

Unveiling the Non-Traditional Security Landscape in Pakistan: Assessing Modern Tools and Legal Framework

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Abstract: This research paper aims to address Pakistan's non-traditional security challenges. The meaning of "national security" has expanded in the aftermath of 9/11. States have started to pay more attention to non-traditional security risks in addition to conventional military threats in order to secure comprehensive national security, and Pakistan is no exception. Several non-traditional security issues, including cybersecurity, deterioration of the environment, economic instability, climate change, microbiological infections, the food crisis, and many others, have long plagued Pakistan. These threats frequently involve diffuse networks, unusual tactics, and a variety of linked circumstances in contrast to traditional military threats, which may have clearly defined enemies and methods. Therefore, this paper fills the gaps by critically evaluating the modern tools and legal framework to combat this superlative threat. The qualitative doctrinal research methodologies were applied for this study. This research critically analyses the elements involved in Non-traditional threats that have grown to be a serious issue for Pakistan as a result of the country's growing reliance on digital technologies. Cyber threats, including malware, breaches of data, and cyber spying, can compromise sensitive information, disrupt vital infrastructure, and have an impact on the nation's financial health and security. In this backdrop, Pakistan needs to shift its focus away from traditional security. Due to the non-linear character of non-traditional security threats, the objective of this paper is to call for a special approach to address non-traditional security concerns. A comprehensive, multi-stakeholder strategy that incorporates international collaboration, exchange of information, agile governance structure is needed to address these issues.

Keywords: Non-traditional threats, Cyber Security, Cyber Terrorism, Food Crisis, Water Scarcity, Deterrence, Microbiological Infections, Prevention

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1. Introduction

Once the conclusion of the Cold War, the word "security" has grown to be the most divisive. It has taken a lot of effort to reinterpret the new boundaries of international security through the lens of liberal and realist theories that already exist. Critical theorists and the Copenhagen School have greatly contributed to defining the broader concept of protection in this way [1]. The security of nations has historically entirely depended on external threats, and it has prioritised the use of force and military power to counter security challenges to territorial integrity coming from outside sources. Nevertheless, the prevalent notion of traditional security was unable to address

the security challenges that were emerging within the nations and were mostly socioeconomic in character. There has been a competing and opposing paradigm change in the theoretical underpinnings of international relations as a result of the traditional idea of security's incapacity to account for non-territorial security threats. Following the conclusion of the Cold War, the range of security risks had expanded, and the enormous field of security now included non-traditional security challenges. The modern understanding of national security extends beyond the protection of borders. Instead, it has been expanded to include non-territorial security, which poses a grave existential risk to the safety of people and, ultimately, of entire governments. Non-traditional security issues are international in scope and non-military in origin. These difficulties directly relate to the population's endurance. Threats to non-traditional security harm a state's sociopolitical and financial stability. States today must combat both conventional and non-conventional security concerns, such as environmental deterioration, changing demographics, and international organized crime. South Asian nations are more at risk from non-traditional security threats to their national security. The national and regional security environment in South Asian countries is extremely complicated and confusing [2]. The political stability, economic progress, and sustainable development in South Asia have all been negatively impacted by non-traditional security problems. Since non-traditional security challenges are transcendental in nature, they represent a major existential danger to the sovereign position of its nations and make the region's safety more vulnerable than before. The non-traditional security threats to South Asian states have been empirically investigated in this study, and the results show that these dangers, when combined with traditional concerns, pose a serious existential threat to the integrity of South Asian nations.

The dawn of new information and technology is thought to have brought about the new global order. Despite the fact that the geopolitical and economic landscape of the world has changed due to the rapid advancement of science, the world still faces significant traditional and nontraditional security issues. In particular, Pakistan had been dealing with several non-traditional crises for many years. Non-traditional security risks are one of Pakistan's biggest problems. These difficulties are the biggest and most significant roadblocks to the nation's development. The socioeconomic development of the nation has been significantly hampered for a number of decades as a result of security issues. In addition, Pakistan's economic and political development was significantly impacted by the war against terror, insurrection, cybercrimes,

water crises, widespread migration, heat waves, floods, and food security. To handle the wide variety of dangers the country faces, an extensive security paradigm is required. The traditional approach to national security is insufficient for dealing with these problems since it has neglected important sectors like education, healthcare, and infrastructure on the ground.

Due to weak governance frameworks and poor internal and external policies, Pakistan's societal values are right now at a turning point. A deficiency of democratic ideals and poorly thought-out policies is to blame for the severe degree of human anxiety and unpredictability that the country is currently suffering. All parties involved place a high importance on ensuring the safety of the people and the nation in South Asia, notably in Pakistan. However, reaching this goal necessitates putting democratic ideas into practise and making wise policy decisions. The difficulties Pakistan is experiencing at present show how ineffective the traditional security system is at handling them. Pakistan must create tailored solutions for each and every one of these issues. Human security habits must be taken into consideration while creating a policy [3].

2. Threat Dynamics From Non-traditional Sources

In addition to its advantages, globalisation has produced a fear that "a threat to one is a threat to all" [4]. A UN high-level commission that examined the types of threats to international security reiterated this notion [5] (See United Nations, A more secure world: Our shared responsibility; Report of the High-level Panel on Threats, Challenges and Change report by United Nations Department of Public Information 2004) Indeed, the idea of security has expanded beyond the conventional physical boundaries of state(s), and the use of force in conflict is no longer the only option for protecting a country's security [6]. Globalisation is responsible for this change in how security is thought of. Non-military in type and global in extent, non-traditional security threats [7]. These are, in fact, neither domestic nor merely interstate, but rather appear suddenly, result in enormous losses, and spread quickly as a result of globalisation and the revolution in communication.

Natural disasters and non-state human acts are examples of non-traditional security threats that cannot be controlled within geopolitical boundaries. As a result, they have an impact on governments, citizens, society, and institutions both within and outside of a state's borders. These threats, it is generally acknowledged, are three-dimensional in nature: first, solely pertaining to natural disasters such as avalanches, earthquakes, tsunamis, volcanic eruptions, floods, and hurricanes. Additionally, it covers outbreaks of communicable diseases such as swine flu, SARS,

tuberculosis, HIV/AIDS, and others. The second dimension comprises the semi-natural hazards that have an impact on the nation states' economic situations and basic resources, such as water shortages, renewable energy scarcity, impoverishment, and unemployment. The third group, on the other hand, is entirely man-made and includes things like terrorism, forest destruction, insurgencies, international criminal activity, illegal trafficking of substances and weapons, and the movement of migrants, among other things. Massive migrations and displacements could result from calamities, both natural and caused by humans.

In fact, even those nations that are not physically next to one another are now inexorably tied by non-traditional security challenges. These dangers may jeopardise their territorial integrity, sovereignty, and the security of the societies in which they live [8]. Non-traditional dangers can affect a whole state, a region, or even the world's security. In the modern world, each nation-state needs regional and international collaboration to make itself secure because no state can handle the various non-traditional dangers by itself. These dangers eventually endanger the region's development and human security.

The South Asian sub-Himalayan area, one of the world's most densely inhabited geographical areas, is plagued by both conventional and unconventional security concerns. Otherwise, the region's politics is weakened by frequent disagreements and political instability, which are mostly brought on by India and Pakistan's nuclear rivalry. Natural disasters and the three major conflicts between India and Pakistan have caused significant casualties and worsened poverty. Since SAARC's founding in 1985, conflict and war have diminished its potential. Since the turn of the millennium, more than 130,000 people have died in natural disasters, while fewer than 30,000 people have died in all major conflicts and smaller skirmishes involving India and Pakistan [9].

3. Human Security and Non-traditional Security: A Relationship

Human security, an area of non-traditional security threats challenge the survival and safety of people and states that emerge mainly out of nonmilitary causes [10]. All these cause flux. International terrorism, transnational organised crime, environmental security, illegal immigration, energy safety, and human security are listed as nontraditional security concerns by Ulman. (Chaudhuri, n.d). The previous security paradigm proceeded to supplant nations and associations. Spending a lot of money on weaponry products and warheads at the expense of people makes the security of people worse. According to Lloyd Axworthy, "the concept of

traditional security is based on state sovereignty, whereas the concept of human safety is based on individual sovereignty." [11].

The Institute of Asia and Pacific Studies' research indicates that the "War on Terror's" effects on security for humans in South Asia, particularly on the connection between counterterrorism policies and a comprehensive understanding of human security, have become a problem (n.d.). The idea that security has been widened, expanded, and recreated after the conclusion of the Cold War. As a non-traditional security concern, human security has evolved into a fundamentally contentious idea. The focus of an unconventional security strategy is on threats other than military security threats. They are described in terms of politics and socioeconomics and are transnational in nature. The decision-makers should be involved in devising measures to decrease the threat to state security posed by human security, as well as the role of non-traditional security in directing political response to the problem. Governments, regional organisations, and international organisations should strengthen their institutional capacity to address these issues [12].

The political, economic, and social progress of the nation is hampered by these issues. The political governments did not respond to these issues in a timely and effective manner. Internal security issues received little attention from the military because of the weak governmental institutions, which instead concentrated on border defence. National security plans did not include NT security measures. Changes to global security strategies following 9/11 were also not taken seriously in Pakistan. After the terrorist strikes at the Army Public School in Peshawar, various NT security vulnerabilities were identified. The leadership of all political parties, the military, national security agencies, and political governments (both federal and provincial) in Pakistan meet collectively to review, redefine, and redesign Pakistan's security strategy. 2014 saw the release of Pakistan's first National Internal Security Policy (NISP-2014-2018). [13]. Although there are many threats called non-traditional security threats, some of these are being discussed here.

4. From Traditional to Non-traditional

4.1 Cyber Terrorism and Deterrence

Attacks by terrorists in the US caused a paradigm change in the history of security. American policymakers criticised the US security services and highlighted the need for innovation in the state's internal security. Pakistan, a US ally in the war in Afghanistan, has also been severely

impacted by terrorism. Traditional principles of deterrence won't work over a terrorist adversary whose stated methods include wanton devastation and the targeting of the innocent, according to G.W. Bush during a national security briefing in 2002. The "age of information" is said to be the twenty-first century. The cybersecurity challenges have risen as a result of technological innovation. The dangers to Pakistan's cybersecurity are a new problem, made more difficult by the country's lack of attention to the matter over the past few decades. Pakistan is becoming more flexible in cyberspace. It has no intention of securing its digital networks. As a result, the country's national infrastructure is likewise deteriorating. Pakistan now requires a suitable cyber secure procedure to protect its national security because it has become a threat to that country's security [14]. In 2014, Pakistani senator Mushahid Hussain Sayed introduced the Cyber Security Council Bill in the Senate. This bill truly requested that the nation pay attention to non-traditional security concerns. The "National Response Centre for Cyber Crimes" is Pakistan's complaint center for online crimes. Its purpose is to actively combat online crooks. These criminals steal data, handle finances, and even engage in terrorism. It is ineffective because the general population is ignorant about cyber risks and their gravity. People are unsure about how and where to file complaints. Facebook, Bing, Twitter, Yahoo, Google, Skype, and other cybercrimes are investigated by the Federal Investigation Agency (FIA). [15].

Pakistan recently blocked YouTube and a few other websites for posting anti-Muslim content. The establishment or upkeep of telecommunications is the responsibility of the Pakistan Telecommunication Authority (PTA), a government organisation. For the sake of improving cybersecurity, it controls the entire communication infrastructure and prohibits the use of threatening or unlawful websites. Because of inappropriate content on them, PTA blacklisted 15,380 websites and links in 2012 and 2013, and according to [14], the US National Security Agency is secretly eavesdropping on Pakistan via internet communication technologies. They intercepted 13.5 billion emails, phone calls, and faxes, making Pakistan the second-highest state being monitored by the NSA.

The banking industry is also relying more on the internet and teaching Pakistanis how to use the e-system, but because it is not safe, most people are beginning to lose faith in it. Different banks in Pakistan continue to fail to provide clients with adequate insurance. Around the world, both anonymous and organized terrorist groups are active in obtaining information about customer accounts [16]. In the area of cybercrime, they have both technology and professional criminals.

The national database and registration authority (NADRA) is allegedly accessible to hackers. Since hacktivism is not illegal in Pakistan, many of the country's official websites have been compromised and disabled by hackers.

4.1.1 Pakistan's Current State of Cyber Security

We live in a society that is so open to new hazards that no governmental entity or state can assert that it has achieved comprehensive proof and effective cyber protection or that it is completely protected from them. Pakistan is an emerging nation when it comes to network security, yet a display diagram depicts a hopeless situation. This is particularly so given the scope of the nation's cyber threats (UNSD-2013). In 2002, the Electronic Transactions Ordinance, 2002 (ETO 2002), which gave e-commerce some constitutional protection, was passed. ETO's biggest shortcoming has been deemed to be its incapacity to defend against various forms of cybercrime. Because it did not acquire the required support to become a law, the Prevention of Electronic Crimes Ordinance (PECO) of 2007 was struck down in 2009.

As a result, Pakistan passed the Prevention of Electronic Crimes Bill [17], which addresses many different issues, such as cyber terrorism, hate speech, spamming, digital tracking, electronic fabrication, and extortion. However, it has been condemned ever since for tending to control the right to free speech, using vague language, and giving the PTA perpetual power. Two organisations in Pakistan that specialize in network security measures are Pakistan Information Security Association-Computer Emergency Response (PISA-CERT) and Pakistan Computer Emergency Response (PAK CERT). Their services are crucial in providing information on cyber threats for the administration of cybersecurity as a help and an avenue of capacity building. (Kamal)

Under the direction of a task group for cyber security, the Senate Defence Committee also founded a research facility for cyber security in Pakistan. In addition, Pakistan opened its very first National Cyber Security Centre at Air University Islamabad (NCCS) in May 2018. Unfortunately, in order to properly implement international cybersecurity protocols, the nation urgently needs effective cybersecurity protocols as well as cybersecurity plans. Additionally, it does not adhere to the standards of a credentialing system for cybersecurity and protection. Pakistan also has to create a management structure or hire a sufficient number of cybersecurity specialists in accordance with generally accepted standards. In a nutshell, the nation's attention,

legal system, and policy regarding capacity enhancement as well as data assurance are all terribly deficient.⁴⁵ Pakistan's organisational performance was once again appalling.

Although Pakistan adopted a digital policy in 2017, it still doesn't have a plan or policy for cybersecurity. Actually, there isn't a full-fledged department or agency for cybersecurity. Under the direction of the National Response Centre for Cybercrime, the Financial Intelligence Agency (FIA) is a division that deals with cybercrime. The problem is once again the organised competency. The National Cybercrime Response Centre currently lacks the resources and capacity needed to keep an eye on the hacker's personal activities. In addition, even though the nation has consumed plenty of white hats or moral hackers, their talents and skills have not been fully utilised.

4.2 Food Insecurity and Human Security

4.2.1 Conditions Predominating Food Insecurity

Food security is crucial because economic growth cannot guarantee human advancement alone. Over the past thirty years, Pakistan's economy has grown by about 5% annually, but the population has not experienced enough food security. Despite increased food production and availability, 6 out of 10 Pakistanis still face food insecurity and lack access to sufficient amounts of food. Additionally, 3 out of 10 kids are underweight, 15% of kids are wasted, and a greater number than 4 out of 10 kids in the country are stunted. Additionally, practically all Pakistani women suffer from anaemia. [18] Pakistan's national poverty line placed the nation at 147 out of 188 nations pursuant to the Human Development Report of 2015, which places it slightly above Afghanistan in South Asia. Based on the most recent statistics on poverty levels, 18.2% of Pakistanis live in urban areas, and 35.6% live in rural areas, making up the overall population of the nation, which is 29.5%. Food costs have remained tremendously unstable as a result of the global food crisis that occurred in 2007–2008. Due to a sluggish economy, a shortage of employment opportunities for growing populations, a low labour force involvement rate, and landlessness, the poor continue to have restricted access to healthful food [19].

4.2.2 Food Scarcity

The terrible events that occurred at the start of the twenty-first century have shown that, in spite of countless international efforts, there is still a serious issue with food security, which has significant consequences for security. Throughout human history, civilizations have made great efforts to ensure that everybody has access to adequate food to lead healthy, active lives. The

percentage of undernourished people has increased as a result of rising food prices, which have also disturbed numerous economies around the world. Globalisation, as well as climate change, has significantly affected the security of the state and the public through reshaping food systems. [20] Pakistan's supply of food has been under persistent danger in recent years as a result of policymakers giving the issue a low priority. Pakistan's food prices rose by as much as 34% in 2008, the year when global food prices were at their greatest.

According to the World Food Programme (WFP), nearly half of Pakistan's population, or 77 million people, suffered food shortages in 2008. This represents a 28 percent increase from the sixty million individuals who did so in March 2007. Water scarcity is blamed for low agricultural yields by both farmers and government officials. Pakistan has struggled with severe water constraints, which have exacerbated a persistent energy calamity. Additionally, Pakistani military operations against militant organisations in FATA and KPK have made the country's dietary and water shortages worse [21].

4.3 Scarcity of Water

Pakistan's human security is threatened by water scarcity. Pakistan is predicted to run out of water by 2035, although this could occur as soon as 2030 due to the country's rapidly changing climate, poor management of water resources, and dearth of reservoirs. The lives of common people are threatened by the drinking water quality in rural and urban areas [22]. Population increase and poorly managed reservoirs are the main contributors to Pakistan's water scarcity. This sector is vital to Pakistan's economic development and employs a large number of citizens. The water supply is, however, rapidly diminishing, which has an impact on Pakistan's population, ecology, development, and agriculture. Water availability in Pakistan ranged from abundant in 1950 to moderately abundant in 1980 to water-stressed in 2010 to maybe scarce by 2035.

The human security of Pakistan is harmed by these issues. [23] Life on Earth depends on water. Life needs water. Water is necessary for crops and livestock to survive. As a result, a lack of rainfall or a water shortage in regions of deserts throughout a dry season frequently denotes a national food shortage or crisis [23]. The lack of water will probably lead to warfare everywhere. Water is necessary for life and the production of food, and its scarcity could result in food crises. Although South Asia has an abundance of water, bad management and a lack of cooperation have led to conflicts, especially between India and Pakistan. Pakistan needs immediate water

conservation and management due to its water shortage. To address the country's water needs and stop hostilities, regional cooperation is vital [24].

4.4 HIV/AIDS Security Risks

HIV/AIDS was merely viewed as a health issue until the second part of the 20th century. The first meeting of the UN Security Council to nominate HIV/AIDS as an imminent danger to human security or a form of non-traditional security concern was held on January 10, 2000 [25]. Approximately 39.4 million people had HIV or AIDS in 2004. 37.2 million Adults (aged 15 to 49) and 2.2 million children below the age of 15 are included. In 2004, 3.1 million people passed away from AIDS-related illnesses, which is roughly three times as many as on September 11, 2001. [6]. This fatal illness is no longer restricted to sub-Saharan Africa; it has spread around the world. UNAIDS estimates that this lethal disease affects between 3 and 3.5 million people in South Asia. Pakistan's first HIV/AIDS case was diagnosed in 1987 [26].

In Pakistan, there are just 15,370 confirmed cases of HIV/AIDS. However, 100,000 people (Illicit drug trends in Pakistan) currently have the condition. The Paris Pact Initiative: a collaboration to fight the consumption and trafficking of Afghan opiates (2008). Pakistan has seen a startling increase in the number of HIV/AIDS infections reported; from 2005 to 2015, there were 45,990 cases reported, indicating the biggest worldwide average increase of 17.6 % in the past. [27]. The number of fatalities has increased as well. Based on the prevalence data from the Comprehensive Biological and Behavioural Surveillance Round V, the National AIDS Control Programme of Pakistan estimates that 133,179 persons would have HIV/AIDS in Pakistan at the conclusion of 2016. (UNAIDS HIV Data and Estimates | UNAIDS, n.d.)

In addition to the HIV/AIDS patient, the pandemic also affects the patient's family, which will have several detrimental financial, political, demographic, and social effects that require careful management [28]. The incapacity of people to support themselves and their families has an economic consequence. Additionally, economic activity would be restricted or selective in areas impacted by HIV/AIDS. The stigmatisation of those who are afflicted and the resulting social isolation are worse than the illness itself. HIV/AIDS is one of the five most prevalent causes of mortality quantitatively, killing three million people annually, which is 10 times more than armed combat. [6].

5. Recommendations and Conclusions

To ensure that Pakistan is secure from any threats to human security, it is vital to make recommendations that can help in resolving these challenges. Due to non-traditional security challenges affecting the economic, social, human, and environmental sectors, the way most people think about security has substantially changed. Non-traditional security concerns are now accorded more emphasis than they were previously. Because of the interconnection of globalisation and international politics, states must cooperate to combat these novel and non-traditional security risks. The new paradigm for human security receives far too little attention, and unresolved regional conflicts are a major contributor to international mistrust. One way to address this issue and educate the public is by increasing social awareness; the safety of humans should be incorporated as an academic discipline in every institution at all levels. Different seminars and social gatherings ought to be organised locally, and both traditional and digital media ought to be used to communicate with the populace. To address this difficult issue, the government should create a comprehensive indigenous policy. The nation needs leaders who are intelligent, enthusiastic, wise, and statesmanlike, and who can raise the level of living for the majority of the populace. In Pakistan, for example, there is also a lack of a functioning healthcare system, which creates a breeding ground for microbe-borne illnesses. The microbiological infections like HIV/AIDS and COVID-19 must also be addressed to maintain peace and stability in Pakistan. Both nationally and internationally, cooperation needs to be fostered. To preserve a balance of power in the nation, institutional reforms must be prioritised by the government, and good governance must be put into practise by tackling the societal, political, and institutional factors that influence governance. To solve the problem of scarcity, a comprehensive and cooperative plan that takes into account the demand as well as the supply of food and water is required. The issue of insecurity in FATA must also be addressed by creating Standing Order Procedures (SOPs) that are effective at all levels.

A stitch in time saves nine, and the fundamental finding of this study is that deterrence plays an important role in all nontraditional vulnerabilities to Pakistani security. As a result, an efficient deterrence security plan is urgently needed. A strong legal framework with widely recognised norms is necessary for this goal. Additionally, given that developed countries have sophisticated technological procedures, working with them can be beneficial. Additionally, it is crucial to identify, publicly name, and deal with non-state actors in a neutral manner under the law.

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