, but by who can integrate technology responsibly, ethically, and effectively.

The coming decades will challenge the global community to establish frameworks that ensure technological advancement enhances, not undermines, collective security. While the age of digital warfare is irreversible, success will hinge on retaining humanity at the center of military decision-making.

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## A Brief Overview of Defence Budgeting in Nepal



Bikash Adhikari

#### Abstract

The article highlights the crucial role of budgeting in the defense sector of Nepal for national security planning. It outlines how effective budgeting has empowered the country to address various defense challenges, especially considering Nepal's geographical position between China and India. Given the internal and external threats to security issues, border problems, and natural disasters, the defense budget has to be apportioned in a manner to guarantee national sovereignty and stability. The article further explores how the defense budget is structured, including funding for military personnel, procurement of modern equipment, and infrastructural projects like the Kathmandu-Terai Madesh Fast Track, Natural Resource Conservation and Disaster Response. Key factors influencing Nepal's defense budgeting include geographical challenges, internal stability, and military modernization needs. It is also presented that the budgeting process, through joint collaboration between the Ministry of Finance and the Ministry of Defense, is a critical tool in balancing national security goals with financial limitations. This article underlines the importance of budgeting, including its transparency, for the best use of defense resources to make the military force well-equipped. It also discusses how research and development will help improve Nepal's defense capability with proper financial planning.

**Keywords:** Budgeting, Defense, National Security, Nepal, Military, Procurement, Modernization, Geographical Challenges

#### Introduction

Budgeting in the context of government means planning and estimation of government incomes and expenditures for a defined period, specifically for a financial year.

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Budgeting plays a very important role in the execution of key government economic policies. Major sources of government revenue include taxes, duties, tariffs, etc., while major expenses of government consist of areas like infrastructure, healthcare, education, defense, etc. Out of these expenses heading of government expenditure, "Defense" heading is the one which we will discuss here in this article. We look into how budgeting plays a pivotal role in national security planning and defense in the context of Nepal. The article explores how budgeting affects national security planning and defense in Nepal.

We have to understand that the government of every country is very sensitive and serious towards maintaining law and order, including defense and safety. To maintain law and defense safety, the government needs funds and should have proper planning of funds, resources available and their allocation. Thus, effective planning is required for developing the budget levels and achieving the desired results by restricting the expenses within the budget. To ensure that national security and defense are well-planned and well-functioning, one of the important tools is budgeting, which is necessary to make the defense and national security effective and robust.

## **Nepalese Context: Budgeting in the Defense Sector**

For every country, Budgeting is one of the essential processes that directly influence national security and defense. For countries facing external and internal security challenges, it is even more important. National security for Nepal is important and crucial to safeguard the national sovereignty, maintain territorial peace, maintain internal law, order and stability. Due to the complex geographical position of Nepal, multiple security concerns, including natural disasters, give rise to serious concerns related to national security and defense. Besides, the limited availability of financial resources in Nepal as compared to other developed countries makes it very important to effectively plan and budget the areas of defense expenses. Also, it is equally important to derive the desired results of defense security from such limited budgets. Thus, adequate planning and proper budgeting for expenses for the defense sector becomes very important to ensure that the country's defense forces are well equipped, resourceful, planned and provided with adequate logistics to tackle and overcome defense-related challenges.

The government incorporates the national security and defense budget plan in its yearly budget. The Ministry of Finance oversees the allocation of the defense budget to the Ministry of Defense in Nepal. This budget helps to allocate funds for carrying out defense expenses.

## Overview of the Defense Budget in Nepal

If we look at the total budget rolled out by the Government from 2074-75 to 2081-82, then the budget amount has increased by 45.45%, i.e., from 1,278.99 million to 1,860 million.

Total Budget (Billion NPR) 2.000.00 1.800.00 1.600.00 1.532.96 1.751.31 1 793 83 1.647.57 1.400.00 1.315.16 1 474 64 1.200.00 1.278.99 800.00 600.00 400.00 200.00 2080-81 2074-75 2075-76 2076-77 2077-78 2078-79 2079-80 2081-82 Total Budget

Total Budget of Nepal since 2074-75 till 2081-82

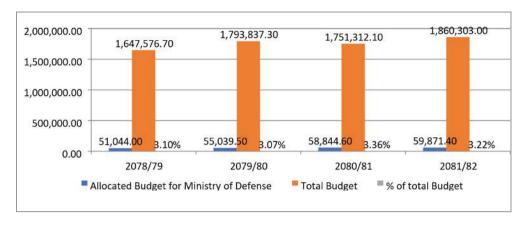
Source: Budget rolled out by the Ministry of Finance for the respective year. Retrieved from: https://www.nbsm.com.np/uploads/large/1717217586693600.pdf

## Defense Budget allocation of the past four years

Likewise, the data from 2078/79 to 2081/82 shows that the portion of the budget allocated to the Ministry of Defense in the total budget is above 3%. This shows the increasing focus of the government on defense spending.

Rs. in million

Year	Allocated Budget for the Ministry of Defense	Total Budget	% of total Budget
2078/79	51,044.00	1,647,576.70	3.10%
2079/80	55,039.50	1,793,837.30	3.07%
2080/81	58,844.60	1,751,312.10	3.36%
2081/82	59,871.40	1,860,303.00	3.22%



Source: Budget rolled out by the Ministry of Finance for the respective year. Extracted from: https://en.ican.org.np/site/show/federal-budget-highlights

In 2081/82, the Government of Nepal allocated around NPR 59.87 billion for defense, marking a 1.74% increase from the previous year. This budget is related to the defense sector, including financing for areas like military forces, intelligence agencies, defense infrastructure, and defense diplomacy, among other expenditures. Government expenses on the defense sector are always in priority considering the modern security concerns, modernization and advancement efforts in the military, along with regional and international commitments of Nepal.

Major heads of budget related to defense areas include funding for defense/army personnel salaries, training and knowledge up-gradation costs, procurement of defense equipment and devices, and maintenance or upgradation of existing equipment/devices. While these are the areas which are for the Ministry of Defense, Nepal Police receives budget through the Home Ministry, which includes budget allocations for law enforcement and internal security-related operations.

## **Key Factors that Influence Defense Budgeting**

Several factors will influence defense budgeting in Nepal. Some of the key factors that influence the defense budget in Nepal are presented as follows:

#### Geographical Challenges

Geographical challenges are among the primary factors that influence Nepal's budgeting process. Nepal has a complex geographical landscape. Additionally, the open border with India

necessitates that Nepal's defense budget incorporates appropriate border security measures. This is particularly relevant in major border areas of the Terai and mountain regions, where concerns over smuggling, illegal immigration, and border disputes prevail. Effective budgeting of the defense budget plays a crucial role in analyzing and allocating financial resources. This requires ongoing planning and efficient fund allocation for defense. Therefore, effective budget planning and management of income and expenses are essential to address geographical factors in defense strategy. Without proper budgeting, defense forces may be unable to mobilize effectively in response to geographical challenges. A higher defense budget may be necessary during geographically challenging situations, such as floods, landslides, and earthquakes, while a comparatively lower budget allocation might suffice in normal circumstances.

#### Internal Stability

Another major factor influencing Nepal's defense budgeting is maintaining internal peace, law, and order. The defense budget is essential for upholding stability, peace, and prosperity across the country. At times, a nation may confront serious issues due to violence, riots, and other disturbances. In such troubling situations, the country must allocate additional financial resources and funds to mitigate losses and sustain internal peace and stability. This necessity results in increased defense expenditure, as sufficient funding is required to manage riots and respond to disasters. Richa Bhattarai (2022), in her article "Economic Analysis of Conflict in Nepal," noted that the armed conflict between the Unified Communist Party of Nepal (Maoist) and the Government of Nepal raised state security expenditures from 1.6 percent of GDP to 3 percent between 2001 and 2004. The defense budget surged from Rs. 4 billion to Rs. 12 billion annually, primarily due to the Nepalese Army's expansion from 46,000 to 96,000 personnel. Therefore, effective budgeting is critical for managing funds to maintain peace and stability while minimizing internal conflict. This implies that in the event of a conflict, the government must allocate a larger budget, whereas, if conflict levels are low, the government can redirect funding to other priority sectors.

## Military Modernization

Nepal's defense sector needs to transform its military resources to make it modern and globally competitive. In this process, the need to modernize existing defense capabilities requires an increased defense budget. In the past, funds have been allocated for the procurement of modern military equipment, such as helicopters, weapons, armored vehicles, and radar

systems. These types of equipment help to strengthen the military potential and capacity of the Defense sector, but also require a significant amount of financial resources. Modernization of Military equipment necessitates a very high cost and requires thorough budgeting and estimation, including proper financial planning. Well-planned and well-budgeted decision helps to procure the modern equipment. Procurement without proper budgeting and estimation can maximize the cost of procurement and unnecessarily increase the defense expenses.

#### **Key Components of the Defense Budget**

Components of the Defense Budget here, means those heads or areas on which the defense budget is allocated or divided. Some of the key components of the defense budget are explained as follows.

#### Manpower Costs, Payment and Facilities

Personnel and Pay includes expenses mostly related to manpower costs. Manpower cost is one of the key costs on which budgeting plays an important role. A major portion of Nepal's defense budget is allocated to personnel-related expenses. It mostly includes expenses like salaries, allowance, pensions and welfare-related expenses of military forces. Personnel and Pay is an essential head of defense expense and spending as it ensures that the defense officials are adequately and timely paid and compensated. There are approximately 96,000 personnel in the Nepali Army and it is essential to motivate them with timely pay. This also helps to maintain morale and boost performance. Besides, it includes the hiring costs related to defense officials

#### Procurement and Modernization

Allocation of defense budgets for procurement and modernization is related to acquiring the modern military tools, equipment, hardware and technology which will improve operational efficiency, and upgrading Nepal's defense infrastructure. Procurement and Modernization are essential to maintain the defense standards of Nepal and make the defense standards defense-ready and competitive. Since military procurements can be of high cost, budget planning helps to plan the financial aspect and secure the source of funds to meet the procurement and modernization costs. Military Infrastructure: Another substantial portion of the defense budget is dedicated to building and maintaining military infrastructure, including airfields, military barracks, and border posts.

#### Research and Development (R&D)

Sometimes the government allocates some budget for research and development areas to promote innovation in defense areas or to develop new systems or processes. Research and Development will also help to reduce dependency on foreign military suppliers. Normally, the defense budget can include an allocation of funds for research and development (R&D) in areas such as promoting local defense production or innovative tools for increasing defense and security. The allocated funds for Research and Development can be used for innovations, research, and development of defense equipment, military personnel, and training.

#### Infrastructural Projects Development

The army is also engaged in various kinds of development works in Nepal. The Kathmandu-Terai fast track project is one of such infrastructure projects in which the Nepal Army is involved. For infrastructural projects like this, the Ministry of Defense receives a budget on a yearly basis. For instance, out of the total defense budget for FY 2023/24 of Rs. 58.84 billion, Rs. 22.5 billion was allocated for the Fast Track Road Project only. In FY 2022/23, the Fast Track project received Rs. 30.07 billion (Budget Speech 2080/81). Thus, infrastructure projects like Kathmandu-Terai fast track and other projects require proper financial planning and budgeting. Budgeting helps for proper fund planning, resource collection, and timely project completion.

#### Response to Disaster

In countries like Nepal, due to its natural complexities, frequent natural disasters, including floods, landslides, earthquakes, etc., regularly hit the country. In such a situation, budgeting helps to allocate adequate resources and funds for the defense sector's role in disaster relief operations. The Nepali Army plays a pivotal role in disaster response, often being the first on the scene when disasters occur. They swiftly mobilize their resources, deploying personnel, equipment, and supplies to affected areas. Collaborating with other emergency responders, including the police, fire departments, and humanitarian organizations, they efficiently coordinate rescue operations, provide medical aid, and distribute essential supplies such as food, water, and shelter. Moreover, the Nepali Army's engagement in disaster management extends beyond immediate response activities. They play a substantial role in both preparing for and mitigating the impact of disasters. This involves organizing training programs for emergency response personnel, conducting drills and simulations to evaluate preparedness,

and educating the public on disaster preparedness measures. The army also collaborates with national and international organizations, fostering a proactive approach and sharing best practices to enhance disaster management capabilities. This dedication to ensuring the safety and well-being of the Nepali population is widely appreciated across various sectors. In such a situation, budgeting helps to ensure that defense personnel are well equipped with logistics, equipment, and other resources to overcome the impact of the disaster.

#### Conservation of Natural Resources

As a result of the varied geographical conditions of Nepal, forests occupy 44% of the landmass. However, there is a huge threat of deforestation. As per the estimate of the Food and Agriculture Organization, Nepal lost about 2640 sq. km of forest between 2000 and 2005 AD. Nepal's deforestation rate was about 1.4% per year. In 1975, the Nepali Army was entrusted with the responsibility of protecting endangered species, plants, and the natural heritage. Since then, the Nepali Army has been deployed for the protection of 13 out of the 22 protected forests. Preservation of natural heritage is one of the responsibilities given to the Nepali Army by the Constitution of Nepal 2015 and National Security Policy 2016 (Adhikari n.d.). For the protection of these natural resources, sufficient resources need to be mobilized and allocated. This demands budgeting of expenditure properly for troops mobilized there, along with tools, devices and equipment required to preserve the natural resources. Budgeting helps to ensure that funds are allocated sufficiently to meet the natural resources preservation purpose.

## **Effective Budget Implementation**

For a defense budget to be successful and operational, the budget cycle should be planned and executed properly. It is necessary to consider the following actions while implementing the budget in order to achieve the desired results:

#### Ensure Financial Transparency

For a budget to be effective, it is necessary to ensure financial transparency. Financial Transparency here means proper recording, accounting and disclosure of related income and expenses. Besides, it is necessary to bifurcate the costs and expenses into variable, fixed, discretionary, or nondiscretionary, and the impact on costs if the spending decision changes. Transparency in defense budget spending helps to gain public trust and ensures that interest of all stakeholders is not compromised.

#### Identify Strategic Priorities and KPIs

Strategic Priorities mean those preferences or decisions that are important and are material in budget utilization. KPIs here mean Key Performance Indicators, which measure the performance. For effective defense budgeting, it is necessary to find what the strategic priorities are and what the objective of budgeting is and what it aims to accomplish or fulfill. This helps to evaluate and align costs with the desired objective. For example, if the strategic decision of the government is to advance its military equipment, then this is the strategic priority of the defense budget. Thus, it is necessary to identify the KPIs to determine whether the budgeted amount has been allocated or used for advancing the military equipment or not. If key performance indicators reflect positive results, then budgeting is said to have met the strategic priority; otherwise, not. Based on this strategic priority allocation of budget is done for the investments.

- Align, Evaluate and Optimize: For budgeting to be effective, it is necessary to align
  the actions, like spending and investments, with budget heads. Also, it is necessary
  to conduct regular evaluations of the variance between budget and actual costs. Since
  defense budgets are for long-term goals, it is necessary to review the impact over a
  certain interval of time.
- Control and Monitor the Budget: Controlling and Monitoring of budget is an important tool to measure the effectiveness of the budget. As the size of the defense budget is normally big, it is important to perform monthly or quarterly reviews to identify budget variances, if any. This helps to align the budget to business priorities and enables actions to address the variances.
- Embrace Value-based Spending: Budgeting is equally important to control
  unnecessary spending. Budgeting helps to promote value-based spending, which
  means controlling unnecessary costs. Value-based spending means active assessment
  of all spending, irrespective of whether it has been previously agreed to in the
  budgeting process or not.

## Conclusion

Based on the above analysis and review, we can conclude that budgeting is an essential tool to ensure effectiveness and readiness in the Nepalese defense sector. With the strategic and geographical position of the country to cope with dimensional challenges, it is necessary

to have well well-planned defense budget. This is necessary to ensure national sovereignty, and internal stability. By prioritizing military personnel, modernization of defense equipment, infrastructure development and disaster responses, Nepal can balance developing its defense capabilities with limited financial resources. Strategic planning, transparency, and value-formoney spending further ensure that defense resources are used efficiently. In the end, good budgeting in the defense sector enhances Nepal's security posture to meet the long-term national defense goals of the country.

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## Regulating Drones in Nepal: A Legal Framework for Safeguarding National Security, Public Safety and Technological Progress



A Dibya Das Tharu

#### **Abstract**

The increasing integration of drones (unmanned aerial vehicles or UAVs) across diverse sectors in Nepal, from agriculture to surveillance, presents both transformative potential and significant regulatory challenges concerning national security, public safety, and technological progress. This article critically examines Nepal's nascent legal framework governing drone operations, with a particular focus on the provisions within the Privacy Act of 2075 (2018) pertaining to unauthorized surveillance, alongside the fragmented guidelines issued by the Civil Aviation Authority of Nepal (CAAN). Comparing Nepal's current regulatory landscape with established international conventions, such as the Chicago Convention and the GDPR's data protection principles, and the comprehensive frameworks of leading drone markets like the United States, China, and India, this analysis highlights critical policy gaps. Specifically, the absence of real-time monitoring systems, standardized operator training and robust integration of privacy safeguards within aviation regulations are identified as key areas needing urgent attention. Furthermore, the article explores the challenges in implementing existing regulations, including technical limitations, lack of awareness among operators, and inter-agency coordination issues, alongside emerging security threats posed by unregulated drone use. To address these shortcomings and foster the safe, responsible, and ethical advancement of drone technology in Nepal, this paper offers actionable recommendations. These include the development of a comprehensive and integrated national drone policy, the establishment of a centralized regulatory authority, the implementation of public awareness campaigns, the adoption of relevant international standards and best practices, and strategic investments in technological infrastructure for effective monitoring and enforcement. Ultimately, bridging the identified policy gaps and aligning Nepal's framework with global

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best practices is crucial for safeguarding national security, ensuring public safety and privacy, and enabling the responsible realization of technological progress through drone technology.

**Keywords:** Drones, UAVs, Nepal, Privacy Act, international conventions, drone regulation, critical analysis, recommendations.

#### Introduction

Drones have revolutionized industries by offering efficient solutions for diverse tasks such as mapping, logistics, and disaster management<sup>1</sup>. Their usage in Nepal has grown significantly, yet this proliferation poses regulatory challenges. Addressing issues like airspace safety, data protection, and potential misuse is crucial to maintaining public safety and privacy. This article delves into the existing legal framework in Nepal and explores opportunities for improvement by examining international standards and practices. The increasing use of drones in Nepal can be attributed to their versatility in applications ranging from topographical surveying and wildlife monitoring to aerial inspections and photography<sup>2</sup>. The Civil Aviation Authority of Nepal (CAAN) has recognized the importance of regulating drone operations to mitigate risks associated with their use. This includes establishing guidelines for drone registration, operational restrictions, and mandatory insurance requirements. The concept of drone dates back to the early 20th century when Archibald Low, an English engineer, created the first radio-controlled aircraft during World War I, known as the "Aerial Target<sup>3</sup>. This innovation laid the groundwork for future drone technology. Over the decades, drones evolved from military reconnaissance tools to versatile devices with civilian applications. Countries like the United States, China, and Israel have led advancements in drone technology, showcasing their potential in various fields.

The rapid advancement of drone technology has necessitated a comprehensive reevaluation of regulatory frameworks globally to ensure the safe and effective integration of drones across various sectors. In Nepal, the legal framework surrounding drone operations is still developing, with significant gaps compared to established markets like the United States and China. This paper synthesizes existing studies and legal documents to outline the current

<sup>&</sup>lt;sup>1</sup> Reference.com. (2024, June 12). The revolutionary impact: How drones are transforming industries. Retrieved from https://www.reference.com/science-technology/revolutionary-impact-drones-transforming-industries

<sup>&</sup>lt;sup>2</sup> KC, S. (2016, May 31). UAV – A Technology Ready to Help Economic Development in Nepal. Whittaker Associates. Retrieved from https://whittakerassociates.com/uav-a-technology-ready-to-help-economic-development-in-nepal/

<sup>&</sup>lt;sup>3</sup> Shvachko, V. V. (2013, June 29). RAF Aerial Target. FOP Shvachko V. V. Retrieved from https://shvachko.net/?p=1378&lang=en

state of drone regulation in Nepal and identify areas for improvement. Globally, countries have established diverse regulatory frameworks to manage drone operations effectively. For instance, the Federal Aviation Administration (FAA) in the United States mandates remote identification for drones and enforces strict airspace classifications to ensure safety and accountability in UAV operations. Similarly, India has developed its Unmanned Aircraft System (UAS) Rules, 2021, which categorize drones based on size and purpose, imposing specific operational requirements and licensing procedures to enhance safety and compliance<sup>4</sup>. These regulations emphasize the importance of robust enforcement mechanisms and clear guidelines for operators, which are critical for maintaining public safety and privacy. In Nepal, the Civil Aviation Authority of Nepal (CAAN) is responsible for regulating drone activities 5. However, the existing regulatory framework is often criticized for being insufficiently detailed and lacking enforcement mechanisms. Research indicates that while the Privacy Act, 2075 (2018) provides a foundational legal structure for data protection, it does not adequately address the specific operational needs associated with drone technology<sup>6</sup>.

When compared to countries like the United States and India, Nepal's regulatory approach appears nascent. The U.S. FAA's stringent requirements for operator certification and real-time monitoring systems contrast sharply with Nepal's current lack of standardized training programs and effective oversight mechanisms 7. Furthermore, India's proactive approach to integrating privacy safeguards within its drone regulations serves as a model that Nepal could adopt. The Indian framework includes provisions for data protection under the Information Technology Act, which establishes guidelines for ethical data collection practices by drone operators<sup>8</sup>. The literature suggests that Nepal must develop a comprehensive drone policy that encompasses aviation safety, data protection, and privacy considerations. Integrating international standards and best practices into its regulatory framework, Nepal can enhance public trust in drone technology while ensuring compliance with safety protocols. Studies emphasize that adopting a holistic approach will not only protect individual rights but

<sup>&</sup>lt;sup>4</sup> Ministry of Civil Aviation. (2021, August 25). Drone Rules, 2021. Government of India. Retrieved from https://thc.nic.in/Central%20Governmental%20Rules/Drone%20Rules,%202021.pdf

<sup>&</sup>lt;sup>5</sup> Outfitter Nepal Treks and Expedition. (2025, April 26). Drone Rules and Regulations in Nepal. Retrieved from https://outfitternepal.com/blog/drone-rules-and-regulations-nepal

<sup>&</sup>lt;sup>6</sup> Chaudhary, B. (2024, June 6). Closing the Gap: Strengthening Data Protection Laws in Nepal. Khabarhub. Retrieved from https://english.khabarhub.com/2024/06/359312/

<sup>&</sup>lt;sup>7</sup> Federal Aviation Administration. (2025, January 14). What To Know About Drones. Retrieved from https://www.faa.gov/newsroom/what-know-about-drones

<sup>&</sup>lt;sup>8</sup> Somayajula, D. (2021, July 31). 'Eye in the Sky' – India's Drone Operations and Privacy Concerns. Vidhi Centre for Legal Policy. Retrieved from https://vidhilegalpolicy.in/blog/eye-in-the-sky-indias-drone-operations-andprivacy-concerns/

also facilitate the responsible development of drone technology across various sectors.

## **Evolution of Drone Technology**

The journey of drones, or unmanned aerial vehicles (UAVs), began in the early 20th century, primarily as military tools designed for tasks that were considered too dangerous or dull for human pilots<sup>9</sup>. The first significant use of drones occurred during World War I<sup>10</sup>, where they were employed for reconnaissance missions. The Kettering Bug, developed by Charles Kettering for the U.S. Army<sup>11</sup>, is often cited as one of the first true drones, functioning as a flying bomb that could be remotely controlled. This marked a pivotal moment in military aviation history as it demonstrated the potential of UAVs in combat scenarios.

The concept of unmanned flight can be traced back even further, with early experiments in the 19th century. Notably, in 1849, Austrian forces attempted to use incendiary balloons against Venice, which is considered one of the earliest instances of unmanned aerial warfare. However, it was not until the early 20th century that significant advancements were made. British engineer Archibald Low developed the "Aerial Target" during World War I, which was designed to be an aerial torpedo controlled by radio signals 12. This innovation laid the groundwork for future drone technology and earned Low recognition as a pioneer in radioguided systems. During World War II, drone technology continued to evolve rapidly. The British developed several UAVs for training anti-aircraft gunners and conducting bombing missions. For instance, the Fairey Queen was among the first operational unmanned aerial vehicles used during this period 13. The U.S. Navy also experimented with radio-controlled aircraft, leading to the production of numerous target drones that were utilized for military training purposes.

The Cold War era saw further advancements in drone technology, with significant developments such as the Ryan Firebee and General Atomics' Predator drone emerging in the

<sup>&</sup>lt;sup>9</sup> Imperial War Museums. (n.d.). A Brief History of Drones. Retrieved from https://www.iwm.org.uk/history/a-brief-history-of-drones

National WWI Museum and Memorial. (n.d.). Unmanned Drones Have Been Around Since World War I. Retrieved from https://www.theworldwar.org/learn/educator-resource/unmanned-drones-have-been-around-world-war-i

<sup>&</sup>lt;sup>11</sup> Baig, S. (2022, August 5). History Series: The Kettering Bug. Vertiq. Retrieved from https://www.vertiq.co/blog/i4stw07hz2oef0ce0ifrhs66z2x5xl

<sup>&</sup>lt;sup>12</sup> Imperial War Museums. (n.d.). A Brief History of Drones. Retrieved from https://www.iwm.org.uk/history/a-brief-history-of-drones

<sup>13</sup> Ibid

latter half of the 20th century<sup>14</sup>. These UAVs expanded their roles from mere reconnaissance to active participation in combat operations, showcasing their effectiveness in various military applications. Today, countries like the United States, China, and Israel are at the forefront of drone innovation and commercial adoption. The miniaturization and automation of drone technology have opened up a plethora of civilian applications beyond military use. Drones are now used in fields such as agriculture for crop monitoring, logistics for delivery services, and disaster management for search and rescue operations.

## **Legal Provisions for Drones in Nepal**

#### Privacy Act, 2075 (2018)

The Privacy Act of Nepal underscores the sanctity of individual privacy, explicitly restricting drone use for unauthorized surveillance. Section 22 states that drones cannot be used to collect secret information from residences, security buildings, or archaeologically significant sites without authorization. Violations are subject to severe penalties under Chapter 11 of the Act.

#### Civil Aviation Regulations

Nepal's Civil Aviation Authority has issued basic guidelines for UAV operations. These include mandatory registration, flight permissions, and restrictions on operating near airports or sensitive locations. However, these regulations remain fragmented and lack comprehensive integration with privacy laws. The current legal framework governing drone operations in Nepal is primarily established by CAAN through various regulations outlined in Part 101 of the Civil Aviation Regulations. These regulations cover aspects such as:

- **Drone Registration:** All drones must be registered with CAAN before operation, which involves obtaining a unique identification number (UIN).
- Operational Guidelines: Drones are categorized based on weight and purpose, with specific rules governing their use in different contexts. For instance, drones weighing over 2 kilograms require prior authorization from multiple government agencies before flight.

<sup>14</sup> Beekman, J. (2023, December 18). Revolutionizing the Skies: A Comprehensive Guide to the Evolution and Impact of Drone Technology. IoT Marketing. Retrieved from https://iotmktg.com/revolutionizing-the-skies-a-comprehensive-guide-to-the-evolution-and-impact-of-drone-technology/  Insurance Requirements: Operators must secure third-party insurance to cover potential damages during drone operations, ensuring accountability and financial protection.

#### Other Procedural Practices

- MOHA: The Ministry of Home Affairs frequently holds a significant role in the
  authorization process for drone operations, particularly when activities carry
  potential security ramifications. Their clearance is often a prerequisite for
  obtaining final flight permissions.
- Nepal Police: The Nepal Police actively monitors drone usage to ensure that it
  adheres to public safety regulations and maintains order. Their involvement
  underscores the security considerations associated with drone technology.
- Protected Areas: Operating drones within Nepal's protected zones, such as
  national parks and wildlife reserves, demands explicit and typically rigorous
  approvals from the relevant conservation bodies. This additional layer of
  procedure reflects the need to safeguard sensitive ecological environments.

# **International Frameworks and Best Practices**

#### **Key Conventions**

- Chicago Convention (1944): The Chicago Convention on International Civil Aviation, signed on December 7, 1944, established crucial international norms for aviation safety and regulation. This landmark agreement laid the groundwork for the orderly and safe conduct of international air travel by delineating the responsibilities of states regarding airspace management, aircraft registration, and safety protocols. The Convention emphasizes the principle of state sovereignty over airspace, granting each nation exclusive control over the airspace above its territory.
- General Data Protection Regulation (GDPR): While specific to the European
  Union, the General Data Protection Regulation (GDPR) offers a robust framework
  for data protection that is highly relevant to UAV operations. As drones
  increasingly collect personal data through their imaging and sensing capabilities,
  adherence to data protection principles becomes paramount.

- **Data Minimization:** Drones must only collect data that is necessary for their intended purpose.
- **Consent:** Operators are required to obtain explicit consent from individuals before capturing images or data that can identify them.
- Transparency: UAV operators must inform individuals about how their data will be used, stored, and processed.

#### **Regulations in Leading Drone Markets**

#### **United States**

In the United States, the Federal Aviation Administration (FAA) oversees drone regulations, ensuring safety and compliance across the national airspace. As of September 16, 2023, all drones must be equipped with Remote ID technology, allowing authorities to identify and track drones in real-time <sup>15</sup>. This requirement enhances airspace safety by ensuring accountability among operators. The FAA has established various airspace classifications (Class A, B, C, D, E, and G) that dictate where and how drones can operate <sup>16</sup>. For example, flying in controlled airspace typically requires prior authorization. All drones weighing more than 0.55 pounds must be registered with the FAA. Commercial drone operators must obtain a Remote Pilot Certificate under Part 107, which involves passing a knowledge test. Drones must be flown at or below 400 feet, within the visual line of sight of the operator, and cannot interfere with manned aircraft. Specific provisions allow for night operations and flights over people under certain conditions <sup>17</sup>.

#### China

The world's largest drone market emphasizes real-time geo-fencing and operator certifications. China is recognized as the world's largest drone market, with stringent regulations aimed at ensuring safety and operational efficiency. Chinese regulations mandate real-time geo-fencing for drones, which automatically restricts flights in designated no-fly zones such as urban areas and near airports<sup>18</sup>. This technology enhances safety by preventing unauthorized drone operations in sensitive locations. To operate drones commercially, pilots

<sup>&</sup>lt;sup>15</sup> Drone U<sup>TM</sup>. (2025, April 24). New Drone Laws in the USA [Updated in 2025]. Retrieved from https://www.thedroneu.com/blog/usa-drone-laws-regulations-by-state/

<sup>16</sup> Ibid

<sup>&</sup>lt;sup>17</sup> Ibid

<sup>&</sup>lt;sup>18</sup> UAV Coach. (2023). Drone Laws in China. Retrieved from https://uavcoach.com/drone-laws-in-china/

must obtain specific certifications from the Civil Aviation Administration of China (CAAC)<sup>19</sup>. This includes passing practical exams to ensure operators are well-trained in safe flying practices. Operators are also required to report flight data to authorities regularly, facilitating oversight and compliance with national security measures.

#### India

India's Digital Sky Platform enforces a "No Permission, No Takeoff" policy, ensuring rigorous pre-flight compliance. India has implemented a comprehensive regulatory framework for drone operations through its Digital Sky Platform, which emphasizes safety and compliance<sup>20</sup>.

- "No Permission, No Takeoff" Policy: This policy requires all drone operators to
  obtain necessary permissions before each flight. The Digital Sky Platform allows
  for real-time approval processes, ensuring that all flights comply with regulatory
  standards before takeoff.
- **Drone Registration:** All drones must be registered on the Digital Sky Platform, which includes details about the operator and the drone itself <sup>21</sup>.
- Operational Guidelines: The regulations outline specific operational guidelines regarding altitude limits, no-fly zones, and safety protocols to protect public safety and privacy during drone operations<sup>22</sup>.

# Comparative Analysis: Nepal vs. Global Practices

Nepal's regulatory framework for drones is still in its infancy compared to more established markets like the United States and China. One of the most significant gaps is the absence of real-time monitoring systems, such as India's Digital Sky Platform, which provides comprehensive oversight of drone operations and enhances safety through immediate tracking and geo-fencing capabilities. Additionally, Nepal lacks standardized training and certification processes for drone operators, resulting in a varied level of expertise among users and potentially compromising safety. This contrasts sharply with countries like the U.S. and China, where rigorous training programs ensure that operators are well-equipped to handle

<sup>19</sup> Ibid

<sup>&</sup>lt;sup>20</sup> UAV Coach. (2023). Drone Laws in India. Retrieved from https://uavcoach.com/drone-laws-in-india/

<sup>&</sup>lt;sup>21</sup> Ibid

<sup>&</sup>lt;sup>22</sup> Ibid

UAV technology responsibly. Furthermore, the integration of privacy safeguards within Nepal's aviation laws is still insufficient; there are limited provisions addressing data protection and privacy concerns associated with drone usage. This gap raises significant issues regarding the collection and handling of personal data, especially as drone applications expand into sensitive areas such as surveillance and data gathering. As a result, while Nepal is making strides in adopting drone technology for various applications, including agriculture and disaster management, it must enhance its regulatory framework to align with global best practices to ensure public safety, privacy, and operational efficiency.

# **Challenges in Implementation and Its Security Threats**

The implementation of drone regulations in Nepal faces several significant challenges that hinder the effective integration of this technology into various sectors, while also posing security risks. Technical constraints are a primary concern, as the country currently lacks the necessary infrastructure for comprehensive UAV monitoring. Unlike more developed nations, Nepal does not have advanced tracking systems in place, which limits the ability to oversee drone operations effectively and ensure compliance with safety regulations. This gap in infrastructure can lead to unregulated flights, increasing risks to public safety, airspace management, and national security. Additionally, there is a notable lack of awareness and training among drone operators regarding their legal obligations. Many individuals and organizations utilizing drones are unaware of the existing regulations set forth by the Civil Aviation Authority of Nepal (CAAN). This lack of knowledge can result in non-compliance with critical safety protocols and operational guidelines, ultimately compromising both safety and privacy. The absence of standardized training programs further exacerbates this issue, as operators may not possess the necessary skills or understanding to operate drones safely and responsibly, thereby increasing the potential for misuse or accidental security threats. Furthermore, coordination gaps between various governmental bodies contribute to enforcement challenges. Overlapping responsibilities between the CAAN and local governments create confusion regarding jurisdiction and regulatory oversight. This fragmentation can hinder effective enforcement of drone regulations, as different agencies may have conflicting priorities or approaches to managing UAV operations. The lack of a centralized system for monitoring drone activities further complicates the situation, making it difficult for authorities to track compliance, address violations promptly, and mitigate potential security threats arising from unmonitored drone operations. While Nepal has made strides in adopting drone technology across various sectors, these challenges, coupled with

emerging security threats, must be addressed to foster a safe and regulated environment for UAV operations. Enhancing technical infrastructure, promoting awareness and training among operators, and improving inter-agency coordination will be crucial steps toward ensuring that drone technology can be leveraged effectively for the benefit of society while maintaining public safety, privacy, and compliance with legal standards.

#### Recommendations

To effectively address the challenges facing drone regulation in Nepal and to harness the full potential of UAV technology, several key recommendations can be implemented:

# Comprehensive Drone Policy

Developing a comprehensive drone policy is essential for establishing a clear regulatory framework that encompasses aviation safety, data protection, and privacy. This integrated policy should outline specific guidelines for drone operations, including safety protocols, registration requirements, and data handling practices. By addressing these critical areas, Nepal can create a robust legal framework that fosters innovation while safeguarding public interests.

# Centralized Authority

Establishing a dedicated UAV regulatory body would streamline oversight and enforcement of drone regulations. This centralized authority could be responsible for developing policies, issuing licenses, and ensuring compliance with safety standards. By consolidating regulatory functions under one agency, Nepal can enhance coordination among various stakeholders, reduce bureaucratic overlap and improve the overall effectiveness of drone governance.

#### Public Awareness Campaigns

Implementing public awareness campaigns is crucial for educating drone users about existing laws and safe operational practices. These campaigns should target both commercial operators and recreational users to ensure widespread understanding of regulatory obligations. Workshops, online resources, and community outreach programs can help raise awareness about the importance of compliance with safety protocols and the legal implications of drone misuse.

#### **Adopt International Standards**

Nepal should strive to incorporate international standards into its drone regulations by adopting best practices from leading markets. This includes implementing systems for real-time monitoring of drone operations, similar to India's Digital Sky Platform, which enhances safety through geofencing capabilities. Additionally, establishing rigorous operator certification programs will ensure that drone pilots are well-trained and knowledgeable about safe flying practices.

# Technological Investments

To support effective regulation and oversight of drone operations, Nepal must make technological investments in advanced tools for tracking and geo-fencing drones. Implementing technologies such as GPS tracking systems and automated geo-fencing solutions will enhance the ability to monitor drone activities in real-time. These tools can also facilitate compliance with no-fly zones and other operational restrictions, thereby improving overall airspace safety.

#### Conclusion

The growth of drone technology in Nepal presents both significant opportunities and challenges that necessitate a robust regulatory framework. The Privacy Act, 2075 (2018) serves as a foundational legal structure aimed at protecting personal privacy and data rights; however, it requires further expansion to address the specific operational needs associated with drone usage. Currently, the Act encompasses general provisions for data protection but lacks detailed regulations tailored to the unique aspects of UAV operations, such as real-time monitoring and operator accountability. Learning from global leaders in drone regulation, such as the United States and India, could provide valuable insights for Nepal. By integrating international standards and best practices, Nepal can enhance its regulatory environment to ensure safe and ethical drone usage. This includes establishing clearer guidelines for data collection, enhancing operator training and certification processes, and implementing effective monitoring systems. Ultimately, a comprehensive approach that incorporates these elements will not only protect individual rights but also facilitate the responsible development of drone technology in Nepal, fostering innovation while ensuring public safety and privacy.

#### Illicit Small Arms and Border Security: Enhancing Nepal's National Security



A Dinesh Kumar Khadka

#### Abstract

The availability of illegal small arms has brought public security threats to Nepal. Armed robbery, kidnapping, and gang-related crimes have all seen unprecedented rises in violent crime due to the easy availability of firearms. The Terai region, where arms trafficking is dominant, has recorded the use of illegal small arms in a number of incidents. Besides having porous borders with India and China, Nepal's adverse terrain makes it easier to smuggle illegal weapons. In addition to insufficient border management, socio-economic challenges such as poverty and unemployment are enabling arms trafficking. The increasing use of technology and online platforms has led to the emergence of more criminal networks that have presented greater obstacles for law enforcement to overcome. The aim of this paper, therefore, is to analyze the proliferation of illegal arms in Nepal and assess the border security vis-à-vis the perceived threat to national security. The paper shall offer recommendations to improve the national security strategy for Nepal to limit the proliferation of illegal small arms and strengthen border security.

**Keywords:** Small Arms, Border Security, Proliferation, Crime, National Security, Public Security

#### Introduction

The illegal trade of small arms has been seen as a threat to security in Nepal, considering its complex social dynamics and geopolitical location. Since the time of the Rana regime and different armed-related conflicts, there has been a fair amount of presence and flow of small arms in Nepal, according to the Small Arms Survey, 2016. According to Ghimire (2020), by the end of the ten-year armed conflict in 2006, estimates put the number of small arms

Lieutenant Colonel, Nepali Army.

circulating within the country at about 1.5 million, something that is indeed a formidable challenge in governance and public safety. The serious and far-reaching consequences for national security are attributed to the easy availability of firearms in the country.

According to the latest records of the Nepal Police (2021), there has been an alarming increase in armed robbery, gang fights, and domestic violence with small arms. This violence, therefore, has further psychological implications that make rebuilding trust and community resilience even more complicated in Terai areas, which were historically affected by arms trafficking. Armed groups and criminal gangs have used illegal firearms to challenge government activities. Besides that, some ideology-driven groups also threaten to introduce armed revolution, especially in the eastern and Terai regions. According to the International Crisis Group (2020), in the past, the emergence of political-ideology-based activist groups has brought unrest and instability in many parts of the country.

The geographic location of Nepal is such that the illegal arms trade goes through the unchecked border. It lies between India and China, has open borders, and hence is one of the major transit points for arms smuggling. Arms easily get smuggled into and through Nepal because of porous borders. Most of the weapons that end up in Nepal are smuggled through open borders (UNODC, 2020). This study unfolds the answer to the following questions and thus provides policymakers with tangible recommendations: What factors contribute to the illegal trafficking of small arms in Nepal? How does the spread of these weapons impact the security of the nation and the safety of the public?

# Historical Background of Arms Proliferation in Nepal

Historically, the proliferation of arms in Nepal represents a relationship entailing complex sociopolitical factors linked to the pre-20th-century practices of weaponry used for self-defense. Arms control was, in fact, an important means for sustaining power and suppressing opposition during the feudal era, particularly under the Rana regime of 1846-1951. The Ranas made sure that the arms and their handlers, the military forces, were loyal to them. Of course, this was meant to control any uprising and further set their control over the people. Until the overthrow of the Rana regime and the introduction of democratic reforms in the 1950s, there was a brief moment of comparative openness on issues of civilian access to arms. The shift was initially intended to empower the population, but it led to the mistaken proliferation of arms among various groups. The period between 1996 and 2006 was very

crucial in Nepal's history. During this time, the country experienced an armed conflict that transformed the nature of arms proliferation in the country. These armed conflicts used every means to acquire arms, such as seizing licensed arms from natives and illicit arms proliferation. Many factors influence the trafficking of small arms in Nepal, including, but not limited to, its geographical location and its socio-economic conditions. Its borders are relatively porous, enabling the traffickers to move illegal arms into and out of the country without detection (UNODC, 2020).

According to the Nepal Police (2021, there has been a large increase in firearm-related crimes such as armed robbery, violence, and domestic disputes with small arms. Now, with easy access to arms, criminal groups are committing acts of violence and deterring the public, especially contractors, businessmen, and high-profile personalities. This worrying trend is a problem for law enforcement agencies and state security. The growth of technology and the internet has opened up a whole new avenue for arms trafficking these days.

#### Illicit Small Arms Trade in Nepal

# An Overview of Present Trends in Illicit Arms Trade in Nepal

The illegal trade in small arms has been one of the issues in Nepal in recent years. The illegal weapons continued to go up since the end of the armed conflict in 2006, resulting from widespread smuggling of firearms into the country. Today, illicit arms trading not only poses threats to national security but also to the general security situation in the country. In 2018, the Nepal police reported that there has been a common presence of firearms within the nation, which has increased anxiety and fear among communities with shooting, kidnapping, and extortion incidents. The rise in small arms crime in urban areas is a worrying trend; several criminal acts have been on the rise, including small arms shootings and thefts, group violence, and even domestic conflicts with weapons. Apart from threats against the safety of ordinary people, such increases undermine public confidence in the work of law enforcement agencies and the government. Individuals feel increasingly vulnerable, with many stating that they have no control over their personal safety (Poudel 2021). One of the most visible trends currently within the trade in arms is the increasing sophistication of criminal trafficking networks. These networks are now even able to adapt and respond to the tactics employed by law enforcement agencies, rendering it much more difficult to curtail these systems. Weapons traffickers are now using more sophisticated methods to smuggle weapons into Nepal, including hidden compartments in vehicles and secret routes that avoid police checks. Increasing technology also helps; many traffickers now communicate and work through social networking sites and secure messaging apps (Ghimire, 2021), so that they can make deals more efficiently and with less secrecy. To further complicate things, there is also a lack of comprehensive laws and regulations with regard to arms control. Some firearms laws are in place at the moment, but resources and the prime focus on other key issues, such as poverty or unemployment, have largely impeded their execution.

# How Does Weak Border Management Contribute to Arms Trafficking?

Nepal is situated between India and China, having a porous border, particularly to the south. Firearm smugglers access Nepal since the borders are permeable and wide trade paths link these countries. A good number of illegal weapons are entering Nepal through open borders with India and China (UNODC, 2020). Indeed, many armed groups and insurgent movements in the northeast make India a place where small arms can be obtained with relative ease. Many of these weapons are believed to have been smuggled into Nepal and sold on the black market. This problem is compounded by the historical ties and shared ethnic backgrounds between communities on both sides of the border, which sometimes contribute to an increase in illegal activities (Ghosh 2019). As illegal trade between China and Nepal expands, the likelihood of smuggling arms becomes more likely. Both countries have attempted to increase security at the border but have not been able to implement effective ways of preventing arms trafficking. Border security protocols are weak since there is little monitoring and control at the border (Sharma, 2020).

# How Do Socio-Economic Factors Impact Small Arms Proliferation?

Nepal's socio-economic conditions favor the proliferation of illegal arms. Poverty, unemployment, as well as social inequality can lead to illegal activities. A large number of the youth may end up engaging in criminal activities for survival since they lack proper employment and education. Illegal arms trading may, therefore, come out as a quicker way of acquiring power and money in their societies (Poudel, 2021). A culture of fear and lasting distress is often shared by the communities that have been left traumatized by the arms-related violence. The glorification of violence can lead to increased crime and a persistent illicit supply of firearms. Good policy formulation and implementation are obstructed by the frequent shifts in policies, along with the lack of detailed research. In such a setting, the criminals do not face

significant consequences. Thus, law enforcement agencies find it rather challenging to oppose the illicit arms trade. A cycle of armed violence and insecurity is a trend that continues to drive the demand for the illicit small arms trade in Nepal, which is characterized by increased availability, involvement in trafficking networks, and open borders with neighboring countries.

# **Challenges in Border Security with Neighboring Countries**

#### Strategic Location of Nepal

Nepal is a landlocked country lying in the middle of the Himalayas, bordering India to the East, South, and West, while it borders China to the North. It is this very unique geographic position that makes Nepal strategically significant in South Asia. The country sits at the heart of trade, transportation, and cultural exchange between India and China. However, it is posing significant challenges to border security (Sharma 2020). The borders of Nepal, predominantly enclosed by India, stretch over a length of about 1,880 kilometers. While the northern part has a rugged topography with the Himalayas. There are Terai plains in the southern part that have easy access and better living conditions. The geographic variety in Nepal not only impacts the mobility of people and goods but also affects the security aspects (Ghimire, 2021). Nepal is currently at the intersection of major economic powers due to globalization and its ongoing impact on trade patterns.

#### Nepal's Internal Border Security Issues and Vulnerabilities

Although Nepal's borders are strategically important, there are several issues related to border management within the country itself. One major problem persists pertaining to insufficient infrastructure and a shortage of resources being utilized for border management. Border posts are marred by the lack of modern technology used for surveillance, proper roads, and proper staffing levels, especially in the most remote regions. Without adequate resources, security forces are unable to monitor cross-border movements and react promptly to illegal activities (South Asia Terrorism Portal, 2021). Borders have few personnel to operate, creating security gaps and often easing traffickers and smugglers to exploit.

According to the UNODC, the absence of a strict border control mechanism has led to a 'sharp rise in arms trafficking into Nepal, which presents 'serious threats to national security'. The difficulty arises in tackling arms trafficking because of the lack of a cohesive plan in terms of border security issues (Sharma 2020). The diverse geography also makes it particularly

difficult to secure Nepal's borders. The terrain is mountainous along the northern border with China, hindering the ability of security forces to patrol effectively. Because of the logistical constraints created by such high altitude and rugged terrain, a consistent security presence can hardly be maintained in those areas. In contrast to the other regions, the southern border with India may relatively assist both legal and illegal trade through easy movements. The traffickers often use geographical disparity that evades detection and use remote and hidden paths and covert routes to transport illegal imports (Poudel, 2021).

# Porous Borders Act Facilitates Arms Trafficking

The porous border, especially with India, is the cause of the complex issues of arms trafficking. Ease of access and movement of these borders make them an invaluable tool for illegal movements entering the country, as well as traffickers. As reported by the UNODC (2020), unchecked open borders are responsible for trading 80% of illegal arms into Nepal, where various arms dealers and criminal networks are active. Most people in border towns and villages travel on either side of their countries frequently for genuine purposes, which include trading with foreigners, visiting their relatives, and making cultural exchanges. The frequent movement creates an environment where traffickers camouflage themselves with the everyday routine. Traders crossing the borders often can carry weapons or illegal products that curtail law enforcement agencies unknowingly (Ghosh & 2019).

Historical and cultural ties between communities on either side of the border impact the arms control efforts of the security forces. Many ethnic and cultural similarities in border areas make it challenging for residents to report suspicious activities. The social and cultural ties are often manipulated by the arms traffickers, knowing that local people may view community loyalty as more important than reporting crimes. People can feel complicit in such an environment, making it more difficult for law enforcement agencies to collect intelligence and take effective actions against arms trafficking (Ghimire, 2021). Besides conventional smuggling routes, modern technology has also facilitated arms trafficking in Nepal. Along with easy access to the internet and other social media platforms, traffickers have been presented with modern ways of communication and coordination. Online marketplaces can enable the buying and selling of illegal firearms, connecting traffickers with potential buyers across borders.

Besides, the growth in digital currencies and cryptocurrencies has enabled traffickers to conduct their transactions without being traced. This transition towards digital platforms added fresh layers of complexity to track illicit arms sales and allowed the trafficker to operate anonymously (International Crisis Group, 2020). The sophistication of these networks points out the dire need for modernization of approaches to border security and arms trafficking. The geographical, political, and social factors have made border security a complex challenge between Nepal-India and China for a long period. Inadequate border management and weak law enforcement mechanisms, coupled with cultural complexity, provide a congenial environment for arms trafficking.

Such challenges require a multi-dimensional approach related to strengthening border infrastructure, enhancing the capacity of security forces, and building cooperation with neighbors. It should thus be holistic and well-transited in nature. The Nepalese government should be more concerned with the protection of the country's borders and national security regarding the growing threat of illicit trafficking of small arms.

# Impact of Illicit Small Arms on National Security

# The Rise of Crime has a Detrimental Effect on Public Safety

Nepal's illicit small arms trade has caused a significant rise in violent crime, leading to serious security concerns. The number of crimes committed with small arms has significantly increased in recent years, as reported by the Nepal Police (2021). Crimes related to armed theft, small arms fire, and organized crimes are now becoming more common and creating more terror among the people, basically in the Terai and cities. The use of firearms and threats as means of getting away has become more common in urban areas, with criminals involved in many types of armed robberies, kidnapping, and extortion. The rise in armed incidents has made people feel that their neighborhoods, communities, and even workplaces are no longer safe. When the safety of the public is compromised, law enforcement agencies lose their credibility, and decreased community trust in law enforcement agencies can negatively affect the ability of the community to cooperate with the police and combat crime effectively (Poudel, 2021). The economic implications of armed-related crime can reach farther than just concerns about physical safety. Businesses may be hesitant to invest in certain places because there is a possibility that their goods will be stolen, or some workers might be attacked (Ghimire 2021). When businesses shut down or shift away, employment opportunities are not abundant

anymore. This decline in the economy can worsen social problems, resulting in increased crime and instability. Additionally, there is a significant psychological impact of growing violence. The trauma of crime often leaves victims with psychological scars, anxiety, and depression. People who face or see armed violence can be frightened, leading to a generalized sense of unease and collective trauma has the potential to weaken social bonds (Sharma, 2020).

#### Societal Implications and Community Resilience

Illegal ownership of small arms in Nepalese society has many social implications. Violence with arms can devastate the psychological strength of a community. Trauma caused by violence may affect individuals or families, enhancing anxiety, fear, or suspicion within the community (Poudel, 2021). The more violence is a norm in society, the more fear can be instilled in the people, therefore provoking them to use weapons as needed to defend themselves. People believe that weapons instill a sense of security. Consequently, the availability of arms can hamper the process of the development of solidarity and resilience among families and societies where past conflicts cannot be undone (Ghimire, 2021). The possibility of domestic violence is very common with the availability of illegal firearms. The fact that firearms are carried into domestic conflicts can lead to tragic consequences and additional trauma to the family and society. This can prevent peaceful societies from developing and building positive relationships within the community. These challenges have been and continue to be faced by Nepal's communities, but the communities stay resilient.

Arms-controlling campaigns and community dialogue can create trust and work to stem the causes of armed violence, for instance. Working together within the community, these options reduce the number of illegal weapons and make that community a safer place (Sharma, 2020). Moreover, education and awareness of the risks of small arms can help build community resilience. Increasing armed-related crime threatens security, and the spread of weapons threatens political stability and governance. Arms proliferation is condemned for bringing devastating social consequences upon the resilience of its people, for which Nepal must seek comprehensive measures.

#### **Current Policies on Arms Proliferation and Border Security**

The government of Nepal has now become increasingly aware of the risks associated with illegal arms trading. To this effect, the government has formed policies and legal frameworks that regulate arms proliferation and border security. Furthermore, the legislation

concerning firearms in Nepal was established under the Arms Act of 1961. This act lays down the categories of weapons permitted, regulations for legal ownership of small arms, and even punishes cases related to illicit possession and trafficking. Though it originated in an environment of hunting and self-defense, the relevance of this act has grown with the growing violence associated with illicit arms Government of Nepal, 1961. Besides the Arms Act, the National Security Policy of Nepal has emphasized how the country's dividing lines need protection from illicit arms trafficking. The policy is aware of Nepal's geographical conditions, being positioned between the two nations, India and China, which affects the movement to and from Afghanistan. The policy highlights the need for cooperation with neighboring countries to enhance border security and prevent arms trade, emphasizing the importance of a coordinated national security approach (Ministry of Home Affairs, 2016). Also, Nepal participates in international mechanisms that address the problem of small arms proliferation. It has signed the United Nations Program of Action on Small Arms and Light Weapons, which consolidates efforts to prevent and eradicate illicit arms trafficking worldwide. The participation of Nepal through such an exercise proves that Nepal is committed to bringing its national policies closer to those from international norms and best practices (UN, 2001).

#### **Analysis of Inadequacies in Present Strategies and Framework**

Although legal frameworks and policies are in place, Nepal is still plagued by alarming inadequacies in dealing with arms proliferation and border security. With critical resources, training, and personnel deficiencies, many local law enforcement agencies are confronting the challenge of effectively monitoring and regulating illegal arms trading. A short report, Small Arms Survey 2016, discovered that illegal arms possession is still pervasive in the countryside, and enforcement is significantly weak. The weak coordination among various law enforcement agencies is also a serious problem. Intelligence from border security units may be ignored, which causes a gap in surveillance and control (Ghimire, 2021). Moreover, most of the existing laws generally lack rigorous mechanisms of data collection and analysis that might determine weapons sales. In order to develop effective strategies, policymakers need to have reliable and accurate data on the determination of the extent of the problem. Without a systematic collection of data, it is difficult to formulate policies based on evidence; thus, poor adaptations to new threats may result (Sharma, 2020). Apart from that, another major weakness is the tendency to adopt counteractive actions more than proactive methods. The greater part of the existing policy framework is oriented toward responding to incidents of violence rather than preventing

such incidents through community engagement and education. Most of the national security strategies are not dedicated to addressing socio-economic issues driving arms proliferation, which involve poverty, unemployment, and a lack of education. National security planning must consider the role of socio-economic development in addressing the root causes of crime and violence.

#### Some Recommendations for Improving National Security Policies

Various suggestions will be made towards further reinforcing Nepal's strategies on national security in order to meet the challenges posed by illicit small arms and improve border security.

- Capacity Building in Law Enforcement: The Government needs to spend more resources on training and equipping the law enforcement agencies to monitor and restrict arms trafficking at all costs. Apart from giving primary support, special training programs are also assigned that outline the details of arms trafficking. Within this framework, the government could strengthen the capacity of law enforcement agencies in Nepal for effective control over illegal arms trading.
- Establish an Effective Data Collection and Analysis System on the Proliferation of Arms: This is very critical. Such a system needs to involve more than just the police force, academic institutions, and civil society organizations. The data shall be used by the policymakers to establish trends and patterns, assess the effectiveness of the measures already taken, and inform future actions.
- The Proactive Approach is the Key: Embracing and practicing active measures are long-term solutions. This involves the engagement of communities in dialogues on the risks of illegal weapons, and it advocates for a non-violent society. Education campaigns can be designed to sensitize people to the effects of arms proliferation on public safety and community health.
- Socio-economic Dynamics: The programs of socio-economic development embedded within the national security process will reduce the root causes of arms proliferation. Job creation, vocational education, and sponsored school attendance are all ways poverty can be curtailed to help curb illegal weapons trade. Moreover, with the help of local communities through development projects, one is very confident in ownership and responsibility; hence, safer environments.

- Improve Regional Cooperation: Good fence security will again require cooperation with immediate neighbors. The start of joint patrols, intelligence sharing, and training programs with India and China is what is required in the case of Nepal. Please read the details. Through regional cooperation, we build the collective capacity to combat cross-border arms trafficking and foster stability.
- Engage Civil Society in the Initiatives on Preventing Arms Proliferation: These
  organizations need government involvement in policy discussions and
  implementation processes. Drawing on expert experience and the grassroots
  network of civil society can help establish approaches that are more effective and
  community-oriented for Nepal to overcome arms trafficking.

#### Conclusion

The respective geographical location and inaccessibility of Nepal from India, as well as its border with China, have been posing a big challenge for the security of the borders and the prevention of illicit arms trade. The difficult north with rugged topography and the wide, open southern border make consistent surveillance by security forces difficult; hence, they are easy targets for traffickers. Insufficient infrastructure, resources and coordinated approaches only serve to intensify the problem, which is now a significant threat to national security. A multifaceted approach is necessary to address these problems, including improving border control, modernizing security forces, promoting regional cooperation, and engaging communities to prevent arms trafficking more effectively and safeguard national security.

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# Integrated Security Management: A Holistic Approach to Safeguarding the Nation



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#### Abstract

Traditionally, the theory of classical realism mainly emphasized military power as a major strength of a nation to maintain a strong national defense. During the period of the 1950s, the concept of human security began to emerge as a prominent national objective of the nations, shifting focus toward people's welfare, peace and national development. To establish enduring peace, security organizations should work collectively, joining hands with concerned stakeholders. In Nepal, national security is managed by government security institutions, responsible for tackling both internal and external threats. Integrated Security Management (ISM) promotes coordination among these institutions without merging their roles and responsibilities, ensuring effective and unified responses. It also takes support from provincial and local governments, including other institutions, to handle crime, disasters, and border security. Its success relies on advanced technology, strengthened infrastructure, and skilled human resources that make ISM more effective and result-oriented, thereby ensuring a safer, secure and peaceful nation. ISM intends to strengthen collectiveness, sharing information, and coordinating action among security agencies. It promotes an integrated approach to national security, which eloquently addresses some key areas like border control, law enforcement, counter-intelligence, crime control and cyber security. The ISM modality enhances the ability of all security institutions to respond to emerging threats,

**Key words:** Integrated security management, Classical realism, Human security, Border security, Cross-border crimes, Natural disasters, Nepali Army, Nepal Police, Armed Police Force, Nepal,

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#### Introduction

Over the last couple of decades, particularly after the end of the Cold War, the concept of security has moved beyond the traditional definition of protection of a state's territorial integrity and national sovereignty and broadened to include political, economic, social and environmental dimensions. (Bhattarai, 2010, p.21)

There were times when the concept of 'classical realism' actively influenced national security and international relations. The primary focus of this theory was on strengthening the nation by building military power. This concept was driven by the traditional approach of 'might is right', influenced by both the visible and hidden policies of States seeking to expand their territories through military power. However, things began to change after the 1950s, when the human security approach emerged to develop alongside the military security approach in international relations. During this period, the concept of neoliberalism and constructivism began to address human security, which was subsequently included in policy papers, particularly from the governments in the Global South.

While focusing on human security, it encompasses not only an individual's physical safety and security but also the broader social, economic, political, and national development activities that are directly and indirectly connected to the people of the country. This means making the country more robust, not only from an economic standpoint but also in terms of achieving the national goals enshrined in the Constitution. The primary goal of the country lies in holistic development, for which lasting peace is essential. If peace and tranquility are interrupted, no form of development—whether physical, spiritual, or technological—can take place. Without peace, socio-economic progress cannot take proper shape. Nepal has experienced the harsh realities and bitter consequences of a ten-year-long insurgency and violence. This is the reason that, from the very beginning of nation-state building, security became a prominent part of governance.

Now, two questions arise: What is security, and security for whom?

As we generally understand, security means safety. As a matter of fact, security refers to protection, while safety pertains to the condition of being free from harm. Though security and safety have distinct meanings depending on the context, they are often seen as two sides of the same coin.

Candidly speaking, security does not have a universally accepted definition due to its subjective nature and varying perceptions. Security means being free from any kind of threat or fear. Threat and fear—these two words have distinct areas of influence: physical and psychological. Threat and fear are always connected to an individual's personal growth, and, at the same time, they are also linked to the growth of the country. Growth requires a conducive environment of peace, and peace, in turn, relies on effective security. Without a strong foundation of security, it becomes difficult to make peace workable and without peace, no growth flourishes. Thus, 'very broadly speaking, security is a state of 'freedom from harm and freedom from fear, or freedom from want'. (Clarke, *et al*,2022, p.25). Security is required not only for the protection of people living within a country but also for the protection of national sovereignty, the safeguarding of territorial integrity, and the promotion of political institutions, including spiritual practices, national economy and more.

To ensure strong security in the country, the government establishes two types of security institutions: those responsible for internal security and those responsible for national defense. Together, internal security and national defense are commonly referred to as national security. National security does not only mean protecting the country from external aggression but also maintaining law and order within the country, safeguarding it from any kind of threat that emerges inside its territory.

Keeping this reality in mind, the Government of Nepal has established four distinct security organizations: Nepali Army, Nepal Police, Armed Police Force Nepal, and the National Investigation Department. Each organization has different roles and responsibilities, which are defined and accredited through separate Acts. These security organizations play a distinct role. Nepali Army focuses on national defense and external threats, while the Nepal Police and Armed Police Force address law enforcement and internal security concerns. The National Investigation Department contributes by gathering intelligence on any threats to national security. These institutions work together to ensure the country's security by addressing both internal and external threats, maintaining law and order, and protecting national sovereignty.

#### **Integrated Security Management (ISM)**

Quite often, the two terms 'integrated' and 'unified' are used interchangeably in security studies, despite having distinct meanings depending on the perspective. The term 'integrated'

refers to different agencies, organizations, or systems being combined to work together, with each maintaining its own separate identity, duties, and responsibilities. The integrated approach emphasizes collaborative action, where the agencies connect with one another to achieve effective results. Contrary to the word integrated, unified refers to the action of working together to ensure that the desired goal is achieved within a specified time frame. In this case, the actions or functions are carried out as a single entity, rather than being divided into separate responsibilities. The key difference is that agencies, organizations, or systems are not merely working together—they are considered as part of a single, cohesive whole. In a nutshell, integration means combining things to work together, while unity means bringing things together to form one unified entity. Here, we will discuss the term 'integrated' in the context of an integrated approach among the four security organizations, focusing on managing security-related activities in an integrated way rather than a unified manner.

As stated earlier, the four security organizations have their own duties and responsibilities, which they are believed to accomplish sincerely and faithfully. There is no doubt that they are performing their duties with great valor and dignity, as history validates. Whether it is the *Khampa*—rebels' issue, natural disasters, the Maoist conflict, or crime control, these security organizations have proven their strong commitment to the nation, the people, and the Constitution in particular. All these matters of national priority demand perfection in management and the establishment of security, from the homes of common citizens to the highest levels of Government.

To achieve this, cooperation and coordination among all four security organizations are essential. The coordination among all four national security agencies fills an important gap in national security decision-making, enabling strategic thinking and long-term policy planning as well as coordinating and implementing security policies. (Dave,2022, p.90)

It is a well-known truth that no national goal is achieved working in isolation, which requires a coordinated approach in managing the security-related issues. Because of the growing importance of teamwork amongst the security organizations, the concept of ISM has emerged.

In the European Union and the Schengen area, security initiatives are the leading examples of how the EU has integrated its efforts among all 27-member states and 22 members

of the Schengen area in operating border security and controlling organized crime through unified actions.

Intelligence sharing among the USA, the UK, Canada, Australia, and New Zealand, known as the 'Five Eyes,' is one of the best examples of interstate integrated security management. Similarly, regarding cybersecurity infrastructure, Israel and Estonia are known for their advanced cybersecurity frameworks, developed to collectively combat the threats posed to their national security (Singh, 2022).

In Nepal's context, a vivid example of integrated security management was observed during disasters, like the COVID-19 pandemic. Nepal integrated its health services with security organizations, primarily the Nepali Army, Nepal Police, and Armed Police Force, to manage and monitor health threats, enforce quarantine procedures, and impose travel restrictions. These security organizations collaborated with health-related offices and local governments to enforce laws, implement safety measures, track outbreaks, and secure the borders against the spread of the virus. This illustrates that when the implementation of given responsibilities is carried out with a coordinated and integrated approach, the desired goal is achieved.

Additionally, effective coordination and real-time communication among these agencies enhance their institutional efficiency to respond to emerging challenges, especially in controlling organized crime, terrorism, cross-border crimes, civil riots, natural disasters and external threats. In this context, joint training exercises and collaborative efforts can strengthen their operational capabilities and foster a unified security strategy. Without building an integrated security mechanism, an operational gap may emerge, leading to the ineffectiveness of actions taken to control crime and establish peace. ISM is a security strategy that unites all relevant security organizations into an interconnected team. Such a team focuses on analyzing emerging security threats and developing strategies to neutralize these threats in advance.

Based on the above-mentioned analysis, it is the strategic combination of different security organizations into one centralized platform. This approach ensures that all security agencies work together to achieve the goals outlined in the National Security Policy. ISM involves not only with security agencies, but also other government offices, which contribute directly or indirectly to the effort as and when necessary. For example, the Armed Police Force, Nepal, which bears a significant responsibility as per the Act, must maintain constant vigilance

and take effective actions to ensure border security. Cross-border crimes, tampering with border pillars, smuggling in borderland and terrorist activities are some of the key unlawful activities that can occur in border regions. These activities must be addressed immediately to prevent further criminal actions and maintain national security. To effectively control such crimes, a coordinated approach is a must to involve every relevant security organization in the endeavor to neutralize crimes and to bring the criminals within the net of the legal system. Thus, various entities, including related line Ministries, departments, district administration offices, immigration offices, customs, local governments (municipalities and village *palikas*), and local communities, each play equally important roles in ensuring the security of the borders.

Local governments, for instance, are crucial in fostering cooperation with border security forces, while local communities can serve as the eyes and ears on the ground for reporting suspicious activities. A unified effort across all levels of government and society is crucial to creating a secure and stable border environment. District-level, Province-level, and Central-level Security Committees have been established to manage coordination and make appropriate decisions as needed within the three tiers of Nepal's federal government. Despite their legal existence, there is a widespread perception that these committees must be more effective in security analysis and strategy formulation at their respective levels.

# Components of ISM

Integrated security management, however, does not focus on merging the internal responsibilities of security organizations; rather, it emphasizes achieving national objectives through coordinated actions and approaches. Each security organization has its own specific duties and responsibilities, which must be fulfilled with support from other agencies. There are several key areas that need to be protected and enhanced, known as the components of ISM, which are highlighted below.

One of the key components is technology-related matters, which can be examined from two critical perspectives: the effective utilization of technology and the protection of technology. At present, Nepal is moving toward establishing effective and smart digital governance, which requires the use of advanced technologies for better outcomes. Nepali security organizations have not fully embraced modern technologies due to resource constraints. The reliance on traditional and outdated technical equipment has hindered their

efforts to combat crimes that pose significant threats to security. The national security policy, as the overarching policy for all sectoral institutions, has prioritized maintaining both internal and external security, ensuring that threats are addressed in a timely manner. To prioritize security means providing an adequate budget to security agencies. Allocating the necessary budget for security means establishing peace in the country. As long as there is peace, no threat to national development efforts occurs. This reality should be acknowledged by the policymakers. Here, the technological aspect refers to the need for digital security tools to be integrated into establishing 'good security governance.' In this context, maintaining security through Artificial Intelligence (AI) is crucial. To protect against cybercrimes, AI can play a pivotal role in detecting, preventing, and mitigating such offenses in real-time. Additionally, another key element of using technology is ensuring the protection of the technology itself that is being utilized by the government. Technology protection means safeguarding the systems from both internal and external threats, preventing unauthorized access to the critical infrastructure used in daily governmental operations. In the past, we have seen several instances where government websites were hacked, exposing vulnerabilities that could have been prevented with better security measures. As cyber threats evolve, it becomes increasingly important to implement robust digital defenses to ensure the confidentiality, integrity, and availability of government systems and data.

Another component is safeguarding physical resources and assets, which refers to the protection of sensitive and critical infrastructure, such as VVIP offices, residential buildings, data and communication centers, high dams, strategic bridges, and more, from unauthorized access and natural disasters. Measures like strong locks, surveillance cameras, and controlled access points are essential to ensuring robust protection. The current access arrangements for Singha Darbar and other vital establishments highlight security vulnerabilities that require greater attention and vigilance. Another aspect of it involves enhancing the security organizations' effectiveness by providing adequate office spaces at all levels, from central to local, in order to create a comfortable working environment that can motivate security personnel.

The human resource aspect is the third component of ISM, which focuses on developing the skills, capabilities, and efficiency of security personnel through professional training. This kind of training is essential at every step of maintaining the security and safety of both the people and the nation. Such training and education are crucial in the context of the changing

national socio-economic and political landscape. Not only do these areas require attention, but security personnel also need to stay updated with technological advancements, acquiring the proper knowledge and techniques to use these technologies. There should be no gap between the advanced technologies and their practical implementation in Nepal's context. We have seen numerous examples of such gaps in the past. Security personnel must also understand security policies, procedures, and matters of national interest. Regular training sessions can help them identify potential threats, such as phishing attacks, and promote a culture of security within the organization.

For effective management of information security, it is imperative to consider technological, physical, and human resource aspects together. A holistic approach ensures comprehensive protection against all types of threats. These threats can be categorized into two major areas: protection from intentional attacks (security) and safety from unintentional and unpredictable incidents (such as natural disasters and other man-made accidents). These areas can further be divided into internal and external security.

#### Actors of ISM

In an integrated management system, there are policymakers, major actors who enforce the laws, actors with facilitative roles, and supportive partners as needed. The Office of the Prime Minister and Council of Ministers (OPMCM), the Ministry of Defense, and the Ministry of Home Affairs are the key policymakers, providing guiding principles and directions. The OPMCM makes key policies, coordinates, gives direction, and leads security mobilization to make it effective

The Nepali Army (NA) operates under the Ministry of Defense, while the Ministry of Home Affairs is responsible for the mobilization and coordination of the Nepal Police (NP) and the Armed Police Force, Nepal (APF-N). Similarly, the NA, NP, APF-N, and the National Investigation Department (NID) are key actors in the ISM system. Each of these is an independent government security institution with distinct duties, roles, and responsibilities as defined by its respective act.

The Immigration Department, Survey Department, District Administration Office (DAO), and Revenue and Customs Offices primarily play roles in facilitating ISM activities to ensure territorial security and maintain law and order. To achieve effective results, ISM requires support from local governments, citizens, and the media as a whole.

The following diagram 1 shows the relationships of security organizations with policy makers, facilitators and supporters.

Diagram-1



In addition to these vertical and horizontal relationships between and among the concerned government entities, the responsibilities and duties of the major actors are distinctly separate. However, to achieve the set goals, they work together in a holistic approach. They share ideas, technical knowledge, real-time information, experiences, best and worst practices, and engage in skill development activities to accomplish their mandated roles with efficiency and precision.

The below-mentioned Diagram 2 shows the relations among these four security agencies.

Diagram- 2



# Perspective of ISM

In Nepali bureaucracy, an environment of information sharing with authorized entities is not commonly practiced. Working in isolation and sometimes concealing information makes the situation vulnerable. This is a kind of individualistic mindset that stems from a self-serving psychology. Individuals who withhold information often do so to present themselves as more competent and indispensable in the eyes of their superiors. In situations where the organization lacks institutional memory, these individuals position themselves as the gatekeepers of critical knowledge. As a result, they gain undue influence and are often regarded as more valuable assets to the organization by senior officials, including organizational chiefs, secretaries, and ministers of various ministries. This type of behavior undermines organizational efficiency and stifles teamwork and ultimately hinders the institution's growth and effectiveness.

The ISM breaks the isolated 'working style' and 'culture' in the security forces, if any. The reason is that the main purpose of the ISM is to work in collaboration, share information, and cooperate with one another. The ISM operates under the following core perspectives.

Law enforcement, border security, crime control, digital security, and drug control are the major functions at present. If these functions are accomplished in an integrated manner, national security is maintained in an effective manner. As we know, security organizations are mandated to uphold and enforce the law, ensuring the safety and well-being of society. However, crime persists, often fueled by anti-social elements that exploit vulnerabilities within the communities. Various factors contribute to criminal activities across different sectors, including socio-economic disparities, lack of education and awareness, and insufficient community engagement.

Preventing and controlling individual or organized crimes poses a significant challenge for security forces, particularly to the Nepal Police and APF-N, due to their front-line role in maintaining law and order in society. These agencies must adopt a multifaceted approach, combining effective law enforcement with community outreach and education programs. In the past, role overlapping and task duplication sometimes created goal confusion between these two security organizations due to the absence of a proper coordination mechanism. For example, in the case of seizing the unauthorized goods being smuggled across the international border, there was some kind of misunderstanding between two security authorities representing separate security organizations.

According to the APF Act, border security is one of the major responsibilities, as it plays a crucial role in safeguarding the nation's sovereignty and integrity. Effective border management is vital not only for preventing illegal immigration and trafficking but also for combating cross-border crime and terrorism. The APF-N applies and practices various strategies to secure the borders, including regular patrolling, surveillance, and the establishment of checkpoints.

Nepal is lagging behind in effectively upholding counter-intelligence, a critical function of its intelligence agency, mainly the National Investigation Department (NID). The lack of robust counter-intelligence capabilities hampers the nation's ability to detect and neutralize threats, including espionage and organized crime. Strengthening these agencies through comprehensive training, modern technological resources, and intelligence-sharing frameworks is essential for enhancing national security. Furthermore, fostering a culture of collaboration between different intelligence bodies and law enforcement agencies can lead to a more cohesive approach in addressing security challenges. By prioritizing counter-intelligence, Nepal can not only protect its national interests but also build a stronger framework for responding to both internal and external threats.

Intelligence is probably the least understood and the most misrepresented of the professions. (Dulles,1965, p.45) Predicting threats from potential dangers is a complex task for any country. It requires access to confidential internal information about individuals, groups, or states whose actions are considered threatening.

Cybersecurity (Digital/Cloud Security) is rapidly emerging as a critical concern from a national security perspective, and incidents like the 'Pager Blast' in September 2024 in Lebanon serve as stark reminders of the looming threats. This event highlights the vulnerabilities that nations face in an increasingly digital landscape, where malicious actors can exploit weaknesses for devastating effects.

Based on the above elaboration, we can identify two main perspectives of the ISM: the intra-security organization perspective and the inter-security organization perspective

The intra-security organization perspective lies within security organizations. When discussing the internal dynamics of security organizations, we focus on how various components—such as human resources, financial assets, and technology—are utilized in an integrated manner to achieve organizational goals and mission. Understanding these internal factors is crucial for fostering a cohesive and efficient operational environment.

The Inter-security organization viewpoint works among security organizations and other concerned agencies. Moreover, the collaboration among four security organizations plays a vital role in enhancing overall effectiveness. By sharing intelligence, resources, and best practices, these organizations can create a more unified front against threats. This collaborative approach not only strengthens operational capabilities but also fosters innovation in security practices. Collaborative efforts can achieve success through the following activities.

- Information Sharing
- Integrated or unified Command Structure
- Joint Training Exercises
- Resource Optimization (Resource Pooling)
- Cross-Agency Policies
- Leveraging Technology
- Crisis Management Planning

#### **Challenges of ISM in Nepal**

ISM is a core requirement in today's evolving security dynamics. It emphasizes not working in isolation, but rather fostering teamwork and applying best practices to achieve better results with minimal cost and resources. The following areas represent key challenges that need to be addressed with careful attention.

- Gap between Security and Media
- Risk Assessment and Threat Management
- Resilience to Disinformation and Misinformation
- Weak Surveillance
- Weak Counter-Intelligence
- Identifying and Assessing Security Risks
- Threat Detection and Prevention Strategies
- Technology Gap
- Resource Gap

#### Conclusion

ISM plays a crucial role in the effective functioning of security organizations. The present-day security landscape is more complex, with evolving threats from both internal and external dynamics. How to cope with these challenges is a matter of strategic discourse and rigorous analysis, as crises can emerge unpredictably, at any time and in any place. The prime objective of Integrated Security Management is to foster unified team-based responses, which eliminate fragmented approaches to security management from central to local levels. If ISM is brought into practice, it can provide a cohesive framework to navigate the threats with greater agility. It is not only a platform for sharing information and collaborating on security-related matters, but also a strategic imperative. It is imperatively necessary that new innovations in the concerned areas of national security should be prioritized and operationalized. For new innovation in this sector, ISM can be an appropriate mechanism to achieve the national goals outlined in the national security policy.

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# Cybersecurity Issues in Nepal's Digital Payment System and the Role of Regulatory Bodies



™ Namuna Joshi

#### Abstract

The article explores the cybersecurity challenges faced by Nepal's digital payment system and the crucial role of regulatory authorities in addressing these issues. Digital payments have gained significant popularity in Nepal, especially following the COVID-19 pandemic, which accelerated the shift from cash to electronic transactions using digital modes like mobile banking, internet banking, quick response and card transactions. While this growth brings convenience and financial inclusion, it also exposes the system to a range of cybersecurity threats, such as phishing attacks, data breaches, social engineering, malware and hacking. These threats jeopardize user data and financial security, contributing to an alarming increase in cybercrime cases in Nepal. The article discusses various high-profile cyberattacks, such as hacking incidents targeting government websites, banks, and payment systems, illustrating the vulnerability of Nepal's digital infrastructure. The lack of cybersecurity awareness among users and inadequate security measures in some payment platforms exacerbate the risk. Regulatory authorities, such as Nepal Police, Nepal Rastra Bank, and the Ministry of Communication and Information Technology, have been working to mitigate these risks by establishing legal frameworks and monitoring compliance. Additionally, regulatory bodies are urged to enhance monitoring, incident response, and collaboration with international organizations to strengthen the resilience of Nepal's digital payment systems. The article concludes that a comprehensive legal framework for cybersecurity, coupled with proactive regulatory measures, is essential to safeguard the digital payment ecosystem in Nepal, ensuring its security, efficiency, and trustworthiness for users.

Keywords: Cybersecurity, digital payment system, cyberattack, security, cybercrime, system

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#### Introduction

A digital payment system, also called an electronic/online payment system, is an online platform or system where people can make electronic payments, without any physical cash or money, with the use of digital gadgets such as computers, mobile phones, or other smart devices. The system does not involve the physical transfer of cash. Digital payments can be made via a variety of payment modes such as mobile banking, internet banking, debit cards, credit cards, quick response (QR), etc. Digital payment system allows customers to make an electronic fund transfer between peers or make an online purchase from the comfort of their home or office with just a few clicks. Fund transfer through this system is fast, quick, easy and convenient.

The digital payment ecosystem has drastically grown all over the world. The COVID-19 pandemic has spurred financial inclusion, driving a large increase in digital payments amid the global expansion of formal financial services. (World Bank, 2022). The pandemic has also led to an increased use of digital payments. In low and middle-income economies (excluding China), over 40% of adults who made merchant in-store or online payments using a card, phone, or the internet did so for the first time since the start of the pandemic. (World Bank, 2022). The use of online payment systems has also grown rapidly in Nepal. The rapid growth in the digital payment system of Nepal has been fueled by the COVID-19 pandemic. Along with the development of digital infrastructures and digital platforms, the majority of people have switched from the offline mode of cash payments to the digital mode of payment. The use of digital tools and platforms has immensely grown since the pandemic. People are used to using mobile banking platforms and scanning QR codes for payment in merchant outlets.

While digital payment system has several benefits, and the adoption rate of online payment systems has dramatically increased, the system is prone to cybersecurity attacks and challenges. With the rapid global development of information and communication technology and its increasing use among the general public, cybercrime has become a global and complex issue. Nepal is also facing such challenges. Cybersecurity issues concern data loss and the data security of millions of customers.

#### Cybersecurity Issues in Nepal's Digital Payment System

The growing use of digital payment systems has made people more vulnerable to cyberattacks. Nepal's digital payment system is prone to various cybersecurity threats. Some of the common cybersecurity threats observed in the digital payment system of Nepal have been explained below.

#### Phishing Attack

Phishing is one of the most common types of cybersecurity attacks in Nepal's digital payment systems. Cybercriminals often use fake websites, false emails, or SMS messages to trick users into revealing their login credentials or other sensitive information. Customers may unknowingly provide their login credentials to fraudsters, allowing them to steal money from the bank accounts of victims.

Example: Sending a fake email to a customer claiming to be a trusted source and asking them to click a link and log in to verify their account. Another similar attack is social engineering, where attackers manipulate users into revealing their confidential data and information to ultimately misuse their data.

#### Social Engineering

Another similar type of cybersecurity attack used mostly in Nepal is social engineering. Under social engineering, attackers manipulate users into revealing their confidential data and information to ultimately misuse their data. This could include impersonating bank personnel, staff of payment system providers, etc., to trick users into divulging login credentials or personal data.

#### Hacking

Hacking is a form of cyber-attack where the attacker, known as the hacker, gains unauthorized access to a computer system, which can result in theft of personal information (financial as well as non-financial information) of the victim.

# Denial-of-Service (DoS) and Distributed Denial-of-Service (DDoS) Attacks

Under this attack, cyber criminals flood a server or network with excessive requests, overwhelming it and causing a service outage. This can render digital payment systems

inaccessible for legitimate users. Examples include a large-scale DDoS attack targeting an online payment gateway, causing users to be unable to complete transactions.

#### Data Breaches and Privacy Risks

One of the most significant concerns in the digital payment systems of Nepal is the risk of data breaches. In Nepal, many users are not fully aware of the importance of safeguarding their personal information when using digital payment platforms. Weak security practices, such as reusing passwords or using unsecured networks, make users vulnerable to cyberattacks. Hackers may exploit vulnerabilities to steal sensitive financial information, such as bank account details, credit card numbers, and personal identification information.

#### Malware and Ransomware

Malware, particularly ransomware, is another threat to digital payment systems. Cybercriminals use malicious software to infect users' devices, which mostly involves locking them out of their accounts or encrypting their data until a ransom is paid. Many digital payment users in Nepal have not installed a proper security system on their gadgets or devices, which makes them vulnerable to these types of cyberattacks. Examples include a user unknowingly downloading an infected application that tracks the user's financial activity.

#### Lack of Awareness

Lack of awareness is another important cybersecurity issue in the context of Nepal. A significant portion of the Nepali population remains unaware of basic cybersecurity practices. This includes not recognizing phishing attempts, failing to use strong passwords, or neglecting to update devices and apps regularly. The lack of cybersecurity awareness among users exacerbates the risks, making it easier for cybercriminals to exploit vulnerable individuals.

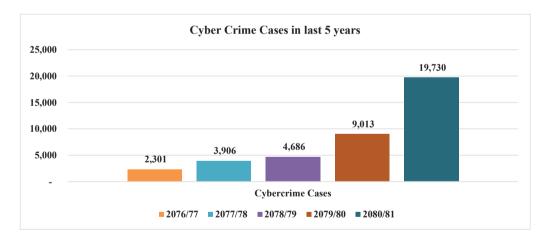
#### Inadequate Security Measures in Payment Platforms

Many payment platforms, particularly smaller or newer ones, may not invest sufficiently in robust cybersecurity infrastructure. This includes using outdated encryption standards, not regularly updating systems, or failing to detect fraudulent activity in a timely manner. These weaknesses open the door for cyberattacks and financial theft.

In order to address the increased cybersecurity issues, both customers and digital service providers have to take adequate cybersecurity measures. On the customer side, this may include maintaining proper access controls, using strong and non-repetitive passwords, keeping login credentials confidential, not sharing one-time passwords (OTP) with anyone, installing anti-virus software on gadgets, and regularly monitoring bank accounts to identify any unauthorized transactions. Digital service providers shall also use Secure Socket Layer (SSL) protocol, proper network security and password security, conduct regular periodic electronic audit of the digital system, and maintain proper physical security and access controls

## **Cybercrime Cases in Nepal**

Nepal ranks 109<sup>th</sup> out of 160 countries on the National Cyber Security Index, and 94<sup>th</sup> on the Global Cyber Security Index. Nepal also ranks 140th on the ICT Development Index. (AAG IT, 2025). The cybercrime cases stood at 19,730 as of FY 2080/81, which increased 118.91% from the previous year, i.e., FY 2079/80. (Nepal Police, 2024) The following figure represents the cybercrime cases in the last five years.



Source: Police Mirror, 2024, published by Nepal Police

## **Incidents of Cyberattacks in Nepal**

Nepal's information security system has been an issue of constant concern. Lack of strong security systems, lack of adequate cybersecurity measures, lack of infrastructure and

resources have led to multiple cases of cyberattacks in Nepal. A few of the major cases of cyberattacks in Nepal have been discussed as follows:

#### Government Website Hack

The Nepal Government National Portal and 500 other websites having the domain gov.np were hacked on 29 January 2023. This was one of the largest security breaches. Databases of the immigration and passport management systems under the Government Integrated Data Centre (GIDC) were disrupted due to a Distributed Denial of Service or DDoS attack (Greentick Consulting, 2023). A DDoS attack is a malicious attempt to disrupt normal traffic of a particular server by creating artificial traffic or internet users. The attack was possibly done from abroad. The websites went offline for four long hours. The websites showed various server failure messages after being rendered inaccessible. This led to the disruption of the service provided by airports and immigration offices, due to which many international flights got delayed.

#### NIC Asia Bank SWIFT Hack

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) network of NIC Asia Bank Limited, which is one of the commercial banks of Nepal, was hacked in October 2017 during the Tihar holidays. SWIFT is a messaging network that banks and financial institutions all over the world use to transfer money across multiple countries. The attackers had stolen an amount worth 4.4 million dollars by hacking the SWIFT server of the Bank. The amount stolen was reportedly transferred to bank accounts of six other countries, which include the United States, the United Kingdom, Japan and Singapore (Schwartz, 2017). The attack reportedly targeted NIC Asia Bank's nostro accounts maintained at Standard Chartered Bank, New York and Mashreq Bank, New York. Banks hold Nostro accounts at another bank and in a foreign currency to facilitate foreign exchange transactions and trades (Schwartz, 2017). The Bank was able to recover about 4 million dollars from the hackers.

## Nepal Electronic Payment Systems (NEPS) Hack

A group of five Chinese nationals hacked the Nepal Electronic Payment System (NEPS), an interface that allows the transaction of money deposited in a bank by using cards issued by other member banks. NEPS is also one of the licensed payment system operators (PSO) of Nepal. The Chinese cybercriminals had stolen NPR 35.9 million. This is also the

largest cyberattack in terms of money in Nepal. The hackers had used fake cards issued by banks in automated teller machines (ATMs) operated by other banks to withdraw the money. Following the attack, NEPS had to halt its operations for 18 days and requested customers to use ATM cards and the Point of Sales (POS) network operated by their own financial institution (The Himalayan Times, 2019).

## Foodmandu Cyberattack

Foodmandu, a popular food delivery service provider and e-commerce company based in Kathmandu, Nepal, was hacked in March 2020. The hacker had gained unauthorized access to a large number of customers, which included names, mailing addresses, email addresses and phone numbers of the users. The hacker also revealed the data dump of data of fifty thousand Foodmandu users and also disclosed the link associated with the data on Twitter, a popular social media platform (Republica, 2020).

With the growing number of users on social media platforms and online payment systems, many innocent Nepali people have fallen into the hands of attackers. Common trends of cybercrime cases frequently reported to the Nepal Police are as follows:

- Character assassination and online blackmailing by leaking private photos on social media platforms. Attackers often ask for a ransom amount by blackmailing users to prevent the release of private and sensitive information or photos.
- Misusing social media by impersonating other people to gain confidential information, such as bank account details and login credentials, to steal money from the other person.
- Establishing a fake online store, accepting online orders from customers and obtaining advance money for the delivery of goods or services that are never delivered.
- Sending fraudulent lottery messages to customers on Facebook, WhatsApp and Instagram. It involves sending messages claiming that the recipient has won a large sum of money and requiring them to pay a processing fee to obtain the full lottery amount.
- Cases of online sports betting and online gambling.

## Role of Regulatory Authorities to Address Cybersecurity Threats

Given the growing digital infrastructures of the country, the role of regulatory authorities is crucial for addressing the increasing cybercrime cases. The digital system and cybersecurity issues are regulated by various government bodies such as Nepal Police, Nepal Rastra Bank, Nepal Telecommunication Authority, Ministry of Communication and Information Technology. These government organizations have established guidelines and regulations with the objective of improving the security and reliability of electronic financial transactions. The role of regulatory bodies in addressing cybersecurity issues in Nepal has been discussed below.

## Nepal Police

With the increase in cybercrime cases in the country, Nepal Police also felt the need to establish a separate specialized unit to monitor and investigate cybercrime cases and established the Cyber Bureau on 27<sup>th</sup> Jestha 2075 (Nepal Police, n.d.). The Cyber Bureau raises awareness, provides education, and enforces laws to safeguard against potential cyber threats and crimes. To achieve its goals, the Cyber Bureau is advancing with strong capacity development, cooperation, coordination, and partnerships with relevant agencies. The Bureau investigates offenses under the Electronic Transactions Act, 2003 and supports investigative units across the country in cybercrime investigations. The Cyber Bureau investigates cybercrimes, plays a coordinating role in the exchange of information between national and international organizations, security bodies, and agencies regarding potential threats and challenges from cybercrimes (Nepal Police, n.d.).

#### Nepal Telecommunication Authority (NTA)

Nepal Telecommunication Authority plays a significant role in addressing cybersecurity issues in Nepal. NTA is a key regulatory body for implementing government policies relating to cybersecurity. NTA helps to ensure compliance with the Electronic Transactions Act 2008 by regulating telecommunication service providers. The Act provides the legal framework for electronic transactions, including digital signatures, data privacy, and cybercrime. It establishes a legal background for addressing issues like hacking, data theft, and digital fraud. Also, NTA has also required security requirements for telecom operators the protect their network and user data.

The Computer Crime Act, 2018: This law addresses various cybercrimes, such as hacking, identity theft, and the spread of harmful digital content. It also establishes penalties for those engaged in illegal activities in cyberspace.

## Ministry of Communication and Information Technology (MoCIT)

The Ministry of Communication and Information Technology (MoCIT) is the government body responsible for regulating the information and communication technology sector of Nepal. The ministry formulates laws relating to communication, information technology and cybersecurity. The ministry has established a legal and regulatory framework, such as the Electronic Transactions Act (2008), Cybercrime Act (2018), and other data protection and privacy laws.

#### Nepal Rastra Bank (NRB)

Nepal Rastra Bank, being the central bank of the country and regulator of banks and financial institutions, has required banks and financial institutions to follow guidelines and directives related to cybersecurity. Some of the guidelines and directives implemented by Nepal Rastra Bank are as follows:

- *Information Technology Guidelines:* Key features of the guideline include requirements for banks to formulate a proper IT strategy, implement strong information security (IS) controls, and conduct an IS audit at least annually (Nepal Rastra Bank, 2012).
- *Cyber Resilience Guidelines:* The guideline requires licensed institutions to implement a robust cyber resilience framework to mitigate the growing cybersecurity risks faced by financial institutions (Nepal Rastra Bank, 2023).
- Unified Directive on Payment System: The directive requires licensed payment system providers and payment system operators to formulate and implement adequate policies on hardware and network security, system audit, access controls, cybersecurity, and cyber resilience (Nepal Rastra Bank, 2021).

In addition, Nepal Rastra Bank also regularly supervises (off-site and on-site) the compliance of the issued guidelines and directives on a periodic basis.

#### Conclusion

The rapid expansion of digital payment systems in Nepal is a positive development for the country's economy, but it also comes with significant cybersecurity risks. Addressing these issues requires a collaborative effort between the government, financial institutions, service providers, and the general public. Regulatory authorities must take proactive measures to set security standards, protect consumers, and enforce compliance. With a robust regulatory framework and greater awareness of cybersecurity best practices, Nepal can safeguard its digital payment systems and ensure they remain secure, efficient, and trustworthy for all users.

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# **Strengthening Vital Instruments of National Power**



\* Suresh Sharma

#### Abstract

National power is the collective strength derived from a nation's diverse and vital resources, strategically utilized to achieve its national objectives. By rediscovering Nepal's proud history and unlocking its untapped resources, we can chart a strategic path to transform the country into a flourishing and captivating country. Nepal needs to strengthen its instruments of national power by aptly fitting the jigsaw piece DIME (Diplomatic, Information, Military, and Economic) into its national strategic road map. As we hold countless prospects for development, the timely optimization of our resources builds its foundation. The promotion of these ensures a prosperous, strong, sovereign, independent, and enduring nation, fostering a sense of contentment among its citizens. In this article, the instruments of national power will be discussed in Nepal's context.

**Keywords**: DIME, National pride, National security, Sovereignty, Self-reliance.

#### Introduction

Small states face many economic, investment, and trade issues. Globalization has placed mounting pressures on the ability of small states to manage their trade, economic, and political relationships. Their economy is linked with the international financial markets, which increases their vulnerabilities and openness to external economic shocks (Demir, 2008). In order to compete internationally, small states adopt different policies (Knudsen, 1996: 137). The geographic location of a small state is an important factor in its relations with the big powers. Proximity to strong powers adds vulnerability (Ibid).

'Independence, sovereignty, territorial integrity, nationality, autonomy, self-respect, protection of rights and interests of Nepali people, protection of boundaries, and economic

Brigadier General (Retired), Nepali Army.

progress and prosperity, shall be the fundamental subjects of Nepal's national interest' (Constitution of Nepal, 2015).

The US military literature coined the term DIME for instruments of national power, and many of the national security planners across the world have adopted this acronym in many of their planning processes. In recent days, other aspects such as natural resources, human capital, intelligence, law enforcement, national morale, and the position of a country on the international stage have also been added to the list. They have further developed DIME by integrating finance, law, and intelligence (FIL). The emergence of a new strategic environment necessitates an orchestration of multiple instruments of power. As a result, it is perhaps time to transition from a DIME to DIME-FIL concept (Cesar, 2020).

Sun Tzu, the pathfinder of strategic thoughts of the 'art of war', prescribed a panacea for how the 'enemy would capitulate without fighting, and Clausewitz later theorized 'warcentric strategies'. Few other eminent scholars, such as Adam Smith, have specifically advocated state intervention in addressing poverty, increasing access to education, building and maintaining infrastructure, providing for national defense, and ensuring the rule of law (The Wealth of Nations, 1776). Although exceptionally used in military parlance, the term DIME can be best understood in a much wider spectrum of national security.

For a distinctive understanding of national security, certain historical events come to the fore. Nepal's national unification campaign, its strategic geographical location in relation to its neighbors, its historic military prowess marked by the indomitable courage of the brave Gorkhalis, the country's vast and diverse landscapes, and the perseverance of Nepali society are truly creditable.

The visionary nation-builder, King Prithvi Narayan Shah, and his teachings (*Divya Upadesh*) from that historical epoch continue to offer timeless and relevant insights on the effective use of national instruments of power. He emphasized the importance of a capable military, effective diplomacy, and the significance of agriculture and industry while advocating for self-reliance, good governance, and social harmony as pillars of nation-building. In truth, a country, regardless of its size, is deeply admired for the courage, values, ideas, culture, hard work, and tightly woven social fabric of its people. Nepal possesses these qualities abundantly, both in tangible and intangible forms.

Nepal, a relatively small country, is strategically situated between two large neighbors, China and India. A small state is characterized by land area, population size, GNP (Gross National Product), GDP (Gross Domestic Product), and per capita income. The great poet Laxmi Prasad Devkota once penned an essay titled, 'Is Nepal Small?' in which he argued that although a country may be physically small, the spirit, values, wisdom, and vigor of its people are far greater.

In any strategy, elements of national interest are often kept confidential. The global superpower, the United States of America, applies DIME as a useful tool to determine its foreign policy construct to both friends and adversaries. We will not need to replicate their DIME which is exclusive to their foreign policy construct. Nevertheless, often discussed in military contexts, these instruments are part of a broader strategic framework that enables nations to achieve their national objectives.

The DIME concept groups many instruments of power a nation-state can muster into these categories: Diplomacy, Information, Military, and Economy. PMESII describes the operational environment in six domains: Political, Military, Economic, Social, Information, and Infrastructure. ASCOPE is used in counter-insurgency (COIN) environments to analyze the cultural and human environment (aka the "human terrain") and encompasses areas, structures, capabilities, organization, people, and events. In addition, the model reflects aspects of information collection requirements (ICR) and information capabilities requirements (ICR) - hence DIME/PMESII/ASCOP/ICR2 (Kodalle, 2019).

King Prithvi's strategic thought had largely incorporated all features of DIME in a true sense. In the subsequent paragraphs, we will discuss how DIME remains vital to strengthening our instruments of national power.

#### **Diplomatic**

'Diplomacy is the art of management that uses the mechanisms of coercion and consent among the various actors of international politics' (Aksoy, 2018). 'The never-ending process of globalization also has placed mounting pressures on the ability of small states to manage their trade, economic, and political relationships' (Demir, 2008).

'Small states should be encouraged to pursue active diplomacy on the international scene, creating a more coherent, visible, and assertive approach. Sub-regional and regional

collaboration through cooperation and, where appropriate, greater integration will enable small states to speak with greater effect and influence on security, economic, and other issues (Wiberg, 1996: 31).

Nepal, ever since 1955 as a member of the United Nations, has been vocal in international affairs. She strongly condemned apartheid in South Africa. In 1960, in his memorable speech entitled 'Small Nations Have a Role to Play', BP Koirala eloquently outlined how Nepal's foreign policy would be fully inspired by the principles and purpose of the UN Charter (Gautam, 2021).

#### Gautam recalls another instance:

'As a hallmark of Nepal's neutral and non-aligned foreign policy to take independent positions based on the merits of the case, often contrary to the views and wishes of the big powers, including pressure from the United States, Nepal advocated for the membership of the People's Republic of China (instead of the Republic of China) in the UN in the 1950s and 1960s. Resisting pressure from the then Union of Soviet Socialist Republics, Nepal condemned the Soviet invasion of Hungary in the 1950s and Czechoslovakia in the 1960s (Ktm Post, 2021).

In appropriate international gatherings, Nepal has become a highly vocal spokesman for the rights of landlocked countries. It led the fight at the 1964 International Trade and Development Conference (UNCTAD-I) at Geneva, which recommended a 23-clause convention on this subject for approval by member-states. At UNCTAD-11, held in New Delhi in early 1968, Nepal presented a nine-point program that would have further expanded the obligations of coastal countries to landlocked states if it had been accepted (Rose 1971, p 252).

Royal Nepalese Embassies were (emphasis added) established in the UK, India, USSR, China, USA, Burma, Pakistan, West Germany, Japan, UAR, France, and Thailand. Consulates General were located in East Pakistan, the Tibetan Region of China, and Calcutta, and a Permanent Mission to the UN in New York. The Nepalese ambassador was the main link with Israel until an embassy was established in Nepal, and in Tibet, where China took away the functions of Nepal's trading stations. Nepalese embassies will be open in Africa, Malaysia, or Australia. In the first year of Nepal's participation in the UN, the Ambassador to Washington, who headed the Royal Nepalese Delegation to the General Assembly, decided without instruction to vote for the resolution condemning the Soviet intervention in Hungary, much to

the chagrin of the Indian Ambassador, Krishna Menon, who argued for a "non-aligned" position' (Brown, p 670). Since 1951, many Governments have established friendly relations. Especially these relations substantiated diverse cooperation, including economic aid to Nepal's development, regardless of ideology. Those from India, USA, China, USSR, Israel, Switzerland, West Germany, United Kingdom, France, and Japan have contributed economic or technical assistance (Ibid).

King Mahendra visited the US in 1960 and 1967, and India several times, as well as China, Mongolia, Pakistan, Ceylon, Japan, Iran, Soviet Union, United Kingdom, France, and other Western and Eastern European states. He personally addressed the conferences of non-aligned states in Belgrade and Cairo in 1962 and 1964 and managed to visit Israel in between' (ibid, p 673). It was testimony that Nepal's diplomatic performance on the world stage was immense. Nepal firmly opposed apartheid in South Africa even when many Western powers were dithering. It voted to impose sanctions against apartheid-era South Africa, but it has consistently voted to lift unilateral US sanctions on Cuba. Nepal commanded sufficient respect at the UN in the 1960s to be entrusted with the responsibility of chairing a high-profile investigation on the death of Secretary-General Dag Hammarskjöld in the 1960s. In the 1970s, Nepal provided strong global leadership in UN negotiations on the Law of the Sea (Gautam, 2021).

During the 60s, Nepal's formal relations were expanded to include almost fifty countries, covering most of Europe, parts of the Middle East, and two Latin American but no Black African states. By 1969, eleven foreign embassies were established in Kathmandu, and Nepal maintained twelve embassies abroad (Singer et al, 1966). In 1963-64, Nepal ranked 89th out of 104 nations studied in the number of diplomats received in her capital, and in the bottom sixth in the number of diplomats sent abroad. (World Politics, July 1967).

Small states face a challenging future in the global system. Taking responsibility for their future would help them to overcome their vulnerabilities. They can enhance their collective prospects by shrewdly working closer together, arguing their common case on the global stage' (Demir, 2008). Good governance with political stability is a must for small states. Domestic consensus about economic development, high levels of education, diversification, and the exploitation of niche markets all contribute to long-term economic sustainability. Larger countries and multilateral organizations seem to have a key role in establishing a reliable environment for the security challenges that the small state faces' (Ibid). From the perspective

of the state, the functions of diplomacy include inculcating, shaping, and implementing foreign policy. In this regard, diplomacy is the sum of the tools with which states preserve and communicate their interests in both narrow and wide circles via officials and other representatives, thereby engaging in several activities such as corresponding, meeting with one another, exchanging perspectives, lobbying, visiting, and even threatening (Barston, 2014: 1).

Nepal defended its national interests through instruments such as a defensive posture, a limited engagement with foreign powers, resistance, wars, appeasement, opening up, diversification of relations, non-alignment, and balancing the ties with immediate neighbors (Acharya, 2019). Today, Nepal has various instruments for defending its national interests, including a dignified and principled foreign policy, persuasive diplomacy, defensive and deterrent military power, international treaties and institutions, and regional cooperative partnerships (Ibid).

Track two and track three diplomacy are employed in the international system to provide states with alternative approaches for resolving complex international relations issues.

#### Informational

With the rise of IoT (Internet of Things) and the advancement of AI (Artificial Intelligence), the world has seen increasing competition for informational and technological supremacy. Computer science and technology made their global arrival simultaneously, including in Nepal. Therefore, the application of informational tools is relevant to every sovereign country, regardless of its size, whether large or small. In the globalized world of the 21st century, information is emerging as one of the most powerful instruments of national power, alongside other key instruments.

Strategic information war refers to the use of information and information technology in the political, economic, (science & technology), diplomatic, cultural, and military arenas in order to secure information advantage (Cheng, 2014).

With the onset of Cold War II, influence operations have become prominent in international relations, targeting both internal and external audiences. Influence can be exerted more effectively in the information domain than in the physical domain. The regime change of Iraqi dictator Saddam Hussein after the Gulf War and the U.S. Global War on Terror (GWOT) are two prominent examples of this. Media warfare is a powerful tool for shaping

both domestic and international public opinion. The development of information technology has paved the way for the widespread dissemination of information.

During the decade-long Nepal's Maoist insurgency, the country endured a tremendous loss of lives and national property. The CPN Maoists' ideology was vague, their ambition for a totalitarian communist regime was a challenging task, and their ranks were uncertain of success. The government could recognize the importance of informational elements in national power in addressing this.

The Naxalite (extremist Maoist) issue has been a long-standing internal security challenge for India, and its potential cooperation with Nepal's Maoists raised significant concerns for them. The possibility of their cooperation for a larger agenda was thwarted due to the constant vigilance of security forces and effective information operations.

The informational dimension influenced by external forces, including the international community (e.g., UNMIN), proved effective in facilitating negotiations between the erstwhile government with the CPN-Maoists and in disbanding their irregular forces. Informational operations involve the impact that a message, narrative, person, or object can have on influencing another's behavior. The informational dimension of national power can benefit us by legitimizing our concerns in the global arena. It transcends geopolitical boundaries, extending to diverse areas such as climate change, international peace and security, sovereignty, non-proliferation of WMDs, human rights, and more.

Several INGOs and diplomatic corps are active in Nepal, with certain informational agendas being of high priority for them. Our counter-intelligence capabilities play a crucial role in safeguarding sovereignty and achieving national strategic objectives, without the need for heavy reliance on military force.

Furthermore, the informational instrument of national power, which conveys message, means, and matter, takes precedence over other components. In light of the international geopolitical competition driven by the new Cold War II, our informational instruments must challenge and reject foreign narratives that are designed to mislead our statecraft.

We must consider information security as a critical factor upon which national security relies. Developing a national strategy to optimize the information domain in the face of both internal and external threats is, therefore, essential.

## Military

For the majority of Nepali people, who are struggling for the basic needs of life, this instrument of national power may hold little concern. Today's military powers compete for the air, land, sea, and space, for the electromagnetic spectrum and cyber domain to deny the enemy access and enjoy unchallenged primacy. Their success is marked by unparalleled intelligence and surveillance capabilities.

Our constitution states that the Nepal Army will be committed to the protection of Nepal's independence, sovereignty, territorial integrity, autonomy, and national unity (Article 267). A viable military force structure is a must to fulfill these tasks.

Military organizations around the world exist to protect the security of their respective countries: in peacetime, by deterring the adversaries of the country from waging war, and in wartime, by defeating these adversaries should they choose the war option. These two missions are not mutually exclusive: 'The surest way to prevent war is to be prepared to win one' (US National Defense Strategy, 2018).

King Prithvi Narayan Shah, the architect of modern Nepal, demonstrated profound clarity in his military doctrine, encapsulated in his *Divya Upadesh*, 'Jai Katak Nagarnu, Jhiki Katak Garnu' (act with the defensive offense).

'Doctrine can be seen as a bridge connecting thought and action. It interprets ideas about war, and how they affect its conduct and its character, by combining strategic theories and operational plans into functional guidelines for action' (Sloan 2012).

Shah's military doctrine is still relevant. It helps the Nepali army to reaffirm its operational directive, and soldiers are honed to meet new challenges.

History helps policymakers to identify the national security interests (and security policies) of the state. It provides the tools with which policymakers and the population can define and understand the situation they are in, interpret adversarial motives, and suggest ways and means by which state interests can be realized despite such adversarial intentions (Valerie, 1997).

By reiterating King Prithvi's 'Dibya Upadesh', our history can be illustrative of his strategic direction. It would be prudent to explore the visions embedded within his teachings.

'The process of military modernization is driven by three instruments: an actionreaction dynamic between the state and its putative adversary; the domestic structures within the state and a technological imperative within which the first two instruments exist' (Buzan, 1987).

It leads us to think about the Nepali Army. The first consideration involves assessing the capabilities and specializations the state can feasibly acquire. Another critical question is: what should be the mission statement of our military organization? By reflecting on our history and referencing the Constitution, we can find answers to these important questions.

Deterrence holds when an adversary calculates that the costs incurred as a result of initiating military operations will be greater than the possible gains it accrues (Bernard, 2020). It is not sacrosanct that only a more powerful military always wins (Harry, 1981). Examples are: the Korean War, the US war in Vietnam, Afghanistan, Iraq, and the recent war in Ukraine, and so on.

Unification wars were characterized by stubbornness and obduracy, the sheer unwillingness to accept defeat. King Prithvi's 'Trinity' defines a sound strategy with three preconditions. Firstly, it would identify national interests at the apex, secondly, the population behind this interest, and thirdly, the military forces with the necessary resources to prosecute the task successfully. Political leaders and military planners align on a people-centric approach, integrating diplomatic, informational, economic, and military tools to achieve political objectives. (Bondarenko & Mykhalchuk, 2021). A sound strategy can only be crafted if there is agreement between the policymakers and the military. As Colin Gray (1999) has argued, strategy is a bridge that connects policymakers and military planners.

We should not feel inferior by comparing our relatively small army to the unmatched military strength of our neighbors. Their economic strength has naturally contributed to this. Yet the sheer strength of an army is not determined by its size. The history, values, morale, exemplary contributions to major global conflicts, and performance in peacekeeping missions of the Nepali Army are also crucial factors.

The strategic importance of a country's geography is as much an ever-increasing reality that is also psychologically and socially constructed (Bernard, 2020). An astute approach to peacefully navigating any geostrategic challenge is the key.

#### Economic

Conceptually, economic power is the core of a state's operating system and the primary source of strength from which all attributes of a nation-state emanate. Nepal does not face resource constraints, yet economic development and people's welfare remain limited. National wealth will be created through a combination of three components: man-made resources such as infrastructure, human capital that includes manpower with high-quality education, and technology. Nepalese expatriates are making remarkable strides across various sectors abroad, and similarly, our youth force has the potential to drive a transformative change within the country.

Foreign writers verify Nepal's Terai had surplus food grains in the 1970s (Rose, 1971). Agricultural reliance can serve as the foundation of our economy, followed by tourism and hydropower as key sectors for growth. The motto "Happy Nepali, Prosperous Nepal by 2043" is overarching to national morale, with economic development serving as a vital condition for its realization.

Integrating national resources with technology and innovation fosters economic growth, which in turn creates opportunities for deeper integration into the regional and global economy. This is a crucial piece of the puzzle that our planners must consider in their strategy. We investigate that there is an infrastructure gap in our system, but the most recent World Bank report substantiates that Nepal's real GDP growth has accelerated to 3.9 percent in FY24, up from 2 percent in FY23. The services sector was the key driver, fueled by a 30.7 percent surge in tourist arrivals, which boosted activities in transportation, accommodation, and food services, and increased hydropower production by over 450 MW. Additionally, a 4.3 percent rise in paddy production also contributed to the growth.

The nation places considerable focus on combating corruption and promoting transparency; however, the anticipated results have yet to be fully achieved. Additionally, the poverty trap represents a unique phenomenon in which many countries, already struggling with poverty, remain trapped in their disadvantaged condition despite available opportunities for improvement (Acemoglu et al, 2012).

Poverty traps are virtually impossible to escape without external assistance, and the primary solutions involve a shared vision that includes social mobilization, infrastructure development, human development, agricultural progress, and environmental sustainability. In

the era of globalization, we need to collaborate with other nations. 'It is our priority to maintain the best relations with India and China and benefit from their economic progress' (Acharya, 2019).

#### Conclusion

Our dream of a peaceful and prosperous society can be realized by rekindling our DIME (Diplomatic, Informational, Military, and Economic) capability. The fundamental pillars of these instruments of national power can be further strengthened through a steadfast national commitment

The primary challenge we face largely resides in the economic and diplomatic spheres, with a lesser focus on the informational and military domains. Diplomacy, at times, is constrained by a lack of economic influence, but if we achieve substantial progress in self-reliance, we can avoid being trapped in the geopolitical challenges we currently face. To ensure sustainable economic growth, we must harness the energy and potential of our hardworking youth.

Our diplomatic efforts should be visible in addressing and finding solutions to key regional and international issues. Our bilateral and multilateral engagements should be framed around interdependence, shared interests, and mutual benefits. Nepal must strengthen its non-official diplomatic channels to effectively address concerns, safeguard interests, and resolve impasses.

More importantly, political leaders must provide the people with a clear sense of direction, fostering a collective commitment among all Nepali citizens to determination and resolve, thereby strengthening the vital instruments of national power.

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# Analyzing the Models of Border Governance: Adopting the Best for Nepal



🖰 Yukesh Upreti

#### Abstract

In recent days, the concept of border governance has emerged as a pivotal tool for enhancing national security. The core objective of this paper is to analyze various border governance models and identify the best model for Nepal border governance. The research engaged a qualitative research approach with a descriptive and analytical design. The findings concluded on analyzing eight different models in which the three major components in border governance, i.e., deterrence, technology and intelligence, are evaluated as per the necessity of Nepal border governance. Among the eight models, integrated border management secures all three components of border governance. However, the research also discussed several challenges that might be encountered in adopting the integrated model. Finally, the research suggests adopting an integrated border management model in Nepal to meet the major component of border governance.

**Keywords:** Border, governance, coordination, integration, regulation.

## Introduction

The borderlands of any nation have been a pivotal point for international relations and domestic political stabilization (Smith, 2005; Brandy, 2014). It refers to the policies, practices, and administrative measures used to regulate and control borders between nations, regions, or territories (Passi, 1998). Fukuyama (2013) states border governance as actors aside from government such as the World Trade Organization (WTO), International Organization for Migration (IOM), International Civil Aviation Organization (ICAO), World Customs Organization (WCO) and other international agencies that are involved in cooperative manner for regulating the movement of persons and trade across international borders. The democratic

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governance of border management is focused on removing barriers for trade, enforcing migration control and generating remittance by shifting responsibility with different stakeholders in a collaborative manner and shared goals (Caparini, 2006). Standing committee for economic and commercial cooperation of Islam (2016) mentions that border governance needs to be applied in technical, operational, legislative and institutional areas for developing social networking among the border citizens by improving border infrastructure.

In recent days, the idea of border governance has emerged among the nations, stating to conduct a collaborative approach in managing the borders (Pulami, 2023, p. 77). He suggested adopting a border governance strategy in open borders like Nepal and India. The border governance includes alignment of governmental agencies, coordination and cooperation, which have a significant relationship with each other (Upreti, 2023, p. 190). The seminal work of Smith (2005) argued that different countries, being massive victims of cross-border migration and immigration issues, need to focus on a proactive mechanism and strategy in order to enhance borderland governance. Different theoretical frameworks and models can pose ideas for developing a strategy for the borderland of the nation. The need for an international model of governance in managing the borderland of Nepal has been a long-term requirement (Shrestha, 2021). In this regard, this paper is an attempt to review different models of border governance and suggest an optimum framework for Nepal border governance.

## **Research Objective**

The models of border governance are propounded by different scholars, philosophers and states. The differences in geographical situation, culture, human affairs and political circumstances have an impact on the formation of the border governance models. In terms of Nepal border governance, there are no actual models that may fit the realities. The objective of this research is to understand the model and identify the best model after generating a conceptual idea. The following are the research questions that the researcher has attempted to answer.

- To analyze the different models of border governance.
- To identify the best model for Nepal border governance.

#### Literature Review

There are different theories in managing the borders of any nation. The traditional notion of border management was focused on securitization theory, which consists of borderland as security discourses are actively constructed and enforced (Buzan et al, 1998). Brandy (2014) defines borders as practices, policies, and strategies of the state to control and regulate borders. This involves overseeing the flow of people, goods, and services across borders, while also enforcing security, immigration, and trade laws (Brandy, 2014).

The concept of functionalism in the context of borders was emphasized by multiple scholars, which refers to borders as functional entities established to manage the relationships between different political, economic, and social systems (Lindberg, 1963; Nye, 1971). The functionalism considers borders not just as physical demarcations but as multi-dimensional phenomena shaped by a variety of processes and emphasizes that the borders are fluid and dynamic, influenced by political, social, economic, and cultural factors (Sendhardt, 2013). The borders in the contemporary world are governed with the functionalist perspective, emphasizing movements of people and goods and cooperation among the states (Aniszewski, 2009).

Focusing on the functionalism theory of border governance, different nations and international organizations have empowered a functional approach to border management (Polner, 2019, p. 49). European Commission (2009) highlighted the concept of functional border management, an essential element of cross-border governance. It encompasses national and international coordination and cooperation among all relevant authorities, where all agencies involved in border management and trade facilitation in order to establish effective, efficient and coordinated border management (European Union, 2009). The success of border governance depends on border agency cooperation to enhance three levels of coordination: intra-service, inter-agency and international cooperation (Aniszewski, 2009). COMCEC (2016) defines uncoordinated border management as resulting in no communication, work duplication, conflicting requirements and separate functional areas, whereas coordinated border management results in smooth flow of information, streamlined line control, clarity in requirements and cross-functional collaboration (Jain, 2011). Furthermore, the areas of integration in border governance are technical, operational, legislative and institutional.

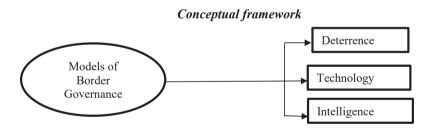
Border governance is a strategy in border areas of any country to boost the mechanisms for better integration and cooperation to enhance national security. Cross-border governance is an act to strengthen collaboration between actors from the public, private, and non-profit sectors (Jose, 2017).

Pulami (2022) highlighted that the principles of border governance are sovereignty, integrity, security and negotiated settlement of disputes. The common findings on the elements of border governance are understood by removing barriers for trade by reassuring the domestic population of the state to enforce migration control with generating remittance by shifting responsibility to different stakeholders in a collaborative manner and shared goals (Caparini, 2006; Hayes, 2011).

## **Conceptual Framework**

After assessing the literature on functionalism theory of border governance, the major components affecting border governance can be traced as deterrence, technology and intelligence. These three components can be regarded daily engine of border governance that ensures effective border control, regulation and security.

Figure 1



**Source:** Researcher conceptual Framework (2024), where deterrence, technology and intelligence are the major components, affecting the model of border governance.

As shown in the figure, among various elements in border governance, there must be at least three elements to meet the existing demand of border functionalism. These three elements are assessed by the researcher in order to draw out the appropriate model for Nepal border governance. Deterrence is the process of controlling the border crossing and regulating the flow of goods and people across the border. This process is mostly emphasized by world governing institutions like the World Trade Organization and the World Customs Organization. The

decisions drawn by these agencies may impact the entire border operating procedures. Technology is the use of the latest devices and equipment, which helps in policy, operational levels of operations. Similarly, intelligence is the specific information acquired by border controlling and regulating agencies for the benefit and sake of cross-border governance.

## Methodology

The research follows a qualitative research approach with and descriptive design. The research has concentrated only on two major questions. The research is dependent on secondary sources of data. The research has utilized different concept papers on a similar subject. After the extensive review, the secondary sources of data on border governance, the appropriate model is extracted and analyzed. The research has engaged in analyzing tables to meet the objective of the research from the developed conceptual framework on the basis of three identified elements of border governance.

#### Findings and Discussion

The findings have been sequenced according to the research questions. At first, the necessary models of border governance are defined, and later, the extracted theme is analyzed as per the conceptual framework.

#### **Traditional Border Management Model**

Traditional border management theory focuses on the control and regulation of borders to ensure national security, economic stability, and territorial integrity. This approach often emphasizes the need for strict enforcement measures, including physical barriers, surveillance systems, and legal frameworks to manage the flow of people, goods, and information across borders (Anderson M., 1996). According to Andreas (2003), traditional border management relies heavily on state sovereignty and the idea that borders are fixed, clearly defined lines that need to be protected from external threats (p.78). Furthermore, this model prioritizes the prevention of illegal immigration, smuggling, and other cross-border crimes, which are seen as primary threats to national security (Harlon, 2019). These perspectives highlight the conventional view that effective border management requires robust state control mechanisms and international cooperation to address transnational challenges. This model has been exercised from the traditional era where borders were ill-defined, marked by natural features like rivers, mountains, or forests, and were more fluid, which has been practiced till today.

## Hard Model Border Management

The hard model of border management theory, often referred to as the fortress approach, focuses on the strict control and securitization of national borders to prevent illegal activities and unauthorized entry (Jones, 2012). This model emphasizes the use of physical barriers, advanced surveillance technologies, and increased military and law enforcement presence at borders. The primary goal is to protect national security, maintain public order, and ensure the integrity of state sovereignty (Anderson M., 1996).

In the hard model, borders are seen as critical points of control that need to be fortified against various threats, including terrorism, smuggling, and illegal immigration. This approach is characterized by a reliance on physical and technological means to secure borders, such as fences, walls, drones, and biometric systems (Andreas, 2003). The underlying assumption is that these measures can effectively deter and prevent unauthorized crossings and have been used by most of the countries engaging in tensions and border conflicts. This model is more similar to the traditional model that focuses on territorial integrity and national unity.

# **Technology-Driven Model**

The technology-driven model of border governance is the use of advanced technological solutions to enhance the efficiency and effectiveness of border management. This approach integrates cutting-edge technologies such as biometrics, artificial intelligence, drones, surveillance systems, and data analytics to monitor and control border activities (Broeders, 2007, pp. 71-92). The objective is to create a more responsive and adaptable border management system that can handle the complexities of modern cross-border movements and security challenges. With the growing flow of movement of people at the borders, this model has emerged as a smart model for cross-border governance.

#### **Intelligence-Led Model**

The intelligence-led model of border management focuses on utilizing intelligence and data analysis to proactively address and mitigate security threats. This model emphasizes the collection, analysis, and application of information to make informed decisions regarding border security and immigration enforcement. In the context of the European border, the specialized agencies like Europol and Frontex engage in an intelligence sharing mechanism to secure external borders and combat cross-border crime (Ratcliffe, 2016). The aim is to enhance

the effectiveness and efficiency of border operations by anticipating and preventing illegal activities before they occur. The intelligence-led model of border management represents a proactive and strategic approach that leverages information and technology to enhance border security and facilitate legitimate cross-border movement (COMCEC, 2016).

#### **Community Engagement Model**

The community engagement model of border management emphasizes the importance of collaboration between border agencies and local communities in enhancing border security and facilitating legitimate cross-border activities. This approach is based on the understanding that local communities, particularly those residing near borders, possess valuable knowledge and insights that can contribute to more effective cross-border governance (Anderson, Wilson, & O'liam, 2003, pp. 37-60). By fostering trust and cooperation between border authorities and local residents, this model aims to create a more inclusive and comprehensive approach to border security.

#### **Humanitarian Model**

The humanitarian model of border management prioritizes the protection of human rights and the provision of assistance to vulnerable populations, such as refugees, asylum seekers, and migrants (UNHCR, 2006, pp. 19-32). This approach is grounded in the principles of international humanitarian law and human rights standards, emphasizing the need for compassionate and humane treatment of individuals crossing borders. The humanitarian model seeks to balance security concerns with the ethical imperative to protect and support those in need. The humanitarian model advocates for the development of comprehensive and inclusive migration policies that address the root causes of displacement and migration (Barnett, 2011, pp. 74-78). This includes efforts to promote peace, stability, and development in countries of origin, thereby reducing the need for individuals to undertake perilous journeys.

## **Integrated Border Management Model**

The Integrated Border Management model is a comprehensive approach that combines various strategies and mechanisms to enhance the efficiency and effectiveness of border management. This model aims to streamline border control processes, improve inter-agency cooperation, and balance security with the facilitation of legitimate trade and travel

(Aniszewski, 2009). The IBM model is based on the principles of coordination, cooperation, and collaboration among all stakeholders involved in border management. (Polner, 2019)

The IBM model also includes a focus on capacity building and training for border personnel. Ensuring that border officers are well-trained and equipped with the necessary skills and knowledge is essential for the effective implementation of integrated border management practices (EU, 2009; WCO, 2010; WTO, 2018). Training programs often cover areas such as risk assessment, use of technology, and international law, contributing to a more professional and capable border management workforce.

## **Analysis of the Model**

The theme of all the models focuses on the management of borders under various circumstances. The models are analyzed in the derived three variables, which are shown in the table below.

Table 1

Model Analysis Table

S.N.	Models	Deterrence	Technology	Intelligence
1	Traditional Model		×	×
2	Hard Model	V	×	
3	Technology-Driven Model	×		×
4	Intelligence-Led Model	×		
5	Community Engagement Model	V	×	×
6	Humanitarian Model	×	×	
7	Integrated Management Model		1	$\sqrt{}$

**Source:** Research Findings (2024)

The table provides a comparative analysis of seven different models of border governance by evaluating their focus on three key aspects: deterrence, technology, and intelligence. The traditional model relies heavily on deterrence through physical barriers and strict enforcement but does not emphasize advanced technologies or intelligence. Similarly, the hard model strongly focuses on deterrence and utilizes intelligence for threat assessment to control cross-border crimes and migration but has limited use of advanced technology. In contrast, the technology-driven model centers on the use of advanced technologies like biometrics, drones, and surveillance systems without prioritizing deterrence or intelligence.

The intelligence-led model is distinguished by its heavy reliance on intelligence and data analysis to predict and prevent security threats, without significant emphasis on deterrence or technology. The community engagement model enhances border security through collaboration with local communities, focusing on mutual trust and cooperation, and does not prioritize technology or intelligence. The humanitarian model prioritizes the human treatment and protection of human rights for migrants, eschewing deterrence, technology, and intelligence as primary strategies. Finally, the integrated management model adopts a comprehensive approach that incorporates deterrence, advanced technologies, and intelligence, aiming to balance security with the facilitation of legitimate trade and travel. This detailed comparison highlights the varied approaches and tools utilized in different border management strategies.

#### Discussion

In recent days, the practice of integrated border management has been regarded as a successful strategy in most European countries. It is an attempt by the government to facilitate border clearance processes, which were regarded as the most problematic links in the global supply chain. This new approach of border management has articulated a new strategy for border processing and clearance, consisting of border agency coordination for a comprehensive border management approach. These concepts have emerged after the trade facilitation agreement conducted by the WTO in December 2013 to improve trade efficiency worldwide, cutting the red tape at borders by increasing transparency and the use of new technology. The trade facilitation agreement came into action on February 22, 2017, which has been a turning point in the cross-border governance modality of nations. Different regional and international organizations adopt this integrated border management with different layers of scope and area as published by WCO (2017), shown in the table below.

Table 2

Border Management Approach of Different Organizations

S.N.	Approach	Organization	Features
1	Integrated Border Management	European Union	Information sharing, Risk management, Technology Integration and inter-agency cooperation for external borders.
2	Collaborative Border Management	World Bank	Cooperation within and across the border, Joint border control, shared facilities

3	Comprehensive	Organization for	Holistic approach for trade, security and
	Border Management	security and	human rights protection.
		cooperation in	
		Europe	
4	Coordinated Border	World Customs	Harmonization and collaboration among
	Management	Organization (WCO)	the border agencies of different countries
5	Border Agency	World Trade	Governmental agencies responsible for
	Coordination	Organization (WTO)	border control are working together for
			trade facilitation.

**Source:** Adopted and modified from World Customs Organization Publication (2017)

## Is the Integrated Model Appropriate for Nepal?

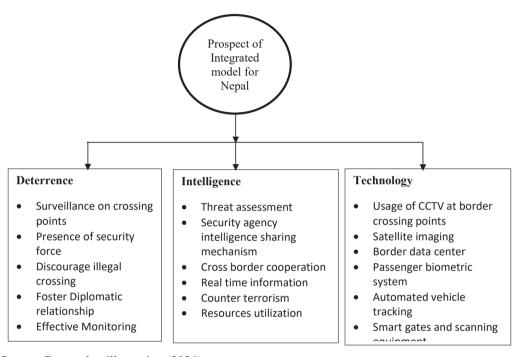
As the integrated model of border management is adopted by the European Union, and in recent days, this model has been beneficial in European countries. The question of the suitability of this model for Nepal has been a prime concern. However, the suitability of this model depends on various factors, including Nepal's border challenges, its relationship with neighboring countries, and its capacity to implement such a model effectively. The integrated model promotes collaboration among various government agencies, including customs, immigration, security agencies, and other relevant entities. This coordination is intended to prevent overlaps, reduce inefficiencies, and improve the overall effectiveness of border management by promoting border security in Nepal. The model emphasizes on advanced technologies, such as biometric systems, surveillance equipment, and data-sharing platforms, which have often been advocated by different experts, scholars and researchers. In terms of cross-border governance, this model emphasizes cooperation with neighboring states, which involves joint patrols, shared intelligence, and harmonized procedures.

As the border of Nepal with India is largely open, facilitating open trade and free movement of people, it poses security challenges, such as smuggling and illegal migration. The integrated model could enhance cooperation with these neighbors, particularly in managing shared challenges like smuggling, human trafficking, and cross-border crime. The border with China lies in the Himalayan region, which has less cross-border movement as compared to India. Nepal's diplomatic relationships with India and China are crucial for the successful implementation of this model. Also, different factors such as mutual trust, effective communication and effective bilateral agreements must be under consideration. In security factors, the open border with India allows for easy movement of people and goods, inviting security threats such as trafficking, financial crimes, drug dealing and illegal trade. An

integrated approach could improve on deterrence, technological and intelligence improvement in the following way.

Figure 2

Prospects of the Integrated Model in Nepal



**Source:** Researcher illustration (2024)

The figure shows the prospects of the integrated model by enhancing surveillance and control and mitigating the risks. The integrated model could help by improving coordination among security agencies, customs, and immigration, leading to more effective monitoring and enforcement. Nepal's existing border management infrastructure is relatively underdeveloped, especially in remote areas. Implementing this model requires significant investment in technology and training, which could be a challenge given Nepal's resources. Nepal would need to establish a robust legal and institutional framework to support the integrated model. This might involve reforms to current laws, the establishment of new agencies or the restructuring of existing ones, and the creation of mechanisms for inter-agency coordination. Some challenges of adopting this model are as follows.

## **Challenges in Adopting the Integrated Model**

Due to Geographic disparity in border areas and the availability of rugged and remote terrain limits infrastructure development, complicates logistics, and makes it difficult to maintain a consistent presence along the border. The border areas, especially those with India, often lack the necessary infrastructure, such as roads, communication networks, and modern border posts. This lack of infrastructure hampers an effective coordination and control system. Similarly, limited financial resources reduce investment in infrastructure, technology, training, and operational costs. The financial burden could be a major obstacle, especially when balancing other national priorities.

The main problem in the implementation of the integrated model is considered to be an open border in nature. Nepal shares an open border with India, which has both positive and negative effects in terms of economic and social benefits. Hence, managing this border under an integrated model would require delicate negotiations and cross-border cooperation with India.

There is also a reformation necessary for improving effective coordination between various agencies, including customs, immigration and security agencies. It also requires legal and institutional frameworks to support the integrated model. Necessary reforms would involve constructing the necessary laws, regulations, and operational protocols, which take a long time.

Finally, social and cultural factors also have a tremendous impact on implementing the integrated model in Nepal. Border communities often have strong cross-border ties with India, where people share cultural, linguistic, and economic connections. These factors cannot be neglected by the government in order to boost border governance.

## Conclusion

Here we can infer that integrated border management is the best model as per the analysis of the three factors of analysis. Integrated Border Management for Nepal can play a crucial role in enhancing the country's border security while facilitating legitimate trade and travel. Nepal shares extensive borders with India and China, making effective border management essential for national security, economic development, and regional stability. The IBM approach can address these needs by fostering coordination, technology use, intelligence

sharing, and community engagement. The model focuses on interagency cooperation, use of technology, community engagement, infrastructural development and legal regulation.

Nevertheless, this model cannot be preferred in all the border areas of Nepal. Due to several challenges in adopting this model, the government of Nepal needs to be proactive by conducting a pilot project in the major crossing points and enhancing the area of operation. The diverse areas of Nepal make it very difficult to assimilate a single model, hence, further research can be done on different sectors and variables of integrated border management of Nepal.

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# राष्ट्रिय सुरक्षा र राष्ट्रहितको कसीमा साइबर सुरक्षा



🌥 कृष्ण बहादुर जि.सी.

# विषय प्रवेश

राष्ट्रिय सुरक्षा प्रत्येक राष्ट्र र त्यस राष्ट्रका सम्पूर्ण नागरिकहरूका लागि सबैभन्दा महत्त्वको विषय हो। राष्ट्रका सबै नीतिहरू र मुख्य कार्यक्रमहरू राष्ट्रिय सुरक्षा जगेर्ना गर्न अभिप्रेरित हुन्छन् र हुनुपर्छ। सबै नागरिकहरू यस कुरामा सचेत नहुन पनि सक्छन् तर राज्य र नीति निर्माताहरूको प्रमुख दायित्व नै राष्ट्रिय सुरक्षालाई केन्द्रबिन्दुमा राख्ने र सम्पूर्ण नागरिकहरूलाई राष्ट्रिय सुरक्षाबारे सु-सूचित गराउने हो। राष्ट्रिय सुरक्षा, राष्ट्रियहित एवम् राष्ट्रिय संवेदनशीलताबारे सु-सूचित आम नागरिकबाटै राष्ट्रिय एकता प्रवर्द्धन हुने हो र राष्ट्रलाई मजबुत बनाउने हो। नेपालको संविधानले भाग ४ (राज्यका निर्देशक सिद्धान्त, नीति र दायित्व) को धारा ५१ (क) मा राज्यका नीतिहरू अन्तर्गत पहिलो नीतिका रूपमा राष्ट्रिय एकता र राष्ट्रिय सुरक्षा सम्बन्धी नीतिको व्यवस्था गरेको छ। सूचना र प्रविधि नजोडिएको कुनै क्षेत्र नभएको परिप्रेक्ष्यमा उक्त नीतिका सबै ७ वटा बुँदाहरूमा साइबर सुरक्षा कुनै न कुनै रूपमा आकृष्ट हुने देखिन्छ।

राष्ट्रिय सुरक्षा नीति, २०७३ ले राष्ट्रिय सुरक्षा नीतिको आवश्यकता स्पष्ट पार्ने क्रममा १.३.१, १.३.२, १.३.८ एवम् १.३.९ लगायतका बुँदाहरूमा सूचना र प्रविधिको विकाससँगै आउन सक्ने सम्भावित खतराहरूलाई सम्बोधन गर्न पनि राष्ट्रिय सुरक्षा नीतिको आवश्यकता भएको स्पष्ट पारेको छ। यसरी नै बुँदा १.७.१० मा राष्ट्रिय सुरक्षामा प्रभाव पार्ने तत्त्वको रूपमा विज्ञान प्रविधि र आधुनिक उपकरणको दुरुपयोगलाई उल्लेख गरेको छ। यसैगरी राष्ट्रिय सुरक्षा नीतिका प्राथमिकताहरूको छैटौं नम्बर (बुँदा २.४.६) मा विज्ञान, प्रविधि र सूचनाको सुरक्षालाई स्पष्ट रूपमा उल्लेख गर्दै त्यसको व्याख्या समेत गरिएको छ। त्यस्तै, उक्त

<sup>🦫</sup> उपरथी, नेपाली सेना ।

नीतिले बुँदा १.६.१ मा १२ वटा विशिष्ट राष्ट्रिय हितका विषयहरू पहिचान गरेको छ। त्यो बाहेकको बुँदा १.६.२ मा १४ वटा रणनीतिक हित सरोकारका विषयहरू समेत पहिचान गरिएका छन्।

राष्ट्रिय सुरक्षा नीतिले देशका संवेदनशील निकायहरूमा हुन सक्ने साइवर हमला र नेपाली मूल्य मान्यता, संस्कृति, परम्परा, धर्म, भाषा, जाति, क्षेत्र र सम्प्रदायिवचको सद्भाव भड्काउने गितिविधिहरू तथा सामाजिक सञ्जाल तथा सञ्चार माध्यमबाट फैलाइने नकारात्मक प्रभावहरूलाई राष्ट्रिय मूल्य मान्यता, राष्ट्रिय सुरक्षा र राष्ट्रिय हितका चुनौती र खतराका रूपमा पित्चान गिरएका छन्। सो नीतिले पित्चान गरेका चुनौती र खतराहरूको समाधानका लागि विभिन्न नीतिगत व्यवस्थाहरू गरेको छ। जसअन्तर्गत राष्ट्रका संवेदनशील सूचनाहरू अनिधकृत तिरकाले सङ्गलन गरी दुरुपयोग गर्नेलाई राष्ट्रद्रोही गितिविधि मानी कानुनी कारबाही गर्ने, नेपालको स्वतन्त्रता र सार्वभौमिकतामाथि आघात पुन्याउने उद्देश्यसाथ अभिप्रेरित समाचार प्रकाशन-प्रसारण भएमा शीघ्रखण्डन, प्रतिवाद र कानून बमोजिम कारवाही गर्ने सरकारी र गैरसरकारी क्षेत्रका कामकाजमा प्रयोग हुने कम्प्युटर प्रविधि र स्वचालित विद्युतीय सञ्चार प्रणालीमाथि हुनसक्ने साइवर हमलाविरुद्ध सुरक्षाको सुनिश्चितता गर्ने र राज्यका अति-संवेदनशील तथा संवेदनशील स्थान र सूचनाहरूमा तोकिएका व्यक्तिहरूको मात्र पहुँच हुने व्यवस्था गर्ने जस्ता नीतिगत प्रावधानहरू व्यवस्था गरिएका छन्। साथै, सूचना र प्रविधिमा भएको अधिक विकासको अवस्थाले राष्ट्रिय हितका सबै विषयहरूमा समेत साइवर सुरक्षा कुनै न कुनै रूपमा जोडिन्छ नै।

सूचना प्रविधिमा भएको तीव्र विकाससँगै सामाजिक अन्तरिकया, विकासमा प्रविधिको प्रयोग, सार्वजिनक सेवा एवम् सूचना प्रवाहमा आमूल परिवर्तन भइरहेको छ। सूचना प्रविधिको निरन्तर विकास, बढ्दो प्रयोग एवम् गतिशीलतासँगै सूचना प्रविधि प्रणालीमाथिको अनिधकृत पहुँचको समस्या दिनानुदिन बढ्दै गइरहेको छ। राज्य व्यवस्थाको सञ्चालन, विकासको व्यवस्थापन, सार्वजिनक सेवा प्रवाह तथा जनताका दैनिक क्रियाकलापहरू सूचना प्रविधिमा निर्भर हुँदै गइरहेको अवस्थामा राष्ट्रिय तथा अन्तर्राष्ट्रियस्तरबाट सूचना प्रविधि प्रणाली र सङ्गलित तथ्याङ्गहरूमाथि हुनसक्ने साइबर आक्रमणको पिहचान तथा प्रतिरक्षा (Define and Defense) सुनिश्चित गर्नु नै साइबर सुरक्षा हो। देशको साइबर एवम् अन्य स्रोत साधनको क्षमता समेतको आधारमा साइबर सुरक्षाको दायरा Define तथा Defense मात्र नभई आक्रमण वा

प्रतिक्रियात्मक आक्रमण (Attack or Counter Attack) समेत हुने गरेको छ। विकसित एवम् शक्ति राष्ट्रहरूले विकास गरेको Attack तथा Counter Attack क्षमता अभिवृद्धि यसैको द्योतक हो।

# साइबर सुरक्षासम्बन्धी नीतिगत प्रबन्ध

## राष्ट्रिय साइबर सुरक्षा नीति, २०८०

वि.सं. २०२८ सालमा राष्ट्रिय जनगणनाका लागि कम्प्युटरको प्रयोग भएसँगै नेपाल सूचना प्रविधिको युगमा प्रवेश गरेको थियो। तत्पश्चात् प्रविधिको विकासलाई आत्मसाथ गर्दै विभिन्न समयमा विभिन्न नीतिहरू कार्यान्वयनमा आएको पाइन्छ। नेपालमा सूचना तथा सञ्चार प्रविधिको विकासका लागि राष्ट्रिय सञ्चार नीति, २०४९; दूरसञ्चार ऐन, २०५३; दूरसञ्चार नियमावली, २०५४ तथा सूचना प्रविधि नीति, २०५७ ले अहम् भूमिका निर्वाह गरेको देखिन्छ। सूचना प्रविधि नीति, २०५७ लाई अझ परिमार्जन गर्दै सूचना प्रविधि नीति, २०६७ जारी भएको थियो; जसमा सूचना प्रविधिको प्रयोगमा सूचनाको सुरक्षा एवम् तथ्याङ्कको गोपनीयतालाई सुदृढ गरिने कुरालाई जोड दिइएको थियो। उल्लिखित नीतिहरूमा सूचनाको सुरक्षा तथा गोपनीयतालाई जोड दिइए तापनि नेपालमा साइवर सुरक्षाका वारेमा कतै पनि उल्लेख भएको पाइदैन। त्यस्तै, सूचना तथा सञ्चार प्रविधि नीति, २०७२ ले पहिलोपटक साइवर आक्रमण तथा साइवर अपराधको परिकल्पना गरेको थियो। उक्त नीतिले साइवर सुरक्षाका विषयलाई सम्बोधन गर्दै साइवर सुरक्षा निकायको स्थापना तथा साइवर आक्रमणको पहिचान, रोकथाम, प्रतिरक्षा लगायतका आयामहरूको प्रभावकारी रूपमा सम्बोधन गर्ने र आपत्कालीन कम्प्युटर उद्घार समूह (Computer Emergency Response Team) को स्थापना गरी साइवर सुरक्षा सम्बन्धी चुनौतीहरू शीघ्र सम्बोधन गर्ने व्यवस्था मिलाइने उल्लेख गरेको थियो।

नेपाल सरकारबाट २०८०/०४/२३ गते सुरक्षित एवम् उत्थानशील साइबर स्पेस (Secure and Resilient Cyber Space) को निर्माण एवम् हाल भएको Global Cyber Security Index स्कोर ४४.९९ प्रतिशतबाट आगामी पन्ध्र वर्षभित्र ८० प्रतिशत पु-याउने लक्ष्यसिहत सुरिक्षित साइबर स्पेस निर्माणका लागि कानूनी र संस्थागत व्यवस्था गर्ने, साइबर आक्रमणको जोखिम न्यूनीकरण गर्दे संवेदनशील राष्ट्रिय पूर्वाधार संरक्षण गर्ने; साइबर सुरक्षा क्षेत्रमा अनुसन्धान, जनशक्ति उत्पादन एवम् क्षमता अभिवृद्धि गर्ने; डिजिटल सेवालाई विश्वसनीय र सुरिक्षित बनाउने तथा साइबर सुरक्षासम्बन्धी जोखिम न्यूनीकरणका लागि द्विपक्षीय,

क्षेत्रीय तथा अन्तर्राष्ट्रियस्तरमा समन्वय, अनुभव एवम् सहयोग आदानप्रदान गर्ने उद्देश्य सहित "राष्ट्रिय साइबर सुरक्षा नीति, २०८०" तयार भई कार्यान्वयनमा आइसकेको छ। नेपालको सन्दर्भमा साइबर सम्बन्धी जारी गरिएको यो नै पहिलो नीति हो। सो साइबर सुरक्षा नीतिले साइबर सुरक्षाको वर्तमान स्थिति, समस्या र चुनौती, रणनीति एवम् कार्यनीतिहरू समेत तय गरेको छ।

राष्ट्रिय विकासमा सूचना प्रविधिको उच्चतम उपयोग गर्ने विषयलाई राज्यका नीतिमा समावेश गर्ने उद्देश्य अनुरूप राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले निम्न लिखित विषयहरूलाई प्राथमिकताका साथ समावेश गरेको छ:-

- राष्ट्रिय सुरक्षा नीति, २०७३ ले साइबर सुरक्षालाई राष्ट्रिय सुरक्षाको एक महत्त्वपूर्ण आयामका
   रूपमा समेटेको छ।
- राष्ट्रिय सूचना प्रविधि आकस्मिक सहायता समूह (National Information Technology Emergency Response Team) र राष्ट्रिय साइबर सुरक्षा अनुगमन केन्द्र स्थापना भई सरकारी सूचना प्रविधि प्रणालीहरूको निरन्तर अनुगमन भइरहेको छ।
- दूरसञ्चार तथा इन्टरनेट सेवा प्रदायकहरूको सूचना प्रणालीलाई समेटिने गरी साइबर सुरक्षा विनियमावली, २०७७ (Cyber Security Byelaw, 2020) कार्यान्वयनमा आएको छ।

# समस्या तथा चुनौती

सूचना तथा सञ्चार प्रविधि प्रणालीमाथि राष्ट्रिय एवम् अन्तर्राष्ट्रियस्तरबाट हुने विभिन्न प्रकारका अनिधकृत पहुँच तथा आक्रमणका प्रयासलाई निस्तेज पार्न राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले विभिन्न समस्या तथा चुनौतीहरू पहिचान गरेको छ।

#### समस्या

- साइबर सुरक्षाका लागि प्रभावकारी कानूनी व्यवस्था तथा संस्थागत संरचना नहुनु।
- साइबर सुरक्षासम्बन्धी भौतिक तथा प्राविधिक पूर्वाधारको कमी हुनु।
- साइबर सुरक्षाका क्षेत्रमा दक्ष जनशक्ति तथा अनुसन्धानको कमी हुन्।

- साइबर सुरक्षा सम्बन्धी सचेतनाको कमी हुन्।
- साइबर सुरक्षा सम्बन्धमा आन्तरिक तथा बाह्य समन्वयमा कमी हुन्।

# चुनौती

- सूचना तथा सञ्चार प्रविधि प्रणालीमा हुने साइबर आक्रमणको जोखिम न्यून गर्नका लागि नीतिगत
   र संरचनागत व्यवस्था गर्नु।
- साइबर सुरक्षाको सुनिश्चितता गर्न समयानुकूल अनुसन्धान र क्षमतामा आधारित दक्ष जनशक्तिको विकास र उपयोग गर्नु।
- राष्ट्रिय संवेदनशील पूर्वाधार (National Critical Infrastructure) को पहिचान एवम् संरक्षण गर्नु।
- सार्वजिनक, व्यावसायिक र व्यक्तिगत सूचना तथा तथ्याङ्कमा अनिधकृत पहुँच नियन्त्रण गर्नु।
- नागरिक सेवामा विश्वसनीय डिजिटल प्रणाली र साइबर सुरक्षाको प्रत्याभूति गर्नु।
- साइबर सुरक्षाका लागि राष्ट्रिय तथा अन्तर्राष्ट्रिय सहयोग तथा समन्वय गर्नु।

### रणनीति

नेपाल सरकारद्वारा जारी भएको राष्ट्रिय साइबर सुरक्षा नीति, २०८० को प्रभावकारी कार्यान्वयनका लागि उक्त नीतिले ९ वटा विभिन्न रणनीतिहरू तय गरेको छ। उक्त नीतिले सुरक्षित र उत्थानशील साइबर स्पेस (Secure and Resilient Cyber Space) बनाउन आवश्यक कानून एवम् मापदण्ड तर्जुमा गरी सूचना तथा सञ्चार प्रविधि प्रणालीको सुरक्षा गर्न संस्थागत संरचनाहरू निर्माण एवम् सुदृढीकरण गर्ने, संवेदनशील राष्ट्रिय पूर्वाधारहरूको पहिचान गरी संरक्षण गर्ने, जनचेतना अभिवृद्धि गरी सुरक्षित अनलाइन स्पेस निर्माण गर्ने, राष्ट्रिय तथा अन्तर्राष्ट्रिय सङ्घ संस्थाहरूसँग समन्वय एवम् सहकार्य गर्ने तथा सुरक्षाका उपकरणहरू विकासकर्ता/आपूर्तिकर्ता/उत्पादक/सेवा प्रदायकलाई आवश्यकताअनुसार जिम्मेवार बनाउने जस्ता मुख्य रणनीतिहरू तय गरेको छ।

### कार्यनीति

यसरी नै राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले निर्देश गरेका विभिन्न ९ वटा रणनीतिहरूसँग सम्बन्धित रही यस नीतिले कुल ७२ वटा कार्यनीतिहरू तय गरेको छ। उक्त नीतिले विद्यमान कानूनलाई साइबर सुरक्षा अनुकूल हुने गरी संशोधन, परिमार्जन र पुनरावलोकन गरी साइबर अपराध (Cyber Crime) नियन्त्रण गर्ने कार्यनीति लिएको छ। साइबर सुरक्षा प्रिक्रयामा पूर्वतयारी, संरक्षण, पहिचान, प्रतिकार्य तथा पुनर्लाभ (Preparedness, Protection, Detection, Response and Recovery) सम्बन्धी कार्यविधि तयार गरी सुचनाको हक, गोपनीयताको हक लगायतका मौलिक अधिकारहरूको संरक्षणका लागि आवश्यक नीतिगत व्यवस्था गर्ने र साइबर सुरक्षाका विषयमा चौबिसै घण्टा सम्पर्क निकायको रूपमा कार्य गर्न, डिजिटल फोरेन्सिक अनुसन्धान गर्न तथा साइबर सुरक्षासँग सम्बन्धित निकायको नियमनकारी निकायको रूपमा कार्य गर्नेगरी राष्ट्रिय साइबर सुरक्षा केन्द्र स्थापना गर्ने कार्यनीति रहेकामा हाल राष्ट्रिय साइबर सुरक्षा केन्द्र समेत सञ्चालनमा आइसकेको छ। साइबर सुरक्षा सम्बन्धी आऋमणहरूका बारेमा सुचना आदानप्रदान गर्न डिजिटल पूर्वाधार (Digital Infrastructure) को विकास गरी सुरक्षित साइबर स्पेस निर्माणका लागि सम्पूर्ण समाज (Whole of the Society) को अवधारणालाई अवलम्बन गरी साइबर सुरक्षा पूर्वाधारहरूको विकास गर्न सरकारी, निजी तथा सार्वजनिक निजी साझेदारी [Public-Private Partnership-(PPP)] अवधारणा अवलम्बन गर्नुका साथै राष्ट्रिय सुरक्षामा आँच पुऱ्याउने, घुणा वा द्वेष फैलाउने, अनलाइन उत्पीडन (Online Harassment) र साइबर बुलिङ गर्ने, सामाजिक तथा सम्प्रदायिक सद्भावमा खलल पुऱ्याउने, अश्लिलता फैलाउने जस्ता डिजिटल सामग्रीको सम्प्रेषणलाई निषेध गर्ने जस्ता कार्यनीतिहरू समेत उक्त नीतिले तय गरेको छ।

# राष्ट्रिय साइबर सुरक्षा नीति, २०८० कार्यान्वयनमा देखिएका कमी (GAPS) हरू

राष्ट्रिय साइवर सुरक्षा नीति, २०८० कार्यान्वयनमा आइसकेको भए तापनि यसको कार्यान्वयनको दौरान विभिन्न कमीहरू महसुस गरिएका छन्।

### समन्वयको कमी

डिजिटल प्रणालीबाट प्रवाह हुने सबैखाले सेवालाई विश्वसनीय र सुरक्षित बनाउने उद्देश्यका साथ कार्यान्वयनमा आएको राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले राष्ट्रिय स्तरमा कुनै पिन सरकारी निकाय वा सङ्घ-संस्थामा हुनसक्ने साइबर हमलालाई निस्तेज पार्नका लागि समन्वयकारी भूमिका निर्वाह गर्ने उल्लेख गरेको छ। तर विगतमा भएका घटनाहरूको समीक्षा गर्ने हो भने सरकारी निकायमे त्यस्ता घटनाहरू हुँदा एक-आपसमा समन्वय हुन नसक्ने, सम्बन्धित निकायलाई जानकारी समेत नहुने र सामान्य घटनाले पिन संवेदनशील प्रणाली (System) हरू बन्द (Down) गर्नुपर्ने अवस्था सिर्जना भएको पाइन्छ। जसले सेवाग्राहीहरूलाई प्रदान गर्नुपर्ने सेवा प्रवाहमा अवरोध हुने गरेको छ।

## केन्द्रीय संरचनाको अभाव

राष्ट्रिय साइबर सुरक्षा नीति, २०८० को संस्थागत व्यवस्था अन्तर्गत निर्देशक सिमिति र राष्ट्रिय साइबर सुरक्षा कार्यान्वयन सिमितिको परिकल्पना गरिएको भए तापिन राष्ट्रिय सुरक्षा र राष्ट्रियहितसँग सम्बन्धित घटनाहरू घट्दा त्यस्ता घटनाहरूको सम्बोधन गर्नका लागि केन्द्रीयस्तरमा कुनै पिन संयन्त्र नहुँदा विभिन्न निकायहरूबिच आवश्यक समन्वयमा दुविधा तथा जिटलता देखिएको पाइन्छ।

# साइबर सुरक्षाको संवेदनशीलता

राष्ट्रिय साइबर सुरक्षा नीति कार्यान्वयनमा आउनुपूर्व साइबर सुरक्षासम्बन्धी देखिएका वा देखिन सक्ने समस्याहरूलाई आकलन गरी नीतिमा समेट्न सिकएको भए कानून निर्माण तथा साइबर सुरक्षामा आइपर्ने समस्या समाधान गर्न मार्गदर्शन प्रदान गर्न सिकन्थ्यो। साथै, नेपाल सरकारलगायत अन्य विभिन्न निकायहरूका अधिकांश डिजिटल सेवाहरू अन्तर्राष्ट्रिय टेण्डरका माध्यमबाट विभिन्न अन्तर्राष्ट्रिय कम्पनीहरूबाट प्राप्त हुने गरेको छ। यो अवस्थामा ती कार्य तथा निकायहरूमा रहेका डाटाहरू एवम् System को सुरक्षाका लागि अपनाउने विधिहरूको बारेमा समेत उक्त नीतिले नसमेटेको पाइन्छ।

## नीति निर्माणमा संवैधानिक अधिकार

राष्ट्रिय साइबर सुरक्षा नीतिमा सुरक्षित अनलाइन स्पेस निर्माण गर्नका लागि अनलाइन प्लेटफर्म प्रयोगकर्ताहरूको अनुगमन गरी निषेधित कार्यहरू नगर्न सजग गराए तापनि नेपालको संविधान (२०७२) ले निर्देश गरेका मौलिक हकहरू जस्तैः स्वतन्त्रताको हक, सञ्चारको हक, सूचनाको हक तथा गोपनीयताको हक लगायतका कुराहरू र त्यसले नागरिकलाई दिने अधिकार एवम् ती अधिकारहरूको प्रयोगले राष्ट्रिय सुरक्षा र राष्ट्र हितमा पर्नसक्ने असरबारे सम्बोधन हुन नसकेको अवस्था देखिन्छ।

# छिमेकी राष्ट्रहरूसँगको सम्बन्ध

नेपाल एक भूपरिवेष्टित राष्ट्र हो। दक्षिण एसियाका दुई ठूला राष्ट्रहरूका बिचमा अवस्थित रहेकोले यसको भू-राजनैतिक महत्त्व विशेष छ। राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले अन्तर्राष्ट्रिय स्तरमा हुनुपर्ने सहकार्य तथा समन्वयको कुरालाई उल्लेख गरेको भए तापिन नेपालमा हुने साइबर सुरक्षासम्बन्धी गतिविधिले दुई छिमेकी राष्ट्रहरूसँगको सम्बन्धमा पार्न सक्ने असर र त्यसको परिणामको बारेमा समेत विशेष चनाखो हुनुपर्ने अवस्था देखिन्छ।

# सूचनामा पहुँच

राष्ट्रिय हित र सुरक्षा प्रतिकूलका नागरिकका सूचनाहरूमा राज्यको पहुँच हुन सक्नु पर्दछ भन्ने भाव राष्ट्रिय साइबर सुरक्षा नीति, २०८० मा देखिएको भए तापनि कस्तो सूचनामा पहुँच राख्ने र कस्तोमा नराख्ने भन्ने सम्बन्धमा स्पष्टता देखिँदैन। मूलरूपमा यस्तो पहुँच राष्ट्रिय सुरक्षा र राष्ट्रहित सम्बन्धी सूचनामा मात्र सीमित हुनु पर्दछ। साथै; पहुँच पाउने निकाय समेत राष्ट्रिय सुरक्षा र राष्ट्रहितबारे जिम्मेवार निकाय हुनुपर्ने सम्बन्धमा राष्ट्रिय साइबर सुरक्षा नीति, २०८० मौन रहेको देखिन्छ।

# प्रविधिमा भएको विकास र चुनौती

सूचना प्रविधिको निरन्तर विकास, बढ्दो प्रयोग एवम् गतिशीलतासँगै सूचना प्रविधिको प्रयोग गरी चुस्त, पारदर्शी, सहज, छिटोछिरितो सार्वजनिक सेवा तथा सूचना प्रवाहको अपेक्षा गरिएको हुन्छ। विश्वव्यापी रूपमा सूचना र प्रविधिमा भएको विकास सँगसँगै विभिन्न चुनौतीहरू समेत दिनानुदिन बढ्दै गइरहेका छन्। नेपाल जस्ता सूचना तथा प्रविधिको विकास हुने कममा रहेका राष्ट्रहरूमा यस्ता चुनौती झनै जटिल रहन्छन्। राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले सूचना तथा प्रविधि क्षेत्रमा भएको विकास, त्यसका चुनौतीहरू तथा त्यस्ता प्रविधिहरूमा हुन सक्ने साइबर हमलाहरूका बारेमा स्पष्टता प्रदान गर्न सकेको देखिँदैन।

# राष्ट्रिय सुरक्षा र राष्ट्रियहितसँग जोडिएका तथ्याङ्क (Data) तथा प्रणाली (System) हरूको सुरक्षा

सञ्चार तथा सूचना प्रविधिको बदलिँदो तथा बढ्दो प्रयोगसँगै नेपालले समेत डिजिटल रूपान्तरणमा फड्को मारिसकेको छ। डिजिटल रूपान्तरणको आधारको रूपमा लिइएको नागरिक एप (Nagarik App) मार्फत अधिकांश सरकारी सेवाहरू अहिले हात हातमा उपलब्ध छ। यसका साथै राष्ट्रिय परिचयपत्रलाई समेत नागरिक एपमा आबद्ध गर्ने गृहकार्य भइरहेको छ। हाल नेपालमा दूरसञ्चार सेवा, पासपोर्ट तथा ड्राइभिङ लाइसेन्स सेवा, बैंकिङ सेवा, विभिन्न डिजिटल वालेट (Wallet) सेवा, मालपोत सेवा, विद्युत् बिल भुक्तानी सेवा लगायत अधिकांश सेवाहरू Internet मार्फत Digitalized भइसकेको अवस्थामा हाम्रा सम्पूर्ण विवरणहरूको गोपनीयता कायम गर्नु र System Functional राखिराख्नु एक चुनौतीको रूपमा देखा परेको छ। यस्ता विवरणहरूको चुहावट वा अवरोधले राष्ट्रियस्तरमै असर गर्नसक्ने उदाहरण हालसालै राहदानी विभाग (Department of Passports) को System मा आएको अवरोधलाई लिन सिकन्छ। सुरुमा त्यस्ता अवरोधहरू सानो स्केलमा देखिए तापिन समाधानका लागि समयमै पहलकदम लिन नसक्दा त्यसले भयावह स्थिति निम्त्याउन पनि सक्दछ। साथै यस प्रकारका सेवाहरू Digitalized भएसँगै सेवा सञ्चालनमा सहजता महसुस भए पनि विभिन्न समयमा हुने Virus/Malware आक्रमणहरूको जोखिम भने बढ्दो कममा रहेको छ।

## अबको बाटो

साइबर Domain को महत्त्व र यसले पार्नसक्ने असरबारे राज्य संयन्त्रहरूमा चासो र गम्भीरता बढ्दै गएको छ। यसको प्रभावकारिताका लागि आवश्यक कानूनहरू निर्माणको क्रममा रहेका छन्। यसरी बन्ने कानूनहरू मूल रूपमा साइबर Domain मा आउने आधार हीन (Baseless) विरोध वा प्रतिरोधका स्वरहरू निषेध गर्ने वा साइबर अपराध न्यूनीकरण गर्ने मूल उद्देश्यबाट निर्देशित भएको पाइएकोले ती कानूनहरू बन्दा राष्ट्रिय सुरक्षा र राष्ट्रिय हितलाई केन्द्रबिन्दुमा राखी बनाउने र राष्ट्रिय सुरक्षा तथा राष्ट्रिय

हितलाई चुनौती दिनेगरी साइबर Domain लाई नियन्त्रण वा प्रयोग गर्न सक्ने व्यक्ति, Issue वा निकायको गिहराइमा अध्ययन/अनुसन्धान गर्न सहजीकरण हुने गरी बन्न आवश्यक छ। साथै, नियमक निकायमा राष्ट्रिय सुरक्षा र राष्ट्रिय हितबारे जानकार संस्थाको प्रतिनिधित्व समेत हुन जरुरी छ। साइबर सुरक्षा विधेयक (मस्यौदा) तयारीको चरणमा रहेको छ भने "राष्ट्रिय साइबर सुरक्षा नीति-२०८०" ले विभिन्न मन्त्रालय, विभाग, केन्द्र, विषयविज्ञ, अन्य सुरक्षा निकाय लगायत नेपाली सेनालाई समेत नीति कार्यान्वयन समितिमा समावेश गरेको छ। नेपाली सेनाको तर्फबाट पनि भविष्यमा आउन सक्ने चुनौतीहरूलाई मध्यनजर गरी नेपाली सेनाको साइबर सुरक्षाको लागि आपनै रणनीति तयार गर्ने ऋममा रहेको छ।

नेपालको संविधान (२०७२) ले निर्देश गरेअनुसार नेपाल प्रहरीको मूलकर्तव्य शान्ति व्यवस्थालाई कायम गर्दै अपराधको रोकथाम गरी जनतालाई सुरक्षाको प्रत्याभूति गराउनु हो। यसै अनुरूप नेपाल प्रहरीअन्तर्गतको साइवर ब्युरोले उपलब्ध जनशक्ति, स्रोत तथा साधनहरूको प्रयोग गर्दै नेपाल राष्ट्रभित्र हुने साइवर अपराधहरूको अनुसन्धान तथा निरूपण गर्दै आइरहेको छ। यसैगरी नेपाली सेनाको साइवर सुरक्षा निर्देशनालयले हालको सीमित स्रोतसाधन र जनशक्तिबाट नेपाली सेनाको साइवर डोमेनको सुरक्षा गर्ने एवम् नेपाली सेनाभित्र हुने साइवर अपराधको अनुसन्धान गर्ने कार्य गर्दै आइरहेको छ। नेपालका अधिकांश संवेदनशील डिजिटल सेवा (राहदानी, ड्राइभिङ लाइसेन्स तथा राष्ट्रिय परिचयपत्र) को जिम्मा अन्तर्राष्ट्रिय टेण्डर प्रक्रियाको माध्यमबाट विभिन्न अन्तर्राष्ट्रिय कम्पनीहरूले पाउँदै आइरहेका छन्। यस्तो अवस्थामा नेपालीहरूको डाटाहरूको अनिधकृत प्रयोग हुनुका साथै विभिन्न साइवर हमलाहरू हुने सम्भावना रहिरहन्छ। यिनै कुराहरूलाई आधार मान्ने हो भने पनि नेपालमा राष्ट्रिय हित र राष्ट्रिय सुरक्षाको बर्खिलाप हुनसक्ने सम्भावित साइवर हमलाबाट बच्नका लागि उच्चस्तरीय संयन्त्र निर्माण गरी त्यस्ता संवेदनशील System हरूको सुरक्षाबारे एवम् ती System हरूको Well-Functioning बारे निगरानी गर्ने केन्द्रीय संरचनाको आवश्यकता देखिन्छ।

नेपालको संविधान (२०७२) ले समेत नेपाली सेनालाई नेपालको स्वतन्त्रता, सार्वभौमसत्ता, भौगोलिक अखण्डता, स्वाधीनता र राष्ट्रिय एकताको रक्षाको जिम्मेवारी तोकेको र सञ्चार तथा सूचना प्रविधि मन्त्रालय नेपाल राष्ट्रकै साइवर स्पेसबारेको तालुक मन्त्रालय रहेको हुँदा नीतिगत, संरचनागत एवम् स्रोत-साधनको समेत व्यवस्था गर्दे नेपाल सरकारकै मातहत (सम्भवत: सञ्चार तथा सूचना प्रविधि मन्त्रालयको मातहत) मा

रहने गरी रक्षा मन्त्रालय (नेपाली सेना) को समेत संलग्नतामा उच्चस्तिरय साइबर सुरक्षा संयन्त्र निर्माण गर्दा उपयुक्त हुने देखिन्छ। यस प्रकारको उच्चस्तरीय संयन्त्र निर्माण गर्दा सरकारी र सूचना तथा साइबर सुरक्षासँग सम्बन्धित निजी कम्पनीहरूका निवनतम ज्ञान र दक्षता/क्षमता भएका IT Professional हरूलाई समेत समायोजन गर्न सिकएमा Optimum Results प्राप्त गर्न सिकन्छ। साइबर सुरक्षा अत्यन्त संवेदनशील क्षेत्र भएको हुनाले यस क्षेत्रमा कार्य गर्ने सबै जनशक्तिको स्वेच्छा/Security Clearance/Vetting हुन जरुरी रहन्छ।

राष्ट्रविकास र समृद्धिको अनेकोँ अवसरहरूको सिर्जना गर्दै सञ्चार तथा सूचना प्रविधिको विकाससँगै यसका सुरक्षा चुनौतीको अनवरत रूपमा सम्बोधन हुनु नितान्त आवश्यक छ। साइबर सुरक्षा संवेदनशील क्षेत्र भएको हुनाले साइबर सुरक्षाको क्षमता अभिवृद्धि गर्नका लागि राष्ट्रिय साइबर सुरक्षा नीति, २०८० ले ठोस आधारहरू निर्धारण गरेको छ। यसका अतिरिक्त विद्यालय तहबाटै साइबर सुरक्षासम्बन्धी पाठ्यक्रम निर्धारण गर्ने, विभिन्न कार्यक्रमहरूको माध्यमबाट विश्वस्तरीय साइबर क्षमताको सुदृढीकरण गर्दै समयसीमाहरू निर्धारण गरी व्यावसायिक क्षमताका जनशक्तिहरूको विकास गर्नुका साथै विभिन्न सरकारी तथा सुरक्षा निकायहरूलाई साधन स्रोत र प्रविधिले सुसज्जित गरी साइबर क्षमता अभिवृद्धि गर्नु आवश्यक देखिन्छ।

नेपालको Geo-Political Location दुई ठूला ढुङ्गाबिचको तरुलका रूपमा रहेको छ, जसले गर्दा यहाँ हुने हरप्रकारका गतिविधिले महत्त्वपूर्ण अर्थ राखेको हुन्छ। नेपालले राष्ट्रिय सुरक्षा र राष्ट्रिय हित केन्द्रित आफ्नो साइबर सुरक्षा क्षमता अभिवृद्धि गर्दे गर्दा छिमेकी राष्ट्रहरूबाट विभिन्न रूपमा त्यस उपर विभिन्न प्रकृतिका सरोकारहरू व्यक्त नहोला भन्न सिकँदैन। यसैले गर्दा नेपालले आफ्नो साइबर सुरक्षा क्षमता अभिवृद्धि गर्दा Low Profile मा रहेर सानो Outlook अवलम्बन गर्न पनि आवश्यक देखिन्छ। त्यसका लागि सञ्चार तथा सूचना प्रविधि मन्त्रालयको सहकार्यमा रक्षा मन्त्रालय (नेपाली सेना) नै उपयुक्त निकाय हुन सक्ने देखिन्छ।

राष्ट्रका हरेक क्षेत्रका लागि साइबर सुरक्षा अति संवेदनशील क्षेत्र रहेको हुन्छ। साइबर सुरक्षाको क्षेत्र कुनै परिधिमा सीमित रहेको हुँदैन।यसका क्षेत्रहरू दिनानुदिन बढ्दै गइरहेका हुन्छन्। यिनै कुराहरूलाई सम्बोधन गर्नका लागि साइबर सुरक्षा क्षमताको विकास तथा जनशक्तिको अभिवृद्धि गर्दै साइबर सुरक्षा सम्बन्धी अनुसन्धान तथा विकासलाई प्राथमिकतामा राख्न जरुरी देखिन्छ।

### निष्कर्ष

वर्तमान विश्वमा अन्तर्राष्ट्रिय सम्बन्धका आयामहरू थिपने ऋममा साइबर सुरक्षा पिन एक मुख्य आयामका रूपमा रहेको छ। सोही सन्दर्भमा नेपालमा पिन साइबर सुरक्षालाई एउटा महत्त्वपूर्ण क्षेत्रका रूपमा विकास गरी भविष्यमा हुनसक्ने आन्तरिक तथा बाह्य साइबर हमलाहरूबाट सुरिक्षित रहन तथा प्रितिकार्य गर्न नेपालको साइबर सुरक्षा क्षमतालाई सोहीअनुसार दक्ष जनशक्ति र स्रोतसाधन सम्पन्न बनाई राष्ट्रिय सुरक्षा र राष्ट्रिय हितलाई Cyber Domain बाट हुनसक्ने क्षतिबाट सुरिक्षित गर्ने कार्यको लागि छाता सङ्गठनको विकास गर्नुपर्ने देखिन्छ। साथसाथै, सबैभन्दा संवेदनशील विषय भनेको नेपालको Geo-Political Location पिन हो। अतः छिमेकी राष्ट्रहरूको संवेदनशीलता र चासोमा असर नपर्ने गरी Low Profile मा रही नेपालले आफ्नो साइबर सुरक्षा क्षमतालाई अभिवृद्धि गर्नेतर्फ जोड दिनुपर्छ। साथै राष्ट्रिय साइबर सुरक्षा नीति, २०८० कार्यान्वयनमा देखिएका Gaps लाई सम्बोधन गर्दै उक्त नीतिलाई आवश्यकताअनुसार परिमार्जन गरी समग्र राष्ट्रिय सुरक्षा र राष्ट्रहितलाई सुदृढ गर्न नितान्त आवश्यक रहेको छ।

### सन्दर्भ सामग्री

नेपालको संविधान (२०७२)

राष्ट्रिय सुरक्षा नीति, २०७३

विद्यमान साइबर सुरक्षाका चुनौतीहरू एवम् साइबर अपराध नियन्त्रणलाई प्रभावकारी बनाउने उपायका सम्बन्धमा प्रतिवेदन पेस गर्न गठित अध्ययन समितिको प्रतिवेदन (२०७८), गृह मन्त्रालय।

राष्ट्रिय साइबर सुरक्षा नीति, २०८०

घिमिरे, भक्तिराम (अधिवक्ता) (२०८०), राष्ट्रिय साइबर सुरक्षा नीति, २०८० को विश्लेषण, सेन्टर फर मिडिया रिसर्च-नेपाल।

# राष्ट्रिय सुरक्षा र राष्ट्रनिर्माणमा भूतपूर्व सैनिकको भूमिका



**केशर बहादुर भण्डारी** 

# पृष्ठभूमि

भूतपूर्व सैनिकलाई साधारणतः अंग्रेजी भाषामा अन्तर्राष्ट्रिय जगत्मै 'भेटेरान' Veteran भन्ने चलन छ। Veteran भन्ने शब्द लेटिन 'Vetus' अर्थात् 'Old' भन्ने शब्दबाट आएको हो । यसको अर्थ कुनै पेशामा विशिष्ट अनुभव र विज्ञता भएका व्यक्तिलाई बुझाउँछ । यसैबाट सेनामा लामो समय सेवा गरी निवृत्त भएका व्यक्तिलाई भेटरान भन्न थालिएको हो ।

भेटेरानहरूसँग अनेकन उपायोगी गुणहरू हुन्छन् जस्तो कि - नेतृत्वदायी क्षमता, सिक्रियता, सँधै तम्तयारी, सहकार्यमा सहयोगी, जोखिम लिन सक्ने, आवश्यक पहल गर्न सक्ने, इमान्दारी, उच्च तहको निष्ठा, अलग अनुभव र व्यावहारिक सोच आदि। भेटेरानहरूमा साहसीपना, इमान, सम्मान, फरक विशिष्टता र परम त्याग, बलिदान (Supreme Sacrifice) सम्म गर्न सक्ने विशिष्ट मनवीय गुण हुन्छन् । यसर्थ, भेटेरानहरूलाई उपयोग गर्दा रोजगारदाताले बहुमूल्य मानव साधन प्राप्त गर्छन् । (सन्दर्भ: १)

सैनिक भेटेरान (Military Veteran) भन्नाले कुनै देशको स्थल सेना,जल सेना वा वायु सेनामा सेवा गरी सम्मानित वा विधिवत् रूपमा सेवाबाट बेदाग अवकाश लिएका व्यक्तिहरू भन्ने बुझिन्छ । अझ प्रष्टसँग भन्दा लामो सैनिक अनुभव बटुलेका, दिग्गज, अवकाश पाएर बसेका सैनिक व्यक्तिहरू भेटेरान हुन्। दिवङ्गत भएका यस्ता सैनिक व्यक्तिहरूलाई पनि भेटेरान भनेर नै सम्बोधन गरिन्छ भने उनीहरूको योगदानलाई सम्मन गर्न सैनिक स्मारकहरू बनाइएको पाइन्छ । संयुक्त राज्य अमेरिकामा भेटेरान विषयमा तयार पारिएका, लेखिएका दस्ताबेजहरू प्रशस्त र तुलनात्मक हिसाबले धेरै नै पाइन्छन् । भेटेरानबारे

<sup>🎘</sup> सहायक रथी (अ.प्रा.), नेपाली सेना।

अमेरिकी परिभाषा बृहत् छ भने यससँग संयुक्त अधिराज्यको परिभाषालाई समेत जोड्दा भेटेरानको परिभाषा पूर्ण हुने देखिन्छ ।

सैनिक भेटेरानहरूको विभिन्न किसिमले सम्मान गरिन्छ, जसमा सार्वजनिक बिदा, सम्मान परेड, झाँकी, समुदायको समर्थन तथा विविध सुविधाहरू जस्तो पेन्सन, अपाङ्गलाई क्षतिपूर्ति, शिक्षा, तालिम, रोजगारी लगायत कानुनी परामर्श, अनेक सहजीकरण कार्य र सहयोगहरू आदि पर्दछन् । विभिन्न देशहरूका समुदायले भेटेरानहरूलाई सैनिक जीवनबाट नागरिक जीवनमा भिज्नका लागि अनेक कार्यक्रम गरी सघाउँछन्।

### विश्वका भेटेरान

# संयुक्त राज्य अमेरिका

अमेरिकी परिभाषामा 'भेटेरान' भन्नाले अमेरिकी आर्मड फोर्सेज (स्थल सेना, जल सेना, वायु/अन्तरिक्ष सेना, मरिन कोर र कोष्ट गार्ड्स) मा क्रियाशील सदस्य भई सेवा गरेका र विधिवत् सम्मानित ढङ्गबाट अवकाश पाएका व्यक्तिहरू हुन् भनेर बुझिन्छ । (In the USA under title 38 of the U.S. Code, a veteran is defined as a person who served in the active military, naval, air or space service, and who was discharged or released therefrom under conditions other than dishonorable - December 9, 2024.)

अमेरिकामा भेटेरान भएको १ वर्षपछि उसले पेन्सन, शिक्षा, स्वास्थ्य, आवास, रोजगारीका लागि तालिम तथा सहयोग, व्यवसाय गर्न सहयोग, सार्वजिनक यातायात तथा मनोरञ्जन क्षेत्रमा सहुलियत, बीमा तथा ऋण सुविधा र अन्त्येष्टिमा सहयोग पाउँछ । Annual Warrior Survey को आधारमा भेटेरानहरूको शारीरिक तथा मानसिक स्वास्थ्य र सामाजिक संसारमा जोडिन पनि स्वस्थ आध्यात्मिक अभ्यासको आवश्यकता पर्दछ । (सन्दर्भ: २, ३)

अमेरिकी भेटेरानहरूलाई आजीवन सेवा, सहयोग प्रदान गर्नको लागि अमेरिकी सरकारले United States Department of Veteran Affairs (VA) लाई सन् २०२२ मा २७३.८६ बिलियन डलर बजेट छुट्याएको थियो । अमेरिकामा जिउँदा भेटेरानहरू मुख्यतः दोस्रो विश्वयुद्ध (१९४१-१९४४), कोरियन

युद्ध (१९५०-५३), भियतनाम युद्ध (१९६४-७५) र गल्फ वार (१९९०-९१) का छन् । अमेरिकामा करिव १ करोड ५८ लाख भेटेरानहरू छन् (२०२३ को तथ्याङ्क) र अत्यधिक भियतनाम युद्धका ७५ वर्ष उमेर माथिका मानिसहरू छन् । अमेरिकी भेटेरानमध्ये करिव १४ करोड ५३ लाख पुरुष र १ करोड ६७ लाख महिला छन् (२०२५ को तथ्याङ्क) । अमेरिकामा सबैभन्दा ठूलो भेटेरान सेवा र सैनिक भेटेरान क्लबहरू छन् । (सन्दर्भ: ४, ५, ६)

## संयुक्त अधिराज्य

संयुक्त अधिराज्यको Her Majesty's Armed Forces (AF) मा एक दिनमात्र सेवा गरेको भए तापनि १८ वर्ष उमेर माथिका सेवानिवृत्त सैनिकलाई Veteran मानिन्छ । ब्रिटिश शब्दावलीमा Ex-Service भनेको ब्रिटिश साम्राज्य वा कमनवेल्थ आर्मेड फोर्सेजमा सेवा गरेका भेटेरान भन्ने बुझिन्छ । यसभित्र नियमित फौज, जगेडा फौज वा व्यापारिक जहाजमा सैनिक कार्यका लागि सेवा गरेका मरिनहरू पनि पर्दछन्। (Veterans are defined "as anyone who has served for at least one day in Her Majesty's Armed Forces (Regular or Reserved) or Merchant Mariners who has seen duty on legally defined military operations".) बेलायतमा AFs Covenant भनेको 'राष्ट्रले सैनिक सेवामा भएका र पहिले सेवा गरेकाहरूका परिवारहरू समेतलाई राम्रोसँग व्यवहार गर्नेछ' भनी गरेको वाचा बन्धन हो। भेटेरानको विषयमा यही Covenant लाई २०११ को AFs Act भनी कानुनमा सुरक्षित गरिएको छ ।

यही Covenant मा भेटेरानको रोजगारी, स्वास्थ्य सेवा, आवास, शिक्षा, आर्थिक सहयोग, सल्लाह सुझाव आदि पर्दछन् । सेवा पश्चात् सबैको स्वास्थ्य उपचार राष्ट्रिय स्वास्थ्य सेवा NHS ले गर्छ । वृत्ति विकासका लागि रोजगारी, विविध उद्योग, व्यवसाय, सेवा तथा सार्वजनिक क्षेत्रमा भेटेरानहरूलाई प्राथमिकता दिइन्छ । अनेक कानूनी सल्लाह र सहयोग (कैदमा हुँदा समेत) र भेटेरानहरूलाई समाजमा सामान्य नागरिकमा रूपान्तरण हुन Veterans Welfare Service ले सहयोग पुऱ्याउँछ । रक्षा मन्त्रालय अन्तर्गत रहेको The Veterans UK नामको एक सहयोगी विभागले भेटेरानको पेन्सन, सेवा सुविधा, सहुलियतलगायत अन्य अवश्यक सल्लाह सुझाव सेवा समेत प्रदान गर्छ । यसका लागि विविध शीर्षकहरूमा सरकारले बजेट छुट्याएको हुन्छ । सन् १९४० भन्दा अगाडि जन्मेका भेटेरानको लागि Aged Veterans Fund को व्यवस्था गरिएको छ र भेटेरानहरूको लागि भनेर अन्य विविध योजनाहरू पनि लाग् गरिएको पाइन्छ ।

सन् २०२१ को सर्भे अनुसार इङ्गल्याण्ड र वेल्समा भेटेरानहरूको सङ्ख्या 9, \$2, \$3, 9, 9 थियो भने यसमा पुरुषको सङ्ख्या \$4,

#### क्यानडा

क्यानिडयन आर्मेड फोर्सेज (Canadian Armed Forces -CAF) तथा रोयल क्यानिडयन माउन्टेड पुलिस (Royal Canadian Mounted Police-RCMP) मा सेवारत वा पहिले सेवा गरेका र तिनका परिवारहरूलाई लक्षित गरी उनीहरूलाई राम्रो जीवन (Well-Being) यापन गर्न Veteran Affairs Canada ले सेवा एवम लाभ प्रदान गर्ने काम गर्दछ ।

Veteran Affairs Canada ले आफ्नो CAF र RCMP भेटेरानहरूको मानसिक र शारीरिक स्वास्थ्य, आर्थिक कार्यक्रम र सेवा, शिक्षा र रोजगारी, आवास तथा गृहस्थ जीवन, परिवार र हेरचाह गर्ने मानिस आदि क्षेत्रहरूमा सेवा सहयोग गर्छ । भेटेरानहरूको देन र उपलिब्धहरूको सम्मान र सम्झनामा कार्यक्रमहरू गर्छ । क्यानडाको स्थल सेना, जल सेना, वायु सेनाका भेटेरानहरू (ANA VETS) को प्रमुख संरक्षक (Patron) बेलायती शाही परिवारका अन्य सदस्य रहने चलन छ । क्यानडाको The Royal Canadian Legion को Grand Patron क्यानडाको Governor General रहने चलन छ । (सन्दर्भ: १०, ११)

### गणतान्त्रिक दक्षिण अफ्रिका

गणतान्त्रिक दक्षिण अफ्रिकाको कानूनमा भेटरानसम्बन्धी नीतिसहित विविध व्यवस्थाहरू समाविष्ट छन् । भेटरानको लागि Military Veterans Department (MVD) भन्ने एउटा विभाग नै छ र यसले Veterans लाई सेवा सुविधा उपलब्ध गराउँछ । MVD को नेतृत्वमा मन्त्रीसहित सहायक मन्त्री र महानिर्देशक रहने व्यवस्था छ । Military Veterans को प्रमुख संरक्षक (Patron-in-Chief) मा राष्ट्रपति रहने व्यवस्था छ । सैनिक भेटेरानहरूको कानूनसम्मत सेवा सुविधामा - पेन्सन सुविधा, रोजगारीका लागि

सीप विकास तथा व्यावसायिक तालिम, सहजीकरण कार्यक्रम, सार्वजिनक यातायातको भाडामा सहुलियत, स्वास्थ्य सेवामा पहुँच, आवास सुविधा लगायत अन्तिम संस्कारमा सहयोग आदि पर्दछन् । MVD को लागि सन् २०२४-२५ को वार्षिक बजेटमा ४७ मिलियन अमेरिकी डलर छुट्याइएको पाइन्छ । (सन्दर्भ: १२)

### जनगणतन्त्र चीन

जनगणतन्त्र चीनको सरकारले सन् २०१८ मा भेटेरान सम्बन्धी मन्त्रालय (Ministry of Veterans Affairs) खडा गरेको छ । यो मन्त्रालयले सैनिक भेटेरान, अवकाश प्राप्त अग्नि नियन्त्रक र अवकाश प्राप्त खोज तथा उद्धार कार्यमा संलग्न व्यक्तिहरूको व्यवस्थापन र उनीहरूको आवश्यकताहरूमा सेवा पुन्याउँछ । यस मन्त्रालयले भेटेरानहरूको अवकाश पिछको राजनीतिक विचार र राजनीतिक पक्षको व्यवस्थापन पिन गर्छ । यस मन्त्रालयले भेटेरानहरूलाई सामाजिक सेवा, सुविधा, स्वास्थ्य उपचार, रोजगारमूलक तालिमसिहत उद्योग, व्यवसायमा लाग्न प्रोत्साहन गर्छ । यसले भेटेरानको निश्चित परिवारको पेन्सन सुविधा तथा जीवन निर्वाह भत्ता आदिको व्यवस्था गर्छ । राष्ट्रपति सि जिन पिडले भेटेरानहरूलाई चीनको आधुनिकीकरण कार्यमा महत्त्वपूर्ण फौजी काम गरेको भनी उल्लेख गरेका छन्। उनीहरूको सेवा, सुविधाका विषयलाई गम्भीरतापूर्वक चासो देखाएका छन् । तथापि, चीनमा भेटेरानहरूले जीवनस्तर कमजोर भएको विषयमा विविध विरोधका कार्यक्रमहरू गर्ने गरेको पिन देखिन्छ। (सन्दर्भ: १३, १४, १४)

### श्रीलंका

श्रीलंकाको सेनाको जंगी अड्डामा भेटेरान सम्बन्धी निर्देशनालय छ । यसले भेटेरानहरूलाई रोजगारीका विभिन्न क्षेत्र र अवसरबारे जानकारी तथा आवेदन दिनको लागि Veteran Job Bank शीर्षकको एउटा 'जब पोर्टल' सञ्चालन गरेको छ । (सन्दर्भ: १६, १७, १८)

श्रीलङ्कामा Private Security Company (PSC) को प्रतिवेदनअनुसार ७० हजारभन्दा बढी पूर्व सुरक्षाकर्मीहरू वैधानिक सुरक्षा कम्पनी मार्फत रोजगारीमा छन्। श्रीलंकाका निजी सुरक्षा कम्पनीहरूले होम ल्याण्ड सिक्युरिटी (Home Land Security) को आदर्श र ढाँचामा काम गरी नागरिक-सेना सम्बन्ध बढाउनमा

महत्त्वपूर्ण भूमिका निर्वाह गरेको पाइन्छ । यस्ता PSC हरूले जटिल मानवीय आपत्कालीन समय र कार्यमा सुरक्षा बलसँगै मिलेर सहयोग पुऱ्याउन सक्छन् र पुऱ्याउने गरेका छन्। (PSC Sri Lanka)

### बंगलादेश

बंगलादेशमा भेटेरान हुनका लागि सेना, जलसेना वा वायु सेनामा क्रियाशील सेवा (Active Duty) प्रदान गरी बिना दाग सेवा निवृत्त भएको हुनुपर्छ । यस्ता भेटेरानहरू भत्ता पाउनको लागि योग्य हुन्छन्। बंगलादेश आर्म्ड फोर्सेज तथा ब्रिटिश-इन्डिया र पाकिस्तानी आर्म्ड फोर्सेजबाट अवकाश भएका र ७० वर्ष काटेका तथा ६५ वर्ष माथिका घाइतेहरू पनि भेटेरान भत्ताका लागि योग्य हुन्छन् । यस्ता भत्ताहरू वितरण गर्न तथा अन्य सेवा सुविधा उपलब्ध गर्नका लागि तिनवटै सेवा - सेना, जलसेना वा वायु सेनाका Welfare Directorate मा पठाइन्छ र त्यहाँबाट भत्ताहरू वितरण तथा अन्य सेवा सुविधा उपलब्ध गराइन्छ ।

बंगलादेशको सन् २०७१ को स्वतन्त्रता सङ्ग्राममा भाग लिएका भेटेरानहरूको परिवारहरूलाई सरकारी सेवाको जागिरमा ३० % आरक्षणको व्यवस्था गरिएको छ । तर यो आरक्षण ब्यवस्था (Quota System) को विरोध भएको छ । (सन्दर्भ: १९, २०)

### पाकिस्तान

पाकिस्तानी आर्म्ड फोर्सेजमा सेवा गरी अवकाश पाएका व्यक्तिहरूलाई पाकिस्तानी आर्मी भेटेरानस भिनन्छ । Pakistan Armed Services Board (PASB) ले देशभरिका Veterans Mess बारेको सूचना राख्ने गर्छ । PASB ब्रिटिश समयको Welfare Oriented Organization Board को पिकस्तानी स्वरूप हो । यो रक्षा मन्त्रालयभित्रकै एक अङ्ग हो र यसको आफ्नै पूर्ण सचिवालय छ । सन् २०१९ देखि रक्षा मन्त्रालयअन्तर्गतको यो कार्यकारिणी विभागको नेतृत्व एक महानिर्देशक र एक सहायक महानिर्देशकले गर्छन् । एक अवकाश प्राप्त ब्रिगेडिएर सचिवमा नियुक्त हुन्छन् र यस विभागको कार्यकारी प्रमुख भएर प्रशासनिक र आर्थिक व्यवस्थापनको काम गर्छन् । यस्तो PASB निर्देशनालयहरू पाकिस्तानको सबै प्रान्तहरूमा छन् । PASB ले भेटेरानहरूको जीवनलाई शान्त, स्थिर, सहज र प्रतिष्ठित बनाउनुका साथै तिनका परिवार र बेपत्ता तथा वीरगित पाएका पूर्वसैनिकहरूको सम्मान गर्दछ । PASB ले हिताधिकारीहरूलाई बृहत् हिसाबले एकीकृत तथा दिगो सेवा, सुविधाको व्यवस्था गर्छ - जसमा पुनःस्थापना,

पुनर्वासदेखि पूर्वसैनिक र तिनका परिवारको स्वास्थ्य, शिक्षा, रोजगारी तथा पुनर्नियुक्ति, क्षमता विकास, सिपमूलक तालिम, स्व-आर्जन तथा रोजगारीसम्बन्धी सल्लाह सुझाव आदि पर्दछन् । यसको लक्ष्य भेटेरानहरूको पुनर्मिलन समारोहको आयोजना गर्नु, नागरिक-सेना सम्बन्ध विकास गर्नु तथा अन्तर्राष्ट्रिय भेट्रान सङ्घ, महासङ्घको कार्यक्रममा भाग लिनु पनि हो । पूर्वसैनिकहरूको एकता र सदा तत्पर रहने गुणका कारण राष्ट्रिय चुनौतीको सामना गर्न र राष्ट्रको प्रगतिमा योगदान पुऱ्याउन सिकन्छ भन्ने पिकस्तानी बुझाइ रहेको पाइन्छ । (PASB)

पाकिस्तान स्वतन्त्रता दिवसको दिनमा पाकिस्तानी प्रधानसेनापित (चिफ अफ द आर्मी स्टाफ) द्वारा भेटेरानहरूको सम्मानमा भोजको आयोजना र भेटेरानको योगदानको सम्मान गर्ने चलन छ। (Dawn News English)

पाकिस्तानमा भेटेरानहरूको अधिकार र कल्याणकारी काम गर्ने गैर नाफामूलका तथा दान दातव्य सञ्चालन गर्ने PASB अन्तर्गत नै अनेकन गैर सरकारी संस्थाहरू (NGOs) पनि छन्, जसमा मुख्यतः फौजी फाउन्डेसन, आर्मी वेल्फियर ट्रस्ट, शाहीन फाउन्डेसन, घाजि-ए-पाकिस्तान, बहरिय फाउन्डेसन आदि हुन्। पाकिस्तानमा भेटेरानहरूले राजनीतिमा आवाज उठाउने गरेको पनि पाइन्छ । (The Print)

#### भारत

भारतमा भेटेरानहरूको मुद्दा र आकाङ्क्षालाई एकद्वार प्रणालीबाट सम्बोधन गर्न Veteran Cell स्थापना गरिएको छ। यसको जिम्मेवारीमा पेन्सन र कल्याणकारी क्षेत्रबाहेक अन्य विषयहरू पनि तोकिएको पाइन्छ । Army Welfare Education Society (AWES) ले सहुलियत मूल्यमा गुणस्तरीय शिक्षा दिने व्यवस्था गर्छ । लडाइँमा वीरगति पाएका र अङ्गभङ्ग भएका भेटेरानका छोराछोरीहरूलाई छात्रवृत्तिको व्यवस्था Army Rehabilitation & Welfare Section बाट हुने गरेको छ ।

सन् २००४ मा खडा भई रक्षा मन्त्रालयमा रहँदै आएको Department of Ex-Servicemen Welfare (DESW) ले विविध योजनासहित स्व-रोजगार कार्यक्रम लागु गर्नुका साथै बैंकहरूबाट कर्जा उपलब्ध हुने व्यवस्था गरेको छ । DESW को सांगठनिक बनावटमा रक्षामन्त्री, रक्षा/साङ्गठनिक सहायक

मन्त्री, सचिव रहने चलन छ । यसको मातहत सह-सचिव (ESW) र DGR रहन्छ । यिनीहरूका अन्तर्गत अन्य विभागहरू हुन्छन् ।

DESW ले भेटेरान तथा परिवारहरूको कल्याणकारी र पुनःस्थापना कार्यहरू गर्दछ र यसका लागि DESW अन्तर्गत पेन्सन विभाग (Pension Division) र पुनःस्थापना विभाग (Rehabilitation Division) छन् । यो DESW मा ३ वटा कार्यालयहरू जोडिएका छन्ः केन्द्रीय सैनिक बोर्ड सचिवालय (Kendriya Sainik Board Secretariat – KSB Sectt.), पुनर्वास महानिर्देशनालय (Director General of Resettlement- DGR), तथा पूर्वसैनिक योगदानयुक्त स्वास्थ्य सेवा योजना, केन्द्रीय सङ्गठन (Central Organization, Ex-servicemen Contributory Health Scheme)।

KSB Sectt ले भेटेरान र तिनका परिवारहरूको कल्याणकारी कार्यहरू गर्नुका साथै कल्याणकारी फण्डको सञ्चालन गर्दछ । यस अन्तर्गत २४ राज्य सैनिक बोर्ड (RSB) र ४१० जिल्ला सैनिक बोर्ड (JSB) हरू छन् । भारत सरकारले यी दुई बोर्डको सञ्चालनार्थ ७५% बजेट दिन्छ भने २५% बाँकी बजेट सम्बन्धित प्रदेश सरकारले व्यहोर्छ । DGR को कार्यालयले अवकाश भएका र अवकाश जानु पूर्वका सैनिकहरूका लागि विविध तालिम, पुनःरोजगार, स्व-रोजगार सम्बन्धी नीति तथा कार्यक्रमहरू लागु गर्छ । COECHS ले भेटेरान र तिनका परिवारहरूको स्वास्थ्य उपचारको काम देशभरिका ४२७ पोलिक्लिनिकहरू मार्फत गर्छ/गराउँछ ।

भारतमा हरेक वर्ष ३५ देखि ४५ वर्ष उमेरका ६० हजार सैनिकहरू अवकाश हुन्छन् भने हाल भारतमा करिब ३० लाख भन्दा बढी भेटेरानहरू छन् । हरेक वर्ष जनवरी १४ मा विभिन्न सैनिक केन्द्रहरू र शहरहरूमा Veterans Day मनाइन्छ । यो दिन भेटेरानहरू तथा वीरनारी र परिवारहरूको जमघट गरिन्छ । स्वास्थ्य शिविरहरू पनि सञ्चालन गरिन्छ । (Ind. Vet)

# विश्व भूतपूर्व सैनिक महासङ्घ

विश्व भूतपूर्व सैनिक महासङ्घ (World Veterans Federation) एक अन्तर्राष्ट्रिय गैरनाफामूलक, गैरसरकारी, गैरराजनीतिक, गैरसाम्प्रदायिक चरित्रको भूतपूर्व सैनिक (Veteran) हरूको छाता महासङ्घ हो (World Veterans Federation (WVF) is an international non-profit, non-governmental, non-

political, and non-sectarian organization.) WVF को मूल थलो स्वीजरल्याण्ड हो । यसले आफ्ना सदस्यहरूबीच कुनै जात जाति, धर्म, लिङ्ग, रङ्ग तथा प्राकृतिक पहिचानको आधारमा विभेद गर्दैन र गर्न पनि दिँदैन । यो संसारभरको ६ करोड (६० मिलियन) भेटेरानहरूको सञ्जाल पनि हो । WVF को लक्ष्य भनेको अन्तर्राष्ट्रिय जगत्मा एक अग्रज संस्था भई भेटेरान तथा युद्धमा घाइते भएकाहरूको सु-स्वास्थ्य, सुख शान्तिको उत्थान गर्न सेवा प्रदान गर्नुका साथै अन्तर्राष्ट्रिय स्तरमा अन्तर्राष्ट्रिय समुदायलाई शान्ति तथा सुरक्षाको प्रवर्द्धन गर्न प्रेरित गर्नु हो । संसारमा मुख्यतः Royal Commonwealth Ex-services League, War Veterans Committee, World Association of Home Army Soldiers र विश्व भूतपूर्व सैनिक महासङ्घ World Veterans Federation गरी चारवटा अन्तर्राष्ट्रिय सङ्गठन छन् । यीमध्ये WVF संसारमा सबैभन्दा ठूलो अन्तर्राष्ट्रिय सङ्गठन हो र यसमा संसारका १२१ देशहरूबाट १७२ भेटेरान सङ्ग, सङ्गठनहरू आबद्ध छन् ।

WVF को आफ्नै विधान र नियमहरू छन् । यसले भेटेरान समुदाय, युद्धका घाइते तथा तिनका परिवारहरूको हौसला तथा मौलिक चासोका विषयमा सहयोग गर्छ । त्यस्तै संयुक्त राष्ट्रसङ्घको लक्ष्य प्राप्तिका लागि सहयोग गर्ने कार्य गर्दछ । यसको प्रस्तावनामा चारवटा कुराहरू छन्ः (१) अन्तर्राष्ट्रिय शान्ति र सुरक्षा कायम गर्ने (२) राष्ट्र, राष्ट्रहरूबिच मित्रवत् सम्बन्ध विकास गर्ने (३) अन्तर्राष्ट्रिय सहयोग मार्फत् समस्याहरू समाधान गर्ने (४) समान उद्देश्य प्राप्तिको लागि देशहरूबिचको कार्यहरूलाई एकतामा मिलाउने, Harmonize गर्ने ।

## उद्देश्य

WVF को उद्देश्यमा (१) भेटेरान, तिनका परिवार तथा युद्धका घाइतेहरूका भौतिक तथा आध्यात्मिक चासोको रक्षा गर्नु (२) संयुक्त राष्ट्रसङ्घको चार्टर अनुसार अन्तर्राष्ट्रिय शान्ति तथा सुरक्षा प्रवर्द्धन गर्नु (३) भेटेरान तथा युद्धका घाइतेहरूलाई आ-आफ्नो समुदायमा पुनःस्थापना गर्नु (४) अरु सदस्य सङ्घ/संस्थाहरूसँग मित्रवत्, सहयोगी, एकताबद्ध हुनेगरी सम्बन्ध कायम गर्नु र ज्ञान, सिप, र विज्ञताको आदान प्रदान गर्नु (५) ऐतिहासिक, स्मरणयोग्य, स्वच्छ कर्तव्य, कार्यहरूको प्रवर्द्धन, उत्थान तथा संरक्षण गर्नु आदि पर्दछन् ।

### सङ्गठन

WVF को सङ्गठनात्मक बनावटमा साधारण सभा, कार्यकारी बोर्ड, क्षेत्रीय स्टेन्डिङ कमिटि तथा महिलाको स्टेन्डिङ कमिटि छन् । WVF को कार्यकारी बोर्ड (Executive Board) मा सभापित, सहायक सभापित, महासचिव, कोषाध्यक्ष र ६ जना उप-सभापितहरू रहने व्यवस्था छ । कार्यकारी बोर्डका सबै पदाधिकारीहरू साधारण सभा (General Assembly) बाट नियुक्ति हुने वा चुनिने प्रावधान छ । WVF को Standing Committee मा The Americas, African Affairs, Asia Pacific, European Affairs, Middle East तथा Standing Committee on Women गरी ६ वटा कमिटिहरू छन् ।

अन्तर्राष्ट्रिय शान्ति तथा सुरक्षा प्रवर्द्धन WVF को आदर्शको आधारशिला हो । यसका दुईवटा विभागहरू छन् — पहिलो Peace & Security Division र दोस्रो चाहिँ Well Being Division हो। यसको Peace & Security Division ले शान्ति तथा मानव अधिकारको प्रवर्द्धन गर्छ भने द्वन्द्वरत क्षेत्रमा सम्भव भएसम्म मध्यस्थता गर्ने काम पिन गर्छ । यस विभागले हरेक वर्ष फेब्रुअरी २१ मा शान्ति दिवस मनाउँछ भने संसारका भेटेरानहरूको शान्ति पैदलयात्राको आयोजना गर्छ। यसको Well Being Division ले समाजका भेटेरानहरूको सुखमय, आरामदायी जीवनका लागि रेखदेख सम्बन्धी विषयमा आधुनिक तथा Holistic Approach अपनाउनु पर्ने भनेर निक्योंल गरेको छ । यही कारण भेटेरानहरूको शारीरिक तथा मानसिक स्वास्थ्य र सामाजिक संसारमा जोडिन पिन स्वस्थ आध्यात्मिक अभ्यासको आवश्यकता पर्दछ भन्ने पिन हो । यसैले पहिलेको Health & Welfare Division लाई Wellbeing Division नामकरण गरिएको हो । यहाँ यो भनाइ सान्दर्भिक हुन्छ: No one can speak more eloquently for peace than those who have fought war — Ralph Bunche, Nobel Peace Prize, 1950. (WVF; WVF Constitution)

# नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ

# पृष्ठभूमि

नेपाली सेनाका भूतपूर्व सैनिकहरूमा राज्य र सेनाप्रति पूर्ण निष्ठा र आस्थाको भावना सिर्जना गरी उनीहरूलाई एकताबद्ध रूपमा सङ्गठित गरी यथोचितरूपमा संरक्षण र संवर्धन गर्दै परिआएको समयमा देश र जनाताको रक्षा र सेवा जस्तो मूलभूत आदर्श र लक्ष्यसिहतको कार्यमा परिचालन गर्न र आफ्नो वर्गको कल्याणकारी कार्यका निमित्त एक सङ्गठनको आवश्यकता भएको महसुस गरी २०११ सालमा तत्कालीन सैनिक नेतृत्वको प्रोत्साहन र भूतपूर्व सैनिकहरूको पहलमा 'नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ' स्थापना भएको हो । तत्कालीन "राष्ट्र प्रमुखको प्रमुख संरक्षकत्वमा" स्थापित यो सङ्घको विधिवत् रूपमा उद्घाटन २०१४ सालमा भएको र त्यसैवेला श्री ४ अधिराजकुमार हिमालय विक्रम शाह तथा श्री ४ अधिराजकुमार वसुन्धरा विक्रम शाहबाट संरक्षक पद ग्रहण भएको थियो । सो उद्घाटन समारोहको वेला प्रधानमन्त्री डा. के.आइ. सिंहले आफ्नो सम्बोधनमा "जहाँसम्म सम्भव छ, सरकारले भूतपूर्व सैनिकहरूको भलाइका लागि प्रयत्न गर्नेछ" भनेका थिए भने रक्षामन्त्री पुरेन्द्र विक्रम शाह र प्रधानसेनापित जनरल तोरण शमशेर ज.व.राणाले पिन सकारात्मक भाषण गरेका थिए । २०४७ सालको संविधान आउनुभन्दा अगाडि सम्म पिन यस सङ्घको प्रमुख संरक्षक (Chief Patron) मा राष्ट्र प्रमुख नै रहने प्रावधान थियो । २०२४ सालमा यस सङ्घको केन्द्रीय कार्यालय रहेको लिलतपुर, पुल्चोकस्थित सङ्घको परिसरमा सैनिक स्मारक स्तम्भको उद्घाटन स्व. राजा श्री ४ महेन्द्र वीर विक्रम शाहदेवबाट भएको थियो । २०६७ साल जेठ ८ गते तत्कालीन रक्षा मन्त्री श्रीमती विद्यादेवी भण्डारीज्यबाट यस सङ्घको कार्यालय भवनको शिलान्यास समेत भएको थियो ।

यस सङ्घले आफ्नो स्थापना कालदेखि आफ्नो स्रोत र साधनले भ्याएसम्म आफ्नो समुदायको कल्याणको निमित्त तथा देश र जनाताको रक्षा एवम् सेवामा यथाशक्य प्रयास र योगदान गर्दे आइरहेको छ । हाल यस सङ्घको संरक्षकमा रथी श्रीधर शमशेर ज.व.राणा (अ.प्रा) हुनुहुन्छ भने वहाँ विश्व भूतपूर्व सैनिक महासङ्घ (World Veterans Federation) को मानार्थ उपसभापित (Honorary Vice President) पिन हुनुहुन्छ । पूर्व प्रधानसेनापित तथा उच्च रथीवृन्द यस सङ्घको सल्लाहकार रूपमा रहने व्यवस्था छ। नेपालको सन्दर्भमा Veteran भन्नाले नेपाली सेनाबाट विधिवत् रूपमा अवकाश पाएका वा अवकाश लिएका सैनिक व्यक्तिलाई मात्र भृतपूर्व सैनिक मानिन्छ ।

नेपाली सेनाका भूतपूर्व सैनिकहरूको आधिकारिक सङ्गठन (Veterans Association) भनेको "नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्ग" एक मात्र हो । यो सङ्घ नेपाली सेनाबाट अवकाश प्राप्त गरेका भूतपूर्व सैनिकहरू तथा तिनका परिवारहरूको कल्याण र परिआएको समयमा देश र जनाताको रक्षा र सेवा गर्ने जस्तो मूलभूत आदर्श र लक्ष्यसिहत गठित एक विशुद्ध सामाजिक संस्थाको रूपमा स्थापना भएको हो । यो सङ्घ २०१६ सालमा विश्व भूतपूर्व सैनिक महासङ्घ (World Veterans Federation-WVF) को सदस्य भई

यसले विगत ६५ वर्षदेखि सो महासङ्घको कार्य प्रिक्रियामा योगदान पुऱ्याउँदै आएको छ । यसैले WVF मा आबद्ध संसारका १२१ देशहरूका भेटेरान सङ्घ, सङ्गठनहरूमध्ये नेपालको "नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ" पनि एक हो ।

वि.सं. २०१९ सालमा गठित वर्गीय सङ्गठनहरू विघटन भए पश्चात् यस सङ्गलाई यथावत् सञ्चालन गर्नु आवश्यक देखी वि.सं २०४६ सालको जनआन्दोलनको सफलतासँगै वि.सं २०४७ साल वैशाख १५ गते पुनः दर्ता भई "नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ (ने.रा.भू.पू.सै.सं.)" को विधान तर्जुमा गरिएको हो । यो सङ्घ २०४७ साल जेठ १३ गते को तत्कालीन श्री ५ को सरकार, मन्त्रिपरिषद्को निर्णय बमोजिम नेपाल सरकार रक्षा मन्त्रालय अन्तर्गत रहने व्यवस्था भएको तथा नेपाली सेनाबाट मान्यता प्राप्त एक मात्र सङ्गठन हो । यही कारण यो सङ्घले विश्व भूतपूर्व सैनिक महासङ्घ WVF लाई तिर्नुपर्ने वार्षिक सदस्यता शुल्क नेपाली सेना जङ्गी अङ्गाबाट प्राप्त हुँदै आएको छ । (विधान; परिचय)

## औचित्य तथा महत्त्व

राज्यबाट निवृत्तिभरण प्राप्त गर्ने, सेनाको कल्याणकारी कोषबाट विभिन्न सेवा सुविधा प्राप्त गर्ने र परिआएको समयमा देश र जनाताको रक्षाको निमित्त आफ्नो सामर्थ्यअनुसार योगदान गर्नुपर्ने नैतिक दायित्व बोकेको नेपाली सेनाका भूतपूर्व सैनिकहरू असङ्गठित र अनियन्त्रित अवस्थामा रहन गएमा राज्य र सेनाको निमित्त प्रतिकूल स्थिति सृजना हुनसक्ने परिस्थितिको आकलन गर्न सिकन्छ । यही सम्भाव्य परिस्थितिलाई दृष्टिगत गरी नेपाली सेनाका भूतपूर्व सैनिकहरूलाई एकताबद्ध रूपमा सुसंगठित र व्यवस्थित गरी राज्य र सेनाप्रति निरन्तर निष्ठावान तुल्याई राख जरुरी हुन्छ । कुनै पनि भूतपूर्व सैनिकले आफ्नो योग्यता र क्षमता अनुरूप देशमा परिआउन सक्ने सङ्कटकालीन समयमा देश र जनताको रक्षा र सेवाको निमित्त आफ्नो सेवा समर्पण गर्नु उसको नैतिक दायित्व हुन्छ भने यो सैनिकको लागि एक सर्वव्यापी रूपमा स्थापित मान्यता पनि हो। युद्धकालीन समयमा भूतपूर्व सैनिकहरूलाई सीमा सुरक्षा, बन्दोबस्ती कार्य, ग्यारिजन डयूटी, आदिमा परिचालन गर्न सिकन्छ । त्यसैगरी भूकम्प, बाढी, पहिरोजस्ता प्राकृतिक प्रकोप, आगजनी आदि सङ्कटकालीन भूतपूर्व सैनिकहरूमा भएको ज्ञान, सिप र अनुभवको सदुपयोग गरी यस्ता अनुशासित फौजलाई परिचालन गरी तुरुन्त खोजी तथा उद्धार कार्य, आपत्कालीन आवासको व्यवस्था, अस्थायी निर्माण कार्य, पानी, खाद्यात्र वितरण, मेडिकल सेवा, हाइजिन तथा स्यानिटेसन कार्य, पुनःस्थापनाको बेलाको निर्माण आदि

कार्य गर्न, गराउन सिकन्छ । त्यस्तै शान्तिको समयमा विविध संवेदनशील संरचना, इन्स्टलेसन, बैंक, कार्यालय भवन, आयोजना, परियोजना आदिको सुरक्षा कार्य (ग्यारिजन डयूटी) को साथै प्रकृति संरक्षण तथा वन्यजन्तु आरक्षण, विविध सामाजिक कार्य, फायर फाइट, डढेलो नियन्त्रण, सर्पदंश आदि बारे जनचेतनाका कार्यक्रम तथा चुनावको बेला प्रशिक्षण र सुरक्षा कार्यहरूमा संलग्न गराउन सिकन्छ । यसरी एक अनुशासित र सङ्गिटत भएर काम गर्न सक्ने भूतपूर्व सैनिक जस्तो जनशक्तिबाट देश र समाजले धेरै लाभ लिन सक्ने देखिन्छ । यसैले यो जनशक्तिलाई केही न केही काममा संलग्न गरी सङ्गिटत राख्न सकेको खण्डमा देशमा परी आएको बेला तुरुन्त परिचालन गर्न सिकने बहुमूल्य जनशक्ति उपलब्ध हुन सक्छ ।

अर्को महत्त्वपूर्ण कुरा भनेको भूतपूर्व सैनिकहरूमा भएका बहुआयामिक ज्ञान, सिप, अनुभव र विज्ञताको सदुपयोग गर्दै एउटा 'थिङ्क ट्याङ्क' स्थापना गर्न सिकन्छ । यस्तो 'थिङ्क ट्याङ्क' ले विविध राष्ट्रिय चासो, हित र स्वार्थका विषयहरूमा निरन्तर अध्ययन, अनुसन्धान गरी सरकार र सेनालाई उपयुक्त निर्णयमा पुग्न चाहिने गुणस्तरीय सूचना, जानकारी तथा सुझावहरू उपलब्ध गराउन सक्छ । यही सोच अनुसार 'ने.रा.भू.पू.सै.सं.' मा एउटा सानो 'थिङ्क ट्याङ्क' सञ्चालन गरिएको पनि छ । यदि 'ने.रा.भू.पू.सै.सं.' मा भएको यो थिङ्क ट्याङ्क' लाई सेना वा सरकारले स्रोत साधन उपलब्ध गराएर अर्धसरकारी प्रकृतिको 'थिङ्क ट्याङ्क'को रूपमा विकास गर्न सिकयो भने यसले सेना वा सरकारले प्रत्यक्ष गर्न निमल्ने, नसक्ने अन्तरिकया, अध्ययन तथा अनुसन्धानका कार्यहरू गर्न, गराउन सक्छ । यस्तो 'थिङ्क ट्याङ्क'ले आम नागरिक-समाजसँग अनौपचारिक Interface को काम पनि गर्न सक्छ । कतिपय मुलुकमा भूतपूर्व सैनिकहरूले यस्ता 'थिङ्क ट्याङ्क'हरू सञ्चालन गरेका पनि छन् ।

नेपाली सेनाका भूतपूर्व सैनिकहरूले आफ्नो जीवनको ऊर्जाशील समय देश र जनताको रक्षा र सेवामा समर्पण गरी अवकाश प्राप्त गरेका हुनाले उनीहरूका निमित्त भावनात्मक रूपमा नेपाली सेना कुल र मूल दुबै हो । यसैले बहालवाला सैनिक र भूतपूर्व सैनिक एउटै सिक्काका दुईपाटा हुन् भने एक अर्काका परिपूरक समेत हुन् । भूतपूर्व सैनिकहरूले युद्ध तथा आपत्कालीन समयमा देश र जनताको सुरक्षा र सेवामा लाग्नुपर्ने तथा शान्तिको समयमा पनि सामाजिक सेवाका कार्यहरू गर्नुपर्ने भएकाले उनीहरूको सदुपयोग गर्न एक सु-संगठित र सु-व्यवस्थित सङ्गठनमा समाहित भएको हुनुपर्दछ जुन 'ने.रा.भू.पू.सै.सं.' ले गर्न सक्छ। यसका निमित्त राज्य र सेनाबाट यथोचित व्यवस्था हुनुपर्दछ । यसैले पनि भूतपूर्व सैनिकहरूको कल्याणका

निमित्त यथोचित व्यवस्था गर्नु राज्य र सेनाको उत्तिकै नैतिक दायित्त्व हुन्छ र यो सर्वव्यापी मान्यता पिन हो । यही कारण यो सङ्घलाई सु-सङ्गठित र सु-व्यवस्थित गर्न राज्य र सेनाबाट यथोचित सहयोग र समर्थन हुन सकेको खण्डमा मात्र यो सङ्घले राष्ट्रमा परिआउन सक्ने विपद्/विपत्तिको बखतमा सम्पूर्ण भूतपूर्व सैनिकहरू परिचालन गरी देश र जनाताको रक्षा र सेवाका निमित्त एक सशक्त सहायक शक्तिका रूपमा खडा हुन सक्छ । (परिचय)

## जगेडा फौज

नेपाली सेनाको युद्ध दर्शन, उच्च सामरिक सोच र रणनीतिअनुसार यदि बाह्यशक्तिले नेपालमाथि आक्रमण गरी अधीनस्थ बनाउन खोजेमा नेपाली सेनाले सबै राष्ट्रिय शक्तिहरूलाई परिचालन गरी शत्रुलाई देशको सीमाबाहिर लखेटी राष्ट्रिय अस्तित्व, स्वतन्त्रता, भौगोलिक अखण्डता र सार्वभौमसत्ता जोगाउनु पर्छ। यो लक्ष्य प्राप्त नहुन्जेलसम्म सेनाले जनपरिचालनसहित सबै राष्ट्रिय शक्तिहरूको परिचालन गरी अनन्तकालसम्म युद्ध जारी राखेछ । यस्तो खाले प्रतिरोधात्मक तथा प्रतिकारात्मक युद्ध (war of attrition) का बेला राष्ट्रिय जनशक्तिको सैनिक तालिम र परिचालन कार्यले लक्ष्य प्राप्तिका लागि अहम् भूमिका खेल्ने गर्छ । यसरी राष्ट्रिय जनशक्तिको तालिम र जनपरिचालन गर्ने कार्यमा भूतपूर्व सैनिकहरूको ठूलो जिम्मेवारी र दायित्व रहन्छ । भूतपूर्व सैनिकहरूमै पनि यसको ठुलो अंश लडाईँ लड्न सक्ने अवस्थामै हुन्छन् । भूतपूर्व सैनिकहरूले परेका बेलामा परम बलिदान जस्तो अमूल्य योगदान दिन सक्ने क्षमता राख्छन् । यसैले नेपाली सेनाको भृतपूर्व सैनिकहरूलाई देशको जगेडा फौज (reserve force) को रूपमा पनि हेरिन्छ ।

## उद्देश्य

यस ने.रा.भू.पू.से. सङ्घको उद्देश्य निम्नानुसार छन्ः

- अवकाश प्राप्त भूतपूर्व सैनिकहरूलाई सङ्गठित तथा एकताबद्ध गरी देश र जनाताप्रित पूर्ण
   आस्था र निष्ठा सिहत भूतपूर्व सैनिकशक्तिलाई राष्ट्रको सुरक्षा तथा सेवामा परिचालन गराउने,
- भूतपूर्व सैनिक वर्गको हक हित तथा सर्वतोमुखी विकासलाई सदा ध्यानमा राखी उनीहरूलाई अनुशासित र आत्मनिर्भर बनाउन क्रियाशील रहने,
- सैनिक जीवनमा हासिल गरेका विभिन्न सिप तथा दक्षतालाई राष्ट्रोत्थानको काममा लगाउने,

- भूतपूर्व सैनिक र उनीहरूको परिवारलाई योग्यताअनुसार विभिन्न क्रियाकलापद्वारा आर्थिक अवस्था सुधार्न प्रयत्न गर्ने,
- सामाजिक सङ्घ संस्थाहरूसँग समन्वय गरी भूतपूर्व सैनिक र उनीहरूको परिवारको कल्याणका
   लागि काम गर्नुका साथै समाजका विभिन्न कल्याणकारी काममा संलग्न हुने,
- विभिन्न निकायहरूसँग सम्झौता भएबमोजिम भूतपूर्व सैनिकहरूलाई सुरक्षा सेवा तथा रोजगारमूलक काममा संलग्न गराउने,
- यो सङ्घ मुनाफारहित जनहितकारी सामाजिक संस्था हुनेछ ।

# गठन प्रक्रिया

यस सङ्घको गठन प्रक्रिया विधानत निम्नानुसार हुनेछ :

• केन्द्रीय साधारण सभा २) केन्द्रीय सिमित ३) केन्द्रीय सञ्चालक सिमित ४) जिल्ला सभा ५) जिल्ला कार्य सिमित ६) क्षेत्रीय साधारण सभा ७) क्षेत्रीय कार्य सिमित ८) एकाइ साधारण सभा ९) एकाइ कार्य सिमित हरेक तहमा सभापित, उप सभापित, सिचव, कोषाध्यक्ष र सदस्यहरू रहने व्यवस्था छ । केन्द्रमा भने एक विरष्ठ उपाध्यक्ष र महासिचवसमेत रहने व्यवस्था छ । हरेक तहमा सभापितको चयन चुनावद्वारा हुन्छ र सबै तहको कार्य सिमितिको पदाधिकारीहरू र बाँकी सदस्यहरू सभापितद्वारा मनोनयन हुने व्यवस्था छ । यस सङ्घको अहिले ७५ जिल्लामध्ये ६५ जिल्लाहरूमा शाखा कार्यालयहरू सञ्चालित छन् र बाँकी जिल्लाहरूमा पिन जिल्ला कार्य सिमिति स्थापना गर्ने कार्य जारी छ । यस सङ्घको सञ्चालन विधि र कार्यहरू यस सङ्घको विधान-२०४७ र छैटौं संशोधन-२०८९ अनुसार हुने व्यवस्था छ । (विधान)

#### संरक्षकत्व

सबैजसो देशहरूमा 'भेटेरान्स' हरूको सङ्घ, सङ्गठनहरू हुन्छन् भने यस्ता सङ्घ, सङ्गठनहरूको प्रमुख संरक्षक तथा संरक्षकहरू रहने गरेको पाइन्छ। राजा भएको तथा राजसंस्था मानेका देशहरूमा राजा वा रानी वा राज-परिवारका सदस्यहरूमध्येबाट प्रमुख संरक्षक रहेको पाइन्छ । कतिपय राजा नभएका

देशहरूमा त्यहाँको राष्ट्रप्रमुख वा प्रधानमन्त्री वा रक्षा मन्त्री संरक्षकको भूमिकामा रहने गरेको पाइन्छ । नेपालको भूतपूर्व सैनिकहरूको 'नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ ' को प्रमुख संरक्षकमा २०४७ सालसम्म राष्ट्रप्रमुख रहने व्यवस्था थियो। तर २०४७ सालको प्रजातन्त्रपछि सो व्यवस्था हट्न गयो र राज्यले आजसम्म पनि यसको अभिभावकत्व लिन सकेको छैन । (परिचय) यसरी हेर्दा र मूल्याङ्कन गर्दा सबैजसो देशका भेटेरान र तिनका सङ्गठनलाई राज्यले नै स्वामित्व लिने गरेको र अभिभावकत्व प्रदान गर्ने गरेको देखिन्छ । सबैजसो देशहरूले भेटेरानहरूका लागि आफ्नो क्षमताअनुसार निश्चित बजेट निकासा गरी उनीहरूको सुविधा सहित सम्मानित जीवनयापन गर्न सहयोग गरेको पाइन्छ । तर नेपालको भूतपूर्व सैनिकहरू राज्यको त्यो दायित्वबाट विमुख छन् - मासिक पेन्सनबाहेक यिनिहरूले राज्यबाट न त कुनै सिवधा पाएका छन् न त कुनै अभिभावकत्व नै ।

### सैनिक कल्याणकारी कोषबाट उपलब्ध सहयोग

अहिले नेपाली सेनाका भूतपूर्व सैनिक, तिनका आश्रित परिवार र बहालवाला सैनिकका आश्रित परिवारलाई नेपाली सेनाको 'सैनिक कल्याणकारी कोष' बाट निम्न सेवा, सुविधा र सहयोग प्राप्त हुने गरेको छ:

### औषधी उपचार

काठमाण्डौं र प्रदेशहरूमा भएको सैनिक अस्पताल, जिल्लाहरूमा भएको फिल्ड हस्पिटल र स्थानीय गण, गुल्महरूबाट पनि औषधी उपचार सेवा उपलब्ध गराइँदै आएको छ ।

- नेपाली सेनाको आफ्नै मेडिकल कलेज र नर्सिङ कलेज पनि सञ्चालन हुँदै आएको छ ।
- सेनाले निवृत्तिभरणमा जानेहरूको लागि स्वैच्छिक १ मिहनाको पेन्सन जम्मा गरी असाध्य रोग लागेमा उपचारार्थ श्रीमान्/श्रीमतीले १० लाख सम्मको उपचार खर्च पाउने बीमाको व्यवस्था पनि गरेको छ ।

# शिक्षा सुविधा

भूतपूर्व सैनिकका छोरा,छोरीहरूलाई भक्तपुरस्थित वीरेन्द्र सैनिक महाविद्यालय तथा पूर्वमा धरान, पश्चिममा पोखरा, मध्यपश्चिममा सुर्खेत र सुदूरपश्चिमको धनगढीमा भएको सैनिक विद्यालयहरूमा र विद्यालय नभएका कितपय स्थानमा स्थानीय स्कुलहरूमा इम्प्यानिलङको व्यवस्था गरी छात्रवृत्ति प्रदान गरिएको छ । उच्च शिक्षाका लागि पनि छात्रवृत्तिको व्यवस्था गरिएको छ ।

## सैनिक कल्याणकारी भत्ता

निवृत्तिभरणमा अवकाश भएका सकल भूतपूर्व सैनिकहरूलाई उमेरको आधारमा सैनिक कल्याणकारी कोषबाट मासिक न्यूनतम रु. ४०० देखि रु. १० हजारसम्म भत्ता दिने व्यवस्था गरिएको छ ।

- बहालवाला र भूतपूर्व सैनिकहरूको मृत्यु भएमा कल्याणकारी कोषबाट किरिया खर्च बापत रु.
   २५ हजार सहयोग स्वरूप उपलब्ध गराउने व्यवस्था छ ।
- भूकम्प, बाढी, पिहरो जस्ता दैवीप्रकोप र आगजनीबाट पीडित भूतपूर्व सैनिक तथा पिरवारहरूलाई
   क्षित भएको विवरणको आधारमा कल्याणकारी कोषबाट राहतस्वरूप क्षितपूर्ति रकम सहयोग
   प्रदान गर्ने व्यवस्था छ ।

# भूतपूर्व सैनिक पुनर्मिलन समारोह

हरेक वर्ष पूर्व, मध्यपूर्व, मध्य, मध्यपश्चिम र सुदूरपश्चिम गरी ५ क्षेत्रमा पुनर्मिलन समारोह गिरन्छ । यस समारोहमा भूतपूर्व सैनिकहरूलाई भोजको व्यवस्था, आतेजाते र बस्ने खर्चसिहत केही उपहार तथा प्रधानसेनापितसँग साक्षात्कार गर्ने अवसर समेत प्रदान गरिन्छ । सैनिक कल्याणकारी बोर्डले यस्तो पुनर्मिलन समारोहको आयोजना गर्छ भने सबै खर्चको व्यवस्था सैनिक कल्याणकारी कोषबाट हुने गरेको छ।

## सैनिक कल्याणकारी बोर्ड

भूतपूर्व सैनिक तथा परिवारहरूको कल्याणसम्बन्धी कार्यलाई विस्तार र सुदृढ गर्दै लैजाने उद्देश्यले वि.सं. २०६९ सालमा नेपाली सेनाले एक छुट्टै 'सैनिक कल्याणकारी बोर्ड'को गठन गरेको छ । उक्त

बोर्डले बहालवाला र भूतपूर्व सैनिकहरूलाई आयमूलक व्यवसाय गर्नका निमित्त सहुलियत ब्याजदरमा ऋण सुविधा उपलब्ध गराउँदै आएको छ । अवकाशमा जान लागेका सैनिकहरूलाई अवकाशपछि रोजगारीको अवसर प्रदान गर्न सिपमूलक तालिम (vocational training) दिने व्यवस्था पिन गरेको छ । यो बोर्डको सम्पूर्ण बजेट सैनिक कल्याणकारी कोषबाट व्यवस्था गरिएको छ ।

### अतिरथी नीर दैवी प्रकोप उद्धार अक्षय कोष

स्व. अतिरथी नीर शम्शेर ज.व.राणाले वि. सं. २०६२ मा आफ्नो नाउँमा रु ४ करोड पूँजीको दैवी प्रकोप उद्धार अक्षय कोषको स्थापना गरेका थिए। उक्त कोषको व्याजबाट भूतपूर्व सिपाहीदेखि पिदक तहसम्मका दैवी प्रकोप पीडित व्यक्ति/पिरवारलाई रु. ५० हजारसम्म आर्थिक सहयोग प्रदान गर्न सिकने व्यवस्था गरिएको छ । (परिचय)

## संवैधानिक व्यवस्था

नेपालको संविधान (२०७२) को धारा ४८ मा प्रत्येक नागरिकको कर्तव्यमा (क) नेपालको राष्ट्रियता, सार्वभौमसत्ता र अखण्डताको रक्षा गर्नु (ख) संविधान र कानूनको पालना गर्नु (ग) राज्यले चाहेको बखत अनिवार्य सेवा गर्नु र (घ) सार्वजनिक सम्पत्तिको सुरक्षा र संरक्षण गर्नु भन्ने उल्लेख छ । यसमा विशेषतः बुँदा (क) र (ग) भूतपूर्व सैनिकको लागि बढी सान्दर्भिक छ । त्यसैगरी संविधानको धारा ५९ (क) राष्ट्रिय एकता र राष्ट्रिय सुरक्षा नीतिअन्तर्गत उपदफा (७) मा पूर्व कर्मचारी, सैनिक र प्रहरी लगायतका पूर्वराष्ट्रसेवकहरूमा रहेको ज्ञान, सिप र अनुभवलाई राष्ट्र हितमा समुचित उपयोग गर्ने भनी उल्लेख छ। संविधानको यो धाराले भूतपूर्व सैनिकहरूको सान्दर्भिकतालाई अझ बढावा दिएको छ । (नेपालको संविधान)

संविधानको उद्देश्य प्राप्तिका लागि र पूर्वराष्ट्रसेवकहरूको आ-आफ्नो हक, हित र परेको बेला संयुक्त रूपमा राष्ट्रलाई आवश्यक सेवा,सहयोग पुऱ्याउनको लागि एक "बृहत् समन्वयकारी सङ्गठन" निर्माण गर्न वाञ्छनीय भएकोले २०६८ सालमा "पूर्व राष्ट्रसेवक सङ्गठन राष्ट्रिय समन्वय परिषद् नेपाल" नामक एक सञ्जालको स्थापना गरिएको छ। यस परिषद्मा पूर्व कर्मचारी सेवा परिषद्, नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ, नेपाल पूर्व प्रहरी सङ्गठन, नेपाल पूर्व सशस्त्र प्रहरी सङ्घ र नेपाल राष्ट्रिय अनुसन्धान विभाग आबद्ध छन्। संविधान र परिषद्को उद्देश्य प्राप्तिका लागि यी ५ वटा निकायहरूको संयुक्त प्रयासले विशेष प्रभावकारी

असर (Synergy) प्राप्त हुन सक्ने देखिन्छ । तर सरकारले यसको पूर्ण लाभ र सहयोग भने लिन सकेको छैन । (पूर्वराष्ट्रसेवक)

# नेपाल सरकार र नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ

World Veterans Federation को सदस्य ने.रा.भू.प्.से.सं. नेपाल सरकार रक्षा मन्त्रालय अन्तर्गतको नेपाली सेनाबाट मान्यता प्राप्त एक मात्र सङ्गठन हो। तर रक्षा मन्त्रालयमा भृतपूर्व सैनिकको विषयलाई हेर्न एउटा Dedicated Desk को व्यवस्था हुन जरूरी छ। यसलाई सरकारबाट आवश्यक संरक्षण र सहयोग प्रदान गरिनुपर्छ। यस सन्दर्भमा विभिन्न राष्ट्रहरूमा आ-आफ्ना भेटेरानको विषय हेर्नका लागि रक्षा मन्त्रालयभित्र वा छुट्टै विभाग नै पनि स्थापना गरेको पाइन्छ। जसले भेटेरानहरूको हक हित, सेवा सुविधा, कल्याणकारी कार्य, सहजीकरणका कामलगायत भेटेरानहरूको सुखमय जीवन यापनका लागि सहयोगी कार्यहरू गर्दछन् । देशको गच्छे अनुसार सबै राष्ट्रहरूमा भेटेरान र तिनका आश्रित परिवारहरूको लागि सरकारको तर्फबाट केही न केही भत्ता, औषधी उपचार, शिक्षा तथा रोजगारीको अवसर अन्य सेवा सुविधाहरू तथा सम्मान आदि उपलब्ध हुने गरेको पाइन्छ। विश्वमा विद्यमान भेटेरानहरूको सम्बन्धमा राज्यहरूले गरेको व्यवस्थालाई हेर्दा र तुलना गर्दा नेपालको परिदृश्य साह्रै पछाडि परेको र टिठ लाग्दो भएको महसुस हन्छ। नेपालका भृतपूर्व सैनिकहरू र तिनका आश्रित परिवारहरूले जे जित सेवा, सुविधा, कल्याणकारी सहिलयतहरू पाइरहेका छन् ती सबै नेपाल सरकारबाट नभई नेपाली सेनाको कल्याणकारी कोषबाट आर्जित व्याज रकमबाट बेहोरिने गरेको छ । नेपाली सेनाको कल्याणकारी कोष भनेको हरेक सिपाहीले शान्ति सेनामा सेवा गरेबापत आर्जन गरेको रगत पिसनाको कमाइबाट छुट्याई स्थापना गरेको कोष हो जुन भृतपूर्व सिपाहीहरूको सेवा निवृत्त पछिका दिनहरूका लागि अन्य थप हितका कार्यहरूमा खर्चिन पर्ने हो । भविष्यमा यसतर्फ सरकारको ध्यान जानुपर्छ र पक्कैपनि केही न केही पहल हुनेछ भनी आशा भने गर्न सिकन्छ ।

# सुरक्षा प्रदायक कम्पनी

यस सङ्घको उद्देश्य अनुरुप २०५२ साल देखिको सुरक्षा गार्ड सेवाको अनुभवलाई समेटी 'नेपाल राष्ट्रिय भूतपूर्व सैनिक सङ्घ' ले आफ्नै एक सुरक्षा प्रदायक कम्पनी (Security Company) 'नेपाल राष्ट्रिय भूतपूर्व सैनिक सुरक्षा सेवा प्रा.लि.' २०६२ मा दर्ता गराएको छ । अत्यधिक भूतपूर्व सैनिकहरूलाई पेसा

सुहाउँदो रोजगारी दिलाउन यो सुरक्षा प्रदायक कम्पनी खडा गरिएको हो । भूतपूर्व सैनिकहरूलाई रोजगारी दिलाउन विभिन्न जिल्ला कार्य समितिहरूद्वारा सञ्चालित सुरक्षा सेवा कम्पनीलाई स्वीकृति दिन सक्ने अभ्यास पिन छ। नेपाल सरकार रक्षा मन्त्रालयअन्तर्गत रहेको तथा नेपाली सेनाबाट मान्यता प्राप्त नेपाली सेनाको भातृ सङ्गठनको रूपमा रहेको यो ने.रा.भू.पू.सै सं. एक अर्धसरकारी सङ्गठन समान भएकाले यसको सुरक्षा प्रदायक कम्पनी राष्ट्रियस्तरमा नै सबैभन्दा विश्वसनीय, जिम्मेवार जवाफदेही र भरपदों प्रकृतिको Security Company हुन आउँछ। यसैले यो "नेपाल राष्ट्रिय भूतपूर्व सैनिक सुरक्षा सेवा प्रा.लि." लाई नेपाल सरकारले नीतिगत व्यवस्था गरी सरकारी र अर्धसरकारी स्वामित्वमा रहेको संरचना, भवन, कार्यालय, बैंक, प्राधिकरण, सञ्चारगृह, सरकारी योजना, परियोजना आदिको सुरक्षा जिम्मेवारी दिन सिकन्छ । यदि यस्तो नीतिगत व्यवस्था भएको खण्डमा नेपाली सेनाबाट अवकाश पाएका तालिम प्राप्त अनुशासित भूतपूर्व सैनिकको ठूलो सङ्ख्याले सम्मानित रोजगारी पाउनुका साथै राष्ट्रले भरपदों सुरक्षाको प्रत्याभूति पनि पाउनेछ । यस्तो व्यवस्थाले भूतपूर्व सैनिक युवाहरूमा विदेश पलायन हुने प्रवृत्ति समेत रोकिनेछ भने आवश्यकता अनुसार विशेष प्रकृतिका तालिमहरू दिलाएर उच्च कोटिको विशिष्ट सुरक्षा दिनसक्ने मानव जनशक्ति समेत उत्पादन गर्न सिकने देखिन्छ । यदि सरकारले यो सोचलाई गम्भीरता पूर्वक लिन सक्को खण्डमा नेपालको अनौपचारिक सुरक्षा क्षेत्रमा नयाँ आयाम थिपनेछ भने नेपालले यस क्षेत्रमा अतुलनीय क्षमता विकास गर्न सक्ने देखिन्छ ।

### निष्कर्ष

अहिले नेपाली सेनाबाट अवकाश पाएका सैनिकहरूको सङ्ख्या करिब ९२,२९० छ भने सहयोग/इनाम, पुरस्कार (gratuity) पाउनेको सङ्ख्या १२,२९९ (अभिलेखालयमा) छ। यस आधारमा यिनीहरूको परिवारहरू समेतलाई जोड्दा भूतपूर्व र आश्रित परिवार गरी करिब ४/५ लाख हाराहारीको सङ्ख्यामा रहेको पाइन्छ ।

ने.रा.भू.पू.सै.सं. को केन्द्रमा कार्यालय छ। तर अत्यधिक जिल्लाहरूमा यस सङ्घको आफ्नै कार्यालय भवनहरू छैनन् भने कतै नजिकको ब्यारेकको एक कोठामा त कतै निजी घरहरूको कोठाबाट दुःखका साथ कार्यालय सञ्चालन गरिरहेको अवस्था छ । २०६४ सालमा स्थापना गरिएको सङ्घको सानो कल्याणकारी कोषबाट दैवी प्रकोप पीडित र आर्थिक अवस्था ज्यादै कमजोर भएका र बेखर्ची भई घर जान पनि नसक्ने

अवस्थाका भूतपूर्व सैनिकहरूलाई सानो तिनो आर्थिक सहयोग गर्ने पनि गरिएको छ।यस सङ्घले विभिन्न सामाजिक सेवाका कार्यहरू पनि गर्दै आएको छ।

निःस्वार्थ सेवा, राष्ट्रनिर्माण तथा देश विकास र राष्ट्रिय सुरक्षामा यिनीहरूको भूमिका अहम् रहन्छ र रहँदै आएको छ । यिनीहरूले विदेशमा शान्ति स्थापनार्थ शान्ति सेनामा भाग लिएर नेपालको नाम उच्च राखेका छन्। सेवा निवृत्तपछि पनि राष्ट्रको सुरक्षार्थ सेवा गर्ने प्रण खाएका यी भूतपूर्व सैनिकहरू नेपाली सेनाको जगेडा फौजका रूपमा रहँदै आएका छन्।

भूतपूर्व सैनिकहरूमा भएका बहुआयामिक ज्ञान, सिप, अनुभव र विज्ञताको सदुपयोग गर्दै 'ने.रा.भू.पू.सै.सं.' मा भएको 'थिङ्क ट्याङ्क' लाई सेनाले स्रोत साधन उपलब्ध गराएर सशक्त बनाउन सिकयो भने यसले सेनालाई चाहिने गुणात्मक सूचना, जानकारी तथा सुझावहरू उपलब्ध गराउन सक्छ । त्यस्तैगरी यसले सेनाको लागि अनौपचारिक Interface को काम पिन गर्न सक्छ । संसारका धेरैजसो डिफेन्स फोर्सेजहरूमा भेटेरान तथा वीरगित पाएका सैनिकहरूको योगदानको सम्मान गर्ने चलन छ । अमेरिका तथा पाश्चात्य देशहरूमा हरेक वर्षको नोभेम्बर ११ लाई प्रथम विश्वयुद्ध समाप्त भएको दिन भनेर Veterans Day मनाइन्छ र सैनिक भेटेरानहरूको सम्मान गरिन्छ। यो दिनमा भेटेरानहरूको स्मारक स्थलमा पुष्प गुच्छा चढाउने, माला चढाउने (Writhe Laying),अनेक परेडहरू प्रदर्शन गर्ने आदि चलन छ । तर नेपालको इतिहासमा राष्ट्र एकीकरण देखि नेपाल — भोट/चीन युद्ध, नेपाल अंग्रेज-युद्ध, प्रथम र दोस्रो विश्वयुद्ध, अन्य युद्ध, देशभित्र गरेका सैनिक कारवाही, शान्ति सेना आदिमा वीरगित पाएका योद्धा भूतपूर्व सैनिकहरूको यथोचित सम्मान हुन नसकेको महसुस भई रहेको अवस्थामा यसप्रति सरकार र नेपाली सेना दुवै गम्भीर हुनुपर्ने देखिन्छ ।

आजका बहालवाला सैनिक भोलिका भूतपूर्व सैनिक हुन् भने नेपाल सरकार र नेपाली सेनाको आत्मीय संरक्षण, सद्भाव र सहयोग यस भूतपूर्व सैनिक सङ्घका निमित्त आधारभूत आवश्यकता हो । भूतपूर्व सैनिकहरूलाई नेपाल सरकारले हेर्नुपर्ने र दिनुपर्ने सेवा सुविधा र कल्याणकारी कार्यहरूको अभावमा नेपाली सेनाले नै आफ्नो कल्याणकारी कोषबाट सक्दो सेवा सुविधाहरू दिइराखेको छ । सरकारले यस विषयमा ध्यान दिनैपर्छ र जो सक्दो गर्नुपर्छ । यिनै कारण र व्यावहारिकता समेतलाई ध्यानमा राखी नेपाल राष्ट्रिय

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# नेपालको भूराजनीति, राष्ट्रिय सुरक्षा र सीमा व्यवस्थापन



🥆 बुद्धिनारायण श्रेष्ठ

# पृष्ठभूमि

भूराजनीति भन्नाले भूगोलले राजनीतिलाई कसरी प्रभावित गर्दछ भन्ने एउटा अध्ययन विधा हो । "भू" शब्दले पृथ्वीलाई बुझाउँछ र पृथ्वीको कुनै भाग वा भौगोलिक क्षेत्रमा हुने राजनीतिक गतिविधिलाई भूराजनीति भन्ने गरिएको छ । भूगोलले भौगोलिक तत्त्वलाई र राजनीतिले राज्यको स्वार्थ परिपूर्ति गर्न कसरी संघर्ष गरिरहेको हुन्छ भन्ने पक्षलाई समेटेको हुन्छ। भूराजनीतिले भौगोलिक तत्त्वहरूः जस्तै– देशको अवस्थिति, बनावट, जलवायु, प्राकृतिक स्रोत, भूपरिवेष्टितता, पानीको प्राचुर्य, जिमनको ढल्काइ र जनसङ्ख्याले राज्यको व्यवहार र क्रियाकलापमा पार्ने प्रभाव उल्लेख गर्दछ । एक देशको अन्तर्राष्ट्रिय पहिचान वा अन्तर्राष्ट्रिय जगत्का सम्बन्धहरूमा भूराजनीतिक कारणहरू निर्णायक हुन्छन् ।

भूराजनीति भन्ने शब्दको बढी प्रयोग देशको परराष्ट्र मामिलालाई असर पार्ने अर्थमा बुझ्ने गरिन्छ। यसले सत्ता, शक्ति र आर्थिक सम्पन्नताले कसरी राजनीति निर्धारण गर्छ भन्ने स्पष्ट व्याख्या गर्दछ। देशको सिमानाभित्रको भूभागलाई मुख्य केन्द्रबिन्दु मानेर यसका अन्य अवयवको आधारमा शक्तिको निर्माण र शासकीय मनोवृत्तिमाथि प्रकाश पार्न यसले खास भूमिका खेल्दछ । भूराजनीति भनेको ठूला तथा आर्थिक दृष्टिकोणले सम्पन्न देशहरूले अन्य साना तथा निर्धन देशमाथि थोपने उनीहरूको निहित स्वार्थको सैद्धान्तिक अध्ययन पनि हो। निश्चित भूगोललाई प्रतिनिधित्व गर्ने एउटा देशले कसरी भूगोलभित्र आफ्नो अस्तित्वलाई स्थापित गर्दछ भन्ने अध्ययन विधा हो भराजनीति ।

<sup>ື</sup> नापी विभागका पूर्व महानिर्देशक, सीमा अध्येता तथा मदन पुरस्कार विजेता ।

त्यस्तै भूपरिवेष्टित तथा कमजोर एवम् साना देशहरूले कसरी आफ्नो विकास/उन्नतिको लक्ष्य निर्धारण गर्ने र शक्तिशाली छिमेकीसँगको सम्बन्ध कायम गर्ने वा कस्तो प्रतिरणनीति निर्धारण गर्ने भन्नेबारे भूराजनीतिले पर्याप्त आधारहरू दिने गर्दछ। संक्षेपमा भन्नुपर्दा भूराजनीतिले शक्तिशाली देशहरूसँगको दुईपक्षीय वा बहुपक्षीय अन्तर्राष्ट्रिय सम्बन्ध कसरी निर्धारण गर्ने भन्ने बारे अध्ययन, विश्लेषण र नीतिगत सुझावहरू पेस गर्दछ ।

## नेपालको भूराजनीति

नेपाल एसियाका उदीयमान दुई ठूला मुलुक भारत र चीनबीच अवस्थित छ । भारत विश्वको सबैभन्दा धेरै जनसंख्या १ अर्व ४० करोड भएको देश हो भने चीन संसारकै धेरै कलकारखाना भएको औद्योगिक मुलुक हो । चीनमा उत्पादित सरसामान, वस्तु, कपडा, सामग्री, इलेक्ट्रोनिक सामान आदिले विश्व बजार उसैको कब्जामा रहेको छ । अर्कोतर्फ भारत र चीन विश्व राजनीतिक रङ्गमञ्चमा प्रतिस्पर्धीका रूपमा रहेको पाइन्छ । दुवै देशलाई विश्वका विभिन्न देशमा आफ्नो प्रभाव जमाउने, सामिरक श्रेष्ठता स्थापित गर्ने, अन्तरिक्षमा यान प्रक्षेपण गर्ने चाहना भएर होडबाजीमा रहेका छन् । चीन संयुक्त राष्ट्रसंघमा भिटो पावरमा रहेको छ । भारत आफ्नो यथोचित स्थान प्राप्त गर्न प्रयासरत छ।

नेपाल टिस्टादेखि किल्ला काँगडासम्मको बृहत् नेपाल बन्नुभन्दा पहिले यहाँ ससाना भुरे टाकुरे राज्यहरूबीच भूगोल विस्तार गर्ने अभियान चिलरहन्थ्यो । यस्ता राज्यहरूमा एक प्रकारको स्थानीय भौगोलिक राजनीति सिक्रिय भइरहन्थ्यो । बृहत् नेपालको निर्माणपछि यसको भूराजनीतिक सम्बन्ध तिब्बत (हाल चीनको अधीनस्थ) र ब्रिटिस इस्ट इन्डिया कम्पनी (भारत) सरकारसँग भयो । सन् १८१४–१८१६ को नेपाल-अंग्रेज युद्ध अन्त्य भई सुगौली सिन्ध भएपछि नेपालको भूराजनीतिक सिक्रयता अन्य देशहरूसँग पनि भयो।

सम्बन्ध विस्तारका दौरान अरू देशसित नेपालको सम्पर्क बढ्दै गए पनि मुख्यरूपमा दुई छिमेकी राष्ट्रसित भूराजनीतिक गतिविधि निकै बढ्दै गएको छ। बेलाबखत राजनीतिक उतारचढाव पनि बढ्नेघट्ने गरेको छ। यस्तो अवस्थामा नेपालले सन्तुलित परराष्ट्रनीति र त्यस अनुसारको रणनीति र कूटनीति अपनाउनु पर्ने अवस्था रहेको छ। भारत र चीनका बीच विश्व रङ्गमञ्चमा होडवाजी बढेकोले नेपालले आफ्नो भूराजनीतिक अवस्थालाई दृष्टिगत गरी सन्तुलित परराष्ट्रनीति अवलम्बन गर्नुपर्ने खाँचो झन् बढेको छ।

# राष्ट्रिय सुरक्षा

राष्ट्रिय सुरक्षा व्यवस्थापन भनेको मुलुकको सार्वभौमसत्ता, भौगोलिक अखण्डता, राष्ट्रिय हित, स्वाभिमान र राष्ट्रिय स्वाधीनताको रक्षा, आर्थिक, सामाजिक, वातावरणीय एवं साँस्कृतिक तत्त्वहरूको जगेर्ना तथा अन्तर्राष्ट्रिय सम्बन्ध, कूटनीति, आर्थिक साझेदारीमा छिमेकीका अपेक्षाहरूसँग सन्तुलन मिलाउने कार्य हो। यसको मूल उद्देश्य राष्ट्रिय स्वार्थको संरक्षण गर्नु हो। नागरिक र समुदायलाई विश्वसनीय तवरले आत्मनिर्णय, स्वायत्तता, समृद्धि र सुखको उपभोग गर्न सक्षम तुल्याउने गरी आन्तरिक र बाह्य परिस्थितिलाई नियन्त्रणमा राखिराखे शासकीय क्षमतालाई राष्ट्रिय सुरक्षा व्यवस्था भनी परिभाषित गरिएको पाइन्छ ।

अर्कोतर्फ, सुरक्षा भनेको विध्वंसात्मक काम, अपराधजन्य कार्य, हमला गरी भागेर जाने क्रियाकलाप विरुद्ध अपनाइने वैधानिक कार्य पनि हो। नागरिकहरूको बचावट गर्ने र देशको गोपनीयता कायम राख्ने कार्यलाई पनि सुरक्षा भनिन्छ। समग्रमा भन्नपर्दा जनतालाई जीउधनको खतराबाट छुटकारा गराउने र डरत्रास हटाई समाजमा निश्चिन्तता दिलाउन गरिने कार्यलाई सुरक्षा भनिने गर्छ। यसैगरी राष्ट्रको रक्षा गर्ने क्रियाकलापलाई पनि सुरक्षा भन्ने चलन छ। सामान्यतया नागरिक समाजको सुरक्षा देशको प्रहरी, सशस्त्रगण, राष्ट्रिय अनुसन्धान तथा सेनाले गर्दछ। कतैबाट हमला तथा आक्रमण भयो भने त्यस्ता आक्रमणकारीको प्रतिवाद गरेर सुरक्षा निकायले रक्षा गर्ने हुन्छ।

नेपालको वर्तमान संविधान र कानूनले मुलुकको स्वतन्त्रता, सार्वभौमसत्ता, भौगोलिक अखण्डता, राष्ट्रियता र स्वाधीनताको संरक्षण गर्दै राष्ट्रिय एकतालाई अक्षुण्ण राख्नु तथा व्यक्तिको जिउ–धन र स्वतन्त्रताको संरक्षण एवम् प्रत्याभूतिलाई राष्ट्रिय सुरक्षा भनी उल्लेख गरिएको पाइन्छ। राष्ट्रिय सुरक्षा एक अन्तरसम्बन्धित र बहुआयामिक विषयवस्तु हो। मुलुकको रक्षा, प्रतिरक्षा, सुरक्षा मामिला; परराष्ट्र मामिला, सामाजिक, आर्थिक नीति र विकासको पक्ष बृहत् अर्थमा राष्ट्रिय सुरक्षाका अन्तरवस्तु हुन् ।

राष्ट्रिय सुरक्षा नीति, २०७३ को बुँदा १.४.१ मा नेपालको स्वतन्त्रता, सार्वभौमिकता, भौगोलिक अखण्डता, राष्ट्रिय एकता, स्वाधीनता, स्वाभिमान तथा सिमानाको सुरक्षा, राष्ट्रिय सुरक्षा नीतिलाई मार्गदर्शन गर्ने आधार हुन् भिनएको छ। बुँदा १.७.१ मा भौगोलिक अवस्थिति र खुला सिमाना राष्ट्रिय सुरक्षामा प्रभाव पार्ने तत्त्व हुन् भन्दै १.९.६ मा खुला अन्तर्राष्ट्रिय सिमाना र सीमा अतिक्रमण बाह्य चुनौती र खतरा हुन्

भन्ने उल्लिखित छ। यसैगरी बुँदा ३.३.१ मा नेपालको स्वतन्त्रता, सार्वभौमिकता र भौगोलिक अखण्डतालाई बाह्य घुसपैठ र आक्रमणबाट सुरक्षा गर्ने, सीमाको सुरक्षा गर्ने नेपाली सेनाको प्रमुख सुरक्षा जिम्मेवारी हुनेछ भनी उल्लेख गरिएका छन् ।

राष्ट्रिय सुरक्षा नीति,२०७३ मा नेपालको सीमा सुरक्षा र व्यवस्थापन, खुला अन्तर्राष्ट्रिय सिमाना, सीमा अनुगमन र नियमन क्षमतामा अभिवृद्धि गर्ने कुरा उल्लेख गरिएका छन्। यस्तैगरी सीमापार अपराध, अन्तरदेशीय र अन्तरसीमा अपराध, सीमामा हुने क्रियाकलाप, आर्थिक प्रवाह नियमन र अनुगमन क्षमताको विकास गर्ने, हितयार तथा विस्फोटक पदार्थको व्यापार तथा उपयोग नियन्त्रणका लागि सीमा नियमन गर्ने बुँदाहरू समेटिएका छन्। अर्कोतर्फ सीमा अतिक्रमण नियन्त्रणको लागि नेपालको सीमा रक्षा र सुरक्षा गर्ने भन्ने विषय पनि नीतिमा समावेश छन्। यिनै विषयहरू राष्ट्रिय सुरक्षा नीति, २०७४ मा पनि रहेका छन्।

राष्ट्रिय सुरक्षाको सवालमा आन्तरिकभन्दा बाह्य चुनौतीहरू बढी घातक सिद्ध हुन सक्छन् । नेपालको सन्दर्भमा खुला अन्तर्राष्ट्रिय सीमा व्यवस्थापन प्रमुख चुनौतीका रूपमा रहेको छ । नेपाल र भारतको बीच रहेको खुला सिमानाको फाइदा उठाउँदै आपराधिक गिरोहहरूले विभिन्न आपराधिक क्रियाकलाप सञ्चालन गरिरहेको पाइन्छ। खुला सिमानाका कारण आज हातहितयार, लागूऔषध ओसारपसार तथा मानव तस्करी फस्टाइरहेको छ भने बङ्गलादेश, पाकिस्तान, म्यानमारजस्ता तेस्रो मुलुकबाट भारतसम्म आएका विदेशीहरू भारतीयका रूपमा सहजै नेपाल प्रवेश गरिरहेको अवस्था छ । विश्वका विभिन्न देशमा राष्ट्रिय सुरक्षाको एउटा महत्त्वपूर्ण तत्त्वका रूपमा सीमा सुरक्षालाई लिने गरिन्छ। तर नेपालको सन्दर्भमा खुला सीमाको दुरुपयोग र भूमि अतिक्रमण एउटा सामान्य र नियमित घटनाजस्तै हुन थालेको छ ।

# राष्ट्रिय सुरक्षा नीतिको चुनौती

नेपालको सुरक्षा नीतिको एउटा चुनौती भनेको हामीले दुबै छिमेकी देशमा नेपालतर्फबाट कुनै गडबडी हुँदैन भनेर पूर्ण प्रत्याभूति दिन सक्नु हो। त्यसका लागि हामीले उचित संयन्त्रको पनि विकास गर्न जरूरी छ। नेपालको दक्षिणी सीमावर्ती क्षेत्रमा धेरै संख्यामा मदरसा (स्कुल) खुलेका छन्। त्यहाँ हालका दिनमा पनि मदरसामार्फत् उर्दू भाषा र मुस्लिम धर्म संस्कृतिको शिक्षा-दिक्षा दिइन्छ। त्यहाँका छद्मभेषी शिक्षित-दीक्षितले बेला कुबेला सीमापार गरेर भारतमा खलबल पुन्याउन सक्छन्। यस्ता कुरामा नेपाल

सचेत रहनु पर्छ । यसै गरी उत्तरी छिमेकी देश चीनमा नेपालबाट कुनै सुरक्षा खतरा उत्पन्न हुनेछैन भनी चीनले विश्वास गर्न सक्ने नीति र व्यवहार हामीले अवलम्बन गर्नुपर्छ। नेपालको उत्तरी सीमावर्ती डाँडाकाँडा, थुम्काथुम्की, पहाडी टाकुरामा नयाँ बौद्ध गुम्बाहरू निर्मित तथा सञ्चालित छन् । त्यहाँ तिब्बती भाषा संस्कृति पनि पढाइन्छ । त्यहाँ गेरुवस्त्र धारण गरेका पश्चिमी मुलुकका बासिन्दा पनि बौद्धमार्गीका रूपमा रहेका छन् । यस्ता नयाँ बौद्धमार्गीले 'स्वतन्त्र तिब्बत' को गतिविधि उछाल्न मद्दत पुन्याइरहेका हुन सक्छन्। तिब्बतीहरू यदाकदा लुकिछिपी बेलामौका नेपालको सिमानाभित्र घुसपैठ गर्छन् । तिनीहरू नेपाल प्रहरी प्रशासनको पक्राउमा पर्छन् । ती घुसपैठकर्ता आफूलाई शरणार्थीका रूपमा चिनाउन चाहन्छन्। गैरकानुनी तिरकाले सीमापार गर्ने यस्ता अवैध घुसपैठीहरूले चीन विरोधी गतिविधि मच्चाउन सक्दछन् । यसमा हामी सतर्क हुनु पर्छ। त्यस्ता तिब्बतीहरूलाई शरणार्थीको परिचयपत्र दिन दबाब पनि सिर्जना हुन सक्छ। यस्ता कुराहरूमा नेपालको भुराजनीति जोडिएको छ ।

यिनै परिप्रेक्ष्यमा नेपालबाट चीन (तिब्बत) विरोधी गतिविधि हुन निदने प्रतिबद्धताका लागि र तेस्रो देशबाट नेपाल भएर भारतमा गडबड मच्चाउन नसक्ने प्रत्याभूति दिलाउन सशक्त रूपको राष्ट्रिय सुरक्षा नीतिको आवश्यकता पर्दछ । यस्ता सुरक्षा प्रत्याभूति र प्रतिबद्धतामा नेपालको खुला सीमा व्यवस्थापन गाँसिएको छ । हाम्रा दुवै छिमेकीले नेपाललाई शङ्कास्पद तिरकाले हेर्ने चुनौतीलाई सामना गर्न सक्ने प्रकारका उचित नीतिगत प्रबन्धहरू हाम्रो सुरक्षा नीतिमा स्पष्ट उल्लेख हुनुपर्छ ।

बदलिँदो भूराजनीतिक परिवेश र ध्रुवीकरण तथा विभिन्न स्थानमा चिलरहेको द्वन्द्वले नेपाललाई कुनै न कुनै रूपमा प्रभाव पारेको छ । अन्तर्राष्ट्रिय र क्षेत्रीय भूराजनीतिक परिस्थिति बदलिएको कारण सिर्जित परिस्थितिले राष्ट्रिय सुरक्षामा चुनौती थिपएको छ । यस्तो चुनौती सामना गर्न समय सुहाँउदो सुरक्षा रणनीति बनाएर अघि बढ्नुपर्छ ।

अहिलेको विश्व सुरक्षा परिस्थिति बहुआयामिक दृष्टिकोणले संवेदनशील बनेको अवस्थामा आन्तरिक र बाह्य परिस्थितिमा आउनसक्ने उतार चढावले नयाँ प्रकृतिका सुरक्षा चुनौती सिर्जना हुन सक्छ । त्यसलाई सामना गर्न देशको सबै सुरक्षा निकायबीच समन्वयात्मक ढंगले काम गर्नुपर्ने अवस्था छ । विश्व भूराजनीतिक अवस्था र नेपाललाई पार्ने असरका विषयमा पछिल्लो समय देशभित्रै आ–आफ्नो माग राखेर विभिन्न पक्ष आन्दोलित भएको अवस्थालाई पनि दृष्टिगत गर्नुपर्छ । मधेश समुदाय लगायत राज्यको मूल

प्रवाहमा आफ्नो पहुँच र उपस्थिति कमजोर देखिएको अनुभूति गर्ने पक्षका मागमा पनि उचित सम्बोधन आवश्यक रहेको छ।

आजको भूराजनीति विश्व रङ्गमञ्चसँग सम्बन्धित रहेको पाइन्छ । यसको उदाहरण अमेरिकालाई लिन सिकन्छ । अमेरिकी राष्ट्रपति 'डोनाल्ड ट्रम्पले दोस्रो कार्यकालको शासनसत्ता सम्हालेपछि अमेरिकाले यूएसएआईडी, मिलिनिएम च्यालेन्ज कर्पोरेसन (एमसीसी) लगायतबाट नेपाल समेत विभिन्न देशमा आउने अनुदान २०८१ माघ १४ मा कटौती गर्ने निर्णय गरे। अमेरिकाको तत्कालीन बाइडेन प्रशासनले नेपाललाई संघीयता सुदृढीकरणका लागि दिएको २० करोड डलर वर्तमान राष्ट्रपति ट्रम्पले ठगी (फ्रड) हो भनेर रद्द गरेका थिए । अमेरिकाले नेपाललाई दिएको रकम रद्द गरेको समाचार आउनेबित्तिकै चीनले यतिकै मात्राको रकम नेपाललाई दिइनेछ भन्यो । यद्यपि मिलिनिएम च्यालेन्ज एकाउन्ट विकास समिति (एमसिए नेपाल) ले अमेरिकी सरकारले एमसीसीअन्तर्गतका परियोजना अघि बढाउन २०८९ चैत मा अनुमति प्रदान गरेको छ । यसले नेपालको भूराजनीतिलाई कुन रूपमा कसरी असर पारेको छ भनेर गहन विश्लेषण गरी मुलुकले आगामी रणनीति बनाउनुपर्ने कुरा नागरिक समाज तथा सरकारी निकायमा छलफलको विषय भएको छ ।

विश्व भूराजनीतिक अवस्थाको कुरा गर्नुपर्दा, युक्रेनका राष्ट्रपित भ्लोदोमिर जेलेन्स्कीले युक्रेनमा भएको म्याग्नेसियम, ग्रेफाइट, टाइटानियमजस्ता दुर्लभ खनिज भण्डार अमेरिकालाई उपयोग गर्न निदने भनेकोले अमेरिकी राष्ट्रपित डोनाल्ड ट्रम्पले जेलेन्स्कीलाई २० फेब्रअरी २०२५ (२०८१ फागुन ८ गते) मा 'तानाशाह' भने । फागुन १६ गते जेलेन्स्कीले खनिज सम्झौता हुने इच्छा व्यक्त गरेपछि ट्रम्पले उनलाई 'साहसी व्यक्ति' हुन्, मेरो सम्मान छ भने । सम्झौताका लागि फागुन १७ गते जेलेन्स्की ह्वाइट हाउसस्थित ओभल अफिस पुगेका थिए। विभिन्न सञ्चार माध्यममा आए अनुसार वार्तामा युक्रेनको खनिज पदार्थ उपयोग गर्ने क्रममा त्यस क्षेत्रमा अमेरिकी सुरक्षा उपस्थित रहने कुरा आयो । तर युक्रेनी राष्ट्रपित जेलेन्स्कीले मञ्जर गरेनन् । यी कुरालाई समेत लिएर ट्रम्पका साथमा अमेरिकी उपराष्ट्रपित जेडी भान्स र जेलेन्स्कीलीच चर्काचर्की परेपछि ट्रम्पले जेलेन्स्कीलाई तेस्रो विश्वयुद्ध निम्त्याउन चाहेको आरोप लगाउँदै जेलेन्स्कीलाई निम्नस्तरमा दुत्कारे। यसबाट वार्ता असफल भई टुंगियो । यसपछि बाइडेन प्रशासनले युक्रेनलाई दिएको ३५० अर्ब डलर ट्रम्पले फागुन २० गते रोक्का गरे । तर जेलेन्स्कीले माफी माग्दै ट्रम्पलाई पत्राचार

गरेपछि २०८१ फागुन २९ देखि युक्रेनलाई दिइएको सहायता ट्रम्पले यथावत् सुचारु गरिदिए। यसबाट विश्वरङ्गमञ्जको भूराजनीति छिनछिनमा परिवर्तन भएको पाइन्छ ।

यहाँ युक्रेनको प्रसङ्ग उल्लेख गर्नुका कारणचाहिँ बलिया र शक्तिशाली राष्ट्रले जे गरे पिन हुने, कमजोरले सहेर भोगेर बस्नुपर्ने रहेछ भन्ने तीतो यथार्थ पिस्किनु हो । यस्ता घटनाबाट पाठ सिक्दे हाम्रा छिमेकीहरूले हाम्रो देशउपर असहज पिरिस्थित सिर्जना गर्ने वातावरण निर्माण नहोस् भन्नाका खातिर नेपालले सन्तुलित भूराजनीति र कूटनीतिलाई समयसापेक्ष रूपमा अपनाउन सक्नु पर्छ । स्वदेशी विदेशी भूगर्भवेत्ता र खानीविज्ञ भन्छन्, नेपालमा पिन युरेनियम तथा अन्य महत्त्वपूर्ण खिनज पदार्थ रहेका छन् । यसभन्दा पिन महत्त्वपूर्ण कुरा, नेपाल विश्वको एउटा ठुलो जलविद्युत उत्पादन शिक्त भएको देश हो । नेपालमा ८३ हजार मेगावाट जलविद्युत उत्पादन गर्ने क्षमता रहेको छ भिनन्छ। हाल ३ हजार २ सय मेगावाट मात्र विद्युत उत्पादन भएको छ । हाम्रा छिमेकी तथा अन्य देशले हाम्रो अपार जलशिक्त हत्याउन अमेरिकाले युक्रेनलाई गरेजस्तै गर्ने व्यवहार र पिरिस्थिति आउन निवन नेपाल बेलैमा सजग रहनु पर्छ ।

## राष्ट्रिय सुरक्षाका सन्दर्भमा सीमा व्यवस्थापन

नेपाल-भारत अथवा भारत-नेपाल खुला सीमा वास्तवमा अविञ्छित तत्त्वले दुरुपयोग गर्ने गरेका छन् । एउटा देशमा अपराध गर्छन् अनि अन्तर्राष्ट्रिय सीमा लुसुक्क पार गरेर त्यो अपराधी अर्कोतर्फ हराउने गर्छन्। सीमाको एकातिर आतङ्क मच्चाउछन् र तिनै आतङ्ककारी खुला सीमाबाट सुटुक्क अर्कोतिर छिर्छन्। भारतीय नक्कली नोट कारोबारी दिउँसै नेपालको सीमा काटी भारततर्फको बजारमा पुगेर आर्थिक विकृति फैलाउने गर्छन्। लागुपदार्थ झोलामा बोकेर हिंडेका तस्कर विनारोकटोक अन्तर्राष्ट्रिय सीमा वारपार गर्छन्। नेपाली श्रमशक्ति बेच्ने युवा तथा चेलीबेटीलाई मानवतस्करले गैरकानूनी तरिकाले खुला सीमापार गराई भारतको दिल्ली, मुम्बई हुँदै निषेधित देश इराक, जोर्डन पुऱ्याउँछन् र त्यहाँ अवैध धन्दामा लगाउँछन्। वीरगञ्जका उद्योगी व्यापारी र तिनका बालबच्चा अपहरण गरी रक्सोलको खुला सीमाबाट निर्धक्क भारतको बेतिया पुऱ्याइन्छ । फिरौतीको मोलमोलाई र सौदावाजी मिले त्यस्ता अपहृतलाई रिहा गरिन्छ ।सोदा निमले कितको ज्यानै पनि लिने गरेको छ । खुला सीमा दुरुपयोग गरिएका यस्ता काण्ड प्रतिनिधिमूलक उदाहरण हुन्।

सीमा व्यवस्थापन र मुलुकको सुरक्षा एकआपसमा अन्योन्याश्रित विषयवस्तु हुन् । देशभित्रको शान्ति-सुरक्षामा खलल पुग्न लाग्यो भने अन्तर्राष्ट्रिय सीमाक्षेत्रमा सतर्कता अपनाउनु पर्ने हुन्छ । यस्तै, सीमा व्यवस्थापन कुशलताका साथ गर्न सिकएन भने मुलुकमा स्वदेशी तथा विदेशी नकारात्मक तत्त्वहरूको चलखेल बढेर देश विकासमा बाधा उत्पन्न हुन सक्छ । अर्कोतर्फ अन्तर्राष्ट्रिय सिमाना यित संवेदनशील हुन्छ कि छोटो समयाविध भित्रैमा यसले प्रतिकूल नितजा दिन पिन सक्छ । यसको उदाहरणका रूपमा नेपाल तथा भारतमध्ये कुनै एक देशमा भएको आमिनर्वाचनका समयमा बोर्डर सिल गर्ने प्रथा नअपनाउँदा भएका परिणामलाई लिन सिकन्छ ।

दक्षिण एसियाली मुलुकहरूका सन्दर्भमा नेपालको भौगोलिक अवस्थितिका कारणले यहाँको सुरक्षात्मक व्यवस्था छिमेकी मुलुकहरूका निमित्त समेत सरोकारयुक्त हुनपुगेको छ । विश्वमै आफ्नो प्रभुत्व बढाउँदै गएको र ठूलो क्षेत्रफलको भू-भाग ओगटेको तथा पृथक् राजनीतिक व्यवस्था भएको चीन र संसारको सबभन्दा धेरै जनसंख्या भएको मुलुक भारतका बीच नेपाल अवस्थित छ । यसबाहेक अझ तेस्रो परिपाटी भएको मुलुक पाकिस्तानबाट पनि नेपाल धेरै टाढा छैन । यी विविध कारणहरूले गर्दा वर्तमान परिस्थितिमा हाम्रा छिमेकीहरूका निमित्त पनि हाम्रो राष्ट्रिय सुरक्षा र यससँग सम्बन्धित अन्तर्राष्ट्रिय सीमा व्यवस्थापन चासोको विषयवस्तु बन्न पुगेको छ ।

समयको दौरानमा नेपाल र भारतका बीच विद्यमान खुला सिमाना व्यवस्थामा परिवर्तन गर्न अथवा यसको वैकल्पिक उपाय खोज्न दुवै देशका सरकारहरूको चाहना भएको संकेत प्रशस्त मात्रामा देखिएको छ । हाल प्रचलनमा रहेको खुला सीमाको वैकल्पिक व्यवस्थाका रूपमा कस्तो किसिमको नियमन तथा नियन्त्रित सीमाव्यवस्था या सीमापद्धित आवश्यकता पर्छ ? छलफल गर्नुपर्ने बेला आएको छ । दुवै देशबीच जनस्तरमा सयौँ वर्षदेखि घनिष्ठ आपसी सम्बन्ध रहिआएको छ । त्यसैले बदलिदो समय, अवस्था र परिस्थितिअनुसार खुला सीमा प्रणालीको बदलामा नियमन पद्धित लागु गर्न आवश्यक र उपयुक्त देखिन आएको छ ।

यस प्रयोजनका लागि सीमा नाकाको एउटा लामो कोरिडोरमा सिसिटिभि फिट गरी त्यसै कोरिडोरबाट यात्रुलाई आफ्नो नाम, ठेगाना, कित दिनका लागि कहाँ जान लागेको हो, अथवा कहाँ गएर कित दिनपछि फर्केको हो भन्न लगाई फटाफट सीमापार गर्न दिनुपर्छ । यस कार्यलाई भित्री कोठामा रहेको कम्प्युटर मनिटरबाट अनुगमन गर्नुपर्छ । सन्दिग्ध यात्रुलाई कोरिडारको अन्त्यबाट बोलाई भिन्नै कोठामा लगेर केरकार गर्नुपर्छ । दोषी ठहरिए पकाउ गरी कार्वाही गर्नुपर्छ ।

सीमालाई नियमन (रेगुलेटेड) गर्ने सन्दर्भमा सिसिटिभि व्यवस्थापन पछिको अर्को चरण भनेको सीमा वारपार गर्ने यात्रुले परिचयपत्र प्रस्तुत गर्नुपर्ने व्यवस्था अपनाउनु हो । सीमा नाकाको अध्यागमन चौकीमा डिजिटल स्क्यान मेसिन राखी यात्रुले पेश गरेको परिचयपत्र स्क्यान गरी आधा मिनेटभित्रै सीमापार गर्ने अनुमित दिन सिकन्छ । शङ्कास्पद यात्रुलाई भित्रै कोठामा लागी केरकार गर्नुपर्छ । यसबाट सीमापार गर्ने यात्रुको डिजिटल तथ्याङ्क स्थापना भई उसको नालिबेली जानिन्छ । स्मरणीय छ भारतमा धेरै प्रदेशका जनतालाई राष्ट्रिय परिचयपत्र वितरण गरिसिकिएको छ । नेपालमा पनि राष्ट्रिय परिचय पत्र बनाउने र वितरण गर्ने कार्य सुरु भैसकेको छ ।

नियमन सीमापद्धित अन्तर्गत एक देशको सीमावर्ती क्षेत्र पार गरी अर्को देशको सीमावर्ती भू-भागमा प्रवेश गर्न अन्तर्राष्ट्रिय सीमारेखाको खास स्थानमा रहेको अध्यागमन कार्यालयमा यात्रुहरूले आफ्नो परिचयपत्र पेश गर्नुपर्ने हुन्छ र आवश्यकता अनुसार अध्यागमन अधिकारीहरूको प्रश्नको जवाफ दिनुपर्छ। यात्रुको जवाफमा ती अधिकारी आश्वस्त भएपछि अभिलेख राखी नयाँ देशको भू-भागभित्र प्रवेश गर्न अनुमित प्रदान गरिन्छ । जब एक देशको अन्तर्राष्ट्रिय सिमाना पार गरेर अर्को देशमा प्रवेश गरिन्छ, तब निश्चित परिमाणभन्दा बढीका सरसामानहरूको भन्सार महसुल तिर्नुपर्ने हुन्छ, पहिलो देशको मुद्रा अमान्य हुन सक्छ, भाषा फरक पर्न जान्छ र अरू नियम पनि बेग्लै हुन सक्छ । अन्तर्राष्ट्रिय सिमाना साँच्चि नै एकअर्को देशका जनताहरू बीचको भौतिकरूपमा नदेखिने पर्खालका रूपमा रहेको हुन्छ र यसलाई खास निकायबाट सञ्चालित तथा सुरक्षित गरिएको हुन्छ । आफ्नो देशको सीमारेखाभित्र त्यस राष्ट्रका यात्रुले आफ्नो सार्वभौम अधिकारको उपभोग गर्न पाउँछन् भने निश्चित सीमारेखा पार गरेपछि अर्को दशेको सार्वभौमिकता सुरु हुन्छ। यस अर्थमा अन्तर्राष्ट्रिय सिमाना एउटा अभौतिक पर्खाल हो, जसभित्र एक किसिमको तौरतरिका निर्धारित गरिएको हुन्छ भने त्यो पर्खाल नाघेर गएपछि अर्के किसिमको चालचलनमा भिज्नुपर्ने पनि हुन आउँछ ।

यस्तो व्यवस्था भएको नियमन सीमापद्धति नेपाल र भारतका बीच अवलम्बन गर्न विभिन्न वैकल्पिक प्रावधानहरू सम्भावित हुन सक्छन् । ती प्रावधानहरूमध्ये (१) परिचयपत्र प्रथा लागू गर्ने (२) सीमा वारपार गर्ने बिन्दुको अध्यागमन चौकीमा सिसिटिभिद्वारा निगरानी राख्ने । (३) अटोमेटिक डिजिटल क्यामेराद्वारा परिचयपत्रको फोटो खिची सीमा पार गर्न दिने (४) सीमासुरक्षा बल तैनाथ गरी यात्रुको अनुगमन गर्ने आदि रहेका छन् । यीमध्ये तोकिएको सीमा-नाकाबाट परिचयपत्र देखाई सीमावारपार गर्ने व्यवस्था अवलम्बन गर्न वर्तमान कालमा समसामयिक देखिन्छ । डिजिटल क्यामेराले फोटो खिची रिकर्ड राख्ने सम्बन्धमा केही तल व्याख्या गरिनेछ । नेपाल-भारत खुला सीमालाई नियमन गर्दे लैजानु पर्ने सम्बन्धमा सर्वोच्च अदालतले परमादेश जारी गरिसकेको अवस्था छ।

## सर्वोच्च अदालतको परमादेश

नेपाल-भारत खुला सीमालाई नियमन गर्ने सम्बन्धमा २०७८ वैशाख १२ मा सर्वोच्च अदालतबाट भएको परमादेशको पूर्ण विवरण २०८० भदौ २९ गते आएको थियो । यसमा उल्लेख भएका विषयवस्तुको सारसंक्षेप (विवरण) बुँदागत रूपमा निम्नानुसार रहेका छन्:-

- सम्बन्धित अधिकारीहरूले नेपाल-भारत खुला सीमा व्यवस्थालाई प्रभावकारी रूपले नियमन गर्नका लागि दुई देशबीच रहेको सन्धि सम्झौतालाई पुनरावलोकन गर्ने कामको प्रारम्भ गर्न अतिरिक्त बन्दोवस्त मिलाउनु पर्छ ।
- नेपालको संविधानअनुसार विद्यमान कानून, अन्तर्राष्ट्रिय कानून, द्विपक्षीय सिन्धहरू अनुसार नेपालको भौगोलिक अखण्डता, सार्वभौमिकता, स्वतन्त्रता, राष्ट्रियता, स्वाभिमान नेपाली जनताको हकअधिकार कायम गर्ने जिम्मेवारी पुरा गर्नुपर्छ ।
- सुरक्षा निकायले सीमा नाकामा प्रभावकारी सुरक्षा व्यवस्था अपनाउँदै नेपाल प्रवेश गर्ने यात्रुहरूले अध्यागमन कार्यालय अथवा सुरक्षा संयन्त्रसमक्ष आफ्नो औपचारिक परिचय-पत्र देखाउनु पर्ने प्रबन्ध मिलाउनु पर्छ ।
- सीमामा आवागमनलाई नियमन र व्यवस्थित गर्न अभिलेख राख्ने गर्नुपर्छ ।
- सीमा वारपार गर्ने विन्दु निर्धारण गरी ड्रोन तथा सिसिटिभिजस्ता प्रविधि उपयोग गरी सुरक्षाकर्मी
   द्वारा प्रभावकारी रेखदेख गर्ने प्रबन्ध मिलाउनु पर्छ ।
- दुई देशबीचको सम्बन्धलाई अझ सुदृढ गर्न वार्ता, समझदारी, सहयोग, समानता आपसी विश्वास र सद्भावद्वारा पछि फेरि समस्या नआउने गरी सीमा समस्या समाधान गर्नुपर्छ ।

- पारम्परिक अथवा अन्य कुनै कारण देखाई सीमामा गैरकानूनी गतिविधि नियत्रण गर्ने उत्तरदायित्वबाट सरकार पन्छिन मिल्दैन ।
- नेपाल-भारतबीच उच्चस्तरीय विज्ञ, सीमा कूटनीतिक मिसन परिचालन गरी सहज वातावरण सिर्जना गर्नपर्छ ।
- सरकारी निकायहरूले राजनीतिक र कूटनीतिक पहल गरी समानता र आपसी हितका आधारमा
   नेपाल र भारतबीचको खुला सीमालाई नियमन र व्यवस्थित गर्न आवश्यक परे अतिरिक्त सिन्ध
   सम्झौतामा हस्ताक्षर गर्नुपर्छ ।

सर्वोच्च अदालतबाट भएको परमादेश अनुसार नेपाल सरकारले नेपाल-भारतबीचको खुला सीमा नियमन गर्न आवश्यक पहलकदमी लिनुपर्छ। नेपाल-भारतबीच अहिले २४ मूल भन्सार/अध्यागमन र १३५ छोटी भन्सार नाका रहेका छन् । पहिलो चरणमा २४ मूल नाकाको दशगजा क्षेत्रमा प्रिप्यावका कोरिडोर कोठा बनाई त्यसमा सिसिटिभी जडान गर्नुपर्छ। त्यस्ता कोरिडोरमा आवश्यकता अनुसार तीनदेखि पाँच डेस्क स्थापना गरिनु पर्छ। त्यस्ता डेस्क टेबलमाथि केही अग्लो स्टान्ड बनाई रडसहितको डिजिटल अथवा मोबाइल क्यामेरा जडिनु पर्छ। सीमा वारपार गर्ने यात्रुलाई लाइन लगाएर क्यामेराको ठिक मुनितिर चिहन कोरिएको निर्धारित स्थानमा आफ्नो परिचयपत्र राख्न लगाई क्यामेराले क्लिक गर्ने बित्तिकै परिचयपत्र उठाएर आधा मिनेटिभित्रै कोरिडोरबाट बाहिरिने व्यवस्था गरिनु पर्छ। यस्तो गतिविधि कोरिडोरभित्रको कम्प्युटरबाट अनुगमन गरिनु पर्छ। कोरिडोर निजेकै एउटा सानो कोठामा केही सुरक्षाकर्मी रहनु पर्छ। परिचयपत्र क्यामेराले क्लिक गरेर जान लागेको यात्रु शङ्कास्पद र सन्दिग्ध जस्तो लागेमा त्यस सानो कोठामा बोलाई सोधपुछ र केरकार गर्नुपर्छ। सोधपुछ गर्दा अपराधी या अवाञ्छित ठहरिए उसलाई कार्बाही गर्नुपर्छ। दोषी नठहरिए तुरुन्त सीमापार गर्न दिनुपर्छ। यसका साथै सीमाका पाँच किलोमिटर क्षेत्रभित्र बसोबास गर्ने दुवैतर्फका बासिन्दालाई दिनको पाँच पटकसम्म आवागमन गर्न पाउने विशेष डिजिटल परिचयपत्र प्रदान गरिनुपर्छ।

बेलहिया-सुनौलीजस्ता भिडभाड हुने सीमा-नाकामा पाँच डेस्क राखियो भने एक घन्टामा ३०० जना अर्थात् १० घन्टामा ३ हजार यात्रु आवागमन गर्नसक्ने हुन्छन् । रात परेपछि आवागमन नहुने समयमा क्यामेराले खिचेको संख्या गन्ती गरी डिजिटल रूपमा तथ्यांक स्थापना गरिनु पर्छ । दुवै सीमावर्ती क्षेत्रका

जनताको जीउधनको सुरक्षा र सीमा मिचानको कार्य हुन निदनका लागि सर्वोच्च अदालतको परमादेश कार्यान्वयन गरी नियमन सीमा व्यवस्था लागू गर्नु नितान्त जरुरी भएको छ । सीमा वारपार गर्ने यात्रुले सीमामा रहेको अध्यागमन चौकीमा परिचयपत्र प्रस्तुत गरी त्यसको डिजिटल रेकर्ड राख्ने कार्यको व्यवस्थापन गर्ने विषयवस्तु दुवै देशको सुरक्षा चासोको दृष्टिले समेत उपयोगी हुन आउँछ। यो कार्य सीमावर्ती क्षेत्रका जनताको जीउधनका सुरक्षासँग पनि सम्बन्धित रहेको छ ।

#### उपसंहार

हिजोआजको जमानामा नेपालले जिमन मार्फत सिमाना जोडिएका दुई छिमेकी भारत र चीनमात्र होइन, सात समुद्रपारिका शक्ति राष्ट्रहरूसँगको सम्बन्धमा पिन भूराजनीतिक दृष्टिकोणले आफ्नै माटो सुहाउँदो रणनीति अपनाउनु पर्छ । हाम्रा दुई छिमेकी चीन र भारतलाई समदूरीमा होइन, समसामिप्यमा राखेर नेपालले भूराजनीतिक सन्तुलन कायम गर्नु बुद्धिमानी ठहरिन सक्छ । हामीले सन्तुलित कूटनीति मार्फत आफ्नो देशको सार्वभौमिकता, भौगोलिक अखण्डता, स्वतन्त्रता र पिहचान जोगाइ राख्नुपर्छ । हाम्रा दुवै छिमेकी मुलुकको पूँजी, प्रविधि र लगानी तथा आर्थिक सहायताबाट देशभित्रै ठूला कलकारखाना, उद्योग स्थापना गरी प्रचुर मात्रामा रोजगारी सिर्जना गर्दै नेपाली जनताको समुन्नत आर्थिक उन्नतिको योजना बनाउन सक्नुपर्छ।

#### सन्दर्भ सामग्री

उप्रेती, तोयनाथ (२०८० माघ २०), नेपालको भूराजनीति अवसर कि चुनौती, बिजनेस पाटी, काठमाडौँ। नेपालको संविधान (२०७२), कानून किताब व्यवस्था समिति, बबरमहल, काठमाडौँ। श्रेष्ठ, बुद्धिनारायण (२०५९), राष्ट्रिय सुरक्षाका सन्दर्भमा सीमा व्यवस्थापन, भूमिचित्र कम्पनी प्रा.लि., काठमाडौँ।

राष्ट्रिय सुरक्षा नीति (२०७३), रक्षा मन्त्रालय, सिंहदरबार । कोइराला, लक्ष्मीविलास (२०७९ मंसिर १७), भूराजनीति र नेपाल, राजधानी दैनिक । सर्वोच्च अदालतबाट भएको परमादेश (२०७८ वैशाख १२), सर्वोच्च अदालत, संयुक्त इजलास, माननीय न्यायाधीश श्री प्रकाशमान सिंह राउत र माननीय न्यायधीश श्री पुरुषोत्तम भण्डारी । Shrestha, Buddhi Narayan (2003), Border Management of Nepal, Bhumichitra Co.P.Ltd, Kathmandu.

# सरदार रामकृष्ण कुँवर र उनको एकीकरणकालीन युद्ध सेवा



मोहन थापा

## विषय प्रवेश

वि.सं. १८०१ असोज १५ मा गोरखा राज्यले कान्तिपुर अधीनमा रहेको नुवाकोट विजय गर्दा आजको नेपाल सरहदमा काठमाडौँबाट पश्चिम कर्णाली प्रश्नवण क्षेत्रमा बाइस, गण्डकी प्रश्नवण क्षेत्रमा चौबीस, काठमाडौँ उपत्यकाबाट दक्षिणमा मकवानपुरको सेन राज्य, काठमाडौँ उपत्यकामा कान्तिपुर, लिलतपुर र भक्तपुर समेत तीन मल्ल राज्य र काठमाडौँ उपत्यकाबाट पूर्वमा विजयपुर र चौदण्डी समेत ५२ भन्दा धेरै अलग स्वतन्त्र राज्य थिए । नुवाकोट विजयसँगै, गण्डकी प्रश्नवण क्षेत्रमा रहेको सानो राज्य गोरखाका राजा पृथ्वीनारायण शाहको नेतृत्वमा आधुनिक नेपाल एकीकरण अभियानको सुरुवात भएको थियो।

पृथ्वीनारायण शाहको अग्रसरतामा सुरुवात भएको नेपाल एकीकरण अभियानमा गोरखा र गोरखाबाहेक छिमेकी अन्य राज्यका विभिन्न जात, थरका व्यक्तिले पनि आ–आफ्नो तर्फबाट उल्लेख्य योगदान गरेका उदाहरण धेरै छन् । एकीकरण अभियानको सुरुदेखि जीवनपर्यन्त एकीकरण युद्धहरूमा अनवरत सहभागी भएर अतुलनीय योगदान गरेका ख्याति प्राप्त सेनानायक रामकृष्ण कुँवर पनि हुन् ।

कास्कीबाट आएर गोरखामा बसोवास गर्न थालेका रामकृष्ण कुँवर नेपाली सेनाका सरदार र आधुनिक नेपाल निर्माणको प्रारम्भिक चरणदेखिका निर्णायक युद्धहरूमा अनवरत सिक्रय रहेर उच्च योगदान गर्ने नेपाली सेनाका थोरै सङ्ख्याका वीर योद्धामध्येका एक हुन् ।

<sup>🦥</sup> सुबेदार (अ.प्रा.), नेपाली सेना ।

यस अध्ययनमा, वीर सरदार रामकृष्ण कुँवरको वंश तथा पारिवारिक परिचय, उनको सैन्य सेवा प्रवेश र नेपाल एकीकरणका विभिन्न युद्ध मोर्चामा सहभागिता, रामकृष्ण कुँवरको युद्ध नीति (शैली) र उनको धार्मिक योगदानका बारेमा विवेचना गर्ने प्रयास भएको छ ।

## रामकृष्ण कुँवरको वंश

एकीकरणअघि पूर्व मेचीदेखि पश्चिम महाकाली बीचमा सानाठूला ५२ भन्दा धेरै राज्य थिए। ती मध्येको चौबिसी समूहमा पर्ने कास्की राज्यमा बसोबास भएका वत्स गोत्रीय क्षेत्री जातिका अहिराम कुँवर थिए। नेपालको सैनिक इतिहासका अनुसार कास्कीमा बसोबास रहेका यी वत्स गोत्रीय कुँवर क्षत्रीयहरू हाल भारतमा पर्ने चितौडगढका राणा खान्दानका सदस्यहरू तत्ता राणाका भितजा फकतिसंहका छोरा रामसिंहका सन्तित हुन् । वि.सं. १९०५ वैशाख १३ मा तत्कालीन श्री ५ सुरेन्द्रविक्रम शाहले प्रधानमन्त्री जङ्गबहादुर र उनका वंशजहरू भारत चितौडगढका राजपुत राणा हुन् भन्ने प्रमाण हुनाले प्रधानमन्त्री जङ्गबहादुर र उनका वंशजहरूलाई 'राणाजी' भन्नु भन्ने लालमोहर प्रदान गरेको इतिहासकार पुरुषोत्तम शमशेर जबराले लेखेका छन् २।

भारत चितौडगढका राजपुत राणा वंशका अहिराम कुँवरका पूर्वज मुसलमानको आक्रमणबाट आफू बच्न र आफ्नो धर्म संस्कृति बचाउन उत्तरतर्फको पहाडतर्फ पसेका थिए । उनीहरूका सन्तानमध्ये हाल नेपालको पश्चिमी पहाड कास्कीका राजाको आश्रयमा बसी राज्यको सुरक्षार्थ युद्धमा वीरता देखाएपछि उनले कुँवर-खड्काको उपाधि दिएका थिए । यिनैमध्ये एक पुरुष राउत कुँवर कास्कीका राजाको सेनाका अफिसर थिए । तत्कालीन कास्की राज्यको राजधानी रहेको कास्कीकोटबाट पश्चिममा खड्काकोट भन्ने स्थल छ, सोही स्थल नै कास्कीमा कुँवरहरूको पुरानो थलो रहेको इतिहास लेखकहरूको मत छ । कास्की राज्यमा बसोवास गर्दै आएका कुँवरहरूमध्येका पछिल्ला पुस्ताका यी नै अहिराम कुँवर थिए ।

# रामकृष्ण कुँवरको जन्म, परिवार र गोरखा बसाइँ सराइ

अहिराम कुँवरका एक छोरी र तीन छोरा थिए । जेठी छोरी श्रीतारा र छोराहरू रामकृष्ण कुँवर, जयकृष्ण कुँवर र अमरसिंह कुँवर हुन् । कास्कीका राजाले अहिरामकी छोरी श्रीतारालाई आफ्नी रानी बनाउन मागेका तर महारानी नबनाई राजाको भित्रिया पत्नी बनाउन खोजेको तर अहिराम परिवार सहमत

नभएपछि राजासँग खटपट भयो । यस्तो अवस्थामा कास्की राज्यमा बस्नु उपयुक्त नहुने देखी उनी सपरिवार लमजुङ राज्यमा पसेका थिए । लमजुङमा उनीहरूको कदर नहुने देखेकोले अहिराम कुँवर रातिराति बसोवासका लागि स-परिवार गोरखा राज्यमा सरेका थिए जहाँ नरभूपाल शाह राजा थिए । कुँवर खोलामा परिवारसहित बसोवास गर्न थालेका अहिराम कुँवरलाई गोरखाका राजा नरभूपाल शाहले सेनामा जागिर दिएका थिए ।

अहिराम कुँवरका जेठा छोरा रामकृष्ण कुँवरको जन्म कास्की वा गोरखा कहाँ भयो ? यसबारे लेखकबीच फरक मत छ । कतिपय लेखकले रामकृष्ण कुँवरको जन्म गोरखामा भएको लेखेका छन् । तर लेखक डा. राजाराम सुवेदीका अनुसार रामकृष्ण कुँवरको जन्म वि.सं. १७६८ मा कास्की राज्यको ढुङ्गासाँघु भन्ने ठाउँमा भएको थियो ।  $^{3}$ 

## सैनिक सेवामा प्रवेश

रामकृष्ण कुँवरलाई चौध वर्षको उमेरमा गोरखाली सेनामा अधिकृतस्तरको पद मिलेको नेपालको सैनिक इतिहासमा उल्लेख छ । <sup>४.</sup> सानो उमेरदेखि नै रामकृष्ण कुँवर छरितो, चलाख, फुर्तिला र आँटिला व्यक्तित्त्व थिए । सैनिक सेवामा प्रवेश गरेको छोटो समयमै रामकृष्ण कुँवरले गोरखाली सेनामा राम्रो छवि बनाउन सफल भएका थिए ।

इतिहास लेखकहरूले रामकृष्ण कुँवरलाई गोरखाली सेनाको जेठा बुढा पदबाट सम्बोधन गरी उनी र उनको युद्ध सेवाबारे चर्चा गरेको पाइन्छ । जेठा बुढा गोरखाली सेनाको महत्त्वपूर्ण पद थियो । सैनिकलाई तालिम दिने वा युद्धकला सिकाउने जिम्मेवारी जेठा बुढाको थियो । खासगरी युवा अर्थात् नयाँ भर्ती भएका सैनिकलाई हितयार चलाउन, युद्धमा आफू जोगिन र शत्रु सैनिकमाथि प्रहार गर्ने आवश्यक आधारभूत तालिम दिने काम जेठा बुढाको थियो । जेठा बुढाले यदाकदा युद्धमा कुनै मोर्चामा स—सानो समूहको नेतृत्व समेत गर्दथे । जेठा बुढासँग समय समयमा उच्च सेनानायक र राजाले समेत सुझाव—सल्लाह लिने गर्दथे । रामकृष्ण कुँवरले जेठा बुढा पदमा रहेर गोरखाली सेनामा लामो समय विताएको पाइन्छ ।

वि.सं. १७९९ चैत २५ मा राजा नरभूपाल शाहको मृत्यु भएपछि पृथ्वीनारायण शाह गोरखा राज्यका राजा भए । त्यसबेला गोरखा राज्य पूर्वतर्फ त्रिशूलीसम्म, पश्चिममा चेपेसम्म, दक्षिणमा मर्स्याङ्गदी नदीसम्म र उत्तर हिमालय, तिब्बतसम्म थियो । गोरखाली राजा र जनताहरू युद्ध कौशल प्रकट गरेर राज्य बढाउन चाहन्थे । यस चाहनालाई साकार बनाउन पृथ्वीनारायण शाह गोरखाको राजा भए लगत्तै वि.सं.१८०० मा गरेको पहिलो नुवाकोट आक्रमणमा पराजित भएपछि शाहले आफ्ना विश्वासी भारदार लिएर बनारस गए र आधुनिक बन्दुक किनेर ल्याए । थप गोरखाली सैनिक भर्ना गरी तारो हान्ने र युद्धसम्बन्धी तालिम दिएर पुनः वि.सं. १८०१ असोज १५ मा नुवाकोट आक्रमण गरी विजयी भए । मेजर फलेन्द्र विक्रम राणा लिखित 'नेपाली राणा घरानाको संक्षिप्त वंशावली' का अनुसार रामकृष्ण कुँवरले वि.सं. १८०१ असोज १५ गते नुवाकोट युद्धमा भाग लिएका थिए । ५. नुवाकोट विजयपछि गोरखाले स–साना युद्ध गरेर उपत्यका वरपरका भू-भाग लामीडाँडा, दहचोक, शिवपुरी, महादेव पोखरी, दोलखा, सिन्धुपाल्चोक, फर्पिङ लगायतका भू-भाग विजय गरेको थियो ।

## सरदार रामकृष्ण कुँवर

रामकृष्ण कुँवरले गोरखाली सेनाको सरदार पदमा रहेर लामो समय सेवा गरे । रामकृष्ण कुँवरको अन्तिम र उच्च पद सरदार हो । कुँवरले सरदार पद कुन मितिमा पाए ? यसबारे इतिहासकारहरूमा एकमत छैन । कुँवर राणा वंशावली लेखक मेजर फलेन्द्र विक्रम राणाका अनुसार पृथ्वीनारायण शाह राजा भएको केही समयपछि उनले वि.सं. १८०० मा जेठा बुढा रामकृष्ण कुँवरलाई गोरखाली सेनाको सरदार पद दिएका थिए । ६ तर लेखक राजाराम सुवेदीले वि.सं. १८९४ मा गोरखाले कीर्तिपुरमाथि गरेको पहिलो आक्रमणमा गोरखाका १४ जना काजी, चार जना बख्सी, ज्योतिषी एक, पाँच जना सरदार, खरिदार एक, खजान्ची एक, गौरु आठ, डिट्टा एक, नजिकि सात र जेठा बुढा चार जनाले भाग लिएको र त्यस युद्धमा रामकृष्ण कुँवरको पद जेठा बुढा उल्लेख गरेका छन्। ७

## रामकृष्ण कुँवर को पहिलो युद्ध कौशल

वि.सं. १८१६ मा पृथ्वीनारायण शाहले गोरखाको सिरानचोक घरबास भएका उमराव भीमसिंह (भीमसेन) थापा <sup>5.</sup> नेतृत्वमा गोरखाली सेनाको एक टुकडी उपत्यकाका मल्ल राजाहरूको अधीनमा रहेको

पलाञ्चोकगढी आक्रमणका लागि खटाएका थिए । सो सैनिक टोलीमा रामकृष्ण कुँवर पनि थिए । भक्तपुरे सैनिकसँगको युद्धमा गोरखाली सेनाका सेनानायक (सेना प्रमुख) बाघ भीमसिंह थापाले वीरगति पाए । युद्धको नेतृत्वकर्ता स्वयंम् मारिएपछि मातहतका सैनिकको मनोबल घट्न गई तितरिबतर हुनसक्ने सम्भावना देखेर तत्काले रामकृष्ण कुँवरले गोरखाली सैनिकलाई सम्हालेर एकीकृत गरी आफ्नो नेतृत्वमा विपक्षी सैनिकमाथि जाइलागी युद्ध जिन्न सफल भए । पलाञ्चोकगढीको विजयसँगै तत्काले गोरखाली सैनिकको आक्रमणबाट काभ्रेगढीमा तैनाथ उपत्यकाका मल्ल राजाका सेना पिन किल्ला छाडी भागेकाले काभ्रेगढीमा पिन गोरखालीको अधिकार स्थापित भयो । पलाञ्चोकगढी र काभ्रेगढी उपत्यकाबाट पूर्वतर्फका रणनीतिक दृष्टिकोणबाट महत्त्वपूर्ण गढी थिए । काठमाडौँ उपत्यकाका मल्ल राजाहरूको अधीनमा रहेका ती गढीमा विजय गरेपछि गोरखाली सेनाले उपत्यकामाथि नाकाबन्दी गर्नका लागि अनुकुल वातावरण बनेको थियो ।

काभ्रे र पलाञ्चोकका ती गढी विजयका लागि अतुलनीय शौर्य प्रदर्शन गरेका रामकृष्ण कुँवर लाई राजा पृथ्वीनारायण शाहले उच्च कदर गरी सरदार पद दिएको हुनसक्ने कतिपय इतिहास लेखकको अनुमान सत्यको नजिक छ ।

## काभ्रेपलाञ्चोकका प्रशासक

पलाञ्चोकगढी र काभ्रेगढीमा गोरखाको विजय भएपछि, काठमाडौँ उपत्यकाका कान्तिपुर र भक्तपुर राज्यका जनता, सैनिक र व्यापारीहरूलाई दोलखा, सिन्धुपाल्चोक, रसुवा भएर तिब्बतको ल्हासामा व्यापारका लागि आवत जावत गर्न अप्ठेरो भएको थियो । साँचो अर्थमा यसपछि उपत्यकाका मल्ल राज्यहरू रणनीतिक दृष्टिकोणबाट सङ्कटको निकट थिए । पृथ्वीनारायण शाहले त्यसपछि रामकृष्ण कुँवरलाई काभ्रेको भँवरकोट बिर्ता दिएर उनका परिवारलाई त्यसै स्थलमा बसोबासको व्यवस्था मिलाइदिए। सरदार रामकृष्ण कुँवर त्यसपछि परिवारसिहत भँवरकोटमा बस्न थाले । इतिहास शिरोमणि बाबुराम आचार्य (हेर्नुहोस्: नेपालको संक्षिप्त वृत्तान्त) सिहत अन्य इतिहासकारहरूले सरदार रामकृष्ण कुँवरले केही समय काभ्रेपलाञ्चोकको प्रमुख प्रशासकको जिम्मेवारी सम्हालेर बसेको उल्लेख गरेका छन्।

## तिमाल, सिन्धुलीगढी र हरिहरपुरगढी विजयमा रामकृष्ण कुँवर

पलाञ्चोकगढी र काभ्रेगढीबाट पूर्वतर्फ पर्ने तिमाल भूमिमा त्यस बेलाको स्वतन्त्र राज्य मकवानपुरका सेन राजाको अधिकार थियो । गोरखाली आक्रमणको प्रतिकारका लागि तिमालमा सेन राजाका सैनिक बिलयो मोर्चा बनाएर तयारी अवस्थामा थिए । गोरखाली सेनाका सरदार रामकृष्ण कुँवर भंवरकोटमा बसेर तिमाल आक्रमण गर्ने योजना बनाइरहेका थिए । वि.सं. १८१९ भदौमा पृथ्वीनारायण शाहले दहचोकमा बसेर मकवानपुर विजय गर्ने योजना बनाई काजी वंशराज पांडे र बख्सी केहरसिंह बस्न्यात समेतका कमाण्डरको नेतृत्वमा सेना पठाए । गोरखाले मकवानपुर विजय गरेपछि काभ्रेको भँवरकोटमा तैनाथ रहेको सरदार रामकृष्ण कुँवर नेतृत्वको गोरखाली सेनाले मकवानपुर अधीनको तिमालकोट विजय गरी वि.सं. १८१९ असोज २ गते सिन्धुलीगढीमाथि आक्रमण गरी विजय गरेको थियो। रामकृष्ण कुँवर नेतृत्वको गोरखाली सैनिकले तिमाल र सिन्धुलीगढी विजय गरेपछि करिव एक महिनापछि हरिहरपुरगढी विजय युद्धमा समेत भाग लिएको थियो । यही सैन्य दलले तत्कालीन मकवानपुर अधीनको हाल, झाँगाझोलीमा पर्ने परेवाकोटमा समेत अधिकार गरेको बाबुराम आचार्यले उल्लेख गरेका छन् । सिन्धुलीगढी र हरिहरपुरगढी विजयपछि रामकृष्ण कुँवर आफू मातहतका सैनिक लिएर काभ्रेको भँवरकोट फर्किएका थिए ।

# गुर्गीन खाँ नेतृत्वको मुसलमानी सेना विरुद्धको युद्धमा

सरदार रामकृष्ण कुँवरले विदेशी सेना विरुद्ध पनि युद्ध लडेका थिए । गोरखाली सेनासँग पराजयपछि मकवानपुरका राजा दिग्बन्धन सेन र मन्त्री कनक बानियाँ भागेर दक्षिणतर्फ बेतियाको मखनियामा त्यहाँका नवाव वजीर कासीम अली खाँको शरणमा पुगेका थिए । मकवानी राजा र मन्त्रीले कासीम अली खाँसँग सैनिक सहायता मागेर मकवानपुर फिर्ता गर्ने प्रयास गरिरहेका थिए । मकवानी राजा र मन्त्रीको आग्रहमा गोरखाली सेना विरुद्ध युद्ध गरी मकवानपुर गोरखाली अधीनबाट फिर्ता गर्न नवाव कासीम अली खाँले सेनापित गुरगिन खाँ (आर्मेनियाँका नागरिक, यिनको वास्तिवक नाम ग्रेगरी थियो, नवाव कासीम अली खाँले उनको इस्लाम नाम गुर्गीन खाँ राखिदिएका हुन्। को नेतृत्वमा आधुनिक बन्दुक र तालिम पाएका करिब दुई हजार सङ्ख्याका मुसलमानी सैनिक पठाए । गुर्गीन खाँ नेतृत्वको मुसलमानी सेनाले वि.सं. १८९९ पुष २७ मा मकवानपुरको हर्नामाडी कब्जा गरी गोरखाली सेनामाथि आक्रमणको तयारीमा छाउनी बनाई

बसेको थाहा पाई पृथ्वीनारायण शाहले काजी वंशराज पांडे, बख्शी केहरसिंह बस्न्यात र सरदार रामकृष्ण कुँवर नेतृत्वमा गोरखाली सैनिक पठाए ।

कुनै समय इष्ट इण्डिया कम्पनी (अङ्ग्रेज) का सेनासँग युद्ध लड्नुपर्छ भन्ने मनसायले कासिम अली खाँले गुप्तरुपमा गुर्गीन खाँ नेतृत्वमा ठूलै सैन्य दल गठन गरी आधुनिक हितयार चलाउने तालिम दिइरहेका थिए । ठिक यसै समयमा गोरखाली सेनाको आक्रमणमा पराजित भई भागेका मकवानपुरका राजा र मन्त्री कासिम अली खाँको शरणमा पुगी गोर्खाली सेनाको कब्जाबाट मकवानपुरलाई छुटाउन सैन्य सहयोग माग्न थाले । आफूले भर्खरै गठन गरी तालिम दिएका सैनिकलाई युद्ध अनुभव हुने र अङ्ग्रेजसँग हुने युद्धमा पराजित हुनुपरेमा पहाडी दुर्गमा भाग्ने उपयुक्त स्थल हुने अनुमान गरी नवाव कासिम अली खाँले मकवानी राजा र मन्त्रीको अनुरोधमा आफ्ना नवगठित सैनिक दललाई गोरखाली सेनाविरुद्ध लड्न पठाएका थिए ।

गुर्गीन खाँ नेतृत्वको मुसलमानी सेनाले गोर्खाली सेनाले मकवानपुर गढीको सुरक्षाका लागि आड लिनलाई बनाइएको तीन मध्येको एक डढुवा ठाना कब्जा गरी हर्नामाडीमा सैनिक छाउनी बनाई बसेका थिए । गुर्गीन खाँ नेतृत्वको मुसलमानी सेनाविरुद्ध गोरखाली सैनिकले वि.सं. १८१९ को माघ १० गते अचानक झुक्याएर आक्रमण गरेको थियो । गोरखाली सेनाको आक्रमणमा गुर्गीन खाँ नेतृत्वका करिब १७०० सैनिक हताहत भएका थिए । त्यस युद्धमा गोरखाली सेनाले मुसलमानी सेनासँग दुई तोप र सयौं थान आधुनिक बन्दुक खोस्न सफल भएका थिए । ९०

गुर्गीन खाँन नेतृत्वको मुसलमानी सेनाविरुद्ध गोरखाली सेनाले छापामार युद्ध लडेको थियो । गुर्गीन नेतृत्वको मुसलमानी सेना आधुनिक तालिम तथा हात-हितयारबाट सु-सिज्जित रहेको अनुमान गिरएको थियो। गोरखाली सेनाले नेपाल सरहदको भूमिभन्दा बाहिरका सैनिकसँग लडेको यो पहिलो युद्ध थियो । काजी वंशराज पांडे, वख्शी केहरसिंह बस्न्यात र सरदार रामकृष्ण कुँवर सिहतको गोरखाली सेनाले छापामार शैलीमा शत्रुलाई झुक्याएर गरेको सशक्त आक्रमणमा मुसलमानी सैनिकहरू युद्ध मैदानमा टिक्न सकेनन् । युद्ध लडेको र सफलताको श्रेय पनि सरदार रामकृष्ण कुँवरलाई जान्छ। मुसलमानी सेनाविरुद्धको युद्धमा सरदार रामकृष्ण कुँवरको महत्त्वपूर्ण योगदान रहेको सम्बन्धमा इतिहासका लेखकहरूमा एक मत छ।

मुसलमानी सैनिकलाई हराएपछी गोरखाली सेना र सेनानायकहरूमा आफ्नो शक्ति र युद्ध क्षमतामाथिको भरोसा बढेको थियो । यस युद्धपछि एकातिर मकवानपुर राज्य फिर्ता पाइने अभिलाषा पदच्युत राजा दिग्बन्धन सेनले पूर्णतः त्याग्न बाध्य भएका थिए भने अर्कातिर पृथ्वीनारायण शाहले मकवानपुरमाथि पूर्णतः विजय भयो भनी विश्वस्त हुन सकेका थिए । मकवानपुर पूर्ण विजय भएपछि काठमाडौँ उपत्यकामाथि गोरखाको नाकाबन्दी बलियो भएको थियो।

# धुलिखेल र आसपासको भू-भाग विजयमा रामकृष्ण कुँवर

सरदार रामकृष्ण कुँवर एकीकरण युद्धमा निरन्तर सिक्रिय रही उनी सिहत काजी दलजित शाह, सरदार कालिदास खड्का र हरिवंश उपाध्याय नेतृत्वको गोर्खाली सेनाले सन् १७६३ को अक्टोवर २७ मा धुलिखेल विजय गरेको थियो । यस सैन्य दलले सोही अक्टोबरको २७ (तदनुसार वि.सं.१८२० को असारदेखि कार्तिक आसपास) का दिनमा काभ्रेका बनेपा, नाला, पनौती, खड्पु, चौकोट, साँगा लगायत सात गाउँमाथि अधिकार गरेको गुरुवंशावलीलाई उद्धृत गरी बाबुराम आचार्यले लेखेका छन् ।

'जस पाइ आयाका सुरप्रताप सीत सल्ला गरी धुलपेल हान्नलाइ भारादार पटाउनु भयो फौज लि कपर्दार राम कृष्ण कुँवर हरिवंशपाध्या प्रभृति फौज गै नेपाल्याको पिन ठुलो लस्कर वाहा जमा भयाको रहेछ वाहिरको लडायी भै जित्या वैरीका पिन ढेरै काटिया आपना पिन घाइत्या र काटिन्या ढेरै भया जीत गोर्खाको भयो जीती लपेटा लि सहर भित्र लस्कर हालि सहर भीत्र लस्कर ढेरै रहेछन् र वाहिरै घेरा दि बस्याका थिया वाहिर नगरवासि लड्थ्या त्यस्तैमा ढिलो गर्यो भनी श्री ४ महाराजाबाट रिसानी भै जसकर्ण पत्रीलाई पठाइ धुलपेल हानी पिनौति हान्नु भिनकन पठायामा ढिलो गन्या भनी रिसानी भै चौकोट हान्नालाई दलजित साहलाई पठाइ जसकर्ण पत्रीले तीनै जनालाइ ४।४ सप्को लाया चौकोट हान्न दलजित साह गयाको देषदा इन्हरुले पिन शाके १६८४ कार्तीकका दिन १० जादा आदित्यवारका दिन ११ घडि ४४ पला दिन चढदा धुल पेल फत्य भयो.दलजित साहका साथका फौजले पिन ठुलो लडायी जितीकन शाके १६८४ कार्तीकका दिन १४ जांदा सोमवारका दिन घरि १४ दिन चढदा चौकोट सर भयो त्यसै दिनका लपेटामा पन्हौति पिन सर गन्या अर्का मुहडाले पडुप पिन सर गन्या'।

# भक्तपुर विजय युद्धमा रामकृष्ण कुँवर

गोरखाली सेनाले वि.सं. १८२६ कार्तिक २८ मा भक्तपुरमाथि आक्रमण गरेको थियो। त्यस आक्रमणमा काजी वंशराज पांडे, बख्शी केहरसिंह बस्न्यात, सरदार कालिदास खड्का, सरदार अमरसिंह थापा, काजी शूरप्रताप शाह र सरदार रामकृष्ण कुँवर नेतृत्वमा गोरखाली सेना परिचालित थिए। सो अवधिमा भक्तपुरमा रणजित मल्ल राजा थिए। तीन दिन चलेको उक्त युद्धमा गोरखातर्फका ५०–६० जना र भक्तपुरतर्फका १७०० जनाले वीरगति पाएको लेखकहरूले उल्लेख गरेका छन्। निरन्तरको युद्धपछि कार्तिक ३० गते साँझ भक्तपुर राज्य पृथ्वीनारायण शाहको अधिकारमा आएको थियो। भक्तपुर विजयसँगै मकवानपुर र काठमाडौँ उपत्यकाका तीन स्वतन्त्र मल्ल राज्यमाथि गोरखाको अधिकार स्थापित भयो। काठमाडौँ उपत्यका विजयपछि वर्तमान नेपाल निर्माणको स्वरूप (प्रारूप) स्पष्ट भएको थियो। पृथ्वीनारायण शाहले काठमाडौँलाई राजधानी घोषणा गरे। काठमाडौँ उपत्यका राजधानी भएसँगै गोरखा राज्य नेपाल कहलायो र गोरखाली सैनिक नेपाली सेनाका नामबाट परिचित हुनथाल्यो।

## पूर्व विजय र शिरपाउ उपहार

वि.सं. १८२५-१८२६ मा काठमाडौँ उपत्यका विजयपछि राजा पृथ्वीनारायण शाहले उपत्यकाबाट पूर्वका स्वतन्त्र राज्य विजयपुर र चौदण्डी हात पार्ने योजना बनाएका थिए । कमला नदीभन्दा पूर्वतर्फ सिक्किमभन्दा पश्चिम अलग विजयपुर र चौदण्डी राज्य थिए । यी दुवै राज्यका राजा सेन वंशका थिए । यी दुई राज्यमाथि विजयका लागि बख्शी अभिमानसिंह बस्न्यात, सरदार पारथ भण्डारी, कीर्तिमानसिंह खवास, बिल बानियाँ, सरदार अमरसिंह थापा र सरदार रामकृष्ण कुँवर नेतृत्वमा नेपाली सैन्य दल खिटिएका थिए । यस सैन्य दलले वि.सं. १८२८ देखि १८३० को अन्तिमसम्ममा पूर्वका विजयपुर र चौदण्डी राज्य नेपालमा मिलाउन सफल भएको थियो । यसपछि नेपालको सिमाना उत्तरतर्फ तिब्बत र पूर्वतर्फ टिष्टा नदी तथा सिक्किमसम्म पुगेको थियो ।

राजा पृथ्वीनारायण शाह सरदार रामकृष्ण कुँवरको सैन्य योगदानबाट अधिक खुसी थिए । शाहले सरदार रामकृष्ण कुँवरको नाममा वि.सं. १८२९ मा गरिदिएको एक लालमोहरमा कीर्तिपुरको युद्धमा काजी कालु पाँडेले वीरगति पाउँदा रामकृष्ण कुँवरका बुद्धि र वर्गतले नेपालको विस्तार गरेका र तरवारको प्रतापले

नेपाल राज्य निर्माण भएकोले उनलाई आधा राज्य दिएको भएपनि पुरस्कार नपुग्ने हो तापनि स्वयम्भूको सेरोफेरो र धुलिखेल क्षेत्र रामकृष्ण कुँवरका सन्तान दरसन्तानले खानु<sup>, ११</sup> भनी दिएबाट सरदार रामकृष्ण कुँवरले नेपाल एकीकरण युद्धमा पुऱ्याएको अतुलनीय योगदानबारे राम्ररी अनुमान गर्न सिकन्छ ।

सरदार रामकृष्ण कुँवरले सुझबुझका साथ धन र जनको न्यून क्षति हुनेगरी पूर्वका विजयपुर र चौदण्डी राज्यका भू-भाग नेपालमा मिलाएका थिए । पूर्वको किँरात प्रदेशका लिम्बू योद्धाहरूले गोर्खाली सेनालाई ठुले अवरोध गरेका थिए । पाइला-पाइलामा गरिएका सशक्त अवरोधलाई रामकृष्ण कुँवरको परिपक्वता, सुझबुझ र युद्ध अनुभवले पार लगाउन सफल भएको थियो । पृथ्वीनारायण शाहको जोडबल सकेसम्म स्थानीय जनताको कम क्षतिमा विपक्षीमाथि विजय हुनुपर्छ भन्ने हुन्थ्यो। शाहको मनसाय अनुरुप विजय योजनालाई साकार तुल्याएको हुनाले विजयपुरको राजधानी चौदण्डी विजयपछि राजा पृथ्वीनारायण शाहले सरदार रामकृष्ण कुँवरसँग खुसी भएर २२ जोर शिरपाउ उपहार दिएका थिए । पूर्व विजयको रिझबापत कुँवरले शिरपाउ पाएको सम्बन्धमा नेपालको सैनिक इतिहास (पृ.४५५) मा उल्लेख छ भने प्रा.बालकृष्ण पोखरेल लगायत अन्य इतिहास लेखकहरूले पनि यस बारेमा चर्चा गरेका छन् । १२०

## राजा प्रतापसिंहको राज्यकालमा

वि.सं. १८३१ माघ १ गते राजा पृथ्वीनारायण शाहको देहावसानपछि उनका जेठा छोरा प्रतापसिंह शाह राजा भए । प्रतापसिंह शाहको राज्यकालमा सिक्किमका सेना पूर्वको च्याङ्गथापुमा नेपाली सेनामाथि आक्रमण गर्न आएका थिए । सिक्किमे सेनालाई रामकृष्ण कुँवर नेतृत्वको नेपाली सेनाले युद्धमैदानमै पराजित गरी नेपाली भूमि जोगाउन सफल भएको थियो ।

राजा प्रतापसिंह शाहको राज्यकालमा वि.सं. १८३४ साउनमा तनहुँ राज्यको अधीनमा रहेको चितवन, शुम्भेश्वर र उपर्दाङगढी इलाका नेपालमा गाभिएको थियो। त्यसपछि करिब ६ वर्ष सरदार रामकृष्ण कुँवर आफू मातहतका सैनिकसहित उपर्दाङ–गढीको आसपास भूमि सुरक्षार्थ तैनाथ रहेको बाबुराम आचार्य (नेपालको संक्षिप्त वृत्तान्त, पृ.२०९) ले लेखेका छन् ।

वि.सं. १८३४ मंसिर ६ मा राजा प्रतापसिंह शाहको देहावसान भयो । त्यसपछि उनका बालक छोरा युवराज रणबहादुर शाह राजा भए। राजा रणबहादुर शाहको नायब बनेर महारानी राजेन्द्रलक्ष्मीदेवी शाहले पश्चिमतर्फको एकीकरण अघि बढाइन् । यस सिलसिलामा वि.सं. १८३६ मा चौबिसी राज्यहरूको संयुक्त सेनाले गोरखाविरुद्ध युद्ध घोषणा गरेकोमा रामकृष्ण कुँवर, बिल बाँनिया, पारथ भण्डारी लगायतका सेनानायकहरूको नेतृत्वको नेपाली सेनाले चौबिसी संयुक्त सेनाविरुद्ध बिलथुम, ज्यामरुक, उपरदाङ, चितवन लगायतका भूमिमा ठूलो युद्ध लडेको थियो। रामकृष्ण कुँवर नेतृत्वको नेपाली सेनाले त्यसबेला संयुक्त चौबिसी सेनालाई उपरदाङ र चितवनमा पराजित गरिदिएका थिए ।

## रामकृष्ण कुँवरको धार्मिक पक्ष

सरदार रामकृष्ण कुँवर वीर योद्धा हुनुका साथै धार्मिक प्रवृत्तिका पनि थिए । नेपालको सैनिक इतिहास (पृ.४४४) का अनुसार वि.सं. १८२७ (सन् १७७० को जनवरी) मा पृथ्वीनारायण शाहले युद्धमा शौर्य र पराक्रम प्रदर्शन गर्न सफल आफ्ना विश्वासी सैनिक भारदारलाई बोलाएर उनीहरूको काम र त्यागअनुसारको पारितोषिक दिने मनसायले रामकृष्ण कुँवरलाई के पाउने इच्छा छ भनी सोधेका थिए। अन्य भारदारले धेरै उञ्जाउ हुने राम्रो जिमन विर्ता मागेका थिए तर सरदार रामकृष्ण कुँवरले काठमाडौँको प्रसिद्ध शिक्तिपीठ गुहेश्वरीदेखि श्री पशुपितनाथसम्म जाने बाटोमा ढुङ्गा विछ्याउन पाऊँ भनी निवेदन गरेका थिए।

दर्शनार्थीहरूको सुविस्ताका लागि काठमाडौँ उपत्यकाको शक्तिपीठ गुहेश्वरीबाट श्लेषमान्तक जंगलको डाँडो चढेर पशुपितर्तर्फ झर्ने बाटो सर्वप्रथम राजा प्रताप मल्लले बनाएका थिए । यसबाट गुहेश्वरी र पशुपितबीच नित्य सम्बन्ध कायम राख्न सहयोग पुगेको थियो । प्रताप मल्लको मृत्युपिछुका करिब १०० वर्षसम्म सो बाटो मर्मत नगिरैंदा बिग्ने/भत्केको थियो । काठमाडौँ उपत्यका विजयपिछु गोरखाली राजा पृथ्वीनारायण शाहले सो बाटो मर्मत गर्ने मनसुवा राखेका थिए। यसबीच उपत्यका विजयपिछु आफ्ना विश्वासिला भारदारलाई तिमीहरू मसँग के के माग्छौ भनी राय सुझाव माग्दा एक्कासि सरदार रामकृष्ण कुँवरले सो बाटोमा ढुङ्गा बिछयाएर राम्नो बनाउन पाऊँ भनी मागे, यसबाट पृथ्वीनारायण शाह दुविधामा परे। आफैंले के माग्छौ भनी सोधेपिछ आफ्ना विश्वासी भारदारले यसप्रकारको पुण्यकाम गर्छु भनी बिन्ती गर्दा निदनु मनासिव ठहर्ने थिएन, दिँदा पिन उपत्यकाका प्रभावशाली देवदेवीको मिन्दरमा ठुलो पुण्यको जस कुनै एक भारदारले लिँदा, ती देवदेवीको प्रताप भोलिका दिनमा आफ्ना सन्तानको पहुँचबाट अन्यमा सर्ने र कतै राजकीय सत्ता नै रामकृष्णका सन्तानका पोल्टामा पुग्ने हो की भन्ने डर (शङ्का) ले उनीभित्र गिहरो वास

गरेको थियो । तर शाहले त्यस बाटोमा ढुङ्गा बिछ्याउने काम गर्न सरदार रामकृष्ण कुँवर लाई मन्जुरी दिए । राजाबाट मन्जुरी पाएपछि सरदार रामकृष्ण कुँवरले बाटोमा ढुङ्गा बिछ्याउने काम सम्पन्न गरे ।

भाषावंशावलीमा रामकृष्ण कुँवरले गुह्येश्वरीबाट पशुपितनाथ जाने बाटो मर्मत गरेको र सदावर्त गुठीबारे यसप्रकार उल्लेख छ – शाके १६९१ मार्ग शुदी ४ का दिन रामकृष्ण कुँवर ले श्रीमाहाराज बक्साई श्री पशुपितदेषि श्री गुह्येश्वरीका स्थानसम्म पत्थरले चिन्हि बाटो बनाई सिध्याई मृगस्थलीका वनभित्रमा श्रीरामेश्वर माहादेव स्थापना गरी राजाबाट आफूलाई बक्स्याको ढाल् तरवारमा थापि लियाका रणजित मल्लका छोरा अवधुत सिंहके सर्वश्व घर वारि षेत् १८३७ साल माघ शुदी ४ रोज २ का दिन तांवापत्र गरी श्री पशुपित प्रीति गरि सदावर्त गुठी राषि चहाया'

## सदावर्त गुठी स्थापना र मन्दिर-सत्तल निर्माण

वि.सं. १८२६ मा भक्तपुर विजयपछि राजा रणजित मल्लका मठ्याहा छोरा अवधुत सिंह बनारसमा बसेर राजा पृथ्वीनारायण शाहिवरुद्ध अनेकन प्रपञ्च रचेर नेपालको विरोधमा लागिरहेकाले उनको नाममा भक्तपुरमा रहेको घर र बिर्ता सर्वश्व भएको थियो र सर्वश्व भएको घर र बिर्ता जिमन पृथ्वीनारायण शाहिले सरदार रामकृष्ण कुँवरलाई गुठी राखिदिनु भनी सुम्पिदिएका थिए। शाहिले रामकृष्ण कुँवरलाई दिएको सो घर र जिमनबाट आम्दानी हुने धनबाट महाशिवरात्रीमा देश-देशावरबाट पशुपितको दर्शनका लागि आउने साधु-संन्यासीलाई सिधा दिने नियम राखिएको थियो । महाशिवरात्रीमा पशुपित दर्शनका खातिर देश विदेशबाट आउने साधु-संन्यासीलाई सिधासहित बिदा गर्ने प्रचलन अद्यापि छ ।

सरदार रामकृष्ण कुँवरले पशुपित र गुहेश्वरीबीचको श्लेषमान्तक जङ्गलमा शिवलिङ्गसिहतको रामेश्वरको मन्दिर निर्माण गर्नुका साथै महाशिवरात्रीमा सदावर्त बाँड्न अलग्गै सत्तल बनाएका थिए। १३.

# सरदार रामकृष्ण कुँवरका सन्तान र देहावसान

सरदार रामकृष्ण कुँवरका एकमात्र छोरा रणजित कुँवर हुन् । उनले नेपाल दरबारमा सरदार पद पाएका थिए। सरदार रणजित कुँवरले नेपाली सेनाले काँगडामा सिख सेनासँग लडेको युद्धमा वीरगति पाएका थिए। सरदार रामकृष्ण कुँवरले जीवनपर्यन्त नेपालको एकीकरण र समृद्धिमा योगदान गरे । उनको सिङ्गो जीवन नेपाललाई बलियो अर्थात् सबल बनाउने मुख्य मेरुदण्ड सैन्य सेवा र सैन्य उद्योगमा बित्यो । नाबालक राजा रणबहादुर शाहको राज्यकालमा सरदार रामकृष्ण कुँवरलाई नेपाल दरबारबाट वृद्ध उमेरमा पश्चिम नेपालको प्युठानमा नेपाल सरकारले स्थापना गर्न लागेको बारुद कारखाना अर्थात् सेनाका लागि अत्यावश्यक शस्त्रागार (गोलीगट्टा निर्माण गर्ने कारखाना) निर्माणको जिम्मेवारी दिएर पठाइएको थियो । लेखक मेजर फलेन्द्र विक्रम राणा (नेपाली राणा घरानाको वंशावली, पृ.१३) का अनुसार वि.सं. १८४४ मा सरदार रामकृष्ण कुँवरको ७६ वर्षको उमेरमा सो काम पूरा भई नसक्दै देहावसान भएको थियो ।

#### उपसंहार

सरदार रामकृष्ण कुँवर आधुनिक नेपाल एकीकरण अभियान शुरु हुँदादेखि करिब करिब आधुनिक, सगोल नेपालको स्वरूप निर्माण हुनलाग्दासम्म अनवरत युद्ध सेवा गरेका र सफलता दिलाउन सफल नेपाली सेनाका प्रतिभाशाली सेना नायक हुन् । उनले वि.सं. १८०१ को नुवाकोट विजयदेखि वि.सं. १८३९ को संयुक्त चौबिसी सेनासँग भएको युद्धसम्म करिब चालीस वर्ष लामो युद्ध सेवा गरेका थिए । रामकृष्ण कुँवर एकमात्र यस्ता सेनानायक हुन् जसले युद्धभूमिमा पराजय बेहोरेनन् । उनी संयमित, धीर, परिपक्व, दृढ विश्वासी र युद्ध नीति जानेका शूरवीर योद्धा थिए । उनको समेत बल, बुद्धि, सुझबुझ, शौर्य, पराक्रम, त्याग र परिश्रमबाट आजको आधुनिक नेपाल निर्माण हुन सकेको हो ।

रामकृष्ण कुँवर युद्धमा सकेसम्म धन र जनको क्षति नहोस् भनी सतर्क रहन्थे । शत्रुमाथि के, कसरी, कहाँ, किले प्रहार गर्नुपर्छ ? यस पक्षमा रामकृष्ण कुँवर पर्याप्त दख्खल राख्दथे । जितसुकै शक्तिशाली शत्रुसेना किन नहोस् आफूलाई खटाइएको युद्धमोर्चाबाट उनी पिछ हट्दैनथे। आफू मातहतमा खिटएका सैनिकको विशेष ख्याल राख्ने र शत्रु सेनालाई कज्याउन सीपालु रामकृष्ण कुँवरले झण्डै सैनिक जीवनको चार दशक सरदार पदमा व्यतीत गरेका थिए । आफूभन्दा कम उमेरका र कम युद्ध सेवा गरेका सैन्य व्यक्तिले सरदार भन्दा माथिल्लो बख्शी र काजी जस्ता उच्च र प्रभावशाली पद पाउँदा पिन रामकृष्ण कुँवरले चित्त दुःखाएको पाइँदैन, यो उनको राष्ट्र निर्माणप्रतिको पूर्ण समर्पण र कर्तव्यप्रतिको उच्च बफादारी थियो । समर्पण र बफादारीबाट उनी जीवनभर टसमस भएनन् ।

वीर सेनानायक रामकृष्ण कुँवर आधुनिक सैन्य ज्ञान हासिल गरेका वा तालिम पाएका अधिकारी थिएनन् । तथापि उनले एकीकरण युद्धहरूमा परिपक्व ढङ्गले पाइला चाले र उपलिब्धिपूर्ण नतीजा दिए । धैर्य, सुझबुझ र समर्पण कुँवरमा निहित अभिन्न पक्ष हुन् भने पारिवारिक पृष्ठभूमि, नेपाली समाजमा विद्यमान परम्परागत युद्ध नीतिको अनुसरण रामकृष्ण कुँवरको सफलताको अर्का पाटो हो । गोर्खा राज्यको सैनिक सङ्गठनमा परम्परागतरूपमा सैनिकलाई प्रदान गरिने युद्धसम्बन्धी तालिमबारे नेपाली सेनाले समयोचित अध्ययन अनुसन्धान गरेर त्यसलाई संरक्षण गर्ने र यसलाई भोलिका पुस्तासमक्ष हस्तान्तरण गर्न सके यसबाट भविष्यमा नेपाल र नेपालीले अवश्य लाभ हासिल गर्न सक्नेछन् ।

आधुनिक नेपाल एकीकरणका प्रणेता श्री ६ बडामहाराजाधिराज पृथ्वीनारायण शाहले सोचेका र आँटेका हर युद्ध मोर्चामा अग्रस्थानमा टेकेर जस्तोसुकै किठन मोर्चामा पनि अघि बढ्ने र विजयश्री दिलाउन सक्ने सामर्थ्य राख्ने रामकृष्ण कुँवर खासमा नेपाल एकीकरण अभियानका खातिर आफूलाई समर्पण गर्ने असल पात्र थिए । साना ठूला धेरै युद्ध लडेका र ती युद्धमा विजयी भएका सरदार रामकृष्ण कुँवरले सरदारभन्दा माथिको बक्सी र काजी पद किन पाएनन् ?यो विषय रामकृष्ण कुँवरको जीवनवृत्तान्त अध्ययन गरिरहँदा र लेखिरहँदा खट्टिकरहने अहम् प्रश्न हो ।

सरदार रामकृष्ण कुँवरबारे लेखिरहँदा उल्लेख गरिनुपर्ने अर्को तथ्य तत्कालीन नेपाली समाज वर्णाश्रम व्यवस्थामा आधारित थियो । वर्णाश्रम व्यवस्थामा ब्राह्मण, क्षत्री, वैश्य र शुद्रसमेत चार जात पर्दछन्, तीमध्ये क्षेत्री जातिको कर्तव्य सैनिक पेशा र राजकाज हुन्थ्यो । तत्कालीन समयमा क्षेत्री जातिको खातिर सैनिक पेशा र युद्ध सेवा थियो । क्षेत्रीहरू पुस्ता-पुस्तासम्म सैन्य र युद्ध सेवामा समर्पित रहन्थे । सरदार रामकृष्ण कुँवरको जीवन वृत्तान्त अध्ययनबाट उनका पिता र सन्तानसमेतले क्षेत्री जातिको लागि निर्दिष्ट सैनिक पेशा अवलम्बन गरेर युद्धमार्फत देश सेवा गर्दै आएको स्पष्ट हन्छ ।

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# आणविक हतियार अप्रसार आन्दोलन - एक विवेचना



*~विजयकुमार शाही* 

#### लेखसार

जर्मनी, इटली, जापान आदि राष्ट्रहरूको आ-आफ्नै स्वार्थ तथा सन् १९३० ताकाको आर्थिक मन्दी, तत्कालीन League of Nations को असफलता आदि कारणहरूले गर्दा सन् १९३९ बाट दोस्रो विश्वयुद्ध सञ्चालन भइरहेको थियो। दोस्रो विश्वयुद्ध चरम गतिमा अगाडि बढिरहेको समयमा तत्कालीन सोभियत सङ्घको सेनाले सन् १९४५ अप्रिल ३० मा जर्मनीलाई कञ्जामा लिएको थियो तत्पश्चात जर्मनीका तानाशाह हिटलरले आत्महत्या गरे, अनि जर्मनीले युद्धबाट आत्मसमर्पण गरेको थियो । यो घटनापछि युरोपमा दोस्रो विश्वयुद्ध समाप्त भएको थियो । तर एसियामा जापानले आफ्नो युद्ध जारी राखेको थियो । यद्यपि, जापानको युद्धगति कमजोर भइसकेको थियो । तर उसले आत्मसमर्पण गर्न अस्वीकार गर्दै आएको थियो ।

सन् १९४१ डिसेम्बर ७ तारिखको आइतबार संयुक्त राज्य अमेरिकाको हवाईको समयअनुसार विहान ०७:४८ बजे जापानी नौ सेनाद्वारा अचानक उक्त हवाईस्थित पर्ल हारबोरको अमेरिकी नौ सैनिक शिविरमा आक्रमण गरिएको थियो । जापानिजद्वारा अप्रत्याशित र अचानक झुक्याएर पर्ल हारवरको अमेरिकी नौसेना शिविरमाथि गरिएको यस आक्रमणमा अमेरिकी नौसैनिकतर्फ ठुलो क्षति हुन गएको थियो । यसै परिप्रेक्ष्यमा अमेरिकाले जापानमाथि बदला लिने सोचलाई कार्यरूप दियो । फलस्वरूप सन् १९४५ अगष्ट ६ मा अमेरिकाले पहिलो पटक जापानको हिरोसिमामा आणविक बमद्वारा आक्रमण गरेको थियो । त्यस लगत्तै अमेरिकाले जापानलाई आत्मसमर्पण गर्नको लागि आह्वान गऱ्यो, तर जापानले यो प्रस्तावलाई अस्वीकार गऱ्यो । त्यसपछि अमेरिकाले पुनः अगस्ट ९ मा जापानको नागासाकी सहरमा अर्को आणविक बम प्रहार गऱ्यो। उक्त हमलाको ६ दिनपछि जापानले आत्मसमर्पण गरेको थियो । यस प्रकार अमेरिकाले वम प्रहार गऱ्यो। उक्त हमलाको ६ दिनपछि जापानले आत्मसमर्पण गरेको थियो । यस प्रकार अमेरिकाले

<sup>🖰</sup> सहायक रथी (अ.प्रा.), नेपाली सेना-पाकिस्तानबाट न्यूक्लेयर, बायोलोजिकल र केमिकल वारफेर (NBCW) विषयमा तालिम प्राप्त ।

पर्ल हारबोर आक्रमणको जापानसँग बदला लियो भने इतिहासमा आजसम्म मानव समुदायको विरुद्धमा पहिलो र अन्तिम पटक आणिवक हतियार प्रयोग भएको थियो । साथै, यो घटनापछि दोस्रो विश्वयुद्ध पनि समाप्त भएको थियो । यो लेखको उद्देश्य आणिवक हतियारको सम्बन्धमा संक्षिप्त परिचयसहित आणिवक हतियार अप्रसार आन्दोलनको बारेमा विवेचना गर्नु रहेको छ ।

शब्द कुञ्जी: आणिवक हितयार, नौसेना, विश्वयुद्ध, मन्दी, आत्मसमर्पण, निःशस्त्रीकरण, अप्रसार सिन्ध, आमिवनाशकारी, विस्फोट, परम्परागत हितयार, सशस्त्रागार, वैमनस्य, शीतयुद्ध, मनोवैज्ञानिक आघात, रेडियोधर्मी, विकिरण, युरेनियम, हाइड्रोजन बम ।

## आणविक हतियारको परिचय

आमिवनाशकारी हितयारको वर्गमा पर्ने आणिविक हितियार एक अपरम्परागत हितियार (Unconventional Weapon) हो । यो हितियारको असर ज्यादै शिक्तिशाली, घातक र डरलाग्दो हुन्छ । यो हितियारको विस्फोट पश्चात् वायुमण्डललाई तहसनहस पार्नुको साथै जनसमुदायलाई सखाप बनाई नरसंहार गर्दछ । दोस्रो विश्वयुद्धको दौरान शिक्तिशाली राष्ट्र अमेरिकाद्वारा सर्वप्रथम यो हितियारको उत्पादन र परीक्षण गरिएको पाइन्छ। आजसम्मको विश्व सैनिक इतिहासमा पहिलो र अन्तिम पटक अमेरिकाले नै यो हितियारको प्रयोग गरेको छ । त्यसपछि दोस्रो विश्वयुद्ध नै बन्द भएको थियो । सो युद्धपश्चात् सन् १९४०-६० को शीतयुद्धको समयमा अमेरिका र पूर्व सोभियत सङ्गले यो हितियारको व्यापक रूपमा उत्पादन सुरु गरेका थिए । दोस्रो विश्वयुद्धको समयमा जर्मनीले यो हितियारको उत्पादन गर्दैछ भन्ने आशङ्का गरिएको थियो । तर अमेरिकाले म्यानह्याटन प्रोजेक्ट (Manhattan Project) द्वारा आणिविक बम उत्पादन गरी १६ जुलाई १९४४ मा परीक्षण समेत गरेको थियो ।

उत्पादनको दृष्टिले आणिवक हतियारलाई दुई प्रकारमा विभाजन गरिएको छ । त्यो हो – Fission (अणुहरू टुकिनु) र Fusion (अणुहरू जोडिनु) । Fission प्रतिक्रियामा अणुहरू टुकिएर विस्फोट हुन्छ। यो आणिवक बम उत्पादन गर्न उच्चस्तरको युरेनियम वा प्लुटोनियमको आवश्यकता पर्दछ । त्यस्तै, Fusion प्रतिक्रियाद्वारा आणिवक बम विस्फोट हुदाँ अणुहरू टुकिनुको साथै दुई वा सोभन्दा बढी अणुहरू एक आपसमा जोडिएर प्रतिक्रिया गर्दछन्। यसबाट वायुमण्डलमा ठुलो शक्ति उत्पन्न हुन्छ र व्यापक

मात्रामा धनजनको क्षति हुन पुग्दछ। यो प्रतिक्रियाद्वारा हाइड्रोजन बम उत्पादन गरिन्छ, जुन अति शक्तिशाली हुन्छ । यो बम उत्पादन गर्न Deuterium र Tritium प्रयोगको गरिन्छ ।

## आणविक हतियारबाट सुसज्जित राष्ट्रहरू

विश्वका केही राष्ट्रहरू आमविनाशकारी आणविक हतियारबाट सुसज्जित छन्, भलै तिनीहरूसँग भएको वार**हेड** सङ्ख्या तलमाथि छ ।

## संयुक्त राज्य अमेरिका

आणिवक हितयारको उत्पादन र प्रयोग गर्ने विश्वको पहिलो राष्ट्र अमेरिका हो । यो मुलुकसँग विश्वकै परिष्कृत र आधुनिक आणिवक हितयारको भण्डार छ । अमेरिकाले आफ्नो आणिविक हितयारलाई विभिन्न मित्र राष्ट्रहरूमा समेत तैनाथ गरेको छ। संयुक्तराज्य अमेरिकाले सन् १९४५ मा आणिवक हितयारको परिक्षण गरेको थियो।

## रसिया

पूर्व सोभियत सङ्घबाट नै उत्पादन गरी राखिएको आणविक हितयारको ठुलो भण्डार आज पिन रसियासँग छ । रसियाको सैनिक रणनीति र राष्ट्रिय सुरक्षाको मूलतत्त्व आज पिन आणविक हितयार नै हो। रसिया (तत्कालीन सोभियत सङ्घ) ले सन् १९४९ मा आणविक हितयारको परीक्षण गरेको थियो ।

#### चीन

अमेरिका र रसियाको तुलनामा चीनसँग आणिवक हितयारको भण्डार सानो छ । तर चीनले यो हितियारको आधुनिकीकरण र क्षमता अभिवृद्धितर्फ़ ध्यान दिदैं आएको छ । चीनले आणिविक हितियार प्रयोग सम्बन्धमा "पहिले प्रयोग नगर्ने" (No First Use) नीति अख्तियार गरेको छ । चीनले सन् १९६४ मा आणिविक हितियारको परीक्षण गरेको थियो ।

#### फ्रान्स

फ्रान्सको आफ्नो स्वतन्त्र आणिवक हितयारको भण्डार छ । यो भण्डार सानो भए तापिन आधुनिक आणिवक शक्तिले सुसज्जित छ । फ्रान्सको राष्ट्रिय सुरक्षा र अन्तर्राष्ट्रिय प्रभावको मुख्य तत्त्वको रूपमा आणिविक हितयार रहेको छ । यो हितयारको सम्बन्धमा फ्रान्सले निवारक नीति (Policy of Deterrence) अपनाएको छ । फ्रान्सले सन १९६० मा आणिवक हितयारको परीक्षण गरेको थियो ।

## संयुक्त अधिराज्य

बेलायतसँग सानो परिमाणमा आणिवक हतियारको भण्डार छ र यो भण्डार ऋमशः कम गर्दै लगेको छ । बेलायतले पिन फ्रान्सले जस्तै "Policy of Deterrence" को नीति नै अँगालेको छ । बेलायतले सन् १९४२ मा आणिवक हतियारको परीक्षण गरेको थियो ।

#### भारत

सन् १९७४ मा पहिलो पटक भारतले आणिवक हितयारको परीक्षण गरेको थियो । त्यसपिछ उसले सन् १९९८ मा आफूलाई आणिवक हितयारसम्पन्न राष्ट्र घोषणा गरेको थियो । भारतले पिन चीनले जस्तै आणिवक हितयारको प्रयोग सम्बन्धमा "No First Use" नीति नै अपनाएको छ । साथै, विश्वसनीय न्यूनतम निवारक (Credible Minimum Deterrence) मा जोड दिएको छ ।

#### पाकिस्तान

भारतले आणिवक हितयारसम्पन्न राष्ट्र घोषणा गरेपछि पाकिस्तानले पिन भारतलाई प्रतिकार गर्न आफ्नो मुलुकमा आणिवक हितयार उत्पादन गर्न कम्मर कसेको पाइन्छ । यसै सन्दर्भमा सन् १९९८ मा पाकिस्तानले पहिलो पटक आणिवक हितयारको परीक्षण गरेको थियो ।

## उत्तर कोरिया

सन् २००६ मा पहिलो पटक उत्तर कोरियाले आणविक हतियारको परीक्षण गरेको थियो । अन्य माथि उल्लिखित राष्ट्रहरूको तुलनामा उसको आणविक हतियार कार्यक्रम सानो र कम परिष्कृत छ ।

#### इजरायल

आणिवक हितयार उत्पादन गरी इजरायलले आफूसँग राखेको विश्वास गरिएको छ, तर यस सम्बन्धमा औपचारिक रूपमा आजसम्म पृष्टि हुन सकेको छैन । इजरायलसँग सीमित सङ्ख्यामा आणिवक हितयारको भण्डार रहेको विश्वास गरिएको छ । इजरायलले यो हितयार आफ्नो मुलुक विरिपरिको अस्थिर सुरक्षा क्षेत्रमा निवारक नीतिका रूपमा प्रयोग गर्न सक्नेछ । अपृष्ट खबर अनुसार इजरायलले सन् १९६३ र १९६९ मा आणिवक हितयारको परीक्षण गरेको थियो ।

## आणविक हतियारले पार्ने असर र क्षतिहरू

आणिवक हितयारको विस्फोटबाट हुने असरहरू अन्य परम्परागत हितयारबाट भन्दा ज्यादै पृथक् हुन्छ । यो हितयारको विस्फोट भएपछि वातावरण र जनसमुदायमा अकल्पनीय क्षिति पु-याउँछ । कुनै पिन माध्यमबाट प्रहार गरिएको आणिवक बम विस्फोट हुनासाथ यसले आफ्नो प्रतिक्रिया र असर देखाउन प्रारम्भ गरिहाल्छ । आणिवक बम विस्फोटपश्चात् ज्यादै ठुलो विस्फोटको आवाज सुन्नमा आउँछ । सो विस्फोटपछि ग्राउन्ड जिरो (Ground Zero) बाट आगोको ठुलो मुस्लो माथितिर जान्छ र एउटा च्याउको आकार (Mushroom Shape) बनाउँदछ । आणिवक बम विस्फोटपश्चात् वायुमण्डलमा भएका धुलो, ढुङ्गा, माटो, पात-पितङ्गर आदि वस्तुलाई सोहर माथितर्फ हुत्याउँदा च्याउको आकार बन्न गएको हो। यसका साथै यसले आफ्नो प्रतिक्रिया र असरहरू तुरुन्तै देखाउन सुरु गर्दछ । आणिवक हितयार विस्फोटपछि देखिने क्षितिहरू मुख्यतः दुई प्रकारको हुन्छ ।

## अल्पकालीन असर र क्षतिहरू

आणिवक हतियार विस्फोटबाट उत्पन्न हुने विस्फोटको लहरले गर्दा घर, पुल, सडक जस्ता ठुल-ठुला भौतिक संरचनाहरू तुरुन्तै ध्वस्त हुनुका साथै धेरै सङ्ख्यामा मानिसहरू हताहत हुन पुग्दछन् । साथै, तापीय विकिरणबाट उत्पन्न हुने ताप र उज्यालोले ठुलो क्षेत्रमा रहेको सजीव र निर्जीव वस्तुहरूलाई डढाउँछ र ठुलो आगलागी हुन्छ। त्यस्तै, प्रारम्भिक विकिरणले गर्दा विकिरणबाट हुने रोगहरू फैलन्छ । साथै, विद्युत चुम्बकीय धड्कनले गर्दा विद्युतीय यन्त्र र उपकरणहरूलाई प्रयोग विहीन बनाई क्षति पुन्याउँछ।

## दीर्घकालीन असर र क्षतिहरू

आणिवक हतियारको विस्फोटपश्चात् धेरै दीर्घकालीन असरहरू देखा पर्दछन् । जस अन्तर्गत विकिरणको फैलावट, वातावरणीय क्षति, हावापानीमा पर्ने असर, विश्वमा पर्न जाने राजनीतिक तथा आर्थिक असर तथा समाजमा देखिने मनोवैज्ञानिक तथा सामाजिक प्रभावहरू नै प्रमुख हुन् ।

विश्वमा हाल मौज्दात रहेको आणविक हतियारको अवस्था

सि. नं.	देशको	तैनाथ रहेको	भण्डारण	काम नदिने	कुल जम्मा	कुल जम्मा वारहेड
	नाम	वारहेड	गरिएको	वारहेड	वारहेड (जनवरी	(जनवरी २०२३
			वारहेड		२०२४	सम्म)
					सम्म)	
٩	संयुक्त	9000	१९३८	१३३६	४०४४	५२००
	राज्य अमेरिका					
२	रसिया	9७90	२६७०	१२००	४४८०	४८८९
n	संयुक्त	१२०	१०५		२२५	२२५
	अधिराज्य					
γ	फ्रान्स	२८०	90		२९०	२९०
ሂ	चीन	२४	४७६		५००	४१०
દ્	भारत		१७२		१७२	१६४
9	पाकिस्तान		9७०		960	960
ζ	इजरायल		९०		९०	९०
9	उत्तर कोरिया		५०		५०	५०
	कुल जम्मा	३९०४	५६८१	२५३६	92929	१२५१२

स्रोतः सिपरी एयर बुक २०२४



आणविक बम विस्फोटपश्चात् प्रतिक्रियाको क्रममा आकाशमा देखिएको च्याउको आकार



निलो आकाशतर्फ तयारी अवस्थामा राखिएका लामो दूरीको आणविक क्षेप्यास्त्रहरूको समूह

## आणविक हतियार अप्रसार आन्दोलन

दोस्रो विश्वयुद्धको दौरान आणिवक हितयारको प्रयोग भएपश्चात् विश्वमा आणिविक हितयारको अप्रसार आन्दोलन सुरु भएको पाइन्छ । आणिविक हितयारलाई फैलन निदन, यसको भण्डारमा कमी ल्याउन र आखिरमा यसको निःशस्त्रीकरणतर्फ अगाडि बढ्ने उद्देश्यका साथ सन् १९४५ देखि आजसम्म अन्तर्राष्ट्रियस्तरमा आणिविक हितयारको अप्रसारको सम्बन्धमा धेरै नै काम कारबाही भएका छन् । जसको संक्षिप्त विवरण निम्न बमोजिम छ :

## दोस्रो विश्वयुद्धपश्चात् र शीतयुद्धको काल

अमेरिकाले जापानमा सन् १९४५ मा आणिवक हितयारबाट गरेको आक्रमणबाट कहालीलाग्दो धनजनको क्षिति भएको तथ्य संसारले देखेपछि मात्र आणिविक प्रविधि र हितयारको नियन्त्रण सम्बन्धमा बहस चलेको पाइन्छ । सन् १९४६ मा अमेरिकाले यो हितयारको नियन्त्रणतर्फ पाइला चाल्न प्रस्ताव गरेको थियो, तर पूर्व सोभियत सङ्घले यसलाई ठाडै अस्वीकार गन्यो। तत्पश्चात् सन् १९४९ मा पूर्व सोभियत सङ्घ, सन् १९५२ मा संयुक्त अधिराज्य र सन् १९६० मा फ्रान्सले पहिलो पटक आणिविक हितियारको परीक्षण गरेका थिए, जसबाट शीतयुद्धको दौरान तनाव झन् बढन् गएको थियो । तर अमेरिकी राष्ट्रपति Dwight D. Eisenhower ले सन् १९५३ मा "शान्तिको लागि परमाणु" (Atoms for Peace) को अवधारणा संयुक्त राष्ट्रसङ्घमा राखेका थिए । यसको उद्देश्य आणिविक हितयारको प्रसारलाई नियन्त्रण गर्ने र आणिविक ऊर्जालाई शान्तिपूर्ण कार्यमा लगाउन प्रवर्धन गर्नु थियो । यो कार्यको फलस्वरूप सन् १९५७ मा International Atomic Energy Agency (IAEA) को स्थापना भएको थियो ।

## आणविक हतियार अप्रसार सन्धिको काल

सन् १९६२ को क्युबाको मिसायल सङ्कटपश्चात् आणिवक हितयारको तनाव उच्च रहेको थियो। यसै सन्दर्भमा सन् १९६३ मा अमेरिका, पूर्व सोभियत सङ्घ र संयुक्त अधिराज्यको बीचमा आंशिकरूपले परीक्षण रोक्ने सिन्ध भएको थियो। यसको प्रावधानअनुसार जिमनमुनिबाहेक अन्यत्र स्थानमा आणिवक हितयार परीक्षण गर्न नपाउने भएको थियो। यो सिन्ध भएपछि सन् १९६८ मा एउटा "आणिवक हितयार अप्रसार सिन्ध" (Nuclear Non-Proliferation Treaty-NPT) प्रकाशमा आएको थियो, जुन आणिवक हितयार

नियन्त्रण र अप्रसार सम्बन्धमा एक "कोशे ढुङ्गा" साबित भएको थियो । यो सन्धिको प्रावधानअनुसार आणिवक हितयार फैलन रोक्ने, आणिवक ऊर्जा प्रविधिलाई शान्तिपूर्ण कार्यमा लगाउने र निःशस्त्रीकरणतर्फ अग्रसर रहने भन्ने थियो । यसै सन्धिअनुसार आणिवक हितयार सु-सिज्जित राष्ट्र र आणिवक हितयारिवहीन राष्ट्र गरी दुई भागमा राष्ट्रहरूलाई वर्गीकरण गरी सो अनुसार कार्यादेश तोकिएको थियो ।

## आणविक हतियार अप्रसार सन्धिको विस्तार

भारतले सन् १९७४ मा आणिवक हितयारको परीक्षण गरेको थियो । जसलाई भारतले "शान्तिपूर्ण आणिवक विस्फोट" नाम दिएको थियो । यो घटनापछि NPT लाई विस्तार गर्नुपर्ने आवश्यकता महसुस गरी अमेरिका र पूर्व सोभियत सङ्घको अग्रसरतामा Strategic Arms Limitation Talks (SALT) र पछि गएर Strategic Arms Reduction Treaty (START) ले कार्यरूप लिएको थियो। उल्लिखित दुई प्रावधानअनुसार प्रत्येक महाशक्ति राष्ट्रले आफ्नो आणिवक हितयारको सङ्ख्या र किसिमलाई सीमित गर्नुपर्ने व्यवस्था गरियो। धेरै वर्ष कुराकानी भएपछि सन् १९९६ मा Comprehensive Nuclear Test Ban Treaty (CTBT) मा हस्ताक्षर भई प्रकाशमा आएको थियो । यो प्रावधानअनुसार सैनिक तथा गैरसैनिक उद्देश्यले कुनै पिन आणिवक विस्फोट गर्न नपाइने व्यवस्था थियो। तर केही शक्ति राष्ट्रहरू खासगरी अमेरिका, चीन र भारतले यसलाई अनुमोदन गरेका थिएनन् ।

## शीत्युद्धपछिका नयाँ चुनौतीहरूको काल

यो कालमा आएर भारत, पाकिस्तान र उत्तर कोरियाले आ–आफ्नो राष्ट्रलाई आणिवक हितियारले सुसज्जित गरे । उनीहरूले NPT को खासै पर्वाह गरेनन् वा NPT लाई छाडे । सन् २०१४ ताका इरानले आणिवक हितियारको कार्यक्रम सुरु गरेको भन्ने तथ्य बाहिर आयो । अन्तर्राष्ट्रिय दबाब र नाकाबन्दीको कारण यो कार्यक्रमबाट इरान पछि हटेको थियो। समयको क्रमसँगै ल्याटिन अमेरिका, अफ्रिका र दक्षिणपूर्वी एसिया क्षेत्रहरूमा सिन्ध गरी Nuclear Weapon Free Zones (NWFZs) घोषणा गरिएको थियो। यो सिन्धको प्रावधानअनुसार सदस्य राष्ट्रहरूलाई आणिवक हितियारको विकास र तैनाथ गर्न रोक लगाइएको थियो । सन् २०१० मा आएर आणिवक हितियार नियन्त्रणको पछिल्लो सिलसिला अनुरूप अमेरिका र रिसयाबीच New START सम्झौता भएको थियो । यो सम्झौताको उद्देश्य तैनाथ गरिएका

रणनीतिक आणिवक Warhead र Launcher को सङ्ख्यालाई न्यून गर्नु रहेको थियो। यो सम्झौतालाई सन् २०२१ सम्म अघि बढाइएको थियो, तर यसको भविष्य भने अनिश्चित छ ।

# वर्तमान चुनौतीहरू र प्रगति

सन् २०१७ मा संयुक्त राष्ट्रसङ्घको तत्त्वाधानमा "आणिवक हितयारमा प्रतिबन्ध लगाउने सिन्ध" (TPNW) प्रकाशमा आयो, जुन सन् २०२१ बाट लागु भएको थियो । यद्यपि, आणिवक हितयारले सुसिज्जित कुनै पिन राष्ट्रले यस सिन्धमा हस्ताक्षर गरेनन् । आणिवक हितयारको प्रतिबन्ध र निःशस्त्रीकरणको सम्बन्धमा जितसुकै सिन्ध तथा सम्झौताहरू भए पिन अमेरिका, रिसया र चीनजस्ता मुलुकहरूले आफ्नो आणिविक हितयार शस्त्रागारहरूको आधुनिकीकरण गर्न छाडेका छैनन् । यसै सन्दर्भमा विकसित देशहरूले सिप्शान्दरूको छित्त एप्रिकेका छन् । यत्तर कोरिया आफ्नो आणिविक क्षमता बढाउनेतर्फ लिम्करहेको छ भने इरानको आणिविक कार्यक्रमलाई धेरै राष्ट्रहरूले अझै पिन शङ्गाको दृष्टिले हेरिरहेका छन् । ICAN (International Campaign to Abolish Nuclear Weapon) जसले सन् २०१७ मा नोबेल शान्ति पुरस्कार समेत पाएको थियो, जसअन्तर्गत नागरिक समाजले पूर्णरूपमा आणिविक हितयारको निःशस्त्रीकरणको लागि अभियानहरू सञ्चालन गरिरहेका छन् तर पिन आजको मितिसम्म आइपुग्दा आणिविक हितयारको सम्भावित प्रयोगको डर विश्वमा कायमै रहेको पाइन्छ ।

## आणविक हतियार अप्रसार सन्धिको विश्लेषण

अहिलेसम्म विश्वमा भए गरेका आणिवक हितयार अप्रसार सिन्ध-सम्झौताहरूमध्ये The Treaty on the Non-Proliferation of Nuclear Weapons अर्थात् The Non-Proliferation Treaty (NPT) एक महत्त्वपूर्ण, जीवित र सर्वमान्य अन्तर्राष्ट्रिय सम्झौता हो । यो सम्झौताको मुख्य उद्देश्य विश्वमा आणिवक हितयार र आणिवक हितयार प्रविधि फैलनबाट रोक्नु, आणिवक शक्तिलाई शान्तिपूर्ण कार्यमा प्रयोग गर्न सहयोग प्रवर्धन गर्नु र आणिवक हितयारको निःशस्त्रीकरण गर्दै सामान्य एवम् पूर्णरूपमा निःशस्त्रीकरण गर्नु हो । Non-Proliferation Treaty (NPT) मा ५ वटा आणिवक हितयार सम्पन्न राष्ट्रहरूसहित १९१ राष्ट्रहरूले हस्ताक्षर गरेका थिए । यसले यो सम्झौताको महत्त्वलाई उजागर गरेको थियो । १ जुलाई

१९६८ मा NPT सम्झौता भएको थियो । यो सम्झौता मार्च १९७० मा लागु भई २५ वर्षसम्म कायम रहेको थियो । यो सम्झौतालाई पछि गएर सन् १९९५ मा संयुक्त राष्ट्रसङ्घको मुख्यालयमा १७४ राष्ट्रहरूको समर्थनबाट विनासर्त र अनिश्चितकालीन बनाइएको थियो । सन् २०१६ अगस्टसम्ममा १९१ राष्ट्रहरू सम्झौताको पक्षमा आएका थिए । उत्तर कोरियाले दोस्रो पटक सन् १९८५ मा सम्झौतामा हस्ताक्षर गरे पनि सन् २००३ मा यसबाट पछि हटेको थियो । भारत, पाकिस्तान र इजरायल यो सम्झौताबाट अझै पनि टाढै छन्।

अमेरिकाले सन १९४५ मा जापानको हिरोसिमा र नागासाकीमा आणविक हतियारद्वारा आऋमण गरेपछि सन् १९४९ मा तत्कालीन सोभियत सङ्घले पनि आणविक हतियारको परीक्षण गरेर आणविक हतियारको युगमा प्रवेश गरेको थियो । जसले गर्दा आणविक हतियारको क्षेत्रमा अमेरिकाको एकलौटी समाप्त भएको थियो । त्यसपछि सन १९५० र १९६० को दशकमा संयक्त अधिराज्य फ्रान्स र चीनले पनि आणविक हतियारको उत्पादन गरी परीक्षणसमेत गर्न भ्याएका थिए । यसले गर्दा विश्वमा आणविक हतियारको त्रास बढ्न गएको थियो । यसैक्रममा सन् १९६३ मा आंशिक परीक्षण निषेध सन्धि (Partial Test Ban Treaty-PTBP) लागु गरिएको थियो । त्यसपछि मात्र आणविक हतियारलाई पूर्णरूपमा रोक लगाउन सन् १९६८ मा आणविक हतियार अप्रसार सन्धि (NPT) आएको थियो । यो सन्धि आउनुभन्दा अगाडि अन्तर्राष्ट्रिय आणविक ऊर्जा एजेन्सी (International Atomic Energy Agency-IAEA) को २९ जुलाई १९५७ मा स्थापना भइसकेको थियो । सन् १९५३ मा तत्कालीन अमेरिकी राष्ट्रपति आइजनहाअरले संयुक्त राष्ट्रसङ्घमा दिनु भएको "शान्तिका लागि आणविक" भन्ने भाषणको आधारमा IAEA को स्थापना भएको थियो । शान्तिकार्यको लागि आणविक ऊर्जा प्रयोगमा सदस्य राष्ट्रहरूलाई सहयोग गर्न र आणविक हतियारको प्रसार हुनबाट जोगाउनु नै यो संस्थाको प्रमुख कार्य थियो । त्यसैले यो संस्थाले पनि आणिवक कार्यक्रमको अनुगमन गर्ने र गोप्य रूपमा आणविक हतियार उत्पादन गर्नसक्ने राष्ट्रहरूको आणविक कार्यक्रम निरीक्षण गर्न सुरु गरेको थियो । NPT लागु भएपछि IAEA को जिम्मेवारी अझ बढ्न गएको देखिन्छ ।

वास्तवमा आणिवक हतियारको परीक्षण र प्रयोगमा बन्देज लगाउने सम्बन्धमा NPT आजसम्म पनि एक महत्त्वपूर्ण दस्तावेज साबित भएको छ । यो सन्धि मुख्य तीनवटा खम्बाको आधारमा गरिएको थियो, जसमा अप्रसार, निःशस्त्रीकरण र आणिवक ऊर्जालाई शान्तिपूर्ण कार्यमा प्रयोग गर्नु नै हो । त्यसैले यो सन्धिको आफ्नै उपलब्धि र बलिया पक्षहरू यस प्रकार छन्:-

- आणविक हतियारको प्रसारलाई सीमित गर्नु ।
- आणविक ऊर्जा कार्यक्रमको अनुगमन गर्न IAEA को स्थापना ।
- शस्त्र नियन्त्रणको लागि बनेको अन्य सन्धि तथा सम्झौता (SALT, START आदि) को लागि आधारशिलाको रूपमा काम गर्ने।
- विश्वका विभिन्न क्षेत्रमा आणविक हतियार मुक्तक्षेत्र स्थापना ।

# उल्लिखित बलियो पक्षको अतिरिक्त यो सन्धिका केही चुनौती तथा सीमितता समेत देखिएको छ

- आणविक हतियार निःशस्त्रीकरणको क्षेत्रमा खासै प्रगति हुन नसकेको ।
- आणिवक हितयार उत्पादन गर्ने सबै राष्ट्रहरूले यो सिन्धमा हस्ताक्षर नगर्नु, जस्तै भारत,
   पािकस्तान र इजरायलले हस्ताक्षर गरेका छैनन् भने उत्तर कोरिया सन् २००३ मा यो सिन्धबाट पिछ हटेको थियो ।
- केही राष्ट्रले यो सिन्धको पालना गरेनन् र सिन्धको अपहेलना गरेका थिए, जसमा इरान, इराक,
   लिबिया आदि मुलुकहरू पर्दछन् ।
- केही मुलुकले यो सन्धिलाई असमान सन्धि भनी "आणिवक रङ्गभेदी" सन्धिको संज्ञा दिएका छन् । पाँचवटा मुलुकलाई स्थायी रूपमा आणिवक हतियार राख्न दिइएको सम्बन्धमा यो विषय उठेको हो ।
- इरानको आणविक ऊर्जाको सम्बन्धमा अमेरिकाले आफ्नो धारणमा फेरबदल गर्नु ।

## वर्तमान सन्दर्भ र भविष्यको सम्भावना

आणिवक हतियारको सम्बन्धमा वर्तमान विकासको सन्दर्भ र भविष्यको सम्भावनाहरूलाई दृष्टिगत गर्दा निम्न पक्षहरू देखिन आउँछ:-

- सन् २०१७ मा गरिएको आणिवक हितयार निषेध गर्ने सिन्धिलाई आणिवक हितयारिविहीन राष्ट्रहरूले आणिवक हितयारलाई पूर्ण रूपमा बन्देज गर्नु पर्ने पैरवी गरेका छन् । तर आणिवक हितयार सम्पन्न मुलुकहरू यसको विपक्षमा रहेका छन् ।
- आज पनि अमेरिका, रिसया, चीन जस्ता मुलुकहरू आफ्नो आणिवक हितयारको भण्डारलाई बढाउने र आधुनिकीकरण गर्नेतर्फ लागेका छन् । यसैको फलस्वरूप हाइपरसोनिक हितयारको उत्पादन र (AI) मा आधारित युद्धकलाले नयाँ नयाँ जोखिमहरू देखिनमा आएका छन् ।
- आणिवक हितयार नियन्त्रणको सम्बन्धमा जे-जस्ता सिन्धहरूको व्यवस्था भए पिन उत्तर कोरियाले आफ्नो आणिवक हितयारको विकास कार्यलाई अगाडि बढाइरहेको छ । इरानसँग आणिवक हितयारको महत्त्वाकाङ्क्षा अझै कायम रहेको भन्ने अनुमान गरिन्छ, जुन एउटा मुख्य कूटनीतिक चुनौती हो ।

माथि उल्लिखित विश्लेषणहरूलाई मध्यनजर गर्दा आणिवक हितयार अप्रसार सिन्धले खासै केही गर्न नसकेको हो ? आणिवक हितयार परीक्षण र प्रयोग निषेध गर्ने बारेमा कुनै काम नगरेको हो ? भन्ने प्रश्नहरू पिन उठ्ने गरेका छन् । तर यी प्रश्नहरू पूर्णतया सत्य छैनन् किनभने यसका केही सफल पक्ष र कमीकमजोरीहरूलाई निम्नानुसार केलाउन सिकन्छ ।

#### सबल पक्ष

- यो सन्धिले धेरै राष्ट्रहरूमा आणविक हतियारलाई फैलनबाट रोकेको छ ।
- यो सिन्धले विश्वमा आणिवक हितयारको प्रसारलाई रोक्न एउटा मूल्य र मान्यता स्थापित
   गरेको छ ।
- आणिवक कार्यक्रमको प्रमाणीकरण तथा अनुगमन गर्न IAEA संस्थाको स्थापना भई कार्य भइरहेको छ।

# दुर्बल पक्ष

- आणविक हतियार निःशस्त्रीकरण गरेको यिकन गर्ने कुनै संयन्त्र नभएको ।
- IAEA लाई महत्त्व निदएर केही राष्ट्रले आणिवक हतियारको विकासक्रम जारी राखेका छन्।

- भविष्यमा आणविक हतियाररर सम्पन्न राष्ट्रहरूबीच भ्-राजनीतिक तनाव कायमै रहने देखिन्छ।
- सिन्धमा आणिवक हितयार नियन्त्रण र निःशस्त्रीकरण सम्बन्धमा समय सीमा उल्लेख भएको छैन।

संक्षेपमा भन्ने हो भने विभिन्न चुनौती र सीमितताको बाबजुद पिन यो सिन्ध विश्व शान्ति र सुरक्षाको लागि एउटा बलियो खम्बा नै हो । तर निःशस्त्रीकरणको क्षेत्रमा यो सिन्धलाई गम्भीरताका साथ लागु गर्न सिकएन भने यसको वैधानिकतामाथि नै प्रश्न उठन् सक्दछ । अन्ततोगत्वा यसले विश्वमा आणविक द्वन्द्वको जोखिम बढ्न पिन सक्छ ।

#### निष्कर्ष

अहिले पूर्वी युरोपस्थित मुलुकहरू रिसया र युक्रेनको बीचमा युद्ध जारी छ । यस युद्धमा युक्रेनतर्फ टुलो क्षिति भइरहेको छ भने तुलनात्मक रूपमा रिसयातर्फ कम क्षित भएको देखिएको छ । युक्रेनलाई अमेरिका र NATO मा आबद्ध युरोपियन मुलुकहरूले सैनिक तथा अन्य सहयोग गिररहेको कारण युद्धमा युक्रेनले इटेर रिसयाको सामना गिररहेको छ । नोभेम्बर, २०२४ को दोस्रो साताबाट युद्ध झन् चिकँदै गएको छ । यसैबीच अमेरिकी राष्ट्रपति बाइडेन प्रशासनले रिसयाको भित्री भागसम्म क्षेप्याख्न (मिसायल) प्रहार गर्न सक्ने अनुमित युक्रेनलाई दियो । यसको लगत्तै ब्रिटेन र फ्रान्सले पनि यसमा सहमित जनाए । यो अनुमित पाएको भोलिपल्ट युक्रेनले रिसयामाथि Army Tactical Missile Systems (ATACMS) को हाइपरसोनिक ब्यालेस्टिक मिसायल प्रहार गन्यो, जुन मिसायल अमेरिका र युरोपियन देशले पहिले नै युक्रेनलाई दिएका थिए । युक्रेनले रिसयाको भित्री भागमा प्रहार गरेको फ्रान्समा निर्मित SCALP EG मिसायलले रिसयाको Black Sea को Sevastopol मा रहेको नौसैनिक शिविरमा सामान्य क्षित पुन्याएको थियो । यो घटनापश्चात् रिसयन राष्ट्रपति पुटिनले आफ्नो आणविक हतियार प्रयोग गर्ने सम्बन्धी नीतिमा परिवर्तन गरी युक्रेनविरुद्ध आणविक हतियार प्रयोग गर्न सक्ने गरी खुकुलो नीति कायम गरेका छन् । यसबाट पूर्वी युरोपमा आणविक हतियार प्रयोग हनसक्ने त्रास कायमै रहेको छ ।

आणिवक हतियार अप्रसारको सम्बन्धमा गत करिब आठ दशकको अविधमा आजको विश्व महत्त्वपूर्ण प्रगतितर्फ लिम्करहेको छ । तर विश्वका केही राष्ट्रहरूबीचमा देखिएको आणिवक हतियारको चलखेल रोकिने सम्भावना भने अझै देखिएको छैन । यस क्षेत्रमा NPT देखि लिएर अहिलेसम्म आणिविक हितियार निषेध गर्ने र आणिविक हितियाररिहत क्षेत्र स्थापना गर्नेतर्फ भने ठुलो प्रगित नभएपिन आशा गर्न सिकिने प्रशस्त मार्गहरू छन् । हालै सन् २०२४ को उत्तरार्धमा आएर नर्वेजियन नोबेल सिमितिले यस वर्षको नोबेल शान्ति पुरस्कार Nihon Hidankyo नामक एक जापानिज संस्थालाई प्रदान गरेको छ । यो संस्था हिरोसिमा र नागासाकीमा भएको आणिविक हितयार आक्रमणबाट बाँचेका र आणिविक हितयार परीक्षण स्थलमा रहेका मानिसहरू मिलेर अगस्त १०, १९५६ मा स्थापना भएको संस्था हो । आणिविक शिक्तलाई शान्तिपूर्ण कार्यमा लगाउनु नै आजको समयको माग हो । आणिविक ऊर्जा विनाशकारी प्रयोगको लागि मात्र हैन विकास र विश्वशान्तिको लागि एक सशक्त माध्यम पिन हो भन्ने तथ्य विश्वसमुदाय समक्ष प्रमाणित गर्नु नै समय सापेक्ष हुनेछ ।

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(A Journal of Security Affairs)



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