MILITARY GEOGRAPHY AND TRANSFORMATIONAL TRAJECTORY OF THE PUNJAB (1849-1947): AN APPRAISAL

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By

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DECLARATION

I declare that the dissertation/thesis entitled **"MILITARY GEOGRAPHY AND TRANSFORMATIONAL TRAJECTORY OF THE PUNJAB (1849-1947): AN APPRAISAL"**, has been prepared by me under the guidance of Dr. Kiran Kumari Singh, Assistant Professor, Centre for Geography and Geology, School of Environment and Earth Sciences, Central University of Punjab. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

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ABSTRACT

MILITARY GEOGRAPHY AND TRANSFORMATIONAL TRAJECTORY OF THE PUNJAB (1849-1947): AN APPRAISAL

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This study investigated how the making of modern Punjab, its political configurations, social relations, and economic lives were affected by military geography and shaped by ethos of militarism and militarization instituted by the British Indian Empire. Military geography of Punjab and its effects on the lives of the people and landscape was under researched in the history of Punjab's human geography and even in urban studies and sociology of change. In such a context, the proposed study is a significant attempts to unravel the role of militarism, military activities and related developments in shaping the colonial times and spaces. Though it looks at the specific military history of Punjab in this connection, which in itself would be a significant contribution, at a larger level the work will emphasise on the colonial military history of British India and consequent transformations driven by military geography with a considered position that the whole Indian sub-continent did not follow a single and pre-determined historical trajectory in this regard.

The original contribution of this work lies particularly in the arrangement and manifestation of cartographic presentations and historical accounts in context to military activities. It also gives a new background to the ways through which military geography can be defined. The definition has moved on just from 'the effect of

geography on military activities and militarism' to 'the ways in which military activities are geographically constituted' to the proclamation of 'space and power'. This work is integrative and based on the appraisal of the background of conversion of Punjab into garrison state and the observation effect of military activities on the landscape. Those landscapes are selected, mapped, interpreted and contextualised for detailed study. It gives the expression of reality of the impact of military activities on social, economic and spatial sphere. While transformation of selected cantonment towns are examined in two chapters to decipher this phenomenon but the work retains military geography of Punjab in entire scene.

(Maninderjit Singh)   **(Dr Kiran Kumari Singh)**

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INTRODUCTION

Punjab has a very close relationship with the military that was christened by its geography. It has not only acted as a vanguard for the security of Indian sub-continent[1] but also a 'theatre of Battle' for all the decisive wars fought for the throne of Delhi; geographically being located on the north-western frontier of Indian sub-continent and on the gateway from Central Asia to South Asia or vice versa. It has witnessed numerous wars, battles, holocausts, and skirmishes; and surrendered sovereignty to invaders like Aryans, Greeks, Kushanas, Sakas, Huns, Arabs, Turks and Moghuls who entered Punjab through north-western passes and left their indelible impressions on indigenous society. The local rulers and the people of Punjab participated in all the decisive wars to check the invaders coming through these passes, shed their blood in defending the sanctity of their homeland. Whenever the invaders crossed the Indus, the rulers of the Indian sub-continent gave them tough fight at Lahore, Jalandhar, Malout, Machhiwara, Ambala, Sirhind, Tarain, Kurukshetra and Panipat (Nijjar, 1968, p. 10). These wars and subsequent shuffling of thrones often endowed with transitions and brought spatial, political, social, and economic transformations in the Punjab.

In general, transformations are continuous and persistent aspect of human development. These are by-products of the transition of an existing set of norms of varied fields and spheres towards refinement, reformation, maintenance and modernization. The multitude of actions; initiated and executed by an individual, groups, communities, organisations, and societies in various fields at different levels at a particular time and space; bring forth remarkably distinct processes to redefine the human life. In common parlance, these can be associated with the structural changes and linked to developmental processes. Transformations, initiated and influenced by the exogenous factors are perceptible and often happen on a large

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[1] Indian sub-continent/Sub-continent was widely used for all the countries of present day South Asia including Burma (Myanmar) which was separated in 1937 from British India. However South Asia came into use after the division of Indian sub-continent in late 1940's (Rizal, 2012, p. 4).

scale whereas changes inspired by the endogenous elements gradually take place and remain unnoticeable to general public. The logic of transformations are neither linear nor apparent but are dynamic; required massive changes to move from one establish set up to a new one. It is all about breaking the link with the past and bringing the generational change that gradually attenuates or refined the ethos and knowledge of the past (Rose, 2009, p. 131). The evaluation and assessment of these transformations have to be done in aggregate terms rather than separately (Rose, 2009, p. 83). Foucault evinced that transformations "do not constitute homogeneous process that takes place everywhere in the same way." In fact "it is always a discontinuity specified by number of distinct transformations; between two particular positivity" (Foucault, 2012, p. 193). The decline of one positivity and the rise of another implies several types of transformations that require an analysis of what these changes consist of, and the abstract principle of their succession (Foucault, 2012, p. 190). The transformations ushered and experienced for, by, and after war is faster than other processes.

War, one of the central themes of history, is capable of being studied from a wide variety of perspectives. The problem of war is rooted in geography, as military conflicts emerged over the control of the territories and its people. Wars are the climax of human conflicts in which opponents endeavour to defend or promote their interests by subduing each other on the battlefield. The repercussions of these wars reach far beyond the theatre of war to whole society; albeit the effects of it varies according to the associations of individuals, groups, villages, districts, and provinces with the war. Soldiers, their kith and kin, as well as civilians and the whole society, experienced the broad spectrum of changes as a result of these wars, or often due to preparations involved for it to maintain status-quo. Poole (2011) stated that the entire array of developmental transitions could be classified into "mechanical, technological, medical, and political advances to complete devastation, slow and painful destruction, and absolute demoralization." These wars initially dithered and later entwined back the entire fabric of social reality in ways formerly unimaginable to those living through the process and sometimes for posterity too. Some people will find that the 'social reality' was tempered and eradicated, while for some, social cohesion was advanced, polished, and fortified to impermeable strength (Poole, 2011, p. 2). Overall, a consensus exists among the social scientists, concerning

about the war and its impact on developmental process, whereby war considered as a hindrance for the development (Stewart, 2011, p.9).

May be, this could turn out to be true at number of times, but the transformations took place positively in provinces on the frontiers like colonial Punjab or post-colonial Punjab, while regimes prepare for war whether defensive or offensive. The preparations provide an opportunity to marginalised part of the empire, that could have been neglected or had fewer chances, to experience development; being located on the fringe of a settled civilisation, or a theatre of war as a frontier province, or geographically away from the centre of power. The continual preparations, which state makes for defensive and offensive purposes gives birth to militarised landscapes. Thus, the Military geography[2] conspicuously emerged out from militarised landscapes and manifested itself in the frontiers provinces of the Empire.

1.1 MILITARY GEOGRAPHY AND PUNJAB

Military Geography is present in every nook and cranny of the habitable world of the frontier societies where military forces and their activities touch, shape, view and represent in some manner in every corner as they require control over the space to create the necessary preconditions for military activities (Woodward, 2004, p. 3). Military control over space is exercised by the physical presence of armed forces and by the social, economic, and political influence of the military establishments on the state and its people. In this way, the study of military geography is naturally political; as it's all about the negotiations, impositions, and checking and challenging the control over space, place, and the people (Woodward, 2004, p. 3).

Military geography's original understanding reckons the geographical features of the earth intending to military operations, but sometimes the natural conditions of the landscape had been modified for military manoeuvres (May, 1909, pp. 4-5). Harmon, Dillon, and Garver (2004) described the Military Geography as an application of geospatial concepts, approaches, and tools to military problems related to war and peacetime military operations other than war such as disaster

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[2] Military Geography can be defined as the geography that constituted and expressed by military activities and militarism in specific territory (Woodward, 2004).

management, peacemaking, peacekeeping, and peacebuilding operations. They evinced Military Geography as a "vast field, whose boundaries with closely related areas such as military science and history, military geology, cultural geography, political geography, and geopolitics are diffuse, not clearly delineated, and change with time and circumstance" (Harmon, 2004, p. 8). Thus, Military Geography is an application of geographic information tools and techniques to military problems, focusing on the range of military scenarios from peacetime to war.

Tietze (1993) rightly described the 'military geography' as a 'security geography', which represented the simplest and most deep-rooted relationship that human beings had with his living space, and his desire to protect it from other men to enjoy his life, without any inhibitions and constraints, to fullest. Here geography has to be employed in a much wider sense as a spatial science, that focuses on where the things are, why they occur there, how they transforms over time with what implications on human lives. This approach seeks to answer these entire questions on the basis of location, place, spatial pattern, and spatial interaction with its surroundings. The various transformations of the living space and human beings, as a result of military infrastructure on a given geography thus fall under the concern of studies on military geography, with strong interdisciplinary orientations. This military geographic optics can apply to the British Indian Empire in general and particular to Punjab.

Military was a most visible and vital transitional component in the depiction of the transformational experience of the Punjab. Throughout its history, the military holds great political and social significance that will emerge out more sharply; if we analyse its transitional trajectory, as a part of the British Indian Empire. The most obvious way in which the British presence in Punjab transformed the social environment of the state was through the foundation of military and its allied institutions like cantonments, district soldiers boards, medical and hospital boards, postal and telephone service, and public works department, along with the multifarious infrastructural transformations in irrigation, demographic set up, urbanization process, tax and revenue, health and medicine, sanitation, and education. Therefore, certain regions within the Indian sub-continent assumed pivotal importance in this regard, not only for supplying manpower to the army but also for stationing massive military infrastructure. Punjab is a typical case in point,

as it was the primary recruiting ground for British Indian army and held the largest number of military cantonments. The most important were Ambala, Ferozepore, Jalandhar and Rawalpindi.

The making of the British Indian Empire was a complex and multifaceted process, in which hardly any area of local life left unaffected from the massive changes colonialism had engendered. In varying degrees, British influences could be detected and traced in the government set-up, military institutions, the layout of towns and cities, educational pattern, cultural tastes, sports, religious adherence, and pastimes in the erstwhile British colonies. The British Empire not only changed the character of native people but also the landscape in which they lived (Marshall, 2001, pp. 7-8). In the Indian sub-continent too, it could be assumed that military was one of the main institutions through which British extended and penetrated their ethos into the local societies because the military was used not only for conquering but also for revenue collection, policing, and law enforcement duties. One of the chief contributions of imperial rule was the creation of a professional army which was need of the hour for the British Indian Empire in the prevailing chaotic condition in the subcontinent. In spree of their conquests, British were supported by already existing 'military labour market' of Indo-Gangetic region (Alavi, 1995). They did not only utilise the already existing military labour market but also monopolise the market, which make the British Empire a garrison state. In addition to that, the regional dynamics played a significant role in determining the shape and contours of the garrison state. While the idea of a garrison state can be said to typify the British rule in India, the historical context in which it emerged was firmly rooted in Bengal Presidency. British experiences further shaped it in asserting and consolidating their authority in north-western India, particularly the Punjab (Peers, 2012, p. 20). The proximity of Punjab to the Afghan frontier did not only compel British to centre their recruiting activities in the province but push them to develop the strategic infrastructures like roads, railways, canals, canal colonies, and cantonment towns and hill stations (Talbot, 1988, p. 11).

Geo-strategically, Punjab always remained an important region for every ruler as it was a gateway to the Indian sub-continent from the arid Central Asian region. It inherited a highly militarised geography; as being a frontier society, where warfare remained incessant throughout its history (Major, 1996). However, the Punjab of

India or Pakistan is a much smaller entity than that of the British Indian Empire. Military geography of Punjab under the British had its genesis in the military requirements of empire and their imperial ambitions towards Afghanistan and Central Asia in the nineteenth century, which the geostrategic location of Punjab had to serve. Initially, it guides the establishment of friendly relation with Maharaja Ranjit Singh with the signing of Treaty of Amritsar in 1809. Later it also became the reason for the annexation of Punjab and imperial expansion of British Indian Empire towards the North West Frontier of India as it got implicated into the Anglo-Russian rivalry for political and economic prominence in Central Asia and Afghanistan (Singh, 2012). In post-1857 Mutiny, Punjab emerged as the main recruiting ground for the military and further supported by the perceived theory of martial race in 1880's and resulted in setting up of numerous military cantonments and District Soldiers Board in the Punjab province. It brought modernization and transformation to Punjab in such a way that no other region has ever experienced in Indian sub-continent (Talbot, 1988). Therefore, the proposed research is an endeavour to see the transformational trajectory of Punjab through the optics of Military geography as discussed by Woodward.

1.2 JUSTIFICATION AND SIGNIFICANCE OF STUDY

British were alien to Indian sub-continent and settled here usually like other invaders to rule the sub-continent. But unlike previous rulers of India, British possessed sea power more than the land power. It was through the sea, as evinced by Bombay, Madras and Calcutta presidencies from where British were able to conquer sub-continent by gradually moving inland. The British restored a political identity to the sub-continent– India, which is indeed the fundamental truth of its geography; after the passing of centuries of invasions and migrations through the north-west frontiers of the Punjab (Kaplan, 2010, p. 9). British rule produced sweeping and enduring changes in the Indian sub-continental society and culture, as they brought with them new technologies, institutions, knowledge, beliefs, and values. These new technologies spurred up the revolution in transport and communication that enabled them to integrate the mainland Indian sub-continent as never before in its history (Srinivas, 2009, p. 49).

The British imperial rule over Indian sub-continent had many peculiarities to its credit, out of which one of the most distinctive features was building and sustaining of the empire through the concept and practice of 'garrison state'.[3] The garrison state monopolised in sophisticated ways the pre-colonial practice of military fiscalism (Peers, 1995) with concomitant utilisation and recruitment of already existing traditional labour market of 'armed peasants' in North India (Kolff, 1990) to build up their Empire. This close and sustained relationship with the military recruitments of the armed peasants that earned the epithet of 'military labour market', left behind profound, multifaceted and far-reaching colonial legacies on the regional society in general and particularly on the Punjab. The main recruitment base of British Indian Army was shifted to Punjab, following the suppression of uprising of 1857 as a substitute to Bengal Army, which remained intact till the division of Punjab and demarcation of the Indian sub-continent. This change in policy got further entrenched with the policies of recruitment based on the 'martial races' doctrine and under the compulsions of Great Game; while the apprehension of Russian intervention on the north-west frontier of Punjab via Afghanistan led to the stationing of the largest proportion of the British Indian Army in the state. The presence and recruitment of the soldiers in vast numbers from the state formally militarised the landscape of Punjab, which unleashed profound impact on the cultural landscape and the course of Punjab history, as it could be accepted that Military Geography "reflects the history and cultural traditions within which it has evolved" (Loechl, Batzli, & Enscore, 2007, p. 3).

Military Geography of Indian sub-continent experienced a radical and successive transition and transformation in the eighteenth century. It witnessed the disintegration of the mighty Mughal Empire into small regional kingdoms in the first half, which once had spatial sway over major part of Indian sub-continent and saw the rise of East India Company into a political entity in the second half that brought

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[3] 'Garrison state' means presence of military within the decision making process whereby the priority was given to the military in terms of resource allocation (military fiscalism). The emphasis was put on the use of military force for securing political and strategic objectives against internal unrest or external threats (Lasswell, 1941) (Peers, 2012). This presence of military in decision making or in Government and subsequent reliance over it makes military expansions inevitable.

radical changes in state and armed forces structure (Alavi, 2002). In 1707, after the death of Mughal Emperor Aurangzeb, the Mughal Empire fell into pieces, apparently due to lack of imperial control over the provinces, it said to have enjoyed once. The provincial governors of states like Awadh and Bengal were acting more autonomously and had only accepted the nominal supremacy of the imperial throne (McLeod, 2002, p. 65). The first blow to ramshackle Mughal Empire was given by British in 1757 when Robert Clive beat the Governor of Bengal province (present day Bihar, Jharkhand, Orissa and West Bengal) at Plassey and placed a vassal of East India Company on the seat of administration. But the great anarchy spread in northern and western India. The Afghans defeated the Marathas in the third battle of Panipat who were having sway over territories south of Satluj and Jamuna and controlled the adjacent areas of the Aravalli, Vindhya and Satpura ranges (McLeod, 2002, p. 66) (Keene, 1988, p. xxii). The defeat of Marathas created a power vacuum, filled by the 'Sikhs Misls' in the Punjab who emerged as a great challenge to British in the nineteenth century under the leadership of Maharaja Ranjit Singh (McLeod, 2002, pp. 65-66). In southern India, the eighteenth century also saw the emergence of independent states like Mysore, Cochin, Travancore and Calicut. Out of these Mysore state under Hyder Ali and his son Tipu Sultan emerged as a formidable challenge to British in southern India which remained so until the end of century (Edwardes, 1961, p. 461).

The political instability of Indian sub-continent in the eighteenth century thrust upon the British to defend their trade militarily. Gradually some of them saw the opportunities in the political turmoil to gain additional concessions from regional and local rulers. British exploited these openings by participating in the local politics and wars (Rawlinson, 1948, p. 38) (Schmidt, 1999, pp. 58-60). Geographically, the British started expanding inwards into the Indian sub-continent from three coastal regions: Calcutta in the East, Madras in the south and Bombay in the west; where they had established the firm foothold in the 1750's (Schmidt, 1999, p. 58). Each of these cities developed into Presidencies having a military force and used to formulate their policies in semi-autonomous fashion with the passage of time (Roy, 2007, p. 6).

Initially, the colonial administrative structure was built on the existing social arrangements, customs, institutions, and identities which had not lost their vitality;

during the phase of political decentralisation before the emergence of the colonial state. These were the key factors in bringing about significant changes in economy and society of the sub-continent. However, the essence of the company state as it developed in the late 18th century was military despotism (Bose & Jalal, 2011, p. 54). The degree of embeddedness of military within the colonial state structure was illustrated by John Malcolm's oft-quoted axiom: "our government of that country is essentially military, and our means of preserving and improving our possessions through the operation of our civil institutions depend on our wise and politic exercise of that military power on which the whole fabric rests" (Malcolm, 1826, p. 283) (Bose & Jalal, 2011, p. 54). Even the statement of Robert Clive aptly supported the theory of military despotism- "Hindostan is accustomed to a military government; an army may be kept in discipline and protect the rights of natives without exciting their jealousy" (Peers, 2012, p. 28).

The 19th century observed the consolidation of the British Indian Empire along two critical imperatives- "stability and security," which guided the British relationships with their subjects, and enabled the military to gain essential purchase on the structures, ideologies and practices of colonial rule. While doing so, it left an unmistakable footprint on the making of the British Indian Empire in Indian sub-continent by turning it into a garrison state (Peers, 2012, p. 20). The British Indian Army from the Indian sub-continent became the backbone of the Empire, which was primarily responsible for the expansion and consolidation of British Indian Empire (Marston & Sundaram, 2007, p. xi). British Indian Army was always engaged in combat either in great battles or small scale conflicts. It destroyed all the contemporary regional military powers within Indian sub-continent but also functioned as an organisation for collecting revenue and policing subcontinent as well as overseas British possessions (Roy, 2008, p. 17).

While constructing the British Indian Army, the British introduced a new organisational set-up borrowed from Europe. This organisational set-up involved three elements: a welfare bureaucracy, regimental organisation and court martial mechanism. But European institution absorbed a corpus of indigenous traits like the caste and clan ethos which was geared to generate regimental loyalty. However for the people of Indian sub-continent army was also a vital economic source as British Indian Army was the largest employer in India and consumer of the huge chunk of

the government revenue. The employment opportunities within the British Indian Army increased vividly after the mutiny of 1857 but only for selected regions and pockets, such as Punjab, and selected martial classes to garrison the subcontinent as British lacked adequate number to defend its Indian Empire (Roy, 2008, pp. 17, 20, 29). Punjab is a typical case in point, as it was the primary recruiting ground for British Indian army and held the largest number of military cantonments. In order to understand these transformations driven by the military geography, it is important to closely trace the development process of military and its allied institutes and organisational set up like Cantonments. The proposed research would map this fascinating history of Punjab from the perspective of military geography.

1.3 THEORETICAL FRAMEWORK

The history of humankind is the history of armies (Maguire, 1899). The Army remained a coercive and offensive tool of state while pursuing its interests through war, to shift status quo by annexing territories or changing the regime. The problem of war is rooted in geography because military conflict is primarily undertaken to gain control of land and influence the other states. It required careful study of military geography and history of another state to plan a strategy of attack. Out of three important fields from the military perspective such as strategy, military history and military geography, Macdonnell (1911) advised studying the later, although all three go hand in hand for effective military strategy. Renowned theorists like Sun Tzu and Karl von Clausewitz have emphasised the need for an understanding of geography and environment to conduct military operations. According to DeLoney (1989) these theorists were not concerned about defining military geography but to highlight the influences and constraints imposed by geography on military operations. Accurate information about topography, terrain, weather, and space were offering power to the nation. Entire idea of these theorist were focussed to acquire careful, scientific, and precise information about the geography of a place, which includes its people and culture. These theories are more related to preparation of tactics, strategy and war.

Military geography cannot be narrowed down to just a field of generation of knowledge about the battlefields and wars, due to its historical association with military expansions, rather includes military activities that shape an area and

eventually give it a different identity too. Military gives a distinct imprint to the landscape; it alters economic, social, and cultural environment of given area stimulated by its activities. The Military Geography theory advocated by Rachel Woodward in her book "Military Geographies" looks at "how continual preparations which states make in order to be able to wage war and engage in military operations shape wider social, economic, environmental and cultural geographies and produce their own ordering of space." This theory defines appropriately the relationship of Punjab's transformational trajectory driven by Military Geography throughout its history which is the main focus of the research

1.4 REVIEW OF LITERATURE

Military Geography is a dynamic and evolving subject emerged in the 19th century. Its inherent interdisciplinary nature made it tough to delineate its boundaries clearly that are expanding ever since its emergence. The evolution and expansions of this new sub-field of geography is not very smooth. In fact, it is filled with ups and downs and pauses in its development. Military Geography had a significant bearing on the histories of nations and states. The antecedent of contemporary military geography was the formation of the Royal Geographical Society in the first half of 19th century. It steered the British imperial expansions expressed through military power and control.

The perusal of literature on military geography shows that there has been considerable amount of work available on it, which started to evolve as recognizable subfield of Geography in the mid of 19th century. Initially it was the forte of European writers, mainly British, who had a military service. Throughout its development, the dominant concern has been strategy and the military environment (Anderson, 1993). However, studies with the notion of military geography in general and with special reference to Punjab is particular are very scant; so also is the case on the transformations driven by military geography. Due to this, the attempt here is to rely upon the literature from allied fields, which could be divided into following three categories.

First category of literature is from military men, geographers and other social scientists who attempted to understand military geography from the perspective of

military and security. This strand of literature also include studies that attempted to complicate military geography and re-define it in a much wider sense beyond the perspective of military to include human lives, environment and space. Maguire (1899) succinctly depicted the theories and principles of military geography ranging from battlefield to lines of communication as the focal point was warfare in his book. He describes how geography influence and constrain the exercise of military power and illustrates how geography may be used in conduct of military affairs, emphasising the role of geography in determining the military power. Thereafter the works of Lyde and Ferryman (1905), May (1909), Macdonnell (1911), Cole (1956) and Jackman (1962) focussed on same issues and reiterated the connection between geography and military prowess. These books and articles were written from military perspective of the British, primarily driven by the concerns of the Empire. May and Cole however briefly write about the military geography of India in general and security problem of north-western India with regard to Central Asia, Afghanistan and China. A book by Peltier and Pearcy (1966) that came during the zenith of cold war expanded the idea and contours of military geography. They argued that military geography no longer revolves solely and primarily around terrain and weather, but also concerns about social, economic, and political matters. Authors reasoned that special attention should be paid to the dynamic effects of technological advancement on military interpretation of geography and also to logistical geography and geography of civil affairs. In the post-cold war period the interest in military geography was again revived and was reinvented as a field with a social responsibility. Though the security and strategy remained the main business, but horizon expanded to include human activities and environmental security realm. A German scholar Tietze (1993) in an article depicted the military geography as 'security geography' but critically highlighted that there is no real theory and methodology informing the complexities of military geography. He argued that this may be due to deficiency of well-balanced presentation of military geography with a global approach, and as a result whatever available literature is from the viewpoint of particular military systems, giving lesser attention to military geography as a living space. In an article Coulson (1995) discussed the environmental, economic and social impacts of military defence during peace time and how the changing political and economic backdrop, under the influence and criticism of pressure groups, are influencing the distribution of military facilities and

industries in developed countries. He also illustrates the response and measures adopted by defence forces to counter the criticism and put forward a framework for further research. Palka (1995) put forward the idea of reviving and expanding the scope of Military Geography on the basis of the US army's operations "other than war" since the evolution of military geography in the US to the end of Gulf War. He states that military geographers have opportunity now to contribute to the success of the peacekeeping, humanitarian and disaster assistance missions with which the military is presently occupied. It will highlight that military's geographic endeavours can be both "socially responsible and morally correct" within operations other than war. The books by John M. Collins and Harold Winter highlight the role of environmental conditions on the combat. Winter (1998) illustrates the imprints of weather, climate, terrain, soil, and vegetation on the outcomes of important military operations. He clearly demonstrates in a compelling fashion that the relationship between the environment and combat are highly variable, often unpredictable and always formidable. Whereas, Collins (1998) relates virtually every aspect of the physical world we live in to every imaginable endeavour in the military realm, from reading a tactical map to conducting a major campaign in some far-flung corner of the earth to military geography. He considers a wide range of ever changing environmental conditions and employs historical vignettes to address the warfare at tactical, operational, and strategic level. Tivers (1999) argued that landscapes of military defence are iconic in nature and have a meaning that goes much further than their overt presence. The author examined the meaning of military defence landscapes within and outside the camps; and for that a case study of spatial significance of military defence landscapes of west Surrey and north-east of Hampshire (UK) was conducted. Initially, it used a traditional approach to describe locations, history and physical background. Thereafter, iconographical approach of Cosgrove and Daniels applied to military landscapes and used Ley's existential dimensions of meaning. Palka and Galgano (2000) in their book expanded the scope of Military Geography by incorporating the wide range of "military operations other than war" as well as peacetime endeavours of the military, yet retained the traditional wartime focus of traditional military geography. They emphasize on the need to create synergy between Geography and military operations across a spectrum from peacetime to war and take into account the current nature of activities. Woodward (2004) in her book notes that military geographies are

everywhere and that each part of the world is touched, shaped, viewed, and represented in some way by military forces and activities. She brings out that how military geographies are constituted and expressed in a particular landscape. She depicts that military presence shape local space, place and landscape in distinct moral order and creates their own ordering of space. She also explained how geographies are moulded and touched by militarism and the activities of military forces. However she laments that this pervasive force has been inadequately studied by geographers and as a discipline, we have left invisible an important element of our world. Her aim was to examine how the continuous peacetime preparation for war shapes wider economic, social, environmental, and cultural geographies. In an article Woodward (2005) reviews the dominant contemporary approaches to military issues in the Anglophone human geography and argues for critical approaches to study the geographies of militarism and military activities that are capable of understanding their full geographical constitution and expression. For that she discussed traditional Military Geography which is associated with State Military discourses of military power; a broad Political Geography that focussed on the spatiality of armed conflict, and research from across the social sciences on the political economies and socio-cultural geographies of militarism. Lastly she provided insight into the critical military geography that looks beyond armed conflict to find about the wider geographical impressions of militarism and military activities like politics of military land use etc. Davis (2007) depicts that militarized landscape extend far beyond the combat zones and even the carefully delineated properties of military facilities. It tends to leave imprints on landscapes that linger on long after the activities are over. He illustrates that military activities and use has altered what exists in a landscape and the social practices in a landscape, how people then interpret the naturalness of the resulting landscape and how these all affect the people and institution choose to manage and act in these places after the military activities lessened or ceased. He highlights that military activities do not just destroy nature they also actively produce it.

Second category of works pertains to the general military histories of Indian sub-continent and South Asia which were initially limited to narratives of the British Indian army. However, it proved to be an expanding body of literature that begun to tease out the social, political and cultural implication of Britain's military grip on India. Kolff

(1990) analysed the dynamics of military labour market while describing the tradition of military service provided by the Rajputs as mercenaries. He also demonstrated the way in which British modified their army in first decade of nineteenth century and incorporated those dynamics presumably to achieve demilitarization of North India. Omissi (1994) deals with the Indian army and illustrated the policy of recruitment of Sepoys by the British Raj on the basis of race, while highlighting that military was effective guarantor of British domination. He also unravelled the relationship of military with the colonialism and domination. Peers (1995) focussed on the security and military aspects of British rule that had major reliance and emphasis on the position of the military in the government, and on the strength and expansion of military ideology involved in it. He convincingly argued that army was central institution which received the first claim to resources, when it comes to the allocation of revenue. Alavi (1995) examines and explained the relationship and interaction between the army and the society during a period of British expansion. She pinpoints how, why and with what consequences military traditions and cultures in north India were incorporated and then transformed by Britain in early stages of imperial expansions. Heathcote (1995) illustrated the principal events which shaped British military policy and administration of armed forces in India. He narrated that the British on the basis of their economic wherewithal raised the professional army which could then be drilled and disciplined in such a way to maximise its potential. Rosen (1996) explored and presented the relationship between society and military power by taking the case of India's military history from ancient, medieval and modern times and compare them to the other states political, military and societal interactions. He illustrated that the divided societies can't generate the effective military power and also discussed the various remedies attempted by these societies to overcome these drawbacks. It is pointed out that the British success lies in their ability to organise Indians effectively in armies. British quickly professionalized the Indian army and separated them from society that was highly stratified after the decline of Mughal Empire, which reduced the impact of these divisions on the Indian army.

Third category of literature is works on the history of Punjab, whether military and general. Talbot (1988) sheds light on developments under the British rule and illuminates the processes of making the imperial control over Punjab with the help

of local elites of different communities. With the help of such local elites, British ensured not only the loyalty of the rural population but got robust recruits to its army. The creation of Unionist party institutionalized this alliance between local elites and British which kept Congress and Muslim League at bay in Punjab till 1939. He brings out that it was not because of the sense of separatism that Muslims formed the Muslim League in the post second world war period, but due to strained relationship with the Government of India and local factional rivalries. British sacrificed the Unionist Party's interest while raising the army recruits and exporting food grain from the province. However, he dealt only on the surface with the impact of martial race theory on the army recruitment and remittances on Punjab's social and political life. Mazumder (2003) examines the impact of Punjabisation of Indian army after the Mutiny of 1857, under the influence of theory of 'martial race', and in response to the expanding Russian influence to the borders of British India. The author highlights that Punjab and North-West Frontier Province became the recruiting ground for imperial Indian army which compels British to invest heavily in physical infrastructure like roads, railways, canal, bridges, schools and hospitals etc. These mass recruitments brought up the military cantonments in the seven cities which were dominated by cantonments where half of the population of city live in cantonments. How military exposures and military bases brought changes in political, economic, and social structure is rather missing in book. Yong (2005) probes the peculiar characteristic of Punjab's history that developed from military connections which further entrenched deep into social structure with the ideology of "martial classes." He highlights district pattern of recruitment and their concentration in particular areas. Punjab's exceptional administrative and political features compels the author to call Punjab a 'garrison state.' However, very little attention has been paid to the effects of cantonments and military incomes on the province as a whole and its life. There are few significant works by geographers who primarily focussed on urbanization and demographic transition of Punjab, India and South Asia. Krishan (2004) provides the parameters of demographic change in Punjab on the basis of census of India reports from 1881-1941; he identifies the social, political and economic reorganization of Punjab by the British as a central determining factor behind this transition. He illustrates the change in population growth and density and urbanization of Punjab with the increase in birth rate and decrease in death rate. He also provides religious composition and migration pattern in Punjab. This

paper also gave passing reference to the connection between urbanisation of Punjab and military cantonments, but missed the deeper analysis of the same and its impact on the society at large. Grewal (2009) highlighted the interrelations between the processes of urbanisation, modernisation and social change within the colonial context. The author brings out that administrative personnel were concentrated at district headquarters, divisional headquarters and the capital city. She also gave passing reference that military authority had a direct bearing on the character and growth of towns and cities as several of these centres also had substantial number of cantonments. These studies left behind a question that- is there any inter-relationship between the urbanization with cantonment, and at the same time between the urbanization and cantonments with increase in human development index?

Military geography, although, as an area of research started to evolve in the 19th century and expanded into important inter-disciplinary scholarship. But, the preceding analysis of literature bring forth that there is a wide gap in scholarship on the transformational trajectory of Punjab, if examined and probed through the optics of military geography of British Indian Empire. So, the place of Punjab in military geography of Indian sub-continent has to be located to understand and look into the strategic and political compulsions of expanding military infrastructure in Punjab, which converted the region into a 'garrison state.' Military cantonments, the most prominent object of manifestation of 'military geography' in Punjab are required to be mapped to know its geographical characterization and its implication on the spatial, social, economic and political structure of the colonial Punjab.

1.5 OBJECTIVES OF THE STUDY

- To locate the place of the Punjab in the military geography of the British Indian Empire through understanding the role of the strategic and political compulsions in its emergence as a defensive wall for the Empire.

- To investigate the expansion of military infrastructure in Punjab, its turning into a 'garrison state' with concomitant embeddeness and gradual divergence in the imperial calculations.

- To examine the social, economic, spatial, and political implications of military cantonments in Punjab and the peculiar military geography as represented by them.

- To analyse the transformational trajectory of Punjab by mapping the selected military cantonments (Ambala and Rawalpindi) and their locational and spatial geographical characterisation with transformation of surrounding landscapes.

1.6 HYPOTHESES

- Punjab had contributed substantially in countering the threats of invasion from the north-west frontiers and emerged as the sword arm of the British Indian Empire.

- Military control over defined space is exerted both by physical presence and by the social, economic and political influence of military establishments, which could bring significant changes in the landscape and lives of the people.

1.7 DATA SOURCES AND METHODOLOGY

From methodological point of view colonial period provides several interesting themes for analysis, but this research is undertaken to fill the gap by focussing on the impact of military geography on the varied transformations experienced by the Punjab under the British rule. Therefore, this study is historical, descriptive, analytical and interdisciplinary; and rely on an eclectic methodology to data sources i.e. primary data and secondary data sources. Primary data sources include Census of India (Punjab); Gazetteer of the Punjab Provincial volume, Punjab District Gazetteers, reports of Government of India, Settlements reports of districts, and the Historical Maps. Besides these departmental reports such as reports on railways, canals, towns and cities, monographs along with other contemporary sources are used. Secondary data sources include books, journal articles, translated works, scholarly articles, newspapers articles, conference proceedings, and internet sources.

In dealing with the first objective, a descriptive and analytical approach is followed based on the data sources to bring out the embeddedness and divergence of Punjab in the context of military geography. The embeddedness of Punjab is brought out by probing the paternalistic orientation of British towards it, till the end of First World War and gradual divergence by examining the ignoring of Punjab interests in post World War I period untill the partition of Punjab and concomitant independence of India and creation of Pakistan. The second objective follows an exploratory methodology for examining the strategic and political compulsions of expanding military infrastructure in Punjab and turning it into a 'garrison state'. These are explained by probing the external exigencies like "great game' pressures and internal pressures like Mutiny of 1857, periodical tribal attacks and uprising in North-West Frontier Province and steps taken by the British to counter them. The third objective about the social, economic, spatial and political implications of military cantonments in Punjab and the peculiar military geography as represented by them are analysed through analysis and interpretation of data. The social consequences of military cantonments in Punjab are depicted by probing and investigating attributes like urbanisation and demographic changes, impact on landscape transformation, literacy rate, health and medicine and other symbols of modernization. The Economic impact is measured by checking the employment opportunities, economic activism, roads networks, transportation through railways, etc. The fourth objective relied primarily on the maps, census and gazetteers to analyse the transformational trajectory of Punjab by mapping the Ambala and Rawalpindi Cantonments, their locational and spatial geographical characterization with the transformation of surrounding landscapes.

Maps and Census along with Gazetteer are medium of surveillance to maintain perpetual control over the territories. Maps help in managing the space, and Censuses in putting the people under observation. Anderson (2006) stated that Maps and Censuses "shaped the way in which the colonial state imagined it dominion - the nature of the human beings it ruled, the geography of its dominion." Kitchin (2011) argued that "maps seek to be truth documents; they represent the world as it really is with a known degree of precision. Cartography as an academic and scientific pursuit then largely consists of theorizing how best to represent and communicate that truth." While building on the idea of Michel Foucault, Harley

(1989) illustrated about the non-neutrality of the process of mapping and considered it as an objective pursuit laden with power. Maps are typically the products of privilege and formalised knowledge, and they also tend to produce certain kinds of knowledge about the world. They are the result of power, and they produce power (Kitchin, Perkins, & Dodge, 2011, p. 9). The maps used in the present study are a clear portrayal of power based spatial transformation. The formalised knowledge of map-making has become a repository of knowledge. It helps in exploring the details closed in the container of antiquity. The fourth objective involves descriptive and explanatory methodology in deciphering the transformation trajectory of Ambala and Rawalpindi in particular. Spatial transformation of these two cantonment cities mapped by creating inventory from historical data and information related to railways, roads, urbanisation, telephone lines, postal service, etc. Total thirteen sheets of maps of Ambala and Rawalpindi are procured from British Library, London and one map of Ambala City is from Punjab State Archives, Patiala . Scales of the maps of Rawalpindi city are 1 inch to 1 mile (1931) and 12 inches to one mile (1865), and for Ambala city, the scales are 1 inch to a mile (1889) and 6 inches to a mile (1867-68). Two software packages, ERDAS Imagine 2014 for georeferencing and ArcGIS for vector digitisation and analysis, have been used to undertake the study. The maps are georeferenced with Universal Transverse Mercator Projection system using WGS 1984 Datum. Table 1.1 and figure 1.1 show the parameters used for georeferencing and procedures used for information extraction.

Table 1.1: Parameters used for georeferencing

S. No	Parameters	Specification
1	Projection	Universal Transverse Mercator, zone 43, Central meridian 83E; False Eastening 16500000 meters.
2	Datum	WGS 1984
3	No. of GCPs collected	24
4	Avg. RMS error for image rectification	<2 pixel

Figure 1.1: Flow Diagram of procedure followed in preparation of base map and information extraction
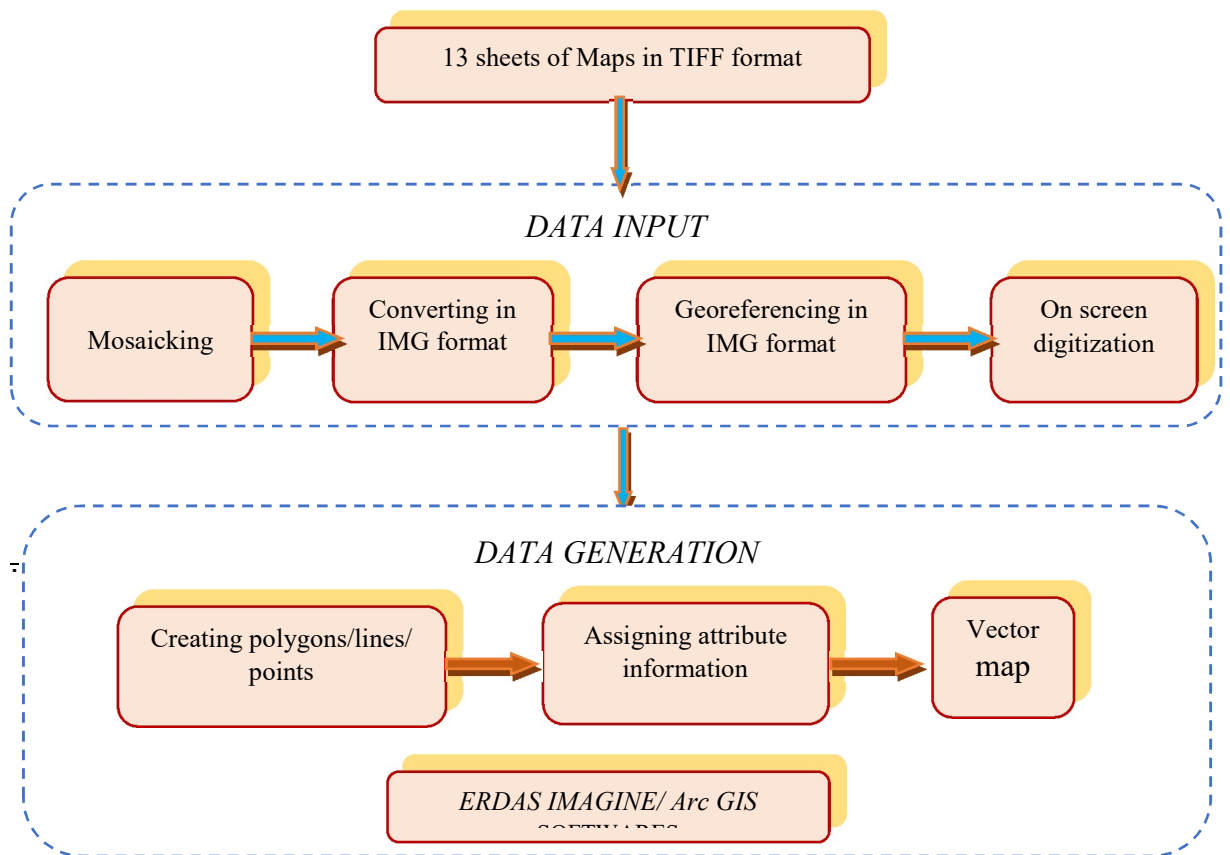
The study exhibited that the military geography of Punjab[4] had significant continuity and discontinuity with its past. However, the specific intention of the proposed study is to investigate how the making of modern Punjab, its social relations and economic lives were shaped by militarism and military geography as instituted by the British Indian Empire. The military geography of Punjab and its effects on the lives of the people and landscape are under-researched in the history of Punjab's human geography and even in urban studies and sociology of change. In such a context, the proposed study is significant as it attempts to unravel the role of militarism, military activities and related developments in shaping the colonial times and spaces.

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[4] Military Geography of Punjab means geography that is touched and moulded by militarism and the activities of military forces in Punjab. Here 'militarism' means extension and penetration of military influence on civilian spheres including social, economic and political life. Definition is extracted from the words of Woodward (2004) "Where military orders create their own geographies, where these geographies of military activity writ large on the physical and social landscape where these geographies exert webs of moral control."

Chapter Two

MILITARY GEOGRAPHY OF BRITISH INDIAN EMPIRE: ITS EXIGENCIES AND PLACE OF THE PUNJAB

The inquisition about Empires will reveal that they were always built with the military might of state concomitantly supported by its economic power. It is not a hyperbolic statement, but a reality that stood right in the context of the British Indian Empire. The credit for such a great feat goes to its active and resourceful merchants and explorers who established the commercial links with the outside markets and gradually colonised these territories. Initially, they built their factories and warehouses closed to the sea and later expanded inwards on finding the favourable conditions and got success in establishing an empire (Lloyd, 2001, pp. ix-x, 1-3). This empire was a part and central pillar of the larger entity, Pax-Britannica or the British Empire.

During the age of imperialism, Britain acquired such an ascendancy over other contemporary imperial powers that it could be predicted that her national interests involve much more than just protection of its sovereignty and territorial integrity. The foreign policy experts and strategists of the Great Britain, who were very well aware of this, linked its dominance with retention and expansion of its worldwide empire and concomitant preservation of its great power status. This symbiosis of great power and empire seem more evident to them in their Indian Empire that covered 85% of the area in terms of the territory of their worldwide empire and 97% of its Asiatic Empire (Mahajan, 2002). Thus, Indian sub-continent remained the centrepiece of their defensive policy as its policy makers didn't envisage any threat to their home country from other European powers. But they apprehended danger to their Indian Empire from all their continental rivals at different times and regular intervals.

These continental rivals mainly comprised France, Russia, and Germany who were competing with Britain in 19th and 20th century all across the world. The control over the Mediterranean Sea generated an intense rivalry between Britain and France over the possessions in North Africa. The Mediterranean region constituted the Britain's most important trade route, a link to Indian sub-continent and Far East

possessions. Whereas Russia wanted to take control of the Dardanelles; the area where the Black Sea opened out into the Mediterranean Sea which could allow Russian warships and trading ships to sail smoothly around Europe without any interruptions. Russian ports in the north used to freeze in winter whereas Black Sea opening controlled by Turkey at Dardanelles. It became a reason of strife between them in which Britain supported the Turkey to keep the Mediterranean Sea 'out of bound' for the Russian ships. Germany entered the scene by the early 1900s. When Germany also acquired some colonies in Africa; it started to show an interest in North African territories opening into the Mediterranean Sea. Out of these rivals, Russia was most dangerous opponent due to its geographical proximity to Afghanistan and Persia. Thus its nearness to the north-western frontier of Indian sub-continent and particularly of Punjab presented geostrategic and geopolitical challenges to the British Indian Empire concomitantly led to the birth of Garrison State.

2.1 CONTEXTUALIZING THE EMPIRE

The British Empire was vast and biggest empire ever established by any nation on the earth. During its heydeys, it spread over all the continents; incorporating quarter of the landmass and equal numbers of the population of the world (Morris, 2010, p. 3). It had lasted for almost five centuries outside the Europe from 1497 to 1997. During this period, British had impacted and influenced upon every corner of the world. They colonised the North America, Australia and New Zealand with the people from the British Isles and ruled the vast swathe of territories in Africa and Asia. The British with their persistent endeavours able to carve out the British Empire that could classify into two distinct empires between seventeenth and twentieth centuries (Luscombe, 2012).

The first Empire was in the west across the Atlantic Ocean in North America made up of thirteen American colonies that got independence in 1783. It was broken up by the war of American Independence that resulted in significant loss of territory and influence. This territorial loss ended the expansion of the British Empire in the North

America (Hall, 2000, p. 6). The second empire[5] established in the near, and far East along the littoral of the Indian Ocean, bolstered by large British Indian Empire. It was British Indian Empire that changed the naval oriented offensive strategy to defensive continental strategy. In 1829 John Wilson stated the famous remark that "The Sun Never Sets on the British Empire." Whole Indian Sub-continent was equal to the whole of Europe except Russia (Muir, 1917, p. 1). The British Indian Empire influenced and affected the international relations of the Great Britain such as its imperial politics related to the sub-continent and the European foreign policy impacted and reflected upon each other. It was possession of this British Indian Empire that conferred great power status on England in the 19th century. Thus protection of this eminence involved an increasing range of imperial commitment in Asia and Africa especially in the Indian sub-continent and Middle East (Porter, 1999, p. 1).

2.2 BRITISH INDIAN EMPIRE

The journey of British Indian Empire begins with the trading expeditions of merchants of the East India Company, landed on Indian shores in the early 17th century. The Company officials remained committed to trading pursuits, with just a few small coastal enclaves, till the war of Plassey, 1757. This war not only transformed the political fortune of the company but also of the British Empire. Slowly and steadily, the company established the British Indian Empire on the whole Indian Sub-continent. The foundation of this empire laid on the pillar of economic

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[5] It could most appropriately classified into four parts such as England and Wales; Scotland; Ireland; and the foreign possessions and colonies (spread throughout world). The territories in Europe included Heligoland, Gibraltar, Malta, Gozo, and Channel Isles. In Asia spread over British India, Ceylon, Cyprus, Perim Islands, Aden, Straits Settlements, British Burmah, Labuan, Hong Kong, Andaman and Nicobar Islands. In Africa comprised Cape Colony, Natal, British Kaffaria, Mauritius, Ascension, Sierra Leone, Gambia, Gold Coast, Lagos and St. Helena. In America covered the areas like Canada, British Columbia, Vancouver Island, Hudson Bay Territory, Newfoundland, Prince Edward's Island, British Honduras, Bermuda's, British Guiana, Falkland Island, New Brunswick, Nova Scotia and the British West Indies. In Oceania constituted Australia, Tasmania, New Zealand, Labuan, Fiji Isles, Chatham Isles (Dunnett, 1889, pp. 13 & 40-41).

and military power concomitantly supported by sound policy making that helped in acting appropriately with particular strategy in different time and spaces.

The colonisation of Indian sub-continent was not a product of any coherent imperial design but emerged out of haphazard and marginal territorial annexations intended to eliminate those wild frontiers impeding the viability of trade and commerce within the sub-continent. Such undirected gradual accretion of land soon created an empire characterised both by extended geography and technically poor communication between London and three presidencies (Tellis, 1990, p. 79). The founding father of British Imperial history Professor Seeley once stated that:

> Our acquisition of India was made blindly. Nothing great that has ever been done by Englishmen was done so unintentionally, so accidentally, as the conquest of India. There has indeed been little enough of calculation or contrivance in our colonisation…. But in India we meant one thing, and did quite another. Our object was trade, and in this we were not particularly successful. War with the native states we did not think of at all till a hundred years after our first settlement, and then we thought only of such war as might support our trade; after this time again more than half a century passed before we thought of any considerable territorial acquisitions; the nineteenth century had almost begun before the policy of acquiring an ascendency over the native states was entered upon; and our present supreme position cannot be said to have been attained before the Governor-Generalship of Lord Dalhousie little more than a quarter of a century ago (Seeley, 1914, pp. 207-208).

The British Indian Empire had two phases- one under the East India Company and Second under the Crown. The East India Company, having a monopoly over Asian trade through a charter from Queen Elizabeth, had a humble beginning with a grant for trade and commerce from Mughal Emperor in India in 1617. The company in 1717 again secured an acquiescence for duty-free export of their goods from Bengal. But the circumstantial clash of interests pitted the British against the local rulers Siraj-ud-daula in 1757 and Mir Qasim in 1764. The former was defeated in Battle of Plassey and the later in Battle of Buxar. The last war established the company as revenue collector of Bengal, Bihar and Orissa with a signing of a treaty

with Mughal emperor (Metcalf & Metcalf, 2012, pp. 51-53). In this way, the year 1757 marked the beginning of first phase.

The success of East India Company in the East raised the concerns of the British parliamentarians, who were well aware of the turpitude and corruption of its officers, about the administration of newly acquired possessions to be left in the hands of private individuals of the company. The British Parliament passed the Pitts India Act, 1784 to bring the East India Company under its jurisdiction by removing the shortcomings of the earlier East India Company Regulating Act, 1773 and established the Board of Control. These regulating acts were renewed and reviewed in every successive gap of twenty years like 1793, 1813, 1833 and 1853 to remove or crop the political and economic privileges of the company. The 1833 act shredded its monopoly over the trade and allowed the other companies to do business without a license, and 1853 act took away the power of appointments of civil servants from the company's purview (Lawson, 1884, p. 256). On the one hand, Parliament keeps on curbing the powers and monopolies of the company; on the other, governor-general's continued to add territory to the Company's holdings through conquest and alliance. Like Marquess Wellesley, the Marquess of Hastings, the Earl of Ellenborough and the Marquess of Dalhousie, keep on expanding the territorial hold of a company by annexing the Mysore Kingdom, Maratha Confederation, Kingdom of Sind, Sikh Empire and Oudh. By 1856, the whole of the Indian subcontinent including Burma territories were ruled by the Company or by its local allied rulers. The second phase of British Indian Empire begins under the Crown as a consequence of Revolt of 1857. Having lost in American Empire in 1770's, the mother country of British took it very seriously. British parliament passed a Government of India Act, 1858 whereby the Company lost all its administrative powers over its Indian possessions and armed forces to the Crown. With this curtains fall over the East India Company's one hundred years (1757-1857) rule over the sub-continent. Queen became the Empress of India who was represented by Viceroy. Thus established the direct imperial rule over India that lasted for another ninety years. The British Indian Empire's administrative space was divided into thirteen provinces and followed three-tier system: province, districts and tahsils resemble system developed by the Mughals like subah, sarkar, and pargana (Kant, 2005, p. 216).

2.3 GEOGRAPHY OF BRITISH INDIA

The issue of The Times newspaper dated August 8, 1857 published an extract of the Parliamentary paper mentioning the details about the extent of the Indian Empire as 1,466,576 square miles (1.46 million sq. miles) and population as 180,884,297 (180.88 million) of India including British territories, Native, French and Portuguese territorial holds. In length, India is about 1900 miles and in Breadth more than 1500 miles. In the word of Sir Charles Napier, "it takes a regiment five months and a half to march from Peshawar to Calcutta; and from Calcutta to Assam, four to five months more" (Ludlow, 1858, pp. 4-5). The most warlike species spread over three regions- Jats in the north, Rajputs in central and Marathas in Deccan (Ludlow, 1858, p. 7). Overall, India could be divided into Hindostan and the Deccan area. The spatial extent of British India comprised nearly three-fifth of Indian sub-continent. It was bounded by Burma and the Bay of Bengal in the East, Tibet on the North, Afghanistan, Baluchistan and the Arabian Sea on the west and by the Indian Ocean and Ceylon (Sri Lanka) in the South. It had extended to strategically important mountain ranges in the north and north-west that marked its external borders, such as the Himalayas and Suleiman ranges. Besides these, internally had Vindhya and Aravalli mountains, the Eastern and Western Ghats, and the Nilgiri Hills (Dunnett, 1889, pp. 79-80). It had important rivers such as Indus, Brahmaputra, Ganges, Mahanadi, Godavari, Krishna, Cauvery, Tapti, and Narmada. The river Indus and Ganga formed the great plains of the British India. India had eight divisions: Assam, Bengal, North-West Provinces, Oudh (Awadh), Punjab, Central Provinces, Ajmer, Coorg, Berar, Madras and Bombay (Mumbai).

The British Indian Empire had its north western boundaries stretched up to the line of Indus and Sutlej beyond which lay the Kingdom of Lahore and Sind by 1818. Sind was annexed in 1843 by Lord Ellenborough and the territories of Punjab between river Beas and Sutlej, and hills after first Anglo-Sikh war by Lord Hardinge. When Lord Dalhousie took over the charge, the geography of the British Indian Empire was such:

> An isolated country, shut off from all powerful neighbours by intervening states, and commanded for strategical purposes from the sea-board. The magnificent harbour of Bombay dominated the Western Presidency that of

Karachi formed the key to Sind. Madras has its long open littoral, with numerous roadsteads, and the great naval station at Trincomalee near its Southern extremity, on the Ceylonese coast. In Bengal the noble port of Calcutta, with the connected river-systems of the Ganges, Indus, and Brahmaputra, afforded water-ways inland towards the frontier of British dominions in Northern India (Hunter, 1890, p. 177).

Lord Dalhousie annexed the Punjab in 1849 and extended empire to the north-west frontier of India-'scientific frontier' of the Indian subcontinent, delimited by the 'great mountain wall' of the Himalayas (Muir, 1917, p. 306). These mountains received the significant amount of attention from Military Geography perspectives and in making security policy for British India such as 'quest for scientific frontier' or 'natural frontier' of India.

Military Geography of the British Indian Empire marked by two discernible factors; internally connoted and externally oriented. Internally connoted military geography concerned with the internal security of the Europeans and the empire from the local population and princely states. It required taking care of troubled areas and borders of the princely states to avoid any uprising like Mutiny of 1857. Tribal territories of Northwestern frontiers tribes of Punjab also came under this section. It was signified by the presence of many princely states, tribal areas especially in the north-western region of Punjab. Externally oriented military geography always exist on the frontiers and borders of the State having a defensive or an aggressive stance, according to its interests in the prevailing trend of international politics. In the case of British Indian Empire, military geography existed on the north-western borders of Punjab. It was created by the threat of Russian invasion through Afghanistan and the exigencies of the great game to keep Afghanistan out of Russian influence. The manoeuvres of great game reached its climax due to tattered and suspicious relations of British with Russia and its annexation of the Central Asian region and subsequent diplomatic machinations in Afghanistan and Persia. The European powers for political and economic dominance in Central Asia made the Afghanistan as a bone of contention in the 19th century. It transformed the role of Punjab as military and later commercial springboard for the British Indian Empire to pursue its Afghanistan and Central Asian policies. The strategic importance of Punjab was due to the military geography of the province, and it became a reason for establishing

the web of cantonments in the region. Later on, the loyalty and martial race concept increased the importance of the people of Punjab in the eyes of the British Administration.

2.4 MILITARY GEOGRAPHY OF BRITISH INDIAN EMPIRE: GEOGRAPHY OF PUNJAB

Before dwelling on the Military geography of British Indian Empire during the British era, it is necessary to define the region. Etymologically, the connotation of word Punjab means 'five waters' that give inference as a 'land of five rivers'. Punjab was historically taken as a politico-administrative unit but having different territorial boundaries at a particular period of times. It was a not a same entity during the Mughal era, under the Sikh rule and even during the British times (Grewal, 2004, p. 1). Punjab under the British connoted as a home of Sikh. It includes territories lying between the snow-clad mountains of Himalayas and Rajputana Desert in North and South direction and river Jamuna and the Indus on the east and west marking its boundaries respectively. It extended up to the borders of the Tibet in the Himalayas and the Baluchistan, across the river Indus. Punjab comprised approximately one-third of mountainous region and remaining territory being plains. Out of this, little less than three-fourth lies directly under the British and out of a total population, five-sixth within British Punjab and remaining in the 43 princely states of Punjab. The British Punjab was divided into divisions under commissioners and districts under deputy commissioners (Barstow, 2004, p. 1).

From Military Geography's point of view, the geographical location of the Punjab in the north-west of the Indian sub-continent made it a very active geopolitical and geostrategic region. It connected trade and commerce of India with the Central Asia and West Asia; and often became a victim of invasion through these trade routes. This region was marked by lofty mountains on its west, north-west and north that contains the Pamir Knot in extreme north-west; from where high mountain ranges shoot off in all directions (Gosal, 2004, p. 19). Hindu Kush mountains, that lies little westwards from the Pamirs, merge into Sulaiman Range between Punjab and northern Baluchistan. Bolan Pass separates exist on the re-entrant of Sulaiman range and Kirthar ranges lies between Sind and Southern Baluchistan. These Mountains end at Makran coast making the western wall of the region (Figure 2.2).

Holdich (1904) argued that the Hindu Kush delimited the natural boundary of Indian Sub-continent and stood as a wall for the military and commercial enterprise from Central Asia through the plains of Bactria and the Oxus to the Kabul valley. He posited that "every military expedition of consequence which has been directed against India, with Peshawar as the first objective and Lahore and Delhi as the ultimate aim of invasion, has been, so far as history can tell us directed either from Kabul or Ghazni…" (Holdich, 1904, p. 75). Kabul dominated all the routes converging on the extreme north-west of the Punjab; to embark on Indo-Gangetic Plains. The traditional route of pre-Mughal era detoured the Afghan highlands via Herat-Kandahar-Ghazni to Kabul. Hence directed towards the southern extremity of our western borderland (Hamadani, 1992, p. 13) (Holdich, 1904, p. 89). Punjab always invaded through four famous mountain passes, which were the gateway to Central Asia and the Indian-subcontinent, such as the Khaiber, Kurram, Tochi, and Gomal passes were part of important trade routes. These four passes connected the Peshawar, Kohat, Bannu and Dera Ismail Khan to the Afghanistan cities, mainly Kabul and Kandahar (Schofield, 2010)

Khaiber (Khyber) route, or reasonably the Khaiber group of courses, were always been the most famous of all the routes debouched into the Punjab. Khyber route from historical times considered as 'golden gateway' to the wealth of the Indo-Gangetic plains. The highest point in Khaiber Pass was Landi Kotal was almost 24 miles from Jamrud fort. Khaiber Route positioned between the Afridi and Mohmands territories. Khaiber to Kurram was the home of almost all the troublesome tribes. The territory between Kurram and Tochi was an abode of Waziri of Waziristan up to the Gomal River. Adjacent to it was the area of Pathan inhabitant of Suleiman Mountains (Hamadani, 1992, p. 16) (Holdich, 1904, p. 72&75).

Kurram Pass and Peiwar Pass separated from the tribal territories adjoining the Khaiber Pass by Safed Koh range, known as Kurram Valley. The environs inhabited by the Afridis, Orakzais, Turis, and other Pathan Rohilla tribes. Kurram Valley also opened up to Peiwar Pass. It includes Kohat as a base and Peiwar Kotal as the border, joined the Kurram Valley with the Shatrugan Pass that shuts it from Afghan trade. Kabul and Ghazni were almost equidistant from Peiwar Kotal (Holdich, 1904, p. 76).

Tochi Pass formed by the Tochi River, an affluent of Kurram River, inhabited by the Waziris tribe of Pathans and district drive its name from them as Waziristan. Historically, Tochi formed the shortest route to Ghazni. Mahmud of Ghazni used it for ransacking Multan and Sindh, but it never was a great trade route. Still, it was "one of those unravelled knots in frontier geography which require further investigation" to locate its exact place among the north-western passes (Holdich, 1904, pp. 79-80).

Gomal Pass composed the 'notional boundary' between Punjab[6] and Baluchistan and formed by the River Gomal in the south of Waziristan. Wazir and Mahsud tribes inhabited these hamlets and controlled the western slopes of Waziristan and encircled the strategic peaks of Waziristan Mountains of height about 11500 feet above sea-level. Thus, acted as a gateway to southern Waziristan Gomal pass was oldest trade route and throughout the year Ghilzai tribes carried out the Povindah trade, in items from Bokhara and Kabul (Tripodi, 2016, p. 75) (Holdich, 1904, p. 81).

Bolan Pass although not directly opens up into Punjab but strategically linked to Punjab. By crossing Bolan Pass invaders could embark on the Sindh, and then cities of the Punjab like Shikarpur and Khairpur to Dera Ghazi Khan and Multan. On the larger panorama, it connected the Quetta and Kandahar with Sukkur on the river Indus. After Khyber, it was most important link despite the intermediate three passes of Kurram, Tochi, and Gomal Valley. Bolan Pass enclosed by the territories of Khan of Kalat on the west and bounded by the Sibi district in the east (Hamadani, 1992, p. 16).

The geography of Punjab attracted the attention of the British during the reign of Maharaja Ranjit Singh. This recognition compelled the British to develop the

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[6] Punjab Government had a responsibility of administration of tribal areas, till the North Western Frontier Province was carved out in 1901 by Lord Curzon. These tribal areas were under the charge of Political Agents. This territory was under the charge of the Political Agent of Wana. The profile of these agents were to develop friendly relations with tribal headman and the people, for peaceful passage and in return distribute allowance to them, without hurting the ego of any individual. Gerald Curtis, a political agent in 1943-46, stated that job was like "conscientious comprehensive school headmaster who is trying to encourage the gifted pupil without doing damage to the doctrine of equality (Tripodi, 2016, p.76)

elementary political links and to some extent trade and commerce relationship. After annexation, the region was vital to pacify the martial instinct people from the frontier region to support outward defence and checkmate the incoming attack of the people invading from the north-west region. So, the network of cantonment laid down to make the people compliant and peaceful to new rules and regulations implemented by the new rulers. In the north, above the Khaiber Pass, British took the political interest in the independent agencies of Chitral, Swat, Gilgit and Hunza in post second Anglo-Afghan war period. Although, these were tributary to Kashmir State. South of these state and Kabul River, there were territories of Bajour and Mohmand (Holdich, 1904, p. 72).

2.5 PUNJAB'S WAY INTO THE EMPIRE: DOMESTICATION OF THE TRIBES

Initially, the officials of the British Indian Empire did not see any urgency to extend its territorial control over the Kingdom of Punjab. They were pleased to have arrangements with Maharaja Ranjit Singh and other players to safeguard their interests in the region according to the need of the hour. One of them was the Treaty of Amritsar concluded between Maharaja Ranjit Singh and Charles Metcalfe in 1809. It marked the beginning of friendly relations between the British Indian Empire and the Sikh Empire, whereby former agreed not to interfere in the affairs in north-west of the river Sutlej and later relinquished his claim over territories subdued by him in the Cis-Sutlej region and agreed never to have any advance on the left bank of Sutlej. For almost two decades British didn't interfere in the affairs of Punjab as they were busy in consolidating their position in other parts of India, apart from their wars with Burma and Nepal. However, soon the developments across Hindu Kush Mountains, where Russians were making advances and inflicted defeat on Persia and even on Turkey, had turned their attention towards the unexplored region of Central Asia. British felt threatened from Russian advances towards the north-west of Indian sub-continent and thought of countering this through the commercial penetration of superior British goods into the markets across this region (Hopkirk, 1990, p. 132).

FIGURE 2.1: AREA OF STUDY
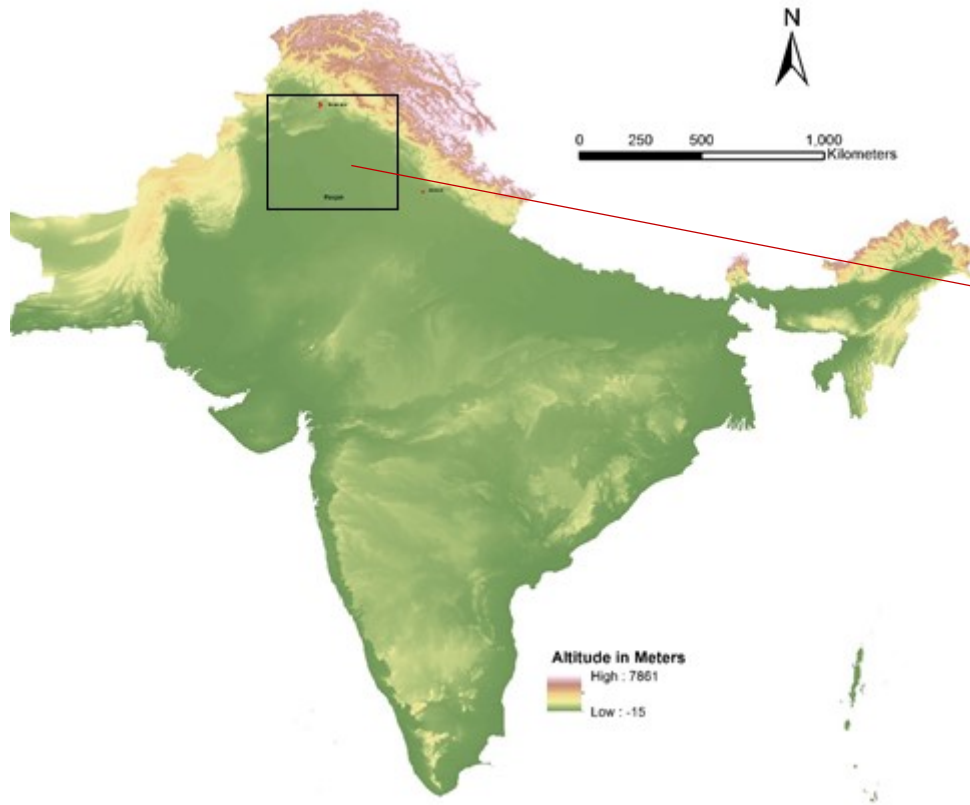
(Source: USGS)
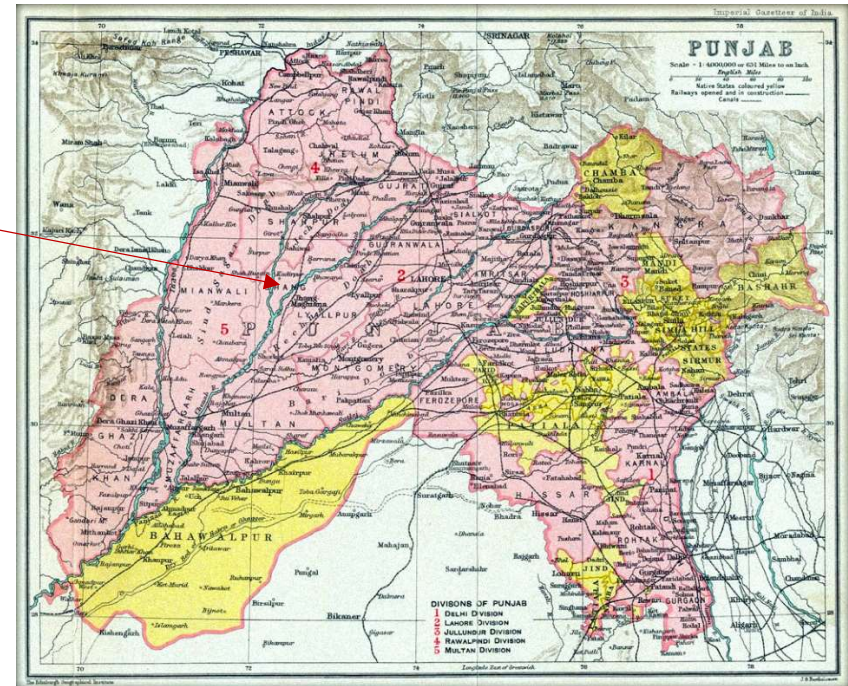
(Source: Digital South Asia Library, British Punjab, 1909)

FIGURE 2.2: LOCATIONS OF PASSES

A- Salang Pass
B- KhyberPass
C- Gomal Pass
D- Bolan Pass
E- Kuramr Pass
F- Peiwar Pass
G- Broghol Pass

Elevation
High : 7861
Low : 15
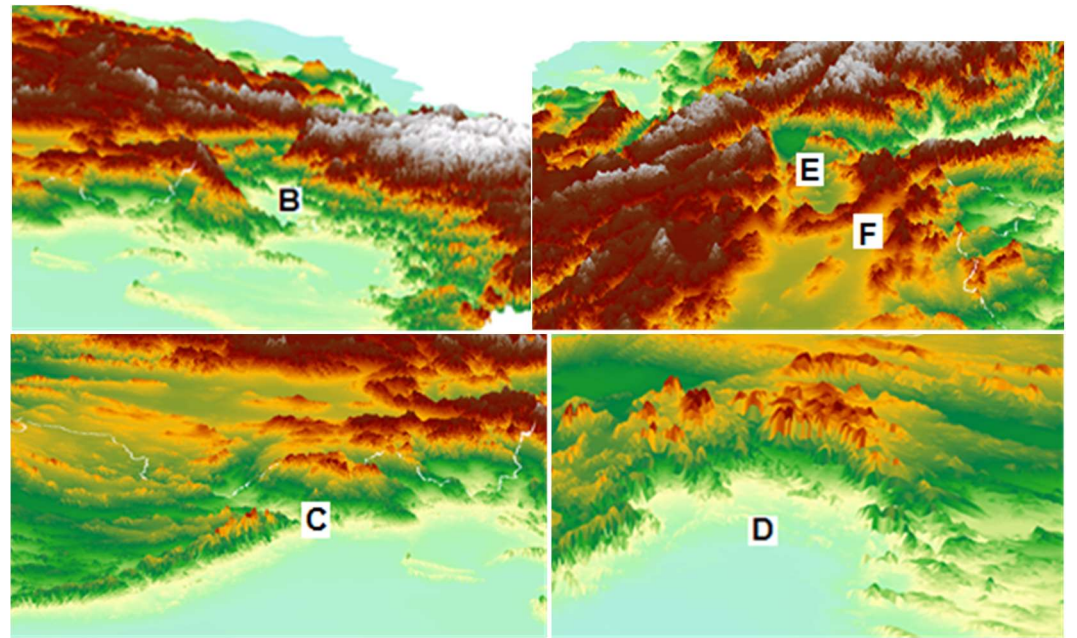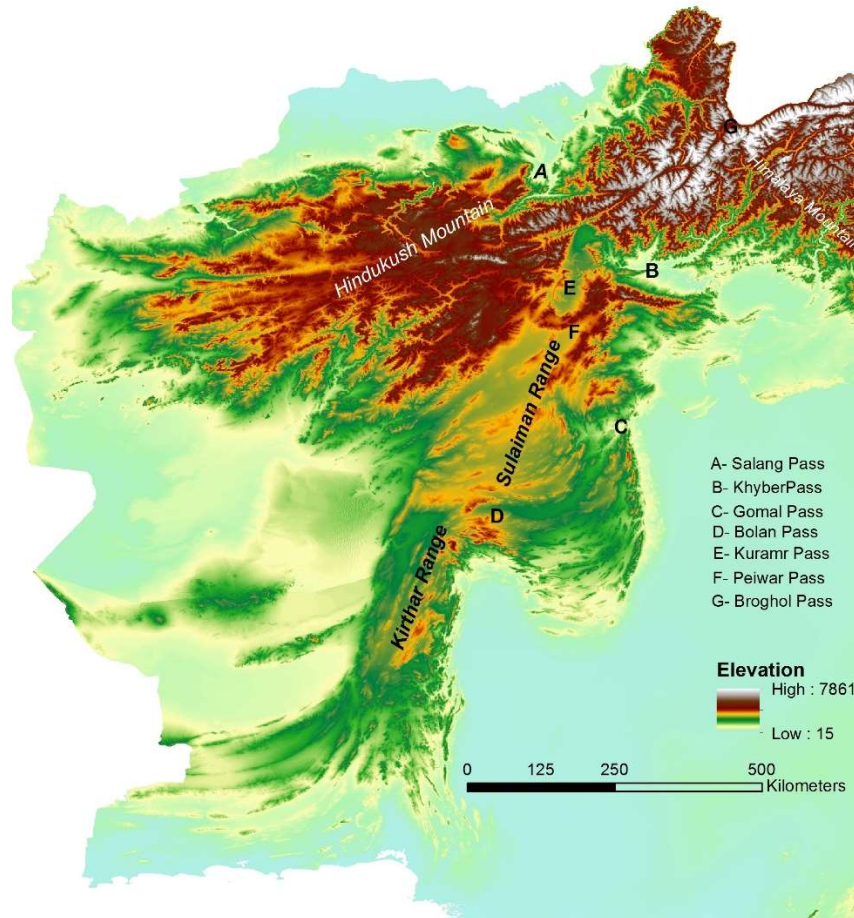
The idea of commercial inroads had sprouted out from the reports of some British agents who explored the region beyond the Indus and gave positive reports about the prospect of Central Asian trade (Tytler, 1953, pp. 88-89). They wanted to establish trading relations with the intention of gradually altering it into political relations (Singh, 1982, pp. 349-350). As the British had their plans about these territories, they even checkmated Maharaja Ranjit Singh in his plan of subduing the Sindh and Baluchistan. Under such political and economic settings, the British sent Alexander Burnes with gifts for Maharaja Ranjit Singh from King William IV in 1831 through the river Indus. This visit had an apparent motive of exploring the navigability of Indus, a prerequisite for the commercial and military penetration of British into Afghanistan and Central Asia (Hopkirk, 1990, pp. 132-134) (Singh, 1955, p. 19). Alexander Burnes reported that there was "perhaps no inland country in this world," which possessed greater facilities for commerce than the Punjab as all its rivers were more or less navigable (Arrora, 1930, p. 12).

The British thereupon negotiated treaties to facilitate the navigation along Indus and Sutlej rivers with the Amir of Sindh and the Maharaja of Punjab through their emissaries, Henry Pottinger and Claude Martine Wade. Maharaja Ranjit Singh was anxious about the British intentions, which they apparently projected as 'purely commercial'. So, he was reluctant to sign it but Wade cleared his "misgivings" and secured his consent for the treaty by convincing him the economic benefits of this project. The treaty[7] which was signed in 1832 and further modified in 1834 and 1839 opened up the two rivers of Punjab for commerce (Singh, 1982, pp. 354-355) Subsequently, Ranjit Singh got busy in the campaigns and administration of north-west frontier as Amir Dost Muhammad started a religious war against the Sikhs

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[7] This treaty, signed on December 26, 1832, opened the navigation of Indus and Sutlej to promote commerce between British Indian Empire and Sikh State of Punjab. Tariff is levied only for the passage of merchants whereas other duties and movements of goods were not touched upon. The Checking post for collection of duties was established at Mithankot and Harike. The merchants had to obtain passport from their respective authorities for crossing the rivers. A supplementary treaty was concluded with Maharaja Ranjit Singh for establishing a toll on the Indus November 29, 1834. On May 1839, it was amended to charge different rates for boats of different sizes and on the volume of the merchandise as it was kept same for all boats irrespective of size (Aitchison, 1863, pp. 240-250).

following the annexation of Peshawar by the former from the latter. The British took advantage of the situation by occupying Ferozepur in 1835, over which the British already accepted the Ranjit Singh's sway. Ferozepur was later converted into a military cantonment in 1838 (Singh, 1955, p. 24). The importance of Ferozepur was highlighted by Captain William Murray, a British officer at Ludhiana, who said that "the capital Lahore (of the kingdom of Punjab) is distant only 40 miles with a single river to cross, fordable for 6 months in the year. The fort of Ferozepur from every point of view seems to be of highest importance to the British government, whether as a check on the growing ambition of Lahore or as a post of consequence" (Singh, 1955, p. 24). Maharaja Ranjit Singh reacted promptly by deciding to build a fort on his side of river Sutlej at Kasur (Singh, 1982, p. 358). In the following year, the British even did not let Ranjit Singh to add the Shikarpur to his empire, which was considered as the gateway to Khorasan (a region that included the territories of north-eastern Iran, southern Turkmenistan, and northern Afghanistan) and also considered to be important to industry and trade of Asia (Mahajan, 1961, p. 175). This was resented by Ranjit Singh, his nobles and ministers, but he avoided confrontation with the British due to pragmatic considerations. He calculated that his reaction would lead to formation of a joint front against him by the Afghans and the British, as the British were free from any major involvement in Indian sub-continent and the already offended Dost Muhammad was looking forward to recapturing Peshawar (Singh, 1955, pp. 22-23).

In 1836, Lord Auckland sent Alexander Burnes to Afghanistan to counter the Russo-Persian, who conspired against the British. The mission failed as the British were not positive about recovering Peshawar for Dost Muhammad from their ally Maharaja Ranjit Singh (Habberton, 1937, pp. 10-11). Dost Muhammad instead promptly reached out to the Russians that made the British anxious about security of north-west frontier and Afghanistan. This, as pointed out already, led to the British decision to replace Dost Muhammad with Shah Shuja in an attempt to place a friendly ruler in Afghanistan with the help of Maharaja Ranjit Singh. The tripartite treaty signed with this objective made Shah Shuja to concede the perpetual control over Kashmir, Attock and Hazara Peshawar, Khyber, Bannu, Tank, Kalabagh, Derajat, Waziri territories and Multan to Maharaja Ranjit Singh (Singh, 1982, p. 362). However, Ranjit Singh was made to renounce the claim over Shikarpur in return of

compensation of ₹ 15 lakhs. In addition to that the British and the Sikh governments were entrusted with the power of jointly controlling the external relations of Afghanistan (Singh, 1982, pp. 362-363). As evident, it was the Russian scare that has driven the British to the tripartite alliance and bought the friendship of the Sikh state of Punjab under Ranjit Singh in an attempt to bring Punjab, north western frontier and Afghanistan under their sphere of influence.

With the demise of Maharaja Ranjit Singh in 1839 and the state of Punjab falling into instability with heightened internal feuds, the British designs over Punjab changed. Not only, they started advocating the restoration of Peshawar to Shah Shuja, but even stopped the Sikh governor of Peshawar from collecting tax (Schofield, 1984, p. 83) (Singh, 1982, p. 327). The British also started to gather war material in Cis-Sutlej territories particularly at Ferozepur cantonment and strengthened the garrison over there. In Multan, the British tried to purchase the grain without the consent of Diwan Sawan Mall. In resentment Diwan Sawan Mall ordered the people not to sell any grain to the British officers (Singh, 1955, p. 27). But Maharaja Kharak Singh intervened and issued a letter to Diwan on August 19, 1839 to co-operate with the British and let them purchase the grain. Later Sawan Mall started constructing a small fort at Mithan Kot as a precautionary measure as the British line of advance from Sindh to Afghanistan was near to his territory (Singh, 1955, pp. 27-28). In 1841, when the Sikh army conquered Iskardo and marched upon Tibet, the British Government resented this move and interfered in the expansion of the Punjab state. The British forced them to retreat to Ladakh and sign a treaty in October 1841 whereby Maharaja Sher Singh agreed not to extend his influence across Ladakh (Majumdar, Majumdar, & Ghose, 1963, p. 1060). The political relationship between the Sikh state and the British by all indications was entering into a turbulent phase.

Despite these differences, the Sikh State of Punjab under Maharaja Sher Singh contributed more than 50% of troops in the First Anglo-Afghan war. This was acknowledged by Henry Lawrence in a letter to J. C. Marshman, an English journalist and historian, dated April 11, 1842. While Maharaja Sher Singh fully co-operated whole heartedly to British in the Afghan war, but the voices to annex the Sikh Kingdom were started to reverberate in British administrative circles. In addition to that, British were promoting internal dissection in Lahore to destabilize Sher

Singh. It was evident from the fact that the former were involved in corrupting the officers of Sher Singh against him, with the promises of territories sliced out of his kingdom to them. Raja Dhian Singh and Gulab Singh were encouraged for the division of the Punjab state. Lal Singh and Tej Singh also joined the British machinations against Punjab. In this manner, British intrigues in Punjab reached a climax as these people "betrayed the cause of Punjab" (Singh, 1955, pp. 29-33).

In 1843, Lahore submerged into a state of anarchy with the murders of Maharaja Sher Singh and his son Prince Partap Singh, and Raja Dhian Singh by Sandhawalia Sardars. The situation got further deteriorated as the Sikh army's loyalty was purchased by slain Dogra chief's son Hira Singh against the Sandhawalia Sardars. Thus factionalism and disintegration came to the forefront in the state (Khilnani, 1972, pp. 8-9). British were certain that such heightened political turmoil will make Punjab's way into the British Indian Empire. Ellenborough, Governor General, wrote to the British Queen on October 20, 1843 that "it is impossible not to perceive that the ultimate tendency of the late events at Lahore is, without any effort on our part, to bring the plains first and at somewhat later period hills under our protection or control" (Singh, 1955, p. 41). Ellenborough also wrote to the Duke of Wellington that "time cannot be too far distant when the Punjab will fall into our management" as in the existing situation he saw the possibility of hills being ruled by the Dogra chief Gulab Singh and the plains by the Sikhs and eventually Multan breaking away (Singh, 1955, p. 42) (Edwardes, 1961, p. 499).

Strategically, the Empire in which an alien minority rules cannot tolerate anarchy on its frontiers as chaos were never respecter of boundaries and cannot be held at borders (Chopra, 1996, p. 301). The Russian scare in the back of their mind, British did not want an instable frontier which would welcome external advances. Therefore, Ellenborough increased the strength of the British troops in Cis-Sutlej particularly at Ludhiana and Ferozepur. He also constructed a supply Depot at Basian near Raikot and also made arrangement for pontoons at Ferozepur to cross Sutlej. Sir Henry Hardinge who replaced Lord Ellenborough, increased the strength of troops and ammunitions further, from 17,612 to 40,523 and guns from 66 to 94 (Singh, 1955, pp. 50-53). After the annexation of Sindh, these preparations seen as an 'encirclement' of Punjab by the British. It heightened the threat perception of the Sikh Army which led to First Anglo-Sikh war in 1845-46 (Schofield, 1984, p. 83). The

War was lost by the Sikh army because of the treachery of the Prime Minister Lal Singh, the Commander-in-Chief Tej Singh and the governor of Jammu Raja Gulab Singh (Singh, 1955, p. 56).

The consequent treaty of Lahore was signed on March 9, 1846 that crippled the Punjab state economically and militarily by restructuring it. Governor General Hardinge was successful in reducing the Sikh army to 32,000 troops- 20,000 infantry and 12,000 cavalry; territories between Beas and Sutlej River were annexed- both in the hills and the plains; payment of one and half million was taken as war indemnity or Kashmir and Hazara had to be ceased by the Company; surrender of guns that was not captured in war; and control on the rivers Beas and Sutlej up to Mithan Kot, where Sutlej confluence into Indus (Khilnani, 1972, p. 18). Later, Kashmir and Hazara was annexed by the Company and handed over to Raja Gulab Singh of Jammu (Rawlinson, 1948, p. 73). By annexing the richest portion of Punjab Kingdom i.e. Jalandhar Doab and hill states, Hardinge rendered the Punjab state economically weak, apart from destroying its political existence. He also broke the military strength by reducing the strength of troops and by capturing the guns in an attempt to make sure that the British don't face any serious threat from them in the future (Khilnani, 1972, p. 18). The treaty of Lahore trifurcated the Punjab- hill tracts between Indus and Beas including Hazara and Kashmir placed under Raja Gulab Singh; plains between Sutlej and Beas including trans-Beas areas of Kulu and Noorpur placed under commissionership of John Lawrence; and the plains between Beas and Indus under Maharaja Dalip Singh. As Dalip Singh was an infant, Punjab was governed by Rani Jindan and his Prime Minister Lal Singh (Khilnani, 1972, pp. 24-25). As it happened in the case of many Princely states, in the guise of supporting the government of infant Maharaja Dalip Singh, Henry Lawrence became the 'Resident' till the end of the year and stayed at Lahore along with his British troops to keep the Kingdom under his control and dictate it policies.[8] Subsequently, the treaty of Bhairowal was signed on December 16, 1846 whereby a Regency Council of eight members was constituted, which was headed by Henry Lawrence to oversee the administration. The treaty also allowed the maintenance of British

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[8] Residency has been an important instrument of colonialism in India (See for discussions from different contexts, Kooiman (2002) and Ramusack (2003).

garrisons in the state for another eight years (Roberts, 1921, p. 339). Henry Lawrence became the real ruler of the Sikh Kingdom and the true successor of Ranjit Singh as J. C. Marshman depicted in 'History of India'. The Bhairowal treaty bestowed upon the Henry Lawrence 'to look after the tranquility and peace of state during adolescence age of Maharaja Dalip Singh'. He was vested with unlimited powers in all matters of external and internal nature. Thus internal and external independence of Punjab state ceased to exist and it had been reduced to a just a political expression (Khilnani, 1972, p. 66). The political authority has been stolen from the state and the crown became hollow.[9] There were adjustments and balancing acts as part of the colonial expediency from time to time. On July 3, 1847 for instance, Hardinge instructed Henry Lawrence to pay attention to the feelings of the people, to preserve the national institutions and customs and rights of all classes (Khilnani, 1972, p. 67). Thereafter Henry Lawrence directed his sub-ordinates to extend equal rights to all the religions and align with none of them (Talbot, 1988, p. 67).

Henry Lawrence viewed the existence of Punjab, as a buffer between the "savaged" tribal regions of north-western frontier of Indian sub-continent and the East India Company's territories, extremely beneficial (Khilnani, 1972, pp. 68-69). The hilly and turbulent frontier of Punjab caught the attention of Lawrence whereby he started the work of 'civilizing' the frontier society along with his famous staff of 'frontier officers'- his brothers George and John Lawrence, Abbott, Nicholson, Edwardes, Hodson and Lumsden (Roberts, 1921, p. 339). In 1846, Henry Lumsden raised an irregular corps of troops, both cavalry and infantry, known as the 'Guides' to support the army by providing intelligence about the activities of tribes (Elliott, 1968, p. 102). At Bannu, Edwardes changed the Sikh policy of collecting the revenue by introducing anti-plunder regulations and peacefully collected the tax. Within short span of time, he successfully persuaded the tribes to destroy their forts, somewhere around four hundred in Bannu. His rapprochement with tribes helped him during the Second Anglo-Sikh war, when he marched upon Multan with tribesmen (Schofield, 1984, p. 85). Even a Sikh regiment was raised in the southern Punjab in 1846 as the first Anglo-Sikh war brought out the fighting qualities of Sikhs especially as gunners and

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[9] See Dirks (1987) for a discussion on this hollowing process as it happened in South India

engineers (Elliott, 1968, p. 103) (Roberts, 1921, p. 338). Besides these, crusade against social evils like punishment by mutilation, Sati, and female infanticide was initiated (Roberts, 1921, p. 340). The dominance of the British over the tribal region was ensured through the multiple strategies of coercion and persuasion by generating significant amount of consent from the dominated population.

Different from Lawrence's policy of hollowing the crown and driving the administration from the back seat, apart from civilizing the tribal groups in the frontier, his successor Frederick Curie wanted to annex the Punjab. The idea received the support of the then Governor General Lord Dalhousie. He created the circumstances for the Second Anglo-Sikh war by removing Governor Mulraj from Multan which led to start of disturbances in Multan, subsequently spreading to other parts of the state. As narrated already, this war was lost by the Sikhs and subsequently Punjab was added to British dominion on March 29, 1849 (Singh, 1955, pp. 106-109). Maharja Dalip Singh was pensioned off in return for relinquishing his title, claim and right over Punjab and even of his heirs and successors. He was put under the tutelage of Dr. John Login and sent to England in 1854 after converting him to Christianity. The treasure of Lahore kingdom was confiscated and valuable articles and jewels were sent to England. Even the famous 'Kohinoor Diamond' which Maharaja Ranjit Singh apparently got from Afghan King Shah Shuja, was presented to Queen of England. Many of the historical and antique goods were sent to the East India Company's Museum (Yadav, 1976, pp. 186-187).

The annexation of Punjab brought the British to two separate problems. The first being the imperial problem due to the rapid Russian expansion into the Central Asia towards the Afghanistan borders, particularly after their defeat in Crimean war (1853-56). This Crimean war also dimmed the chances of an agreed Anglo-Russian policy for Central Asia. The second problem was of local nature due to the 'savage' Pathan and Baluch tribes who were residing in hills and valleys between Indus and Afghanistan. They were posing considerable threat to the British trade interests in the region too, as the 'warlike tribes' were accustomed to drive toll from trade caravans apart from making incursions into the Punjab plains for their livelihood (Thompson & Garratt, 1934, pp. 499-500). The local problem was seen as of small-scale and as preventable as the tribesmen in the valleys between Afghanistan and Indus have neither the numbers nor the organization to penetrate far into Punjab

unless supported by their Indian co-religionists or by invading Army from Central Asia. The British were confident that this problem could be fixed by establishing settled government on the near side of the passes in Punjab. Holistically speaking, however, these problems cannot be divorced from each other as the troubled North Western Frontier and Afghanistan impacted upon the British Indian trade with Central Asia and above all seemingly a great danger to security of British India (Thompson & Garratt, 1934, p. 508).

After annexation, the British intentions was to pacify the Punjab and integrate Punjab into the thread of British Empire. Governor General Lord Dalhousie disarmed the Punjab and turn its "warlike people" towards peaceful business mainly into agriculture as farmers or peasants, under the rule of East India Company (Rawlinson, 1948, p. 79). A Board of Administration with three members was constituted to govern the newly acquired province. Sir Henry Lawrence was its President and looked after the political affairs, which included negotiation with the Sikh chiefs, the disarming of the country side, and raising the new regiments of local people. Lawrence was assisted by his brother John Lawrence and Charles Mansel who took care of the settlement of land revenue and judiciary respectively. In 1851 Charles Mansel was replaced by Robert Montgomery (Roberts, 1921, p. 345). The Board of Administration right from the beginning was focused on the subjugation and suppression of "warlike people" of the Punjab and in totality, destruction of all anti-British elements from state, with the help of 60000 soldiers and 15000 policemen. The first act that Board performed was liquidation of the Sikh army, concomitantly with the disarmament of the people (Ghai, 1986, p. 18) (Malik, 1983, p. 180). All kinds of weapons were annexed from the people of Punjab, except in the Peshawar (Rawlinson, 1948, p. 79). The Sikh chiefs who abstained from taking part in war were let to settle in their hereditary village with a suitable pension according to their rank (Latif, 1891, p. 573). Nearly 50000 of Sikh soldiers were disbanded and pensioned off. This would have led to unemployment and distress in the state, which would have further created problems of disenchantment and dissents for the British (Ghai, 1986, p. 18) (Malik, 1983, p. 180). To give them employment, Punjab Irregular Force (Piffers) was raised by Sir Henry Lawrence with three Mountain batteries, five regiments of Cavalry, and five regiments of infantry, and placed under the control of Board of Administration. Significant number of the

Figure 2.3: Frontier Districts and tribal territory
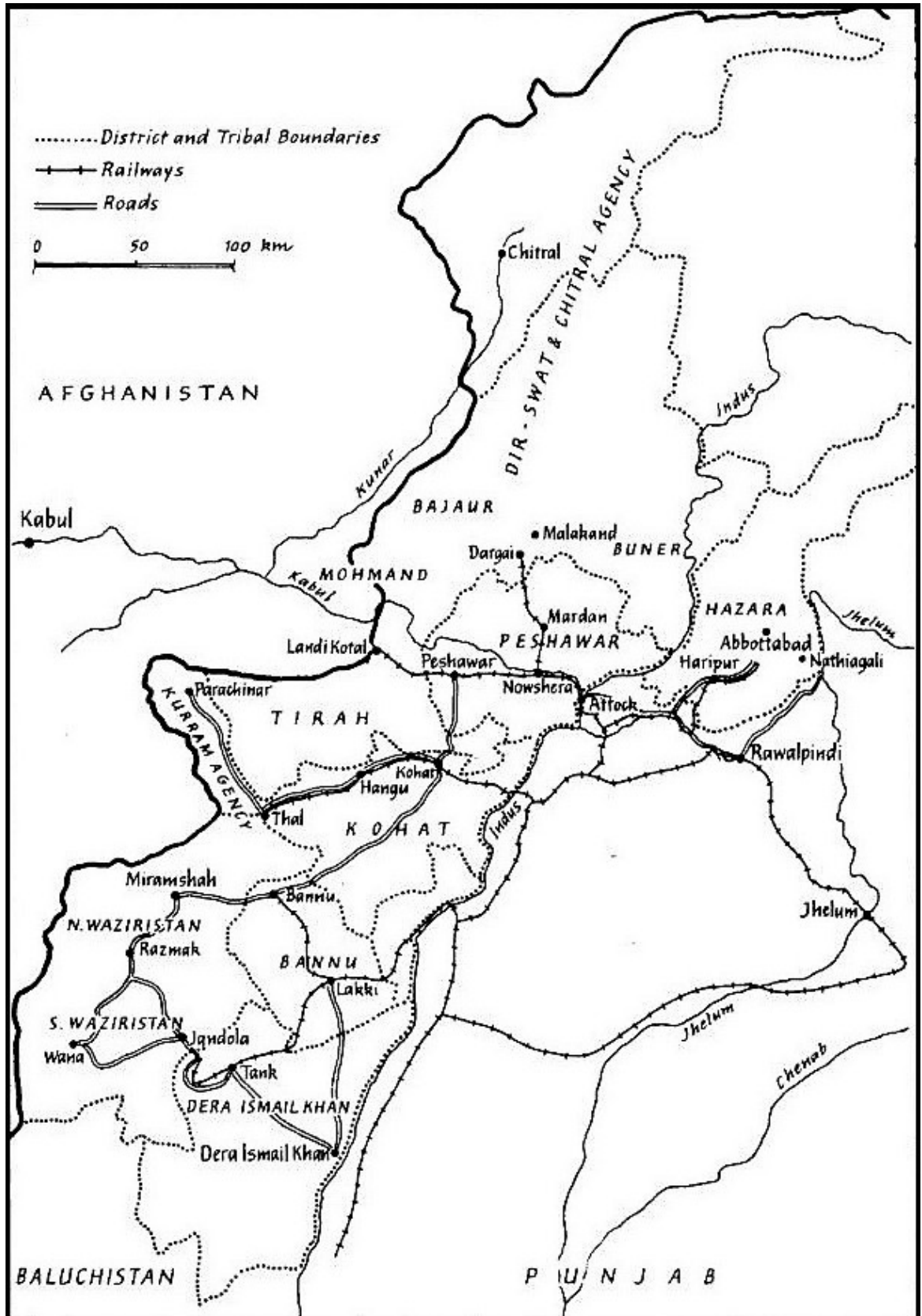
Source: (Schofield, 2010, p. 169)

disbanded soldiers of Sikh army made their way into the Piffers. It was primarily raised to protect the British subjects from attacks of marauding bands, to keep trade routes trouble free, and as far as possible to secure peace at borders and to maintain law and order in the frontier districts. To support them a chain of forts and garrisons were constructed along the border and were connected by the military roads (Latif, 1891, p. 575) (Davies, 1932, p. 22) (Elliott, 1968, p. 103). Later in 1866, the title of Piffers was changed to 'Punjab Frontier Force', which was mainly recruited from Sikhs, Pathans, Gurkhas, and Punjabi Muslims (Davies, 1932, p. 240). In 1851 four battalions were added to Sikh Infantry that was raised from southern and cis-Sutlej Punjab in 1846. In this way, British succeeded, not only, in controlling the Sikh army, but recruited them for their service (Elliott, 1968, p. 1). In 1852 just after three year of the second Anglo-Sikh war, the Sikh regiment even volunteered to go to Burma and fight under the British flag (Ghai, 1986, p. 22). The loyal 'Punjab Frontier Force' was proved even so helpful in crushing the mutiny of 1857 apart from Burmese war (Khilnani, 1972, p. 171).

Thorburn (1904) pen downed that Lord Dalhousie, from the outset, wanted to make Punjab a profitable possession for the British. So he wanted to stop at the left bank of Indus as he and John Lawrence considered the trans-Indus territories as bad investment and 'worst legacy' of the Sikh rule. However, later he retained it apparently for the sake of honor (Thorburn, 1970, p. 288). The trans-Indus territories, dominated by tribes, became regular part of Punjab province in 1850 when these districts were formed into a Division under a Commissioner (Gupta, 1976, pp. 2-3). Of the frontier districts of the Punjab, Hazara, Peshawar and Kohat were brought under the Commissioner of Peshawar; and Dera Ghazi Khan, Dera Ismail Khan, and Bannu under the Commissioner of Derajat. But all the contacts with the frontier tribes were made through local chiefs who liaised with political officers and tribes (Schofield, 1984, p. 87). Lord Dalhousie didn't extend the boundaries of Punjab beyond the Sikh conquest and respected the independence of trans-frontier tracts. But soon the regular tribal inroads into Punjab territories rendered the Guide Corps and the Punjab Frontier Force helpless in curtailing the tribal raids (Nijjar, 1996, p. 62). The responsibility fell upon the John Lawrence to intervene and respond to the challenge. The possible options were two: first, annexation of tribal areas into Punjab, so that the frontier would be extended beyond

Sikh frontier to the western side of mountains; and the other, a policy of non-intervention in tribal affairs except punitive action against the tribal raids. John Lawrence did not depend on force to preserve the tranquility on the border, but was conciliatory to give allowances, subsidies, grant of land etc. to win over troublesome sections of tribes (Nijjar, 1996, p. 63).

The Board of Administration first adopted defensive measures, which was followed by conciliatory steps to show the benefit of friendly relations to the tribesmen. The measures like permission to conventional trade, provision of medical treatment and other assistance to tribesmen were taken with a motive to pacify them and to promote friendly relations. The Punjab administration also restricted its officers from entering into tribal territories, which was strictly followed for next 25 years, except in the time of punitive action, as tribals love their independence and didn't like interference in their way of life (Dodwell, 1932, p. 450). At the same time, the tribesmen were allowed to trade within the British Indian Empire. The various conciliatory methods were adopted for securing these objectives including the abolition of all the frontier duties and capitation taxes. A system of complete freedom of trade was instituted and commercial integration was encouraged which was declined due to heavy taxes during Ranjit Singh reign as traders adopted southern route through Gomal Pass and Bolan Pass instead old route via Khyber Pass was abandoned (Arrora, 1930, p. xxiii) (Davies, 1932, p. 23). Even trade fairs were held for exchange of goods and commodities on regular intervals. The physical infrastructure which was necessary to promote commerce like roads from the passes to nearest bazaars was constructed. Thus, Powindah trade (a trade carried by well-armed *Ghilzai* tribe) increased in the Punjab. The traders brought items from Afghanistan, Persia, and Central Asia to sell in Punjab and in return, purchased the Indian items to sell in Central Asia and Afghanistan.[10]

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[10] The major exports from Punjab were English cotton piece goods, silks of all sorts, Chintzes, European colored clothes, merinos, velvets, copper, tin, tea, cardamom, pepper, betel nuts, sugar, country muslin, indigo, dried ginger, borax, ammonium salt, potassium carbonate, turmeric, pewter, salt, steel, gun powder, and various medicines. Imports to Punjab included silk, horses, drugs, manna, wool, gold coins, furs, gold and silver wire and thread, Persian carpets, currants, turquoises, antimony, quince seeds, saffron, goat hairs, pistachio nuts, dried grapes, almonds, pomegranates, melons, grapes, pears, apples, asafetida, dried apricots, cinnamons seeds, sheep skins, camel hair,

Steamer communication was established up to upper Indus to facilitate trade and commerce. Hospitals and dispensaries were established at various points along the frontier to provide medical treatment to the tribesmen. Tribal *Maliks* (tribal leaders) and Jirgas (assembly of tribal elders who took decisions by consensus) were encouraged to come for settlement of their disputes in their own way within the British territory, in order to develop the peaceful relations with the tribesmen (Dodwell, 1932, p. 451). Further, attempts were made to colonize wastelands in Punjab by settling the families from across the borders, as tribesmen had very limited fertile land to live peacefully from the cultivation, because of which they plundered the neighbouring Punjab plains and took toll from caravan traders passing through their territory (Thompson & Garratt, 1934, p. 500). Therefore, colonies of Afridis, Wazaris, Gurchanis, Bhittannis and Bugtis were created to make them agriculturists in Punjab and other parts of British India (Davies, 1932, pp. 23-30). This was coincided by creation of strong policing, surveillance, and judicial mechanisms to make the anti-social elements docile citizens through coercive measures. The creation of Punjab Frontier Force gave employment to many soldiers, but many of the disbanded soldiers who were loyal to old regime apparently resorted to dacoity and robbery. To curb their "anti-social activities" and to "protect the public from their menace," the local revenue collectors and Tehsildars were given the additional duty of policing in their Jurisdiction (Khilnani, 1972, p. 175). A separate police force was also created to support them. These endeavors of the British, justified for maintaining tranquility and peace, was further facilitated by a sound judicial system. The judicial system was projected as based on simplicity of courts, their cheapness, accessibility, promptness, exclusion of pleaders, and the recognition of Village Panchayats. It is pointed out that the procedures were kept so simple that even a person could plead his own cause against his opponents, and prosecute and conduct his defense. The Tehsildars were also given judicial authority in addition to police authority as they had local knowledge, insight into character of local people, and local norms of justice (Khilnani, 1972, pp. 176-177).

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cloaks, drugs, madder, sheep wool, liquorices, rice, ghee, sarsaparilla gum, Arabic mint, Rhubarb and fruits (Arrora, 1930) (xxv).

2.6 THE UPRISING OF 1857 AND THE PUNJAB

The year 1857 brought the vulnerabilities and fragilities of the empire dependent on the local mercenary army. It shorn off the core structure of the empire on which it was depended and sustained the monopoly over the military power in India. The rebellion engulfed the most of the north and central India from Delhi to western Bihar that started on May 10. The simmering grievances and apprehensions related to loss of foreign allowances in posting to Punjab and Oudh, liabilities of overseas posting irrespective of caste under General Service act 1856, and concerns about loss of favoured position to Sikh and other recruits from Punjab, were the causes of the outbreak of mutiny (Yong, 2005, pp. 40-42). The criticality of the situation could be judged from the fact; the only force available at disposal of the empire was 23000 European troops of the Bengal Army, around half of them were station in Punjab. The reinforcement from Britain would take six months to come; on the other hand, British had doubt over the loyalties of the Madras and Bombay armies. The task of regaining the lost territories fell on the John Lawrence, its chief commissioner, who had twelve regiments of around 10326 European soldiers and 13430 men of Punjab Frontier Force irregulars (Yong, 2005, pp. 43-44). John Lawrence had to deal with three way challenge; had to guard its frontier from tribes living on the frontiers, securing forts and arsenals from the Bengal Army, and sent reinforcement for the Delhi and other centres of mutiny.

The constructive works started since the annexation to pacify the people of Punjab strengthened the British hands during the 1857 Rebellion like during the Burmese war and Crimean war (Rawlinson, 1948, p. 81). By the time of the 1857 rebellion, the abundant harvest, flourishing trade supported by good judicial system had put the people in to comfort (Nijjar, 1996, p. 71). Punjab largely didn't support the Rebellion but helped the British to suppress it. During the Rebellion, most of military centers and cantonments in Punjab were held by native troops of Bengal Presidency (Bengal Army). The strategic centres were secured like forts of Phillaur and Govindgarh in central Punjab, Lahore with its fort and arsenal, and Ferozepur with its arsenal of 7000 barrels of gunpowder and armoury of weapons. Almost 13000 men of 18 native infantry and cavalry regiments were peacefully disarmed at Amritsar, Lahore, Jhelum, and Multan (Yong, 2005, p. 44). During the mutiny, twelve regiments rebelled in Punjab. Overall, Lawrence disbanded 36000 men whose

sympathies lies with fellow Mutineers with the help of 'Punjab Irregular Frontier Force' (Nijjar, 1996, p. 70). The urgent call for reinforcement from Delhi was heeded by Lawrence by sending twelve regiments composed of Europeans, the Guides, 4th Sikhs, 1st Punjab Infantry, 1st Punjab Cavalry, and two squadrons of the 2nd and 5th Punjab cavalry. But British required more as demanded by the Delhi Field Force commanding officer General Arthur Wilson (Yong, 2005, p. 45). John Lawrence resorted to recruitment from the Punjabi people in middle of 1857. For that he followed the strategy that was:

> In a manner reminiscent of Ranjit Singh's army some decade before, not to allow preponderance of armed force to any one particular group of Punjabis. Consequently, the composition of the new force came to be a mixed one, comprising Sikhs from the central Punjab, various tribes of Muslims from the western Punjab (which had little in common except religion), Pathan and Baluch tribes from the frontier, hillmen and Punjabi Hindus (Yong, 2005, p. 47).

All these recruitments provided a tactical advantage to empire of peaceful environment in Punjab and reduced the threat of internal uprising. For example, Chieftains of Tiwana tribes of Shahpur district were encouraged to enlist 1000 horsemen; among them many headmen of the villages joined the levies who had relations with these Chieftains that provided them guarantee of peaceful behaviour in the district and its environs. This kind of recruitment into Punjab Frontier Force channeled their energy outwards from Punjab. By the year ends, 18 new infantry regiments of 34000 men were raised along with 16000 levies for local security in Punjab to keep an eye on the Bengal army's leftover elements in the Punjab (Yong, 2005, p. 48). The princely states of Punjab also provided troops to the British for the imperial defense of Punjab and Delhi. The Rebellion was suppressed by end of the year.

The Uprising reversed the policy of demilitarization followed by the Board of administration in Punjab after the merger of the Punjab into empire. Punjabis were rearmed and rewarded with employment in the Bengal Army. The troops raised during the Rebellion were recruited into the Bengal army. The rewards in term of territories were bestowed upon the rulers of princely states for their support. Delhi

and Hissar were incorporated into Punjab (Thorburn, 1970, pp. 197-210) (Nijjar, 1996, pp. 70-88).

2.7 EXIGENCIES OF GREAT GAME AND TRIBAL UPRISING

Great Game, which started to occupy British imagination in the second quarter of 19th century, attained some substance of reality with the expansion of the Russian Empire in the east and the south-east directions towards the north-west of Indian sub-continent in 1860. The British dominion already reached its limit in the Indian sub-continent with the annexation of Punjab till the base of Afghan mountains. Whereas, the Russians were on an expansion spree towards the south-east largely due to political vacuum in Central Asia, the same way as the British Empire reached the north-western frontier of India by making use of the political situation in the sub-continent (Chopra, 1996, p. 300). In 1860 Khokand, in 1865 Tashkent, Bokhara in 1866, Samarkand in 1868 and Khiva in 1873 were absorbed by the Russians, which brought them on to the bank of River Oxus (Amu Darya). The Russian occupation of Central Asian Khanates pushed the Amir of Afghanistan Sher Ali to negotiate a definite treaty with Viceroy Lord Northbrook, but the Liberal government under Gladstone did not change the policy of non-intervention. However, the British approached the Russians for negotiations to keep some territories neutral in Central Asia between them in the same year as an Anglo-Russian clash looked very much possible in near future (Schofield, 1984, pp. 93-94) (Edwardes, 1961, p. 545) (Chopra, 1996, p. 300). With this aim, the British tried to mark the northern boundary of Afghanistan for which Russia loosely agreed to be the Oxus River (Schofield, 1984, pp. 93-94). Thereafter the focus of the British was directed towards maintaining the independence and integrity of Afghanistan (Lyall, 1929, p. 294).

In 1874, Benjamin Disraeli's Conservative Party formed a government and non-intervention policy relinquished. The Viceroy Lord Northbrook was instructed to suggest the Amir Sher Ali to accept the stationing of the British Resident in Kabul and Herat, which the former was not keen to do but resigned for Lord Lytton to succeed him (Chopra, 1996, pp. 302-303) (Edwardes, 1961, p. 545). Lytton was a true imperialist and a protagonist of Forward policy. On the one hand, he started pushing Amir Sher Ali for definite alliance, which the later earlier sought in 1873, but with a condition to accept British mission at Kabul. At the same time, he took the

control of Quetta and Bolan Pass by an arrangement with the Khan of Kalat (Thompson & Garratt, 1934, p. 515) (Chopra, 1996, pp. 302-303). The occupation of Quetta perturbed the Sher Ali as it enabled the British to command the road to Kandahar and helped them to construct railway network (Schofield, 1984, p. 94) (Edwardes, 1961, p. 546).

In 1878, the international political events took such a shape that the second Anglo-Afghan war became imminent due to the refusal of Britain to accept the treaty of San Stefano signed between Russia and Turkey. British occupied Cyprus and sent an expedition of Indian troops to Malta. Russia replied this move by increasing pressure on India by sending envoy to Afghanistan, who was warmly received by Sher Ali (Edwardes, 1961, p. 545). However, the envoy was recalled by Russia from Afghanistan as the pressure was eased out in Europe with the signing of Berlin treaty (Chopra, 1996, p. 303). Nevertheless, Lytton and Cranbrooke, then-Secretary of State wanted to use this opportunity to push their Forward Policy. Lord Lytton had viewed that "Afghanistan is a state far too weak and barbarous to remain isolated and wholly uninfluenced between two great military empires such as England and Russia" (Magnus & Naby, 1998, p. 34). He added that "so we cannot allow Sher Ali to fall under the influence of any power whose interests were hostile to our own…A tool in the hands of Russia, I will never allow him to become. Such a tool; it would be my duty to break before it could be used" (Schofield, 1984, pp. 93-94).

British sent a mission to the Afghanistan under Neville Chamberlain that was not received by the Amir and became the immediate reason for the start of Second Anglo-Afghan war in November 1878. The British forces entered into Afghanistan from three routes Kurram, Khyber and Quetta and by early 1879 they gained hold over Jalalabad, Peiwar Kotal near Kurram and Kandahar. Sher Ali sought Russian help, but it did not come through as the Russian interests changed due to the signing of Berlin treaty (Schofield, 1984, p. 95). He left Kabul for Petersburg but died at Mazar-e-sharif and succeeded by his son Yakub Khan who signed the 'treaty of Gandamak', whereby all the commanding routes to enter Afghanistan came under the control of British, apart from the Afghan ruler receiving the British envoy, Sir Louis Cavangiri (Magnus & Naby, 1998, p. 35). This treaty not only allowed the British to keep their envoy to control the Afghan administration, but also the Afghan ruler had to surrender territories of Khyber, Kurram, Pishin and Chaman (near

Kandahar) and full control of foreign affairs to the British (Schofield, 1984, p. 96). However, Yakub Khan abdicated the throne after the murder of Cavangiri. General Robert occupied Kabul in consequence to this and subsequently made Abdur Rahman new Amir of Afghanistan. In succeeding events Ayub Khan who had control over Herat attacked Kandahar and defeated the British forces decisively. In retaliation, a relief force was sent comprising 24th and 25th Punjab Infantry; and 2nd, 3rd and 15th Sikhs infantry and 3rd; and 5th Punjab Cavalry to recover the lost ground. Ayub Khan was defeated (Swinson, 1967, pp. 170-196).

Punjab contributed significantly into the second Anglo-Afghan war. Overall the Punjab states of Kapurthala, Bahawalpur, Nabha, Patiala, Jind, Faridkot and Sirmour had contributed 3000 infantry, 1000 cavalry and 13 Guns. These contingents' conduct earned them praise from the Viceroy Lytton even though they were primarily employed for duties of holding Line of Communication, garrisoning of posts, and providing escort to convoys (Arora, 1976, p. 254). In April 1880, Gladstone again came to power in England and replaced the Lytton with Lord Ripon who recognized Abdur Rahman (grandson of Dost Mahommad and nephew of Sher Ali) as new Amir of Afghanistan. He also granted him an annual subsidy, but retained all the territories gained by the treaty of Gandamak. He also agreed to keep the British interest in matters of foreign policy. Lord Ripon withdrew British troops to Quetta but kept the control over Khyber and Kurram passes (Edwardes, 1961, p. 547). After that British abandoned the policy of 'Forward School' of acquiring 'scientific frontier' of the Hindu Kush Mountains and concentrated largely on tribal territories of Punjab, which constituted first line of defense on the borders of India. This subsequently led to demarcation of Indo-Afghan border by Sir Mortimer Durand (1894-96) to check Afghanistan king's interference in the tribal affairs of frontier tribes. Furthermore, political agencies were created under the charge of political agents for the defence of frontiers, and to liaise with tribes at Kurram, Malakand, Tochi, and Wana, between 1892 and 1896 (Majumdar et al., 1963, pp. 1005-1007). These were created as a part of Punjab frontier and was too long and mountainous to be defended by military alone (Dodwell, 1932, p. 451).

Figure 2.4: Places of Turbulence during Great Game
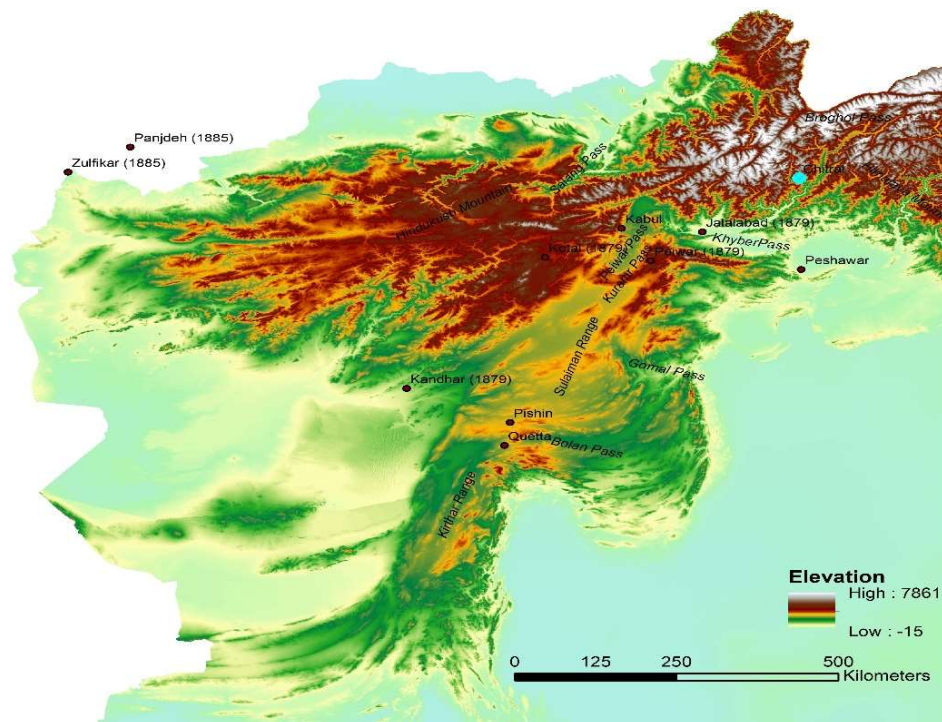
The Russians, on the other hand, apparently resumed their policy of expansion in Central Asia, which was in a sense a consequence of Second Anglo-Afghan war. It resulted in the occupation of Merv in February 1884 by the Russians which was resented by the British, as it lay only 130 miles from the Afghanistan border. In desperation the British forwarded the idea of demarcating the Afghanistan and Russian Empire borders. The Russians accepted this offer. A Border commission was accordingly appointed under General Peter Lumsden and General Zelenoi (Swinson, 1967, pp. 197-199). Against the spirit of the commission, however, in March 1885, the Russians took control of Panjdeh and Zulfikar pass from Afghans which brought Russians and British on the verge of war (Edwardes, 1961, p. 547). During this crisis native rulers of Punjab states came forward to render help for the imperial defense posed by the Russian advance, an offer politely declined by the British authorities (Arora, 1976, p. 254). The war was somehow averted as Russia gave back the control of Zulfiqar Pass to the Afghans, though kept the Panjdeh with them (Edwardes, 1961, p. 547). Subsequently boundary from Oxus River to Zulfiqar Pass was drawn and was accepted by Abdur Rahman and later by Lord Salisbury and Monsieur de Staal in September 1885 (Swinson, 1967, p. 202). In 1892, a dispute again emerged between Russia and Britain with the Russian claim over the

whole Pamir Range. The Russian agents visited the Chitral (a princely state in North of Peshawar and west of Gilgit) and subsequently the Russian foreign office and war office sought to extend their dominion over the whole of Pamir range. However as a result of negotiations and the signing of the convention of 1895, Russia accepted the Oxus (Amu Darya) as southern limit of its empire (Dodwell, 1932, p. 426).

Subsequent to the Panjdeh incident and after the demarcation of Russo-Afghan border, the British focused on laying the railway network in north-western Indian sub-continent to connect this region to the mainland India to move troops rapidly in event of any aggression from the Central Asian side. The defense of frontiers understandably took precedence over civilian and industrial matters (Swinson, 1967, p. 205). During the Panjdeh episode, a commercial and political contact was established with Aman-ul-Mulk, the ruler of Chitral in the north western area. Though the relation worked smoothly for the British till the death of Aman-ul-Mulk in 1892, the internal dissection thereafter occupied much of the British attention to Chitral apart from offering them assistance to strengthen their borders against any possible Russian onslaughts. His death set off a war of succession between his sixteen sons and his brother Sher Afzal, which provoked the British to interfere in this struggle. Aman-ul-Mulk was succeeded by Afzal-ul-Mulk (his Second Son) but he was killed by his Uncle Sher Afzal. He proclaimed himself as the ruler but later fled to Afghanistan as Nizam-ul-Mulk, the eldest son of Aman-ul-Mulk marched on the Chitral with the British support. He also had the support of the people of Chitral. Nizam-ul-Mulk became the ruler but he was killed by his younger brother Amir-ul-Mulk (Hopkirk, 1990, pp. 484-485) (Swinson, 1967, p. 208). Thereafter, Amir-ul-Mulk demanded his recognition as a ruler of Chitral from British which was delayed by the latter. So, he took the help of Umra Khan, the ruler of Swat, who later invaded Chitral. The British agent in Chitral Lieutenant Gurdon sent message about these happenings to Major George Robertson who was stationed at Gilgit. He hurriedly came there with only 400 troops which included 99 men of 14th Sikh Regiment of Bengal Native Infantry. He removed Amir-ul-Mulk and sent an ultimatum to Umra Khan to leave the Chitral. But situation turned against them when Sher Afzul joined with Umra Khan. Thereafter seeing the graveness of situation, Robertson and his men took shelter in Chitral fort. Sher Afzal and Umra Khan seized the fort for two

months. However, they fled due to arrival of relief force from Gilgit under Colonel J.G. Kelly and 1st Division of 1st Army from Naushahra under General Sir Robert Low (Swinson, 1967, pp. 208-209). After defending the Chitral in 1895, British retained it to build a road from Peshawar to Chitral passing through Malakand and Dir as it was too close to Russian posts in the environs of Pamir Mountains (Hopkirk, 1990, p. 499) (Swinson, 1967, pp. 234-235)

2.8 PATHAN REVOLT AND END OF THE GAME

In 1897 Pathan revolt started in the north western region of Punjab, which was an outcome of the forward policy that proved unpopular among tribes. The British not only increased the taxes but interfered with their customs and culture apart from demarcating the 'Durand Line' which affected the age old cross border linkages between Pathans in Afghanistan and north west frontier of Punjab (Swinson, 1967, p. 233). The revolt was started from the village Maizar in Tochi valley, where the escort contingent of Mr. Gee, a political officer, was attacked by Madda Khel Pathans while he was looking for a suitable place to set-up a levy post. The escort contingent consisted of 1st Punjab Infantry, 1st Sikhs and 21st Punjab cavalry and 6th Bombay mountain battery (Elliott, 1968, p. 339) (Mills, 1897, pp. 10-15). In the sudden attack 26 troops were killed and out of which 17 were Sikh. In a week's time, a Tochi punitive expedition force was composed, which included 1st Brigade comprising 1st regiment of Sikh infantry, 1st regiment of Punjab Infantry, 1st regiment of Punjab cavalry and No.3 Peshawar mountain battery of Punjab Frontier Force and 2nd Brigade which includes 14th Sikh Regiment of Bengal native Infantry, 1st regiment of Punjab Cavalry (Mills, 1897, pp. 19-24). While advancing to Maizar, British troops burnt a village Sheranna, where it was reported 12000 Pathans gathered to give them resistance. Subsequently, they marched towards Maizar where all the fortifications and towers were destroyed. However the theatre of Pathan revolt shifted to Malakand and Chakdara where the British forces were again attacked and besieged by tribesmen (Mills, 1897, pp. 31-32).

In August 1897, under the influence of Fakir Saidullah (a religious priest, also known as Mullah of Mastun), tribesmen from Upper Swat, Buner, the Uttman Khel, and neighbouring places rebelled against the British occupations of tribal hamlets. The tribesmen attacked the British posts at Malakand and Chakdara simultaneously

(Mills, 1897, p. 35). The garrison of Malakand comprised 24th and 31st Punjab Infantry and 45th Sikhs regiment, apart from the Bengal lancers, the Madras Sappers & miners and Mountain battery with total strength of 3000. The troops at Chakdara included only two companies of 45th Sikh Infantry regiment and 11th Bengal lancers with a total strength of about 300. These forces took part in the defense of Malakand Pass and Chakdara (Mills, 1897, p. 38). At Malakand, the British successfully repulsed the Pathan tribesmen but in the meantime they were joined by 35th Sikh and 38th Dogra regiment of Bengal Native Infantry (Swinson, 1967, p. 237). Thereafter relief force was sent to Chakdara where the 45th Sikh Infantry regiment and 11th Bengal lancers, a cavalry regiment were defending the garrison from 10000 tribesmen (Mills, 1897, pp. 61-62). The Chakdara besiege was lifted by the Pathans as news of arrival of relief force reached. However they lost almost 2000 Pathan soldiers in this campaign. After relieving the Chakdara, the British sent a punitive expedition in Swat Valley. They had just experienced small skirmishes at Landakai and Kotah before securing the hold of the entire Swat Valley (Mills, 1897, pp. 64-84).

In North western frontier adjacent to Peshawar, 5000 Mohmands tribesmen attacked the Shabkadar fort in August 1897, which was successfully defended by available British force. But tribesmen set ablaze the Shankargarh, a cantonment bazaar. Shabkadar fort was 17 miles from Peshawar and hence force under Lieutenant Colonel J Woon consisting 20th Punjab Infantry, 13th Bengal Lancers, 61st Field battery and Somersetshire Light Infantry reached the fort on time. Alongside, three and half companies of 30th Punjab Infantry were sent as reinforcement to support the army. Tribesmen were subsequently expelled but 20th Punjab Infantry lost 7 soldiers out of total loss of 12 soldiers in this campaign. Thereafter the British called reinforcement from Naushahra and Rawalpindi to increase the strength of reserves at Peshawar (Mills, 1897, pp. 87-97).

In the meantime Kurram valley was taken over by the Pathan insurrection where Afridis moved from Tirah towards the Khyber Pass and secured the hold over Ali Masjid to Landi Kotal on 23rd August 1897 (Mills, 1897, p. 107). Subsequently, Orakzai (a Pathan tribe) joined the revolt and attacked the Mahomedzai fort, situated near the foot of the Ublan pass. The British sent reinforcement from Kohat, which included the 2nd Punjab infantry, 3rd Punjab Cavalry, and Royal Scots Fusiliers.

Tribesmen retreated with the arrival of these contingents from behind the scene (Mills, 1897, pp. 114-121). Subsequently, Orakzais attacked the Fort Lockhart, Saragarhi and Cavangiri at Samana Range; all were successfully defended except Saragarhi where 21 soldiers of 36th Sikh died while defending it (Mills, 1897, pp. 122-134). Thereafter a force which includes 20th Punjab regiment and 22nd Punjab infantry was sent from Peshawar against Mohmands, Afridis and Orakzais and all of them were subdued successfully (Mills, 1897, p. 147) (Majumdar et al., 1963, p. 1012). By the end of the year 1897, all the Pathan inhabited areas were secured under the control of British forces.

In 1901, Lord Curzon carved out the North Western Frontier Province from Punjab to bring all the tribal areas under the direct control of the British Indian Government. He reduced the troops in the forward posts but improved the connectivity of these posts laying railway lines and roads. Tribal levies to guard the frontiers were recruited (Majumdar et al., 1963, pp. 1016-1017). Besides these changes in Punjab, Lord Curzon also sent an expedition to Tibet to counter the increasing influence of Russians. Initially, Tibetans put some resistance but a treaty was signed in September 1904 at Lhasa (Dodwell, 1932, p. 427). Whereby, the two marts were opened at Gyantse and Gartok, all duties on trade to and from India were abolished, and Chumbi Valley remained under British control until the indemnity of half millions was paid to the British by Tibetans though in installments for war losses. The main point of treaty was that Tibetans agreed on the point not to accept agent of other states and lease their territories to them without the consent of British (Majumdar et al., 1963, p. 1063). Thereafter Lord Lansdowne, Foreign Secretary conveyed to Russian ambassador that the British would neither annex Tibet nor establish a protectorate over it, nor control its internal affairs, as long as no other European power interfere there. This was in response to the Russian ambassador's memorandum, when the British expedition set out for Tibet, that this expedition would force the Russians to take measures to protect its interests in those regions (Dodwell, 1932, pp. 427-428).

With dawn of 20th century, the Russia demanded that the Governor General of Turkestan should be placed in direct communication with the authorities of Kabul. In 1902, Count Lamsdorff even pointed out that he can't understand why the external relations of Afghanistan were exclusively managed by Britain. This was all

due to Russian consolidation in the Central Asia as they now have Trans-Caspian and Orenburg-Tashkent railways lines. However, after the Russian defeat in Russo-Japanese war, a new convention was signed on August 31, 1907 through which Russia accepted the Afghanistan as outside her sphere of influence and agreed to conduct her relations through the British Government; but both would have equal commercial facilities in Afghanistan. British also assured the Russians of having no intention to modify the political status of the Amir of Afghanistan. In the case of Tibet, both nations agreed to conduct their political relations through China and that they would not seek any concessions in the Tibetan territory (Dodwell, 1932, pp. 428-430) (Edwardes, 1961, p. 547). This was sounded like the death of the Great Game, a game of tension between Great Britain and Russia, involving too many small regional political players.

Figure 2.5: Places of Turbulence during Pathan Revolt
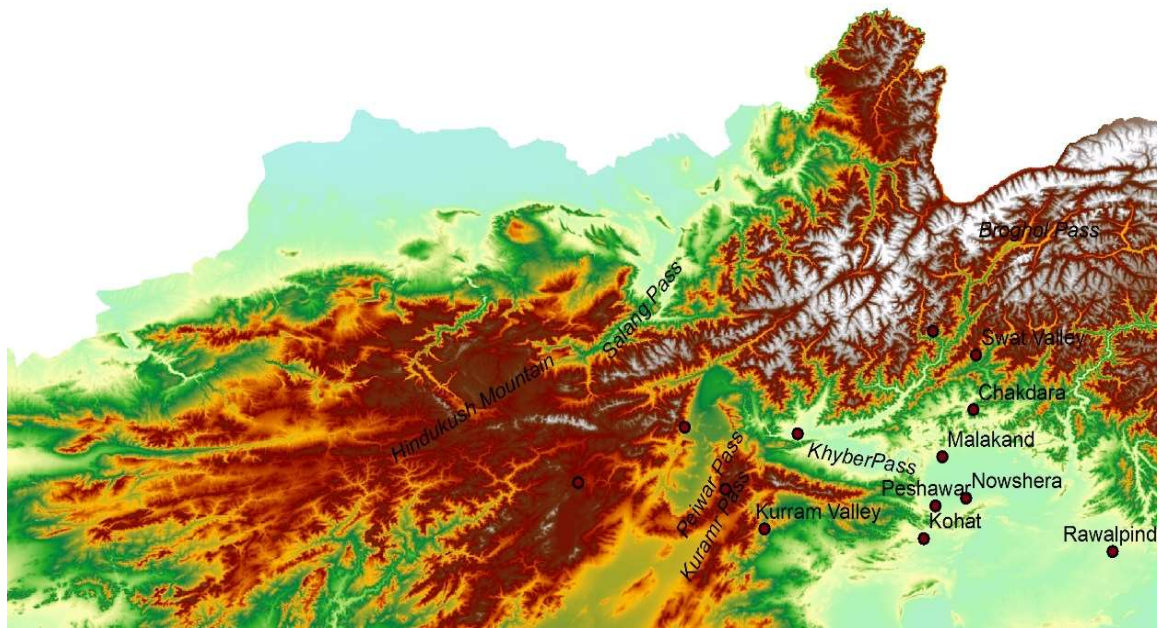
2.9 IMPERATIVES OF WORLD WARS: SWORD ARM AT THE SERVICE OF EMPIRE

In the World Wars 1914-1918, and 1939-1945, the people from the sub-continent were mobilized, for the war effort, by the empire. The strength of British Indian Army crossed the one million mark, and two and half million in these wars respectively-including non-combatants. The register of the Common Wealth War Grave Commission recorded that in these wars nearly 169700 men died from the Indian

sub-continent. In the First World War 80482, and 89218 in the Second World War lost their lives. The actual numbers of casualties were much more than that as there was no trace of missing soldiers who did not come back. The total count of casualties of the Sikh soldiers stood at 192050, out of which 109045 were injured and 83005 were killed (Holland, 2007, pp. 47-49). Punjab faced the most of the casualties due to large number of the enlistment of men from the province.

2.9.1 The World War I

During the First World War, the Punjab became a virtual "home front" for the British war effort, supplied the majority of manpower for the Indian Army, which fought in all the main theatres of the war in Europe, Africa and the Middle East. Although British Indian Empire was not directly involved as it was geographically far from the theatres of war. But slowly, the British Indian Empire also got implicated in the war. At start of war, the British Government of India intimated to the Home Government (Great Britain) that it could offer a maximum of two divisions of infantry and one cavalry brigade; stretching this limit would jeopardise its holds over the Indian empire. The raw figures explicitly highlighted the contribution of Indian sub-continent more than that initially committed by the government; that stands out as 138,000 to France, 675,000 to Mesopotamia, and 144,000 to Egypt (Eynde, 2014). In September 1914, two divisions of infantry of Lahore and Meerut divisions were sent to France and two divisions to Mesopotamia and Egypt after Turkey's entrance into the war. India contributed almost 80,000 combatants, more than visualized by authorities up to June 1915. To meet the ever increasing demands of reinforcement, Army department authorised the formation of 20 companies of 114 men each (Yong, 2005, pp. 100-101).

Punjab was naturally entrusted to meet the mobilization demand of British India Army from Indian sub-continent as being a preferred recruitment area since the mutiny of 1857. Leigh (1922) stated that by the end of the year 1914, 100,000 Punjabi's were serving in the army. Out of which 87000 of them in combatant ranks and of this number 80000 came from British control districts and 7000 from the Indian States (Leigh, 1922, p. 33). In 1914, the religious composition of Indian Army was Muslims 40 percent, Hindus 30 percent, Sikhs 19 percent, Gurkhas 10 percent, and one Percent others. Northern region represented significantly, and ethnically

Punjabi Muslims and the Sikhs Jats were the most favoured class in the army. Punjab constituted more than 50 percent of the army strength (Markovits, 2010, p. 34). It responded and contributed positively in support of the war effort. For example, in October 1916, Lieutenant Governor with the assistance of the civil authorities recruited 10000 drivers in just 18 days for transport duties. He boasted that many more could have been enlisted, if required, to highlight the response of the public (Leigh, 1922, p. 34). Eynde (2014) estimated the increase in contribution of Punjab by more than 500% between 1914 and 1918.

The great demand for manpower brought change in the recruitment policy based on theory of 'martial races' that mainly includes some classes like Sikhs, Rajput, Gorkhas, Jats, Dogra and Pathans. A new recruitment system- 'territorial System', was adopted by replacing the old 'martial class' system to meet the increasing demand of manpower for war front (Pati, 1996, p. 62). Under this system seventy five new classes were selected for recruitment in the army from whole Indian sub-continent (Pradhan, 1978, p. 57). Another change was establishment of the provincial Recruiting board in July 1917. Michael O'Dwyer as a head became moving spirit of board and held darbars covering whole province. He skillfully reminded the audience of Rawalpindi, Jhelum, Rohtak, and Ludhiana of their reputation of the valour of their men and spirit of their women. The people of Karnal, Lahore, Gujranwala, and Ferozepore were provoked to reminiscence about their 'bygone traditions' of bravery and urged them to emulate and strive with leading districts. Even educated were pushed not to lag behind the Bengal (Leigh, 1922, p. 30). He impressed upon the people in Multan that "I do not want it to be said hereafter that any part of the Punjab shirked its duty in this crisis."

The response, that province gave to raj for four and half years, was all due to its successful management of mobilization process. The integration of functions of the Civil-Military authorities proved fruitful in developing the desired co-ordination for producing cannon fodder for the war. When state assumed a direct role in mobilising process, it enlisted the support of its local collaborators – aristocracy, military elites, and landed gentry, and other reputed men of local influence to stimulate the recruitment. The recruitments campaign strengthened the ties and united the government and ordinary people for war effort (Leigh, 1922, p. 29). But the historian Ranjit Guha recently explained to journalist Seema Sirohi that "a widespread proxy

system developed in Punjab whereby a prosperous villager would buy a poor neighbours son and donate him to the recruitment centre as his own contribution" (Joshi, 2014). These kinds of remarks were already rebutted by Leigh, way back in 1922. He stated that due to ignorance sometimes it was alleged that Punjab was coerced into enlisting but it's an injustice to brave men. He maintained that the vast majority of its "recruits came forward gallantly and served gladly" (Leigh, 1922, p. 43).

Table 2.1: Contribution of Punjab in comparison to rest of British Indian Empire

S. No	Detail	Total Population (Male)	Number Mobilized	Representing One man in
1	Punjab (British)	10,992,000	415,000	26
2	Punjab Native States	2,323,000	65,000	36
	Total	13,315,000	480,000	28
3	Rest of Indian Empire	147,000,000	977,000	150

Source: (Leigh, 1922, p.41)

2.9.2 The World War II

The World War II was in real sense a world war, being fought not only in Europe but also in Africa and Asia. India entered into the war as subsidiary participant, but still contributed preponderantly by going out of its proportion to its resources (and that too against the wishes of the people). The strength of Indian Army was disproportionate to its size and situation, which was reduced under the compulsions of imperial policy, financial constraints and political opinion in the sub-continent. The Indian Army was now looked upon as army of occupation in India and as an instrument of British Imperialism abroad. Even the politically conscious young educated Indians neither came forth for recruitment nor were they welcomed in the armed forces. As a result recruitment was limited to certain small pockets and classes in the country (Prasad, 2012, pp. 254-255). Still, the Indian sub-continent contributed heavily with men, material and money.

The Premier of the Punjab, Sikander Hayat Khan, issued a statement to persuade the people to come forward for enlistment to conserve the impressive and great traditions of 'sword arm of India and support the imperial war effort. In the war about one million Punjabi recruited and served the army, out of these figures 800 thousands were combatants (Sharma, 2013, p. 80). The strength of the British Indian Army touched the mark of 2.5 million from just 189 thousands in the period 1939 to 1945. In 1939, there was 3000 British officers and 1115 Indian officers that increased to around 34500 British and 15740 Indian officers by 1945 (Husain, 1998). Lord Linlithgow, Viceroy of India, mentioned to Lord Amery- Secretary of State for India that the contribution of the Punjab in the Army was not less than 50%; as recruitment was done overwhelmingly from Punjab in all the branches of the Indian Army.

Table 2.2: Religious Composition of Indian Army 1940-47

Religion	Jan.1, 1940	Jan.1, 1942	Jan.1, 1945	Jan. 1, 1947
MUSLIMS	92,841	279,507	447,580	205,820
HINDUS	93,132	299,850	649,900	309,360
SIKHS	31,797	79,118	94,270	49,560
CHRISTIANS & OTHERS	2,494	19,715	141,830	31,700
GURKHAS	27,196	64,681	103,260	51,560
TOTAL	247,460	742,871	1,436,840	648,000

Source: (Husain, 1998)

Punjab contributed 39.3 percent recruits to army from the start of the World War II. It was almost 25.5 percent enlistment of the recruitable population. With the share of 15.4 percent, Madras followed the Punjab with the enrollment of 7.8 percent of recruitable population to army. The United Provinces and Bombay followed respectively with share of 14.9 percent and 6.3% in the military. "The contribution of United Provinces was just 7 percent and 3.5 percent of Bombay out of its recruitable population" (Deshpande, 1994, p. 208). The low response to war effort in above discussed region, may be due to non-cooperation of the congress and success of its Quit India movement. The table 2.2 shows the religious composition of the British

Indian Army in the period 1940-1947. The Hindu and Muslim recruitment was almost equal to each other in 1940, but by the year 1945 the difference between them was of more than 200 thousands. In the year of partition, the difference decreased to 100 thousand but still significant in the favour of Hindus.

2.10 Conclusion

Punjab held an important geostrategic and geopolitical place in the military geography of the British Indian Empire, whether as a buffer during the times of Maharaja Ranjit Singh or as a part of the empire after the annexation in 1849. It was a buffer State between Afghanistan and the East India Company in the first quarter of 19th century. When focus of the empire was shifted to tap the Central Asian Market and British intended to make the Afghanistan as a buffer state by diplomatic and coercive measure, Punjab was annexed to remove geographical constraints. In succeeding years after annexation, Punjab supported the empire in its hours of emergencies like mutiny, great game and tribal uprisings, Pathan revolt, World War I, and the World War II. These contributions highlighted the importance of Punjab in the internal security and external security calculations that made it a defensive wall for the empire and ultimately leads it to be emerged as a 'garrison state' and received a paternal treatment from the British.

Chapter Three

GARRISON STATE, CANTONMENTISATION, AND COLLABORATION: PATERNAL ORIENTATION IN PUNJAB

"Our government of the country is essentially military" - John Malcolm

The annexation of Punjab shifted the military and strategic centre of gravity from Sutlej to Indus, and in direct contiguity with north-western tribal territories and Afghanistan (Chhabra, 2005, p. 223). The frontier region and imperial empire inherently had a military construction that ossified the military imprints on the spatial, political, economic, and social structure. Punjab geographically, and the empire due to expansionist tendencies, had reflection and prevalence of military on the government. The pervasiveness of military bureaucracy in the imperial policy calculations could be looked through the fact that the British Empire evolved into military bureaucracy governing vast territories from just a mercantilist community. As the British Empire's reliance over military increased with its every expansion, the professional interest of the military transformed into an 'autonomous sovereignty' within the imperial structure and priority was given to the military in terms of resource allocation. This process was known as military fiscalism that had simultaneous connection with 'garrison state'.

The Garrison state of imperial days could be defined as a state preserved by military power, where military matters dominated the social, economic, and political affairs of the state; as the first and foremost obligation of it was to secure the state from the invasions and uprisings, and prepare for further expansions. Garrison state epitomised a state where military had its sway over the affairs of the state and controlled its fiscal resources. It remained more absorbed in catering the military needs and revenue allocation for it. These characteristic were hallmark of military-fiscalism[11] too, that supported the presence of military men within the 'decision making process whereby the priority was given to the military in terms of resource

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[11] Military fiscalism coined by the Martin Wolfe in the context of Renaissance France, is frequently used to suggest a co-evolution of fiscal capacity and military capacity (Roy, 2013). Military fiscalism materialised in fixing the social and economic relations, and worked to frustrate indigenous economic development on several levels (Peers, 2012, p. 41)

allocation' (Peers, 2012, p. 22). The presence of military in decision making process and reliance of the imperial government over it made military preparations for expansions inevitable. Garrison State had inherent capacity to mobilise resources for military, off-shoots its penetration into the society more profoundly that entrenched with time, as conception of bureaucratic set-up to oversee its expanded authority fall upon it (Peers, 2012, p. 33). Ahmed (2010) educed that it empowers the military elite. He substantiated that "the fact of war or the constant threat of it would result in the military elite acquiring greater importance and centrality in the provision of security and management of society" (Ahmed, 2010, p. 85).

Military was one of the primary medium of organizing the society and state, as "historically, the functions of the state were military rather than economic, and focused on international affairs rather than domestic ones" (Morgan, 2004, p. 6). The scholars like Auguste Comte saw the history of state as progression and succession from military to feudal and feudal to industrial age (Lasswell, 1941). The original idea of garrison state was prompted by the increasing militarization of states in the industrial age to support the imperialistic and expansionistic tendencies of the state. Lasswell propounded the theory of 'garrison state' to depict the rivalry of several European powers to dominate the world system in industrial age (Morgan, 2004, pp. 6-7). The 'Garrison state' marked the militarized societies, dominated by military culture, values, and goals. It signified a "world in which the specialists on violence (military elite) are the most powerful group in society" (Lasswell, 1941).

Dibble (1968) build upon the Lasswell's concept and coined the term 'garrison society' to illustrate the interdependence of military elites comprising the leaders from military, economic, political, or from other institutions with complimentary goals (Morgan, 2004, p. 7). "Garrison state would be characterised by an increasing proportion of the political and economic elites consisting of military professionals and militarized civilians who would prioritize the health of the state's security apparatus over other sectors of society" (Bernazzoli & Flint, 2010, p. 158). They would allure the common man into the ventures and necessities of the state. The result of this would be seen in the blurring of lines between military and non-military spheres of the society by co-opting the economic, religious, and cultural aspects of social life into the realm of the garrison state (Bernazzoli & Flint, 2010, p. 160).

Overall, the garrison state apparently a state imbued with militarised society where military fiscalism was essence of economic and political policy.

In imperial state or colonial empire, (military elite- specialist on violence) these specialists on violence were military and its collaborated groups apparently available in the frontier societies, especially in the newly annexed territories. The emphasis in these territories was on the use of military force for securing political and strategic objectives against internal unrest or external threats (Peers, 2012). The above mentioned Lasswell assertion, appropriately underlines the society of the colonial Punjab. British monopolised the military labour-market of Punjab through collaboration with aristocrats and hereditary agricultural chieftains of different clans for the supply of manpower to British Indian Army, as the imperialism always sustained by the powerful military and backed by the economic wealth. This dependence developed the paternalistic attitude towards these military elites who always stood with them in the hour of reckoning.

In spite of substantial efficacy with which the garrison state was constructed and maintained through the local processes of militarization, the strategy of embodying the state importantly exposes the provisional manner of central-local relations that produced inequality and variation in the social relations characterizing the Punjab (Bernazzoli & Flint, 2010). The protective attitude towards the rural aristocracy developed gradually in post 1857 period and continued till 1930. During this period, Punjab remained 'overwhelmingly loyal' in comparison to other parts of the empire (Talbot, 1988). The succeeding period after 1930's shows the cracks in the 'garrison state' and ends with the partition of India.

3.1. CONCEPTION OF GARRISON STATE

In context to colonial Punjab, the imperative of security and expectation of war give birth to new state of affairs that could be called as Garrison state. Where, nearly all, choices and decisions were made with the anticipation of invasion, uprisings, and hostilities in and around the north-west of Punjab. The newly incorporated province became a landscape of vast standing camp of troops being settled into cantonments (Allen, 1849, p. 321). The first and foremost requisite, after annexation, was to consolidate the hold over the newly bagged kingdom. British followed the same

procedure to control and manage the newly annexed Kingdom like the previous amalgamation of other Kingdoms into British Indian Empire, through the network of permanent military cantonments and military camps. Military presence was considered as guarantor of continuation of British rule over the newly acquired territories. Figures 3.1 and 3.2 show military divisions of Indian sub-continent and northern army's division in Punjab.

Military was primary source of coercive pacification on initial stages, but to sustain for long term the integration of region was required. For that purpose military was stationed in cantonments and garrisons. This process brought up spatial transformation in the region supported by railways, roads, urbanization, telephone lines, postal service etc. In Punjab, garrisoning processes under British Empire started with the surrender of Sikh Sardars at Rawalpindi in 14 March 1849, which also ended the Second Anglo-Sikh war (Punjab, 1890, p. 93). British confiscated the old forts and garrisons of Punjab and destroyed them after the foundation of new military camps and cantonments surrounding the native cities or towns that contributed towards the physical militarization of the city. With the passing of time, the compulsions of great game, tribal uprisings in north-west frontier, and manpower dependence on the region, physically transformed Punjab into a fortress with large military bases and networks of the strategic roads, and having connected by railways.

3.2. WEB OF CANTONMENTS: NEW MILITARY LANDSCAPES

The cantonments in Punjab can be divided into three geographical divisions i.e. in plains, in hills, and in north western frontier region. The cantonments in plains includes Ambala, Amritsar, Attock, Campbellpore, Ferozepore, Jalandhar, Jhelum, Lahore, Multan, Rawalpindi and Sialkot; in hills includes Bakloh, Dagshai, Dalhousie, Dharamshala, Jutgoh, Kasauli, Murree, Simla, Solan and Subathu; and in north western frontier region consists of Abottabad, Bannu, Dera Ismail Khan, Kohat, Mardan, Naushahra and Peshawar. Some cantonments were abandoned by British like Karnal, Ludhiana, Nakodar, Kartarpur, Phillaur, and Dera Ghazi Khan with passing of time (Kaur, 2012).

Figure 3.1: Military Divisions of Indian Sub-Continent

Source: Imperial Gazetteer of India 1909

Figure 3.2: Northern Army's Division in Punjab in 1907
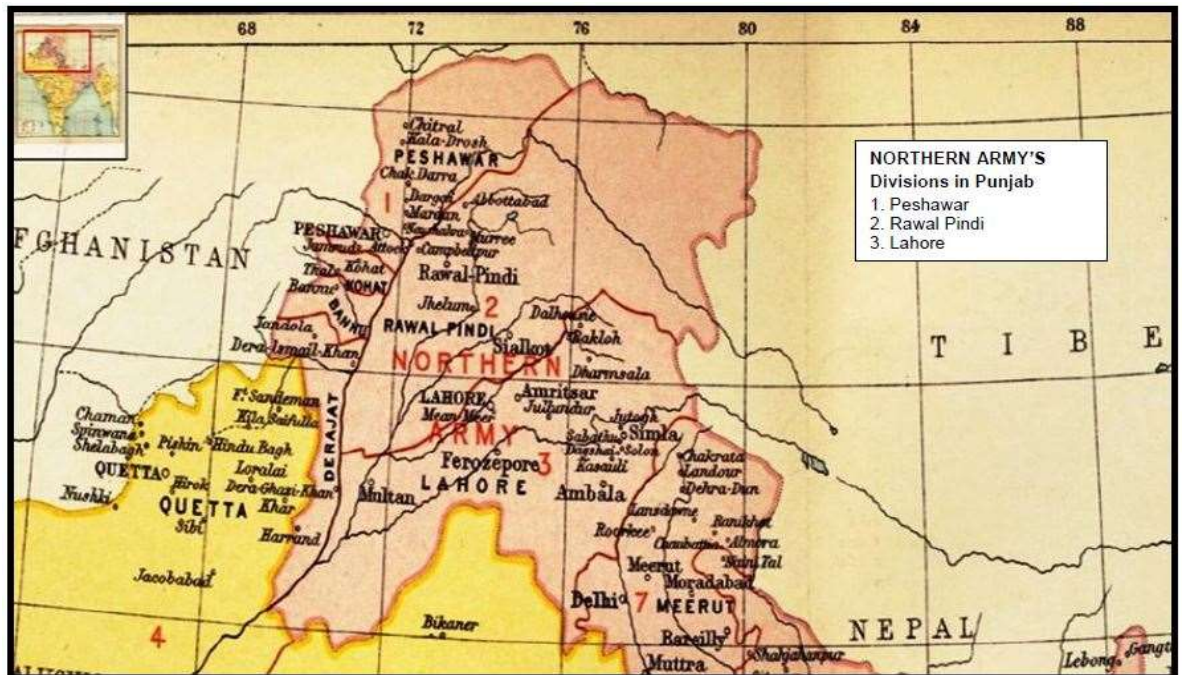
Source: Imperial Gazetteer of India 1909

3.2.1 CANTONEMENTS IN PLAINS

For the cantonments in plains, the major orientations was on internal security. The garrisoning of troops in them underscored the military imperial imperatives in post annexation times (Figure 4.3). These cantonment were placed in such a way to meet the military demands of supply, maintenance, and reinforcement on the frontiers too.

Ambala cantonment was established at a distance of a few miles in the south-east of the old village in 1843. The garrison of Ambala cantonment comprised of one regiment of British and two regiments of native cavalry; one battery of horse artillery, with an ammunition column; and three regiments of British and one battalion of native infantry. It was under the General Officer commanding the Lahore division. The cantonment also contained a mounted infantry school, companies of the Army Hospital and Bearer corps, and detachments of the Punjab Light Horse, and the North-Western and East Indian Railway Volunteers (IGI, 1908a, p. 287).

Amritsar cantonment was established after the annexation of Punjab in 1849. It lied in north-west of city. It was occupied by "a detachment of native infantry from Jalandhar or Sialkot, a detachment of artillery from Ferozepur and detachment of sappers and miners." Amritsar cantonment was important from the perspective of its location in a religious centre and economic capital of the Sikhs of Punjab. In 1867, municipality was formed in the city (IGI, 1908a, p. 330).

Attock cantonment was situated on North-Western Railway and the Grand Trunk Road at latitude 32°53' N and longitude 72°15' E. Attock was famous for its fort that was built by Akbar in 1581 to protect the passage of the Indus and check the invasion from Kabul. "The fort rose in three tiers to commanding heights from the Indus just below the point where it received the Kabul River" (IGI, 1908l, p. 183). It was conquered by Sikhs from the wazir of Kabul in 1812. With annexation of Sikh Empire, it became the part of British Empire in 1849. It was garrisoned by two companies of garrison artillery and a detachment of infantry, and a battery at Campbellpore. Attock Bridge was guarded by one detachment of native infantry at Rawalpindi (Punjab, 1909, p. 267 & 255)

Campbellpore was small cantonment town named after Colin Campbell in Attock. It was situated in 33°46' N and longitude 72°22' E. The Eleven miles long, rough and un-metalled road, connected it to the Grand Trunk Road. Campbellpore cantonment was headquarter of a Silladar Camel Corps. It was placed under the directive of General Officer Commanding, the Rawalpindi Division (IGI, 1908b, p. 298). The garrison included, one battery of Field Artillery, one company of Garrison Artillery, one Ammunition column, and one Camel Corp. It also contained an Elephant Battery but for short time (Punjab, 1909, p. 269). The cantonment in Tallagang was aborted in 1882 (Punjab, 1909, p. 273).

Ferozepore (Ferozepur) cantonment was located at a distance of two miles towards south from the Ferozepur town and connected by the Knox Road to it. An ordnance magazine was built in the Ferozepur cantonment in 1840, while the rest of the ordnance building was on the site of supply and transport lines (Punjab, 1916, p. 262). The cantonment included a battery field artillery, a company of native cavalry, and two battalions of native infantry (IGI, 1908k, p. 452). During the time of Mutiny one of native regiments stationed at Ferozepur rebelled. It plundered and destroyed the buildings of the cantonments. The arsenal and magazine were saved without any loss of life.

Jullundur (Jalandhar) cantonment was built in 1846, after the annexation of Jalandhar Doab from Sikh Kingdom of Lahore into British Indian Empire. It laid over four miles to South east of the town and covered an area of $7^{1/4}$ square miles (Ross, 1883, p. 212) (IGI, 1908k, p. 422). The cantonment usually housed one European regiment, one battery of artillery, one native infantry regiment, and a small detachment of native cavalry from Ambala. The garrison of Jalandhar cantonment included two batteries of field artillery, one battalion of British Infantry, one regiment of Native cavalry, and a battalion of Native Infantry, with regimental depot (IGI, 1908e, p. 232). Jalandhar district had three more cantonments at Phillaur, Nakodar and Kartarpur, which were established during Anglo-Sikh wars. Nakodar and Kartarpur were abandoned in 1854 and 1857 except the Phillaur. The cantonment made by British around the fort of Phillaur was maintained till 1857 (Ross, 1883, p. 221). It was abandoned during the time of Mutiny and never ever again reoccupied. The artillery and magazine were withdrawn in 1863 from the fort, and detachment

of Native Infantry was left as garrison. In 1891, the fort was handed over to Police department by removing the Native Infantry from the site (Punjab, 1908, p. 301).

Jhelum cantonment was located at three miles from civil lines at latitude of 32°6' N and longitude 71°3' E. It comprised a church, a dak bungalow and post office. The dak bungalow and church were lied in the south of the town. Jhelum cantonment generally consisted of four native infantry regiments and one native cavalry. It was mainly inhabited by boatmen and settlements consisted of 500 houses at the time of annexation of Punjab into British Indian Empire. It was selected for the establishment of divisional headquarter for civil administration as well as of a military cantonment (IGI, 1908e, p. 159).

Lahore cantonment was located at latitude of 31°31' N and longitude 74°22' E. It was almost three miles east to the civil station and about four miles from Lahore city. Lahore Cantonment was also known as Mian Mir. In 1851-52 troops were shifted here from the Anarkali quarter of Lahore on the account of unhealthy and unhygienic condition, at the Mian Mir (Punjab, 1884a, p. 125). The open and dreary arid plain area of cantonment was gradually made greener with extension of canal water irrigation to cantonment. The sparse areas were beautified by planting trees along the road side. However it was not turned out conducive for the health of troops. Strategic railway lines were laid down to connect it with other parts of the Punjab and the empire. Lahore Cantonment had two railway stations: in the east, on the branch of north-western railway to Delhi; and in the west, on the branch to Multan. It was occupied by one European infantry regiment, two native infantry regiments or native cavalry regiment, and three batteries of artillery (Punjab, 1884a) (Kaur, 2012).

Multan cantonment was established on the high stretch of land towards the south-west of the native city. It was a part of Lahore division of Northern Command. Multan cantonment was garrisoned by "a company of garrison artillery, a battalion of British infantry, a regiment of native cavalry, two of native infantry, and a detachment of railway volunteers." The greater part of the garrison was stationed in the fort until 1901-02. Multan was important centre of trade being connected by rail with Karachi and Amritsar (IGI, 1908l, p. 242).

Rawalpindi cantonment predates the establishment of British rule in Punjab. The cantonment was situated in the South of the native town, separated from it by a stream named Leh (Ross, 1883, p. 223). It was occupied by native troops in 1849 at the close of Multan Campaign by defeating the Sikh Army. The decision to hold the station permanently was took over by the Marquis of Dalhousie, when he visited the Punjab in 1851. Its size was increased substantially and shortly afterwards it became headquarter of Division. It contained one battery of horse and one of field artillery, one company of garrison artillery, one mountain battery, one ammunition column of field artillery, one regiment of British and one of native cavalry; two British and native infantry and two companies of sappers and miners. It was headquarter of the Northern command and Rawalpindi military division (IGI, 1908l, p. 173).

Sialkot military cantonment was situated at distance of one and half mile from the native town. This cantonment was administered by the Rawalpindi division. It contained "one battery and one ammunition column of horse artillery, one regiment of British Cavalry, two regiments of native cavalry, one battalion of native infantry and one company of sappers and miners" (IGI, 1908l, p. 89). It was one of the largest well laid out military cantonment that covered an area of almost five miles in length from east to west and three miles from north to south. It was barracked by British cavalry and infantry regiments as well as one or two native regiments. Sialkot cantonment was one of the centre of mutiny in 1857. The European inhabitants of cantonment took refuge in old fort in the city that was dismantled in 1866 (IGI, 1908l, p. 89) (Kaur, 2012, p. 30).

3.2.2 CANTONEMENTS IN NORTH WESTERN FRONTIER

The cantonments in this region were strategic and held as bulwark for external security of frontiers from the Afghanistan and tribal insurrections by Pathans. These cantonments were part of Peshawar Division (Figure 4.3).

Abbottabad military cantonment was located in latitude of 34°9' N and longitude 73°13' E. It was established in 800 acres and named after first deputy commissioner Major James Abbott in 1853. It was generally occupied by British Infantry and mountain artillery. Its garrison consisted of four battalions of native infantry (Gurkhas) and four native mountain batteries. Most of the European residents lived

in the bungalow constructed on the western side of cantonment limits (IGI, 1908a, p. 1).

Bannu (Edwardabad) cantonment was centred in and around the fort Duleepgarh (named in honour of Maharaja of Lahore). It was built and founded by Lieutenant Herbert Edwardes, who selected the site for political reasons in 1848. Its garrison consisted of a mountain battery, a regiment of native cavalry, and two regiments of infantry. The municipality was constituted in I867 (IGI, 1908c, p. 402).

Dera Ismail Khan military cantonment was located in south-east of the town. It was spread across an area of four and a quarter square miles. The garrison comprised of a mountain battery, a regiment of native cavalry, and three regiments of native infantry. It was winter headquarter of the Derajat brigade. The outposts of Drazinda, Jandola, and Jatta were garrisoned by detachment from these regiments (IGI, 1908d, p. 269).

Kohat military cantonment was located at latitude of 33°35' N and longitude 71°26' E in the east and north-east of the native town. It was garrisoned by a battery of artillery, one regiment of cavalry and three infantry regiments. A company of artillery was also stationed inside the Kohat fort. Overall, Kohat cantonment had lines for three thousand troops. Cantonment faced the problem of unhygienic water supply causing sickness inside the cantonment. Water got polluted in the town before it reached the soldiers. It was well connected to Khushalgarh through Khushalgarh-Thal branch of North Western Railway, at a distance of 30 miles. Municipality was formed in 1873 (IGI, 1908f, p. 351).

Mardan cantonment was located at latitude of 34°11' N and longitude 72°6' E on the right flank of Kalpari river in Peshawar district. It was at a distance of 33 miles in north-east from Peshawar and 16 miles away from Naushahra in north on the north western railway. In 1854, a fort was constructed in which lines of the guide corps was located by Hodson. In south of cantonment, civil lines was situated (IGI, 1908g, p. 206).

Naushahra cantonment was situated on the right bank of Kabul River on a sandy plain and surrounded by lower hills except in the northward direction. The expanse of the Naushahra cantonment was three miles in diameter. Peshawar cantonment

was 26 miles away from here and Attock lied at distance of 19 miles. The garrison was under the command of Peshawar division of the Northern Command and generally composed of one regiment of the British infantry, two regiments of Native cavalry and four infantry, a mountain battery, and a bearer corps. Dak Bungalow on the Grand Trunk road also was part of the cantonment area (IGI, 1908h, p. 417).

Peshawar cantonment was located at latitude of 31°7' N and longitude 71°35' E. and was at distance of two miles west of the city. The cantonment was occupied by British troops soon after annexation in 1848-9. The garrison was reduced and consisted of one battery of field artillery, two regiments of British and three of Native infantry, one regiment of Native cavalry, and one company each of sappers and miners, bearer corps, and army hospital native corps in 1908. The garrison held the head-quarters of the division and was part of the Peshawar military division of the Northern Command. It overlooked the surrounding plains and city as being occupied and established on elevated position. Jamrud fort, near Khyber Pass, lied at a distance of ten and half miles from cantonment. The important buildings in the cantonments included Magistrate's office, Dak bungalow, post office, Church and Roman Catholic chapel, Freeman's hall, and station club. Treasury garden (Ali Mardan Bagh) was also there in cantonment perimeters. The old Sikh residency where George Lawrence was taken as prisoner was in the centre of cantonment. Water works had been constructed at distance of six miles in south of cantonment for supplying water to cantonment through pipes (IGI, 1908i, pp. 124-126).

3.2.3 CANTONEMENTS IN HILLS

The cantonments in the hills were established to serve as military stations for two purposes. Primarily to cater the needs of British officers and soldiers to escape from summer heat waves and to use them as a convalescent depot. Secondarily to serve as a strategic sites away from natives population. The key military and civil officers decamped in the summer when hot weather made life unbearable on the plains. A large number of soldiers were stationed in the lower hill cantonments too. In Punjab, these were mainly in the vicinity of Pathankot and Shimla hills. The hills principally occupied by Shimla hill princely states ceded to the British Indian Empire in 1815-16 at the termination of the Gurkha war. It was summer headquarter of the Governments of India and of the Punjab, military headquarter and other

departments too. Municipality was created in 1850. It was surrounded by ring of strategic cantonments (IGI, 1908j, p. 384).

Bakloh cantonment was located in outer Himalayas at latitude of 32°29' N and longitude 77°56' E. It was situated at distance of 14 miles from Dalhousie. Bakloh cantonment was chief military station for the Gurkhas. The two battalions of 4th Gurkha rifles formed the permanent part of Bakloh garrison (IGI, 1908c, p. 221).

Balun was a small cantonment situated at distance of two miles from Dalhousie cantonment and served as a convalescent depot. Initially in 1868, the soldiers were stationed there and slowly it emerged as fashionable resort (IGI, 1908c, p. 343)

Dagshai cantonment fall under Shimla District and established in 1842. It was located at latitude of 30°53' N and longitude 77°4' E. It was at a distance of 40.4 miles from Shimla and overlook the Kalka-Shimla cart road. It was headquarter of British Infantry regiment and had accommodation for invalids as a small convalescent depot. The small tract of Dagshai and five villages was transferred to British Indian Empire by Maharaja of Patiala in 1847. Therefore the whole land of these villages came under the jurisdiction of cantonment (IGI, 1908k, p. 346).

Dalhousie cantonment was located at latitude of 33°32' N and longitude 75°58' E. It came under the administrative jurisdiction of Gurdaspur District and fall under the Pathankot sub-division. This cantonment was formed on summits of three mountain peaks in 1854 by purchasing a land from Chamba ruler. It lied almost at a distance of 51 miles from Pathankot and 74 miles from Gurdaspur towards eastern side of river Ravi. It was headquarters of the Commissioner of Lahore Division during summer times (IGI, 1908d, p. 126).

Dharamshala was occupied in 1849 as subsidiary cantonment for the native regiments raised from Kangra and stationed in the district. Gradually the civil authorities built their houses in the neighbourhood of cantonment; being attracted by the salubrious climate and scenic beauty of the Dharamshala. It had two Bazaars- the Forsythganj and Mcleodganj, church, and post office as prominent and exclusive places. In 1855, it became the district headquarter. The first battalion of Gurkhas used to station there till 1894-95 (IGI, 1908k, p. 385). After the devastation of earthquake of 1905, it was never occupied again.

Jutogh cantonment was also a part of Shimla and located at latitude of 31°7' N and longitude 77°7' E. It was almost at a distance of one mile from the western fringe of the station of Shimla. The land was acquired from Patiala State in 1843 and occupied by Gurkha regiment. Later, it was handed over to governors of Bishop Cotton School. In summers two batteries of British Mountain Artillery and two companies of British Infantry were stationed there (IGI, 1908k, p. 346).

Kasauli cantonment was established in 1842. It was southernmost cantonment in Shimla hills. It was located at latitude of 30°53' N and longitude 76°58'E. Kasauli cantonment was transferred from Shimla district to Ambala in 1899. It came under the administrative jurisdiction of Kharar tehsil of Ambala District. It covered an area of 676 acres and was just at a distance of nine miles from Kalka. It was occupied by 13th Somerest Light Infantry in 1843 on their return from Afghanistan (IGI, 1908f, p. 68).

Murree cantonment site was selected in 1850 and by 1853 permanent barracks were constructed. It was located at latitude of 33°54' N and longitude 73°23'E. It was situated at elevation of 7517 feet above sea level and at a distance of 39 miles from Rawalpindi. The Municipality was formed in 1850. It was headquarter of Lieutenant General of the Northern Command. Murree was a summer headquarter for Punjab Government from 1873-76 (IGI, 1908h, pp. 42-43).

Sabathu military cantonment was located at latitude of 30°59' N and longitude 77°0' E in the Shimla district. It was initially held as a military post but later it became part of British Indian Empire since 1815-16. It was situated at elevation of 4500 feet above sea level and also above the old Shimla-Kalka road. It was at a distance of nine miles from Kasauli and twenty three miles from Shimla station (IGI, 1908k, p. 347).

Solan cantonment was located at latitude of 30°55' N and longitude 77°7' E on cart road from Shimla to Kalka. It was thirty one miles from Shimla and eleven miles from north of Dagshai. The land was acquired to make a rifle practice ground for troops stationed at Sabathu in 1863-64. It was used as a summer headquarters of a British infantry regiment. A Dak bungalow was also there for travellers to stay for night (IGI, 1908k, p. 350).

Figure 3.3: Location of Cantonments in Punjab
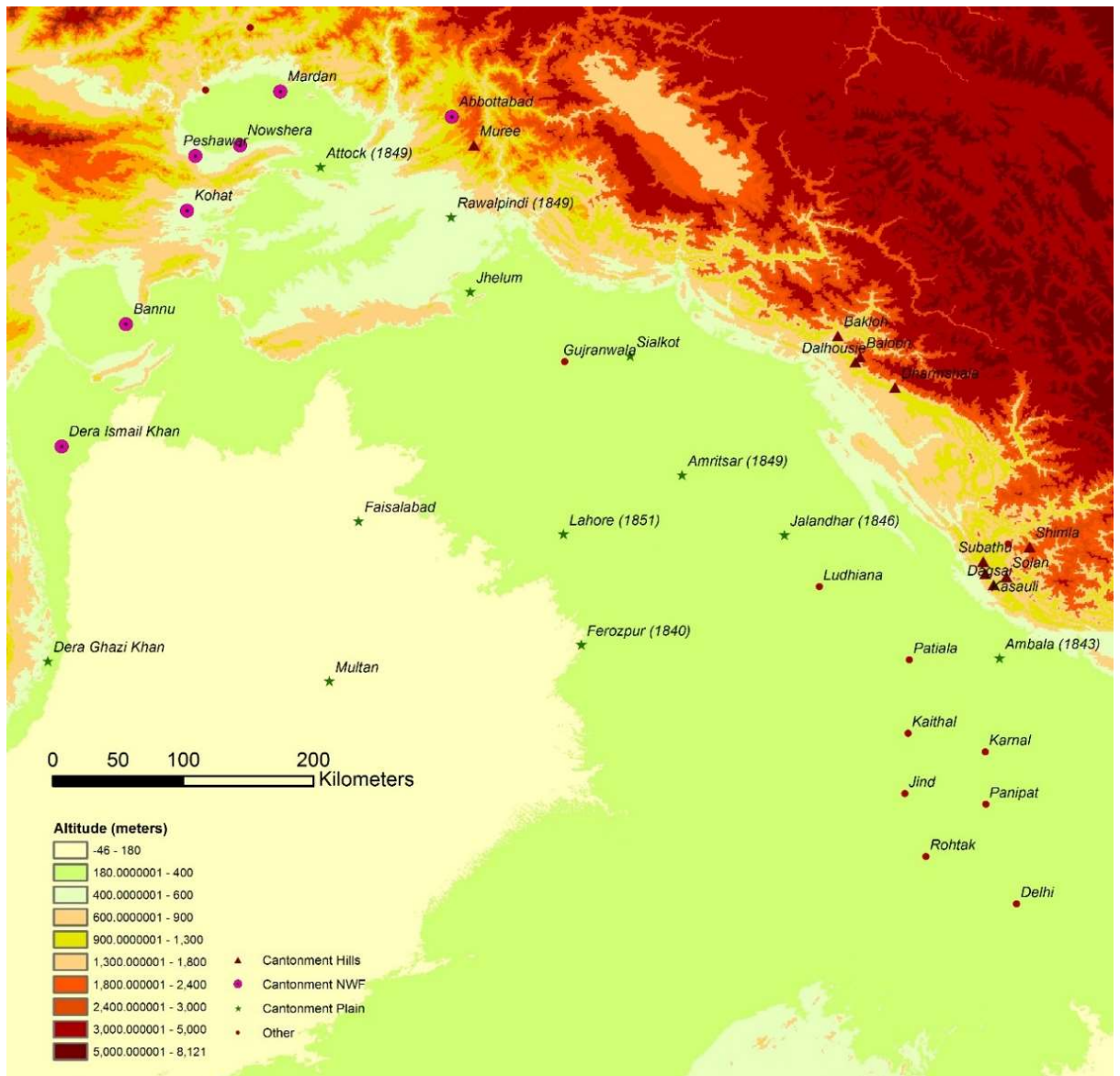
3.3. COLLABORATION: GEOGRAPHY OF ALLIES

The British administration in Indian sub-continent employed a mechanism of involving local collaborating groups of elites as allies, whether ruling elites, landlords, or merchants as mediators between them and natives (Robinson, 1972, p. 117). The reliance on these elites varied according to time and situation. The colonial masters held the reins of power and authority by virtue of, not only, its military and economic prowess, but concomitantly found new collaborators from native population and its competence to be acted as protector of these allies (Yang, 1989, p. 70). The collaborations with these partners were informal way of controlling

the masses of rural society as the control was the basis of power in society. This power and control mechanism signified the unequal relationship of the superior over the sub-ordinate and his resources such as economic, social, political, and human resources/manpower (Janowitz, 1978, pp. 28-29). The British collaboration with the powerful local elites of Punjab was one of the continuities of sub-continental polity of the Mughal Empire that they had learnt while ruling the other regions of their dominion. The collaborating elites helped in establishing the connections of the alien rulers with the native society and through the mechanism of control and consultations between them. These local controllers enhanced the outreach of the empire to different regions, where it was impossible to reach through formal structures of rule, to integrate into their political system (Yang, 1989, p. 55). "Most indigenous elites willingly accepted the role of mediator between the colonial administration and native society because of the opportunities it offered them to enhance their power and influence amongst their networks of rural clients" (Talbot, 1982, p. 73).

The British collaborations within the Punjab had its specific geography. It spread over the Punjab on such a scale that it could distinguish into three different spheres such as the Western, Central, and Eastern. This geography concentrated mainly among the rural landed aristocracy of Muslims, Sikhs and Hindus that further underscored the segregation of religious geography of Punjab dominated by particular religious group respectively in three regions. The groups from these areas, whose support was indispensable in maintaining law and order, were persuaded to back the empire through "the liberal distribution of patronage and the direction of commercial and agrarian policies in favour of them" (Talbot, 1982, p. 73).

3.4. BOARD OF ADMINISTRATION: INTERNAL SECURITIZATION

Lord Dalhousie poured out his high opinion in writing that in application of wise and sound policy, the "British Government is bound not to put aside or to neglect such rightful opportunities of acquiring territory or revenue as may from time to time present themselves" (Arnold, 1865, pp. 119-120). He favoured the creation of such opportunities and guided John Lawrence to do so in Punjab, which resulted in second Anglo-Sikh war (Thorburn, 1970, p. 151). Punjab was annexed to empire

with an assurance by him that it "will, at no distant time, be not only a secure, but a profitable possession" (Allen, 1849, p. 370). He mapped the administrative hierarchy of Punjab under the Board with the shades of both military and civil government to achieve this goal.

The tryst of Punjab with the imperial military administration started with the formation of the Board of Administration, as recommended in dispatch of Governor-General Dalhousie of March, 31st, 1849. It was commanded by military man Henry Lawrence, and assisted by John Lawrence and Charles Mansel. John Lawrence had little experience of working with military in Jalandhar division, which was annexed after first Anglo-Sikh war. Lord Dalhousie kept Punjab as non-regulated province to run its administration, instead of incorporating it into Bengal Presidency. The Board was directed to formulate its own principles and rules for districts and Punjab. Although the Bengal code of Regulations was never in force, but dispatch instructed that the spirit of those laws to be trailed. Later many rules that were formulated acquired the force of law under the Indian Council Act of 1861 (Baden-Powell, 1892, p. 533).

As already pointed out, Punjab administered as a non-regulated province; whereby all the administrative powers were vested in the Lieutenant Governor and there were no executive councillors to check him like in Bombay, Madras, and Bengal Presidencies. He acted as an agent of governor-general for the tribal areas beyond settled districts, and represented the political department of the Government of India in all the Punjab states, except Patiala and Nabha, through the Commissioners, Deputy Commissioners; and acted as an ex-officio Superintendent of Shimla hills states (Sharma, 1966, p. 1). The deputy commissioners in Punjab enjoyed more untrammelled authority than the collectors did in the three Presidencies; would be "all the more so because many of them were drawn from the army" (Sharma, 1966, p. 2). Punjab attracted and received one of the best and brightest civil servants aspired to serve in the region. In the word of Sir Richard Temple, 'to us the Punjab loomed grandly as the land of promise' to build an eventful and the successful career (Talbot, 1991, p. 204). As the responsibility of company increased with annexation, company selected the soldiers turned administrators; administrators turned soldiers to rule the provinces equal to the size of many European states (Bowle, 1974, p. 248).

Lord Dalhousie fully realised that peace would never prevail in Punjab "so long as its people are allowed to retain the means and opportunity of making war; there never can be now any guarantee for the tranquillity of India, until we shall have affected the entire subjection of the Sikh people, and destroyed their power as an independent nation" (Allen, 1849, p. 369). The almost 55000 troops were retained to garrison Punjab and to hold Afghan in checks on its borders. The people of Punjab was disarmed and nearly 120000 weapons were seized from the public. All the forts and garrison not required by the British were demolished. The pacification work started with paying off and disbandment of the Sikh Army, succeeded by constitution of the civil administrative and security setup (Thorburn, 1970, p. 160).

In 1849, British raised Punjab Frontier Force to meet its military requirements of protecting and policing the North-western frontier of Punjab. This force was composed of five regiments of irregular infantry, and five of cavalry; each regiment had four British officers, sixteen native officers, and ninety-six non-commissioned officers. The infantry regiments comprised 800 men, and the cavalry of 588 cavaliers (Mazumdar, 2003, p. 8). These regiments were christened as 1st to 5th Punjab Infantry and 1st to 5th Punjab Cavalry, and labelled as Punjab Irregular Frontier Force. It was commanded by an experienced veteran of Anglo-Sikh wars Brig. John Hodgson, who reported to Punjab authorities instead of commander in chief of the Bengal Army (Kaur, 2015, pp. 91-92). Initially, the recruitment of Sikhs was prohibited but later opened, as authorities were averse to open it for troops from Bengal Presidency, but only for those disbanded loyal soldiers who didn't participate in second Anglo-Sikh war (Mazumdar, 2003, p. 9). Overall, the balance was maintained in selection of recruits for the regiments. It was composed of equal proportion of Pathans, Punjabi Muslims, Sikhs, and Hindus of high caste; to a large extent, representing the whole Punjab (Kaur, 2015, p. 92).

For internal security purposes, police force was instituted that had been distinguished into a 'preventive police with military organization' and a 'detective police with a civil organization' (Mazumdar, 2003, p. 10). Later, formidable police force of 24000 men were raised to preserve the public order, which could be distinguished into two according to their function. Almost 13000 men of provincial police organised into quasi-military roles, and one-third of them stationed in frontier districts in the form of battalions. The remaining two-third distributed among the cis-

Indus area of the province. The leftover 11000 men were assigned civil constabulary role of detection and prevention of crime. They were supported by 30000 village watchmen, who were paid by the residents of the villages (Thorburn, 1970, pp. 160-164).

In 1853, the Board of Administration was brought to an end, and John Lawrence was appointed as a Chief Commissioner of Punjab, who later became the first Lieutenant Governor of Punjab due to the administrative overhaul in the aftermath of mutiny of 1857 (Douie, 1916, p. 188). The ameliorative measures adopted by the bureaucracy under the Henry Lawrence and John Lawrence achieved the pacification of Punjab in such a way that, firstly, it integrated the people of Punjab, then landed elites, and aristocracy in the political structure of the empire. These landed elites and aristocracy supported the colonial masters in Mutiny of 1857, and became permanent allies and collaborators of them. British administrators in return patronised and rewarded them.

3.5 REWARDING THE ALLIES

The ruling elites, who were not replaced by the British after the annexation, emerged as useful intermediaries between government and the people of Punjab. The valuable help rendered by them during mutiny consolidated British position in the armed struggle of 1857-58 (Ali, 1988, p. 4). British knew very well that "it is not enough to humble our enemies, it is also necessary to strengthen our allies" (Allen, 1858, p. 785). So, after successfully curbing the Mutiny, British administrators rewarded the princely states and other chiefs for the services rendered during the mutiny.

Maharaja of Patiala supported the British with contingent of 2146 horsemen, 2846 foot soldiers, 156 officers and 8 guns; and helped in protecting the stations of Ambala, Thanesar, and Karnal. Strategically, Patiala state kept the communication lines open on Grand Trunk road from Phillaur to Delhi. The amount of seven lakhs was contributed by Patiala state to Punjab loan. For this Maharaja of Patiala and lineal heirs were rewarded with Narnaul division of the Jhajjhar territory of ₹ 200,000 revenue per annum and the jurisdiction over small state of Bhudour. In addition to this, confiscated palace belonging to Begum Zenat Mahal, and many honorary titles

bestowed upon the ruler of Patiala. Raja of Nabha safeguarded the station of Ludhiana and remained there in person throughout the campaign. He stopped and captured Jalandhar mutineers, and provided the escort for the siege train. Besides this, Raja rendered loan of two and half lakh rupees to Punjab Government. For his contribution, Raja got a portion of Jhajjhar territory of ₹ 106,000 revenue per annum along with honorary titles and gun salutes. Raja of Jind was first person to take the battleground in support of the British with his 800 men. He secured the boat bridge over Jamuna to keep the communication line open to Meerut, and also secured the stations between Karnal to Meerut. To reward the Raja of Jind for in person service to the empire, the territories of Dadri of value ₹ 103,000 per annum and thirteen villages of Kulran Pergannah valued ₹ 13813 per annum was bestowed upon the Raja of Jind. The confiscated palace of Aboo Bakr and honorary titles were also given to Raja of Jind (Allen, 1858, p. 747). The Raja of Kapurthala who personally commanded 2000 troops to Oudh and involved in six actions, received an estate and taluqdari of Oudh. In return to patronage, princely states were obliged to render the civil and military assistance to empire whenever required by it (Latif, 1891, p. 583).

The rural and feudal Muslim elites and pirs, who fought for British during the revolt of 1857 were also rewarded by the Empire. For example, Tiwanas of Shahpur, Ghebas of Kot Fateh Khan, and Pir Makhdum Shah Muhammad of Zakriya shrine in Multan. Pir received a cash reward of ₹ 3000 for his services of troops and actively participating in propaganda to influence the people in favour of British. A Jagir was allotted to his shrine of value ₹ 1780, and the continuous use of 8 wells valued at ₹ 550 per annum. In 1860, the Viceroy gifted a garden known as Bhangawala Bagh to Pir during his Lahore visit. Sardar Fateh Khan of Kot Gheba rewarded with a life time pension of ₹ 600 per annum, granted 3000 acres of pasture land in the Kila Chita Hills, and judicial powers in 18 villages. British administration also conferred the title Khan Bahadur on him. These dispensed rewards highlighted the rewarding repertoire of British in the Punjab for its rural allies. The rural society gave so much importance to these rewards for loyalty; as these rewards were considered as symbols of good reputation of individuals in the eyes of empire, and enhance the family honour amongst the native people (Talbot, 1982, p. 75).

3.6 DISCOVERING AND PATRONIZING THE ALLIES

The support of Punjabi elite during mutiny motivated the British to consolidate the very native aristocracy that Lord Dalhousie and John Lawrence wanted to uproot. Muslim and Sikh landowners' loyalty inspired British to use them as bulwark against the exigencies. In return, landed aristocracy responded enthusiastically to this change in policy in 1860's, with a hope of patronage and rewards to enhance their social standings among rural tenants and followers. The significance of consolidation of these hereditary local elite was seen in the British Indian Army's decision to switch its recruitment policy in favour of selected people of Punjab (Talbot, 1988, p. 49). Other highlights of policy change in succeeding period of mutiny was attitude towards the princely states and small estates of Punjab and those of its dominion in Indian sub-continent. The gracious concession was given to them that, "on a failure of natural heirs, their adoption of successor according to Hindu law, and to the customs of their face, will be recognised" (Latif, 1891, p. 584). Until and unless they fail to fulfil their obligations to empire as per the treaty, nobody would disturb their engagements. The similar kind of concession were given to other communities for adoption of child in case of ally was not having a natural heir. Under this policy, Lord Canning in a Darbar at Ambala in January 1860, bestowed back the state to illegitimate recognised heir of Raja of Hindore State in Shimla hills, who supported during the Anglo-Gurkha war in 1814. This state was earlier lapsed to British Empire (Latif, 1891, p. 584).

The British in 1860's onwards, invested their time in search of rural notables from each locality, community, and religion. They identified the elites and recorded their family histories in the caste handbooks of the Indian Army, and also in the district gazetteers. The colonial administrators faced serious problems in the case of egalitarian Sikhs from the Central Punjab, and in South-East Punjab in identifying the men of influence; but not in the case of Muslim dominated western feudal Punjab (Talbot, 1988, p. 49). In the eastern Punjab, the absence of leading men was conspicuous that only 15 persons in the whole district of Rohtak were entitles to sit in Lieutenant Governors Darbar, out of them six were retired military officers and two pensioned-off civil servants. So, British created Board of Honorary Magistrates at Jhajhar, Bahadurgarh, and Rohtak, to increase the number of men of influence

in eastern Punjab, and the appointment of Zaildars were step towards making of elites who would receive chairs in the Darbars (Punjab, 1884b, p. 69)

In western Punjab, the prominent elite family of Hayat Khan Khattar from Wah, in Attock district, developed a cordial and patronising relations with British during the Second Anglo-Sikh war and mutiny. In 1871, Sardar Hyat Khan rose to the rank of Assistant Commissioner. From the same family, Sardar Sikandar Hayat Khan garnered an envious political carrier and became Premier of Punjab in 1937. Another family of Umar Hayat Khan Tiwana from Shahpur district had distinguished relations with colonial rulers. The descendant of this family, Khizir Hayat Khan Tiwana became the last Premier of Punjab. Both the families contributed handsomely in the World Wars mobilising efforts of the empire in Punjab (Talbot, 1988, p. 51).

The extended Sikh elite clans and families, patronized by the British, were Sindhanwalias, Majithias, Ahluwalias and Ramgarhias. These families sided with British in the second Anglo-sikh war in 1849, except Majithias who participated in war against the British. They had to wait till the Mutiny of 1857, when Surjit Singh Majitha aided the British and got wounded, to secured back the fortune of the family. He was awarded with pension and estate in Gorakhpur district of the United Province (Uttar Pradesh); concomitant permission to return to Punjab, as being expelled from Punjab after the second Anglo-Sikh War. British administration made him honorary Magistrate in 1875, and bestowed upon him title of Raja in 1877. Later his son Sunder Singh Majithia remained politically loyal to the empire. He was two times revenue ministers in the Unionist Government in 1920-1926, and in 1937. He played prominent role in the development of Chief Khalsa Diwan, and Khalsa College, Amritsar (Talbot, 1988, p. 51). Ahluwalia family secured the fortune for family by remaining loyal towards the British, during the second Anglo-Sikh war. Pratap Singh Ahluwalia remained active in politics, and served as a nominated member to Punjab Legislative Council in 1890s onwards. Sindhanwalia Sardar Shamsher Singh secured honorary magistrate title, but family failed to build on the patronage due to lavish lifestyle; ultimately escaped to Pondicherry to avoid creditors. Another Sikh family that remained loyal to the British during second Anglo-Sikh war was Sardar Mangal Singh Ramgarhia who secured the estate of ₹ 37,000. His son Gurdit Singh served as Police inspector and held the offices of Honorary

Magistrate, Municipal commissioner, and member of Provincial Darbar (Talbot, 1988, p. 50). In the eastern Punjab, the prominent Hindu Jat leader Chaudhuri Chhotu Ram was patronised by the British, who opened the Anglo-Sanskrit Jat High School in Rohtak in 1913. He encouraged enlistment of Jat into the army during World War I. He was one of the primary members of the Unionist party, created by clubbing the interest of landed gentry of three different religions of Punjab by bringing them on same platform with the empire (Talbot, 1988, p. 62).

In addition to rural elites, British drawn loyalist from religious preachers and Sufi Pirs from Punjab; though hesitantly, as they had impartial religious posture. The head of Qureshi Pir family of Multan, Makhdum Shah Muhammad, helped them during Second Anglo-Sikh war. British gave him and other Pirs same patronage, as granted to other rural landed elites, like positions of authority, and the lands in the canal colonies. Similar support was provided to the Mahants of the Sikh Gurudwaras' and in return British secured Hukamnamas in favour of the Punjab Government during the times of political crisis. Baba Khem Singh Bedi helped British during the Mutiny and keep the communications opens. The estates in Jalandhar, land in canal colonies, and other grants in Rawalpindi granted to him as reward for service and loyalty. He served as honorary magistrate. His son Kartar Singh Bedi continued the tradition and secured the patronage for him. Another Spiritual leader Bhai Arjan Singh in Malwa belt and Phulkian States was patronised by the British. He rendered a valuable wartime service during world war (Talbot, 1988, pp. 52-53).

3.7 REARMING OF UNARMED: POST MUTINY PERIOD 1857-1880

After annexation, British administrators' so meticulously demilitarized the Punjab that it seems an end of region's long association with military. But within a decade everything changed with the rebellion of Bengal Army (Yong, 2005, p. 304). The 1857 mutiny brought the path breaking policy change in pattern of military recruitments. Arnold admitted in this regard that "the country which threatened us became the beacon of our hope: our worst enemies were made our staunchest friends" (Arnold, 1862, p. 391). The British strategy was reversed to rearm the Punjab, with the expansion and tapping of its military labour market to build larger empire based on overwhelming military power. Gradually the surplus of military power was generated from the Punjab to establish and expand the empire. Within

a year from the start of Mutiny, 23000 Sikhs were recruited, total 75000 troops were recruited from the Punjab in the Bengal Army's 80000 native troops in June 1858 (Streets, 2004, p. 66) (Jarboe, 2015). Thus, the mutiny brought reversal in the policy of demilitarization adopted after annexation of the Punjab in 1849. This rearming of Punjab and continuous tapping of its military labour market earned an epithet of 'Sword Arm of the Raj'.

After successfully curbing the Mutiny, British administrators' established a Peel commission to find the reasons of Mutiny, the way to secure the hold over the military, and how to enhance the security of the Indian Empire. Besides many measures adopted like increased in ratio of Europeans in proportion to natives and reliance on the Europeans for artillery and arsenals; one of them was to open the recruitment to different castes and nationalities, and decrease the reliance on the Brahmins and Rajput for Bengal Army. The Punjab committee of John Lawrence, Neville Chamberlain, and Herbert Edwards was formed to recommend the Peel commission. One of the ideas of it was based on divide and rule, so that the people never pose a common threat to the British. Another recommendation of Punjab Committee was localization of recruitment and service to avoid uprising as it was one of main reasons of the Bengal army's uprising. This policy opened the avenues for recruitment from Punjab, and also helped the administration in granting permanent commission to soldiers that were recruited during mutiny to garrison the north-western frontier of Punjab (Yong, 2005, pp. 50-54). In this way, Empire rewarded the support of Punjab and opened the way for successful and quick reconstruction of Bengal army. Streets (2004) quoted that "it remained to reconstruct a Bengal Army… Sir John Lawrence, to begin with, has settled at least half the question. There would be neither honour nor policy in dismissing his new levies, or any of the Sikhs who remained faithful. We must have a large mass of one race, and the Sikhs have shown an attachment to our rule, a readiness to aid in our defence, which give them a claim as well as qualification" (Streets, 2004, p. 68).

By the year 1862, British counter poised the Bengal Army's old recruitment base with new one- Punjab. The composition of the Bengal Army was changed and could divided into three components: old loyal remnants of Bengal Army, Punjabi Muslim regiments and Sikh regiments, and four regiments of Gorkha and Hill troops (Yong, 2005, p. 54). Rearmed Punjab contributed extensively for recruitment in the British

Indian Army till the independence of the sub-continent. In the period from 1857 to 1880, although army had been involved in the campaign against the Afghan troops across the Borders, but its main functions considered to guard the imperial order within the empire. Thereafter, 1880s saw the changed orientation of strategy from internal security to external security.

3.8 MARTIAL RACES CONSTRUCT: MAKING OF GARRISON STATE

The second Anglo-Afghan war 1878-80 popularised the British strategists and policy makers' obsession with the 'great game' and their manoeuvers to secure the 'scientific frontier'. This war was outcome of diplomatic failure of the British and the success of Russians in securing ambassadorial presence in the Afghanistan. As the troubled relationship with Afghanistan were main cause of this war in 1870's and remained so in 1880's. In succeeding period to the war, Russian advanced towards the Afghanistan Border, which provided the perpetuity to threat perception of the British from the Russian imperialist design about India (as discussed in previous chapter). The demand for change in organizational set-up of Army was emerged in the higher echelons of the British Indian Army and military bureaucracy. It was accepted as that primary "business of the Indian Army in the foreseeable future would be the defence of the north-west frontier" (Dewey, 1988, p. 97). Lord Roberts criticized the post-mutiny recruitment policy of employing the different classes of soldiers to keep check and balance as an obsolete policy, especially in the wake of pressing threats from the advances of the modern European Army of Russian Empire. Without any hesitation, he asserted "that except Gurkhas, Dogras, Sikhs, the pick of Punjabis Muhammadans, Hindustanis of the Jat and Ranghur castes (such as enlist in the cavalry), and certain classes of Pathans, there are no native soldiers in our service whom we could venture with safety to place in the field against the Russians" (Singh, 1963, p. 184). The British military policy successfully contracted the pool of 'would be recruit', based upon selective grouping of men by race, clan, and caste to the Sikhs, Muslims, Dogras and Hindu Jats of Punjab, Pathans from the North West Frontier, and Gurkhas from Nepal; classified as a 'martial races' (Jarboe, 2015). Mazumdar educed from 'the Military papers of the Field Marshal Roberts, 1876-1893' that "the proportion of the martial races went up from about a quarter of the entire Indian Infantry in 1881 to half in 1893 (Mazumdar, 2003, p. 17).

The Second Anglo-Afghan War period also saw the emergence of demand of unification of the Armies of three Presidencies (Bombay, Bengal, and Madras). The recommendation to unified the command and divide into four corps with division of the Bengal Army into two to create Punjab corps was achieved in 1895 (IGI, 1908c, pp. 353-354). Indian Army had four divisions such as the Punjab including Punjab Frontier Force, Madras including Burma (Myanmar), Bombay including Sind and Baluchistan, and the Bengal (Raugh, 2004, p. 178). Lord Kitchener renumbered the army into single order and reorganised it into a Northern and a Southern Army within five years from his joining in 1902. Former had five divisions and later had four divisions, which were commanded by generals who would lead them in the time of war (Grew, 1916, pp. 29-30). These reforms (and even the end of great game with Anglo-Russian Convention) did not able to diminish the importance of Punjab as 'sword arm of the Raj' (Yong, 2005, p. 68). Punjab had two divisions Lahore, and Rawalpindi excluding Peshawar division of the North Western Frontier Province.

The ramifications of the great game exigencies, subsequent martial races theory, and unification of the Army, on the Bengal Army in particular and in general on British Indian Army could be understood from the tables 4.1 and 4.2. The returns mentioned in the year 1910 excluded the contribution of cis-Sutlej, and the Delhi territories of Punjab. The inference from this could be drawn that the support was much higher from the province. Leigh cited the enlistment of 94,701 men about 54 percent from Punjab into the Army in 1911 (Leigh, 1922, p. 7) (Mazumdar, 2003, p. 18). If the recruitment of the Baluchis and Pathans tribes added to Punjab then the contribution stand at 49.4 percent in 1919 and 55.4 percent in 1925. Punjabi Musalmans input was of 21 percent and increased to over 22 percent by 1925 whereas support of the Sikhs was more than 12 percent in both enumerations. The contribution of Punjab including the share of Punjabi Mussalman, the Sikhs, the Baluchis and Pathans stood at 37.1 and 44.1 percent of the entire Indian Army in 1919 and 1925 respectively (Mazumdar, 2003, p. 19). During the war 60 percent of troops raised for the British Indian Army was from Punjab. The contribution of Sikhs was 90,000 combatants who constituted 1% of population of the British Indian Empire. The involvement of the Sikhs in overseas campaigns were one-eighth of soldiers deployed overseas during the war (Jarboe, 2015). The Simon Commission in its report in 1930's mentioned about the share of Punjab in the British Indian Army.

It noted that Punjab supplies 54 percent of total combatant troops, and if the strength of 19,000 Gurkhas soldier of independent state of Nepal are excluded, the Punjab contingent share increased to 62% in the military (Barnett, 1972, p. 134). The Punjabis wanted to maintain their strong military traditions. A career in the army became an important means through which Punjabis could achieved the upward economic and social mobility. The economic resources dispensed to military personnel through canal colonisation enhanced the attractions of military service for the Punjabis. Hence, the penetration of the military in Punjabi society grew greater with the passing of time (Sharma, 2013, p. 39).

Table 3.1: Regional Origin of Indian Infantry Battalions, 1862-1914

S. No.	Region	1862	1885	1892	1914
1	Nepal (Gurkhas)	5	13	15	20
2	Hindustani east of Yamuna, UP and Bihar	28	20	15	15
3	Punjab and North West Frontier Province	28	31	34	57
4	Bombay (including Rajputana and Central India)	30	26	26	18
5	Madras	40	32	25	11
6	Total	131	122	115	121

Source: (Mazumdar, 2003, p. 18)

Table No 3.2: Soldiers from Punjab in the British Indian Army

S. No.	Year	Total Native Army	Total from Punjab	% of Punjabi
1	1880	137299	25810	18.8
2	1890	147852	30548	20.7
3	1900	144095	50952	35.3
4	1910	176455	69458	39.4
5	1919	813607	362027	44.5
6	1925	219523	99113	45.1

Source: (Mazumdar, 2003, p. 18)

3.9 LAND GRANTS: PATRONIZING THE MILITARY ELITES AND SOLDIERS

The land grants in the form of 'Jagirs' was a pre-colonial continuity, followed by the empire to secure the loyalty of military allies and elites. These land grants enhanced the social status and political clout of the grantees in the rural society. British primarily distributed the land grants and leases of wasteland to persons, who served in military campaigns such as in the Anglo-Sikh wars, the Mutiny, and Afghan wars; even predating the opening of major canal colonies (Yong, 2005, pp. 90-91).

After annexation, British faced the challenge of re-employing the disbanded soldiers of the Sikh empire. As the army composition was of peasant-proprietors, so British considered to re-employ them to agriculture. This would be beneficial for the company to generate the revenue and the food surplus to meet the requirements of the army in the state. So, they opened the canal projects to improve the irrigation facilities in the Punjab. The means of communication were also improved by laying down the roads and railway projects to assist the military, but also helped the civilians and the traders. Punjab was linked to Karachi port through railways and roads. With the help of canal projects and transportation networks, British transformed the pastoral savannah of Punjab into a major centre of commercialised agriculture in the British Indian Empire. The construction of irrigation system helped them in development of agricultural colonization, besides many social and economic changes engineered by them (Maini, 2004, p. 12).

The canal colonies opened in 1880's and volume of land grants distribution increased. Earlier land grants were bestowed upon the few selected military officers every year with reward of up to 500 acres. In the newly opened canal-irrigated wasteland, the land allotment under military grants bequeathed on the soldier-settlers, pensioners and ex-soldiers. These military grantees, overall, received half a million acres, and mainly settled in four canal colonies like: the Chenab, Jhelum, Lower Bari Doab, and Nili bar (Ali, 1988, pp. 110-120) (Yong, 2005, p. 90). Wace mentioned in "The Punjab Colony Manual" that the military grants had its own term and conditions- utmost was loyalty to the empire. It apparently stated that tenant "shall be bound to be and to remain at all times of loyal behaviour and to render active support to Government and its officers in times of trouble or disorder… and, if local government is of opinion that the grantee has committed a breach of this

condition, it may resume the grant, or any portion thereof" (Wace, 1933, p. 38). These grants were distributed among the grantees who had 21 years of service and given to him on recommendation of regimental commanders. In this way, the military career record of soldiers was sole benchmark to be eligible for land grants (Yong, 2005, p. 91). Thus, the penchant for the land grants utilised by the Punjab Government to secure the loyalty of landed martial classes, whose local status associated with the land.

3.10 LAND ALIENATION ACT

The decade of 1880's, witnessed the proliferation of the news and report about the rural indebtedness and land alienation in the province. These news and reports became a cause of worry and compelled the government to react. Punjab Government always concerned and worried about the recruiting base that it "would not fall into penurious circumstances as a result of land alienation." These "soldiers who were also land owners not only gave military service a good image but would also become good agents of state" (Yong, 2005, p. 92). These rural landowners attached so much prestige to land, the alienation of it would become a cause of worry for empire. The Government had apprehension that rural-military revolt might occur, in the home of British Indian army or garrison state, when this rural population was discontented. So, the British attitude towards Punjab was partial as it was home of the martial races, whom they gave first preference in the recruitment for the British Indian Army. In return, Punjab economy benefitted from it through remissions of pay of soldiers, a source of income that no other province had as a privilege or blessing. These remittances were invested into agriculture, thus help the empire's mercantilist layout (Maini, 2004).

After annexation of Punjab, British created the individual property rights and done land settlements to fix the revenue to be paid in cash instead of 'kind' (share in yield). But soon it "proved fatal gifts, as crops were never certain, and necessity, coupled with the possession of marketable assets, induced borrowing" (Thorburn, 1970, p. 230). The British officials from time to time warned about the problem of substantial mortgage of land in the province and passing of it into the hands of moneylenders could flare-up the unrest in the province. These warning received a sense of urgency in 1886 with the publication of Deputy Commissioner of Dera

Ghazi Khan S. S. Thorburn's book 'Mussulmans and Moneylenders in the Punjab'. He evinced that in Dera Ghazi Khan district situation was not worse in villages assign to Biloch Chiefs, as revenue was collected in kind rather than in cash like other parts of the Punjab (Mukherjee, 2005, p. 3) (Thorburn, 1970, p. 252).

The plight of rural peasant populations and its loss of land to urban moneylenders in the frontier regions of the province was getting worse and raised the British concerns about the peasants. During the mid of the last decade of the nineteenth century in a "note on Land Transfer" prepared by Revenue Department in October 1895, it was pointed out that "the moneylenders can never take the place of the large ancestral landlord or the substantial yeomen whom he dispossesses" (Talbot, 1991, p. 205). At last, after such a long time of ignoring the evidence of increasing indebtedness and the consequent land transfer to moneylenders, the Punjab Alienation of Land Act of 1900 was passed, whereby moneylenders (shahukars) were debarred from usurping the land through mortgage by prohibiting the sale of land to the non-agriculturist. The passing of act contracted the credit as the value of land for instance declined in terms of security. Thus the increase in proportion of debt decreased in 1903-1912 but increased many fold in next ten years as moneylenders find another tool of Benami transactions. In this transactions moneylenders got the land to known person of agriculturist caste and in return received a bond in favour of him equal to loan amount dispersed to owner of land (Mukherjee, 2005, pp. 49-50).

The British administration efficiently took care of collaborators and regularly intervened to protect their interests. This paternal orientation towards one section, alienated the other as entrenched with divide and rule policy. Land alienation act was one of the master stroke that divided the population into agricultural tribe and non-agriculturalist. It's mainly directed against the moneylenders, who was reaping benefit out of commodification of agriculture land after the annexation of Punjab. The military imperatives compelled the British to pass this act to prevent the transfer of land to non-agricultures (moneylenders) from those (agriculturist) communities which were major source of manpower to the British Indian Army (Peers, 2012, p. 40). The land alienation act intended to secure the recruitment base of the British Indian Army from any discontentment. In 1907, there were apprehensions about uprising of Sikh regiments to celebrate the 50th anniversary of Mutiny of 1857. In the

same year apprehension turned out true, when the agrarian unrest started in the canal colonies, and spread to the central Punjab, and other part of Punjab. The agitation, that was started against the British intentions to amend the Colonization Bill of 1893, was assuaged only when it was vetoed by the Viceroy of India (Barrier, 1967). Immediately after the World War I, British authorities developed the District Soldiers' Board to meet the demands and redressal of complaints of the soldiers.

3.11 DISTRICT SOLDIERS BOARDS: SECURING THE LOYALTY OF MILITARY CLASS

The District Soldiers Board mechanism originated in Punjab to look after the welfare of soldiers and replicated in other parts of the Indian sub-continent, such as in North West Frontier Province, United Provinces, Rajasthan, Madras, Bombay, etc. in the time of World War I. Gradually, it became institutionalised part of the district administrative machinery in post-World War I era.

> The ideal was a one-stop shop for all grievances that affected soldiers' families…employment for ex-soldiers, gratis payments, and grants for widows and the elderly who had run into trouble, helping the wounded to receive treatment in government hospitals and sending retired or wounded men to homes or training institutes where they might learn a trade (Khan, 2015, p. 37).

In Punjab, retired soldiers managed the affairs of these boards in variety of ways, and liaised between the local committees and the families of soldiers to secure their loyalty and support to the British Empires war (Khan, 2015).

During the First World War, the civil-military alliance were working in tandem to support the war effort, but it was countered by the rumours spreading like a fire; not only in the military recruitment districts but in the whole Punjab, about the British reverses on the war front in Europe. These rumours dented the fidelity and increased the desertion of recruits. In the period from August 1914 to May 1918, total 11.4 percent recruits' absconded from the duty. Datta (1975) brought out that in 1917, the almost 26,702 men deserted in Punjab from the total recruits from the province. Among these deserters 9364 men remained non-traceable for the authorities, which suffice the apprehensions on the local public support enjoyed by

them. It became essential for the administration to control and monitor the public opinion in the province. A multi-pronged mechanism of the District Soldiers Boards, Punjab Soldiers Boards, and Indian Soldier Board was constituted to look after the soldiers and their families to keep them immune to rumours spread by the nationalist (Datta, 1975, p. 92) (Ahuja, 2010, p. 142).

Its constitution was also appreciation of the lurking danger of lingering grievances of rural-military peasantry in the wake of urban unrest, and nationalist propaganda to tap the rural hinterland in its struggle against the empire (Yong, 1994). Even a Viceroy put forward that the greatest risk lies in the grievances of the peasantry. The longer they remained undress the greater the risk involved in their accession to subversive propaganda of nationalism (Low, 1991, p. 5). The British officials knew that Punjab had to be secured from nationalist propaganda as it was a province of key military importance, being a home to substantial number of serving and retired military men. (Yong, 1994). With this establishment of Board, British tried to address the grievances of military men and their families to keep them docile, loyal, and pacified subjects. The loyalty of them would give British the confidence of handling any situation in other parts of the province (Yong, 1994).

The post-World War I was a period, when deteriorating economy and political unrest caused by nationalist movements like civil disobedience and recurrent outbreaks of communal violence were on the rise in the urban areas of the Punjab. The imperial authorities always relied on the army to guard the imperial order against the agitations, but they were aware that the loyalty of the army could never be certain when employed against fellow countrymen (Yong, 1994, p. 833). It had to be constructed through a stable and pacified recruiting base of contented military men away from the influence of nationalist politics. The immediate remedy was to insulate the soldiers from external (urban) influences, whether in cantonments barracks or at home. So, District Soldiers Board was constituted where regimental officers developed a close link with civilian officers to guard the recruiting districts because it was here the chance of losing the war of loyalty exist. It was initially established to look after the rehabilitation of war veterans, but eventually got entrenched and represented the interest of military classes (Yong, 1994, p. 834).

During Second World War, the board played pivotal political role in countering the anti-recruitment propaganda and in mobilising men for the recruitment in Punjab. These boards also emerged as medium for remittances, generally soldiers sent three-fourth of the salary to their families. Families were even advised by these boards; how to support their men on the front and even recommended them what items to be parcelled to soldiers (Khan, 2015, p. 38).

Table 3.3: Activities of the Punjab Soldiers' Board 1936

S. No.	Type of Applications/Cases for investigation	Number of Cases
1	Verifications of rolls and recruits	5449
2	Investigation of relief cases	2285
3	Investigation of pension cases	1634
4	Medals distribution	837
5	Scholarships	685
6	Land Grants	88
7	Arms Licenses	83
8	Arrears of Pay	68
9	Domestic Affairs	164
10	Miscellaneous cases	791

Source: (Yong, 2005, p. 183)

3.12 POLITICS OF PUNJAB: PATRONIZING THE RURAL MILITARY ELITE

The politics of Punjab always centred and revolves around the rural military elite and paternal attitude of empire towards them. This paternal orientation created a division between urban and rural interests, and their attitude and affiliation to empire. British always count on rural military in strategic matters and in political matters too, as it was critically required to have control over politics of Punjab for security of empire. In 1897, it was permitted to constitute a legislative council of nine members, though nominated by the Lieutenant Governor. Its introduction into province was

late by more than three decades in comparison to other provinces who had legislative council's from 1860's. The strength of legislative council was increased to twenty-four, out of that only five were to be elected under Morley-Minto reforms. The strength of elected members were increased to eight in 1912 and twelve in 1916 (Mazumdar, 2003, pp. 116-117).

In post-World War I, the constitutional political reforms in Indian sub-continent created opportunities for natives to be associated with administration and to have more share in political power. The Government of Punjab devolved it in favour of traditional rural-military elites, who had association with the empire since annexation and stood by it during the time of its exigencies (Yong, 2005, p. 240). The seeds of these reforms were laid in Edwin Montagu announcement in 1917, but Michael O'Dwyer was against this on the account that the legislative bodies dominated by urban elite could turn out bad for rural agriculturalist and military elites. Even the vast majority of rural Punjabi were incapable of political judgement on their own (Yong, 2005, pp. 245-247). The devolution of power happened in Punjab under Government of India act of 1919, but held the essence proposed by Government of Punjab of curtailing the power of urban elites. The legislative of council of Punjab expanded to include 71 elected and 23 official members. The elected members further divided into 64 from territorial constituencies and seven from special constituencies. Out of 64 members, 51 were rural and 13 urban. They were divided into 32 Muslims (five urban and twenty seven rural), 20 non-Muslim (seven urban and thirteen rural) and 12 for Sikhs (one urban and eleven rural) (Yong, 2005, p. 258).

In 1935, the Government of India Act of 1935 was implemented, whereby the Punjab got its first Punjab Legislative Assembly that was unicameral legislature and bigger than its earlier predecessor. The seats were distributed among the groups as: General (eight urban and thirty-four rural), Muslims (nine urban and seventy-five rural), Sikhs (two urban and twenty-nine rural), and eighteen special seats. The traditional military elites, military men and their women, landed aristocracy, government appointees, and title holders secured voting rights on the electoral roll and continued their loyalist politics through Punjab National Unionist Party (Mazumdar, 2003, p. 130).

3.13 PUNJAB UNIONIST PARTY: TEMPORAL ORIENTATION OF EMPIRE

The rural military elite of Punjab dominated the post-world war I politics of Punjab from 1919-1935. They continuously dominated the legislatives council in Punjab from 1920 onwards. In 1923, they formed the Panjab National Unionist Party. The Unionist party was dedicated to protect the interest of agriculturist classes, who composed the military elites (Yong, 2005, p. 241). It was formed by Sir Mian Fazl-i-Hussain Muslim Jatt from Western Punjab and Sir Chhottu Ram Hindu Jaat from Eastern Punjab, to check nationalist politics of Hindu urban elites comprising Arora, Khatri and Bania communities of the province. In this coalition, they failed to take the Sikh Jat from Central Punjab, who were rallied under the banner of Akali Dal. Still some of the moderated Sikhs supported the unionist, but the Akali Dal always followed nationalist politics of the congress in 1930's. The Unionist successfully held the reign of Punjab politics till the partition and avoided the imposition of direct British rule in the province after the implementation of constitutional reforms and election of provincial government (Oren, 1974). The system of collaboration under Unionist party worked well for the colonial patronisers till early 1940s, as party held the political ground of Punjab effectively whereby Muslim league and congress failed to find a foot hold in the garrison state (Harding, 2008, p. 35).

During the Second World War, Punjab as a 'garrison province' and 'sword arm' of the empire again mobilised and contributed 36.67 percent combatants and non-combatants to the war out of total Indian support. This contribution indicated how well the civil-military nexus ingrained in the Punjab (Yong, 2005, p. 281). However, the communal representation in the military inclined in the favour of the Punjabi Mussalman and regional emphasis of recruitment favoured the western Punjab (Yong, 2002, p. 144). The unavoidable circumstances generated the fissures; temporal interest of other parts of the Empire took precedence over the interests of the military class and landed elites in the 'garrison state'. Thus the time tested paternal orientation was abandoned due to Bengal Famine; British controlled the food grain prices like of wheat in province that hit the peasant's interests and their earnings.

3.14 Conclusion

The focus of garrison state was to augment the security, whether internal or external; for that it vied for bigger armies that required large income, required control over fiscal, and required large revenue, to support and pursue territorial expansion. To sustain territorial expansion, it required expansion in the military establishment that further required the larger share in revenue. The people in the Punjab were peasant and there was plenty of waste land but water sources of five perennial rivers were untapped. Irrigation facilities were developed to generate agricultural revenue. Most of the income went in security purposes and to forces. Thus it had positive impact on the society of peasant army. The simultaneous phenomenon of the garrison state, cantonmentisation, and collaborative relationship with paternal orientation in Punjab leads to wide spectrum of changes in the varied sphere of region.

Chapter Four

TRANSFORMATIONAL TRAJECTORY OF PUNJAB DRIVEN BY MILITARY LANDSCAPES

Military Geography is mainly concerned with military control of land and the process of control required the presence of military. So, how their presence transformed the landscape and society? In this regard, first and foremost makeovers were spatial, epitomised by cantonments, barracks, airfields, and other military infrastructures and installations. These visible symbol of military control and occupation were high wire fences, low institutional buildings, swept tarmac covered with tidy rows of jeeps and trucks, khaki tractors and camouflaged diggers, neat green diggers, checkpoints, men with guns. The road signs and the names of the places confirm this as military space (Woodward, 2004, p. 38). Military establishments are where they were, because of basic strategic and logistical needs for land, sea, and air defence and offensive requirements of the state. It's an obvious point that location follows basic geography (Woodward, 2004, p. 41). Transformations due to Military Geography cover whole spectrum of changes and transitions- direct and indirect by militarization and military landscape of the region. British invested in Punjab by keeping in view of harvesting the economic and political benefit to support the military activities in north-west and manoeuvrings in Afghanistan and Central Asia. Since the evolution of mankind and socialization of human-being, all the nations experienced transition, but very few have gone through transformation as brusquely and pervasively as once the Punjab gone through as a part of British Indian Empire.

4.1 PRELUDE TO TRANSFORMATIONS

Punjab and its society experienced many foreign influences before the European. Surprisingly, it managed to absorb and adopt them whether that brought minor or major structural makeovers. Transformation that ushered after the annexation in 1849 broke the already working political, economic and social structure (Rose, 2009, p. 1) and often resulted in territorial changes time to time. The seeds of change and transformation in Punjab had laid much earlier when the princely states of cis-Sutlej area became protectorate of the East India Company, followed with the

signing of treaty[12] of Amritsar in 1809, but ceding of Jalandhar Doab and hilly regions to the East India Company by the Lahore Durbar after the first Anglo-Sikh war, opened the door for the transformations executed by the British Indian Empire. The incorporations of the Punjab into the British Indian Empire fully opened the region to spatial, economic, social, and political transformations; being integral part of politico-administrative arrangements evolved by the British in Indian sub-continent. The annexation of Punjab provided the early beginning of the changes and created initial conditions for large scale transformations to take place later (Dasgupta, 1969, p. 118) but Mutiny of 1857 emerged as catalyst; as "despair was to prove an even more powerful agent of transformation"(Polanyi, 2001, p.88)

After the annexation of Punjab, the most crucial task was to consolidate the hold over the newly bagged kingdom. British followed the same procedure to control and manage the newly annexed province like the earlier amalgamation of princely states into British Indian Empire through the network of permanent military cantonments or military camps. Military presence was considered as a guarantor of continuation of British rule over the newly acquired territories. The principle of military control was advocated by the Elphinstone after annexation of Maratha dominion in 1818 as "it is on the strength of our military establishments that the tranquillity of the country and the security of our possession of it must primarily depend..." He warned against the complacency in military preparedness against unforeseen contingencies (Kosambi, 2004, p. 291). Military was main source of coercive pacification for the initial stages, but in the long run, political integration of region was required.

4.2 POLITICAL TRANSFORMATION: TERRITORIAL & POLITICAL COMMAND

After annexation, Punjab re-emerged as a united entity with the addition of Cis-Sutlej territories and stretched between Indus and Yamuna rivers. Princely states were politically attached to the Province. It was divided into nine divisions and 33 districts (Douie, 1916, p. 189). Hissar and Delhi was added to province that increased the

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[12] This agreement however put an end to the dream of Ranjit Singh to consolidate the whole Sikh nation by bringing the entire region of Punjab between Yamuna and Indus under one ruler (Singh 1955: 15, Chhabra 1976: 86).

number of the division to 10 in post-1857. In 1877 retrenchment of troops in Army started when Jammu and Kashmir was placed directly under the Government of India. This number was reduced to six divisions- Delhi, Lahore, Jalandhar, Rawalpindi, Derajat, and Peshawar in 1884. Peshawar division was separated to carve out North Western Frontier Province in 1901. The largest city of Punjab and north India- Delhi was separated to form new capital in 1911. Punjab reduced by 315,000 sq.km but still had area of 347,000 sq.km. British territory included area of 252000 sq.km. British territory was divided into divisions, districts and tehsils. In post 1911, there were 5 divisions (Rawalpindi, Lahore, Multan, Jalandhar, and Ambala) and 28 districts and 114 tehsils in Punjab. In 1919, Sheikhupura was created that increased the number of districts to 29 districts (Grewal, 2009, p. 40) (Khan, 2015, p. 4).

The British employed their military might to conquer Punjab, which disturbed the military elite dominated political structure by seizing their jagirs and property, and disarming the population. British cannot control the province from distance, so they colonised and intricate the region to empire with setting up of civil stations and cantonments. The new colonial ruling class lived in military stations and civil stations. Gradually, they penetrated through missionaries into rural landscape (Diwakar, 1959, p. 407). Overall, British administrators replaced the feudal Military organizational set up of mansabdari system with centralised administrative set-up (Ness & Stahl, 1977, p. 15). Punjab administration was divided into three branches-executive includes officers such as Commissioners, Deputy Commissioners, Assistant and Extra Assistant Commissioners, Tehsildar and Naib-Tehsildars; revenue comprised same structure except financial commissioners over commissioners; and judicial branch includes Chief court with its divisional and session judges assisted by district judges, subordinate judges, and munsifs. Whole administrative hierarchical structure was headed by Lieutenant Governor that was changed to Governor in Government of India act, 1919. This act also changed the nomenclature of Chief court to High court as the apex body in the province. The functions of lower rank officers below deputy commissioners were merged as they have to perform executive, judicial and revenue duties. At district level, deputy commissioners were assisted by superintendent of Police, Civil surgeon and the inspector of schools (Grewal, 2009, pp. 42-43). The town and cities that had

amenities and facilities to support British were selected as headquarters of administrative offices. Some of the towns were small but their location made their destiny to be selected as district headquarters like Bannu, Kohat, Jhang, Attock, Rohtak, and Hoshiarpur. The foundation of new towns to work as administrative centre of district was laid like Montgomery, Lyallpur, Gurdaspur, and Gurgaon (Grewal, 2009, p. 42).

Table 4.1: Change in Area, Population, Administrative Units, and Settlements in Punjab

S. No	Census	Area km^2	Population in Million	Administrative Division		Town & Villages
				Districts	Native states	
1	1881	368941	22.71	32	43	52870
2	1891	368554	25.13	32	43	54989
3	1901	389036	26.88	32	43	47526
4	1911	353095	24.19	29	43	44574
5	1921	354688	24.95	29	43	45409
6	1931	352914	29.15	29	43	51224
7	1941	359179	35.23	29	43	52644

Source: (Kant, 2005) (Ibbetson, 1883)

For that purpose military was stationed in cantonments and garrisons. This process brought up spatial transformation in the region supported by railways, roads, urbanization, telephone lines, postal service etc.

4.3 SPATIAL TRANSFORMATION

In Punjab, spatial transformational processes started with the surrender of Sikh Army at Rawalpindi in 14 March 1849. This day at also ended the Second Anglo-Sikh war (Punjab, 1890, p. 93). British confiscated the old forts and garrisons of Punjab and destroyed them after the foundation of new military camps and cantonments surrounding the native city/town that contributed towards the physical militarization of the city. With the passing of time, the compulsions of great game, tribal uprisings in north-west frontier and manpower dependence on the region; Punjab was physically transformed into a fortress with vast military bases and

military road and railway networks connecting them. The natives of cities and towns got employment in the newly built military cantonments as labourers and service providers. The result of this was new sprawling district came into being with settlement of peoples dependent on the military in the vicinity of cantonment. British built roads and railways for connecting the cantonment with each other, and for steady movements of army and armament to make the empire safer. Canal and canal colonies developed to made empire self-sufficient in food security locally. These cantonments were pivotal bulwark in maintaining the dominance over the subcontinent and sustaining the colonialism.

4.3.1 Roads and Railways

British authorities were very well acquainted with it strategic weaknesses whether logistics or demographic. These constraints compelled them to lay the foundation of modern means of communication channel to back their imperial control over India. Dalhousie was most lavish in the construction of public works in Punjab. Military and political objectives were driving factors for development and maintenance of roads. Roads were constructed for strategic purposes rather than economic reasons. At the local level, most efforts were aimed at connecting settlement of administrative and commercial salience such as district headquarters occupied by garrisons and battalions. The only other roads that consistently maintained in the initial phase of colonial rule were the short strips in the vicinity of the district headquarters. Example metalled roads and non-metalled roads. Subsequently roads were extended up to Khyber Pass while string of outposts was established all along the border from Sind to Hazara along with cantonments in the province. These were connected with one another and with their bases on the Indus by fairly good roads, the river bases being themselves connected by roads with cantonments in the rear (Trevaskis, 1928, p. 224).

The impetus for road building in the area came from military and political objectives specifically outbreak of war with tribes and Afghanistan and great game. Road building project was pushed by the dynamics of political and military objectives mainly concerned with military outposts and cantonments were the main target for connectivity with the main Grand Trunk Road of India linking Peshawar to Calcutta. Military roads and bridges were constructed such as the Grand Trunk road. The

Punjab administration report pointed out that the "Grand Trunk Road from Lahore to Peshawar along which the army of the Punjab was massed and on which the most noble the Governor-General had been pleased to bestow his special attention had been traced surveyed and put well in progress" (Trevaskis, 1928, pp. 224-225). Grand trunk roads were maintained and retained for military purposes. Besides these roads for local needs were constructed by district authorities. The importance of roads over-shadowed by the introduction of railway in the second half of the 19th century, but the road construction also experienced a boom. Railways were regarded as major mode of transportation in post 1857. The construction of roads was aimed at to lay feeder roads for directing overland traffic to the railway stations (Yang, 1998, p. 50).

Although they started the railway works in the initial years of fifth decade of the 19th century but 1857 experience pushed them to embark on more vigorously to lay transport and communication networks to secure logistics and information and control over the empire. The learnings of the Franco-Austrian war (1859), the American Civil War (1861-65) and the Austro-Prussian War (1866) highlighted the importance of railroads on military strategy and 'strategic land movement' without a substitute to it (Badsey, 2001, p. 70). For example: in continental Europe, the Germany and France embarked on railway lines for military purposes having strategic concern with tinge of commercial concerns too. Some lines as such of Prussia with the Russian frontier; 'would never have been built if the motive had been merely financial" (Knowles, 1921, p. 253). Railways turn out far more effective means of military transport than both road and water: road frequently in disrepair while usability of water was affected by both of summer and monsoon. It would be difficult to decipher what were the more important concerns, military or commercial interests, but "military ones remained critical in planning and building" during early days of its development of railways (Prasad, 2015, pp. 201-203). Lord Dalhousie's minute of 1853 fully recognized the indispensable importance and centrality of the railway system for military purposes. But mutiny of 1857 gave the initial push for the railway introduction in the province, and the outbreak of the second Afghan War in 1878 thrusted upon the British administration to interconnect and extend the frontier communications to cater the military needs (Bell, 1894, p. 46). In post- war, British authorities merged three operating railway system to manage its affairs and termed

Figure 4.1: Indian Railway 1893
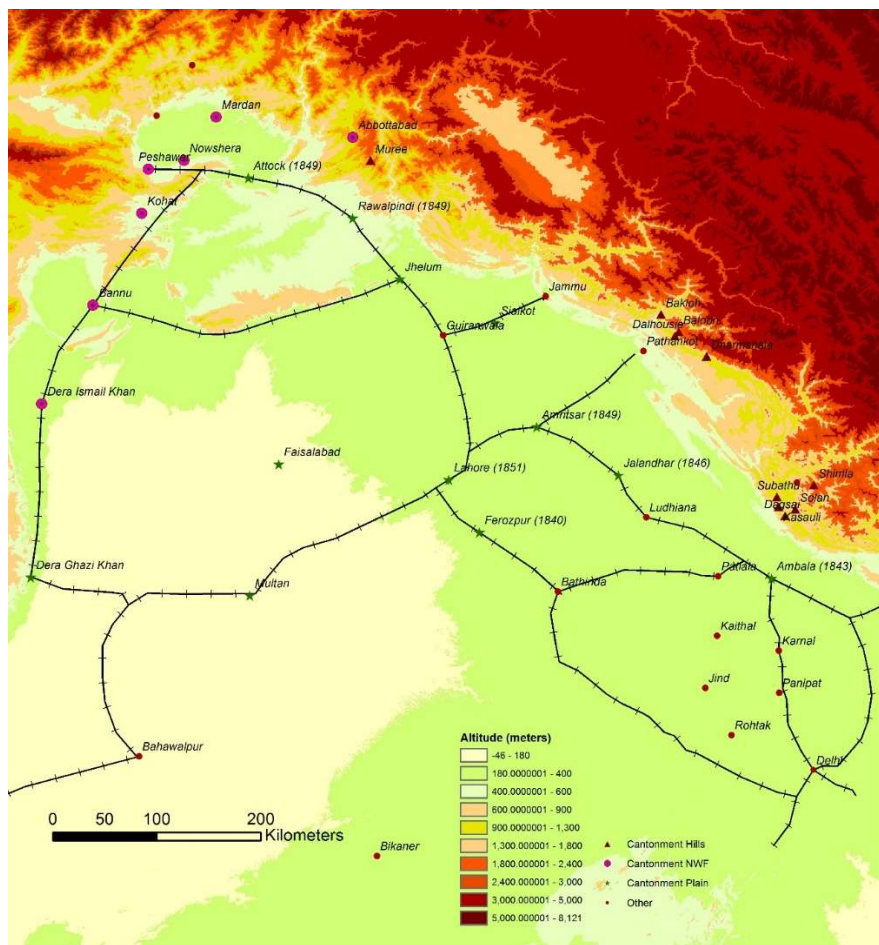
Figure 4.2: Indian Railway 1909
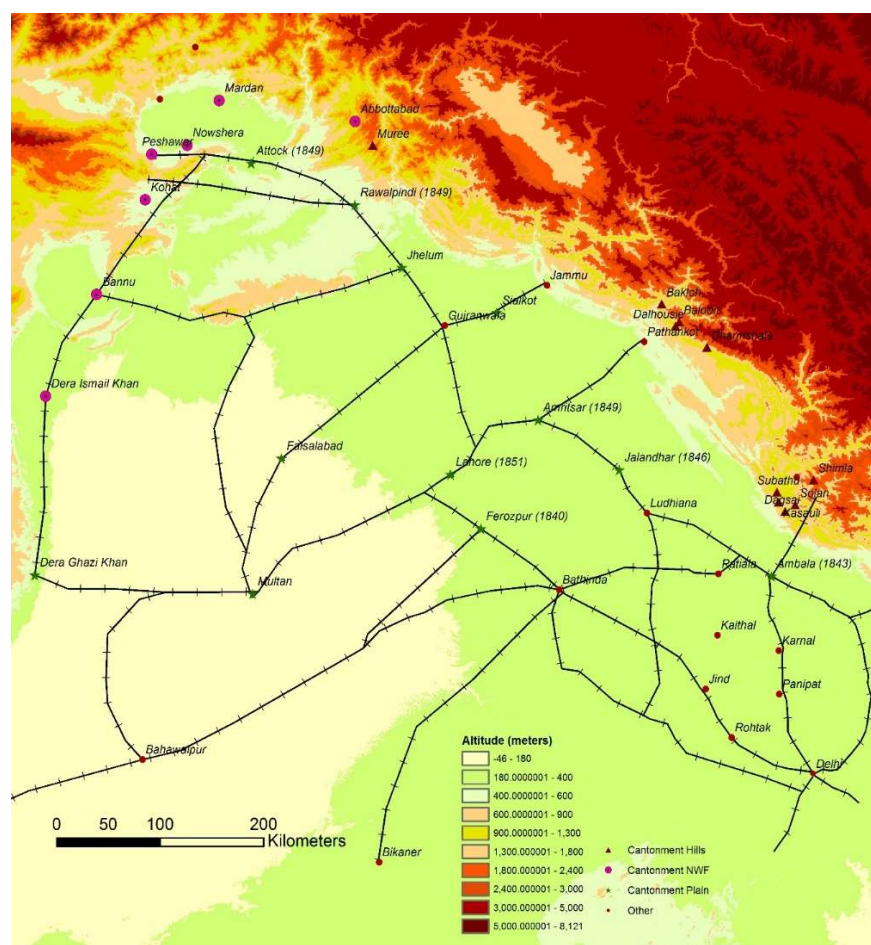
them military lines. Thereafter the military and strategic concerns influenced the establishment of railway station too (Bogart and Chaudhary, 2012, p. 3).

In 1860's, the British invested in strategic as well as commercial railway lines. The construction of a northward line from Karachi to Multan and the Lahore-Delhi line started under the aegis of the Sindh and Punjab Railway company. Multan-Amritsar railway line completed in 1865 was connected to Delhi via Jalandhar Cantonment, Ludhiana, Ambala, Saharanpur, and Ghaziabad by the year 1870 (Khosla, 1976, p. 284-285). The railway link from Lahore to Karachi was established in 1878 as the result of the completion of the Indus Valley State Railway. Punjab Northern State Railway Company built the Lahore-Jhelum line in 1878 and another railway line was laid across the Bolan Pass to facilitate the moving of men and material during the Second Anglo-Afghan War. Multan-Kotri (a town near Hyderabad, Sindh) line was completed in the same year. On the other hand, the Punjab Northern State Railway Road joined Lahore and Peshawar cantonments in 1883 and Attock Bridge across the Indus was constructed. By 1886, the government amalgamated the different railways entities in Punjab and Sind and took its control by naming it 'North Western Railway' (Kerr, 2012, p. 84). Subsequently, another line that connects Delhi to Samasatta was started in 1883 and was completed by 1899. It passes through Bhatinda, Ferozepur cantonment, and Raiwind (Khosla, 1976, p.285). The railway network allowed the integration of the region to the rest of the British India, facilitated movement of goods and people; and more importantly proved to be enormously important in swiftly moving, troops and arms in case of exigencies.

4.3.2 Taming the Rivers: Canals Colonization and Agriculture

The canal colonisation had a reflective influence on the position of province and people in the Punjab. The expansion of colonial rule and militarization of the region overlapped with another process of domestication of the waterscape as represented by the perennial rivers. The irrigation works, commenced after the annexation of the Punjab, draw massive investment from the colonial administrators, even though the war exhausted the limited fiscal resources of the East India Company and relatively made further expansion and conquest impossible (Fox, 1985, p. 19). The political economy of the time also motivated the irrigation ventures, whereby disbanded and unemployed soldiers of the Sikh army were re-employed to plough. So that, they

could not emerge as potential troublemakers and outlaws. Irrigation works in the central Punjab, that held the seat of political power of the former Sikh empire, could provide them employment avenues in their hereditary occupation of agriculture, (Bhardwaj, 1984, p. 24). Another motive was to develop the revenue resources for the company to make Punjab a profitable province, a claimed desire and commitment of Lord Dalhousie to the East India Company directors. The economic value of region was exploited by taming the perennial rivers and constructing the web of canals in Punjab to support agriculture.

The processes of taming the rivers of the Punjab under the British involved three phases. The first phase commenced from the very first year under the patronage of Board of Administration. The inundation canals of the pre-annexation time were speedily extended, and new irrigation projects inaugurated like the Bari Doab and Sirhind Canal (Calvert, 1922, p. 102). The Upper Bari Doab Canal construction project started in 1849 and opened for irrigation in 1860-61. Another system was Sirhind Canal System that began in 1867-68 and opened for irrigation in 1883-84. After that, all the projects were initiated to develop the barren tracts of the west and south-west region of Punjab in the second phase. The 'barren-scape' of the districts like Jhang, Lyallpur, and Montgomery transformed into a densely populated 'agriscape'. The Lower Chenab and Lower Jhelum canals irrigated the new agri-scape that enhanced the profit and recovers the earlier deficits of accumulated due to canal construction. In the third phase, triple canal projects opened such as Lower Bari Doab, Upper Chenab, and the Upper Jhelum Canal System that was inhabited by sparsely populated Jungli tribesmen (Bhardwaj, 1984, pp. 19-20) (Middleton & Jacob, 1923, p. 13). Calvert (1922) put that the cultivated area in the period 1855-1868 saw the increase of 31'6 per cent whereas population grew by 50 per cent. Darling (1925) educed that Punjab experienced 50 per cent increase in cultivation area in the period 1868-1921 and growth in the population of just 22 per cent. The reason was that canal projects and distribution of the land grants increased the cultivable area, but population experienced the decrease due to epidemic faced by Punjab in post-Pathan Revolt of 1897 like a plague, cholera, influenza, and malaria (Leigh, 1922).

Often the accepted reason for annexing the Punjab into the British dominion was its potential for economic exploitation especially in agriculture than strategic concerns.

In this regard, the three most important planks of British agrarian policy in the province were; networks of canals, the periodic settlements of land revenue, and recording the rights on the land (Grewal, 2009, p. 47). Land Rights made the land an owned, marketable and transferable commodity, and passing from hand to hand like any chattel that did not exist before British rule (Trevaskis, 1928, p. 234). It was also important for the British Indian Empire to have the support of the people in its favour when the cloud of the Russian attack was looming on the borders. The agricultural expansion ensured this purpose and made the place animated and happening. Moreover, the most of the families settled in the canal colonies had their male children in the British army, thereby establishing a chord between rural Punjab and the British Indian army. Thus Military service and agriculture became the primary sources of employment for Punjabis (Ali, 1988, pp. 122-125).

Irrigation projects were motivated by desire to increase the productions of cash crops, which would fill the cash crunched Imperial government's revenue. But later used as an reward for loyalty to bestow the land grants on soldiers and allies like military elites and landed gentry.The concept of the Land grants and 'martial race' tied together to support as well as exploit the loyalist proprietors and military elites. Talbot (1988) pointed out that it was Punjab's geographical features-proximity to the Afghan frontier that made the British to undertake extensive development projects in the region. Punjab's loyalty during 1857 that encouraged the colonial masters to construct world's largest irrigation system in the region (Tabolt 1988, p. 11). This policy directed the huge agricultural expansion in the region with establishment of nine canal colonies. These colonies brought around twenty-six million acres of land under irrigation and converted the region into a major commercialised agriculture centre of the Indian sub-continent (Ali, 1988, p. 2-6) (Tabolt 1988, p. 38).

The nine canal colonies augmented the irrigated areas to 5.7 million from 3 million hectares and stimulated the demographic shift from all parts of Punjab, but major composition was from the Central Punjab. Subsequent increase in agricultural production enhanced the export from Punjab to 561000 tons from 250000 tons in period of more than 30 years from 1890-1922 (Heitzman, 2009, 147). These nine canal colonies expressed the demography of Punjab, so also its geography by converting the unfertile and wild areas into locations of production and harvest with high human activity (Singh, 1982, p. 192). It was the lack of rivers and wells and the

unpredictability of the monsoon rains in Punjab in the south-western and western region of Punjab that led to the development of irrigation projects during the colonial times. These projects became one of the most elaborative and ambitious undertaken by the British in India (Middleton & Jacob, 1923, p. 13).

The canal colonisation had profound impact on the position of province and people in the Punjab. The expansion of colonial rule and militarization of the region was coincided by another process of domestication of the agricultural landscape. Punjab's geographical features other than proximity to the Afghan frontier, which made the British to undertook extensive development projects in the region, was presence of perennial rivers that encouraged the colonial masters to construct world's largest irrigation system in the region (Talbot, 1988, p. 11). The taming of rivers and, construction of 20000 miles of canal and laying of colonies eradicated the fear of famine. The cultivation area increased by 50 percent in the period 1868-1921 and rise in population was only 22 percent. The income generated by the export of surplus grains, improved significantly. In 1872, it was of just value of four lakhs that increased to 24 crores in 1918 (Darling, 1925, p. 235).

4.3.3 Urbanization and Demographic Change

Punjab over the many centuries engrossed with the influences from diverse external forces and, in the cities of Punjab, these can be seen in architectural styles and building forms, as well as in the relationship between public spaces, economic, political, and social life. The urbanization of Punjab during colonial times and its multi-layered historical legacies compels to analyse the numerous cultural influences that shaped its culture and society. The colonial period marked by the break with the past. It had been product of assimilation and hybridization of centuries of cultural contact established with the 'near west' (West Asia and Central Asia) and 'far west' (Europe). "A practical approach to deal with vast history is to focus on state, society and urban form and seeing in what ways these had been changed" (Shaw, 2012, p. 2). A new urban forms were imposed on the old towns structures like widening of roads, breaking of wall structured, gates and garrisons around the towns and cities like happen in Punjab and Delhi after 1849 and 1857. The wide circular roads were added around the localities and new colonial symbols raised like town halls, libraries, clock towers, etc. (Grewal, 2009, p. 94). The peculiar feature of

colonial times was development of flourished cities and towns along the network of roads and railways, especially those having cantonments and military stations away from the old native towns. Initially cantonments, hill stations, and civil stations marked this emergence, but later railway colonies and canal colonies made an entry to the list. Cantonments was built only near major towns, mostly in Punjab and western UP for reasons of security (Shaw, 2012, p. 15).

Introduction of railways created a railway suburb in the outskirt of the old cities and towns that was marked by the emergence of railway colonies for employees and railway workshops in the big cities like Lahore, Amritsar, and Rawalpindi (Grewal, 2009, p. 94). Grain markets emerged on the railways routes and that developed into towns and later into cities like Abohar. Administrative offices, schools, mission houses, and factories sprang up in the areas between railway suburbs and old towns forming linear extension to the urban centre. The driving phenomenon behind urbanization was movement of people from villages to towns, cities, and metropolitan. The census reports from 1881 to 1941 highlighted that city populations increased by over 600 percent, in the middling centres by over 1400 percent and in small towns only 10 percent (Grewal, 2009, p. 119). These middling towns had military connections direct or indirect on initial stages before their emergence as cities by 1941. The presence of Europeans and catering to them pulled people to these towns like Ambala and Rawalpindi.

The construction of public buildings in European architectural styles and their arrangement in physical space to display the power and might of the Raj, resulted in startling contrasts with indigenous forms, further highlighted the slowly emerged urban dualities. The development of new towns and cities, which were very different from indigenous towns like hill stations and canal colony towns. The nine canal colonies redefined the demography of Punjab. It converted the unproductive and wild geography of human inactivity into topography of production and high human activity (Singh, 1982, p. 192). Punjab canals have created the four flourishing districts of Shahpur, Lyallpur, Jhang, and Montgomery. In 1860's, 89% of Shahpur was wasteland; and thirty years ago (approx. in 1899) Lyallpur didn't exist at all (Singh, 1929, p. 1).

Urbanization is multi-disciplinary and multifaceted process that covers spatial, temporal, and sectoral changes in social, economic, and political structure of the society. It is process that had a regional dimensions and impacted the regional society by engulfing the cities, towns, and villages and its people. In this way, as a phenomenon it tied to regions geography, economy, and polity (Grewal, 2009, p. 18 & 11). As a social phenomenon, urbanization involved specialized religious, recreational, and educational activities and better health facilities. The necessities, compulsions, and contingencies of the colonial rulers guided the selection of the particular cities and towns as its centre of administration. These centres became the focal point of introduction of modern amenities like networks of roads, railways, telegraph, post offices, schools, industries, and other economic opportunities etc. All these advantages not only attracted the immigration of the people to these centres and made them as fastest growing urban areas, but also influenced the intensity and pattern of urbanization in these centres (Kerr, 1980, p. 212).

In regard to this study, the colonial urbanization apparently derived by population increase due to flourishing economic life around cantonments towns and civil areas; patronized and supported by military and administrative machinery of the British Indian Empire. Urbanization entails increased in population and its density. The population of Rawalpindi was spurted to 120,000 in 1931 from just 16,000 in 1855. Sialkot from 20,000 to 100,000. These were third and fourth largest cities in the province by the end of 1931. In the case of Lahore and Amritsar, largest and second largest cities of the province, had many other factors of increase like former was historical political heartland and later was economic and religious centre of the province. In 1855, Amritsar was leading city with population 122,184 and Lahore with 94,143. This position remains same till 1875, but Lahore had slight edge over Amritsar (Kerr, 1980, p. 216). By 1941, not only position between them changed but difference increased significantly; Lahore had population of 671,659 (Cantonment 39,523 and Municipality 632,136) and Amritsar only 391,010 (Cantonment 1429 and Municipality 389,581). The growth of cities depend on in-migration, in that case Lahore offered more opportunities and attracted more labourers. Jalandhar declined from third position in 1855 to fifth even though its population increased three times approximately (Kerr, 1980, p. 212) (Fazl-i-ilahi, 1941, pp. 26-27). Demographically, military centres had high proportion of young population as compared to other cities.

According to 1921 and 1931 census, overall all the top urban cities had high proportion of people in 20-40 age group. Rawalpindi had high percentage of people among age group 20-40, followed by a Lahore, Ferozepur, and Ambala cantonments in the two decadal census. Whereas Rawalpindi, Ferozepur, and Ambala had much smaller share of under 15 age group population. The 60 plus population was small in cantonment towns. This highlighted the socio-economic character of the population on the basis of age (Grewal, 2009, p. 133).

4.4 SOCIAL AND ECONOMIC TRANSFORMATION

The political and spatial makeovers simultaneously pushed the social and economic transformations of the province. The stationing of Bengal Army into the province and later recruitment of the local people into it, as combatants and non-combatants especially in post-1857, boosted the economy of the Punjab. In this regard Bose (1993) argued that the military takeovers and territorial expansion and occupation of local spaces created demand on the local economies whereas Peers (1995) assessed that up to 70 percent of every soldier's salary was spent locally. Thus surrounding towns and villages became reliant on soldiers spending habits. Soldiers spending created the demands, though specific to military needs, especially of the European that transformed the local economies. The economic and social interdependence between local and military persons required the regulation; as it produce a series of intimate encounters and familial relations that became a central concern for the military administration (Ghosh, 2006, pp. 208-209). Towns and cities that had cantonment towns grew dramatically in this regard, where markets emerged known for selling European goods and in-migration converted the countryside into spiralling city.

4.4.1 Trade and commerce

The massive investment in the road, rail, and canal networks and concomitant British presence in Punjab was motivated by the prospect of huge profits from trade and commerce. Not only had these investments facilitated the British in the transportation of goods back and forth with production of raw materials for export to England, but also army personnel. Out of them, railways were revolutionary and multiplier introduction in boosting the trade and commerce. These lines

interconnected the Indian sub-continent, geographically, economically, politically, and socially with the distant regions and markets (Bogart and Chaudhary, 2012, p. 1). The cantonment cities and other major centre like Amritsar, Lahore and Multan were connected with the port cities of Bombay, Calcutta, and Karachi. These networking opened Punjab to the outer world to a greater degree than witnessed ever before in past (Krishan, 2004, p. 83). Lahore, Amritsar, and Multan became the renowned centres of trade and commerce along with other industrial activities by the end of British rule in Indian sub-continent. The opening up of the Suez Canal in 1869, created further opportunities of international trade for Punjab via Karachi port. It started to export a major share of its annual production of food and non-food crops such as wheat and cotton as "large part of its agriculture production was grown for the market and found its way to many distant land" (Mukherjee, 2005, p. 56). These exports fetched them handsome amount of cash and prices increasing ever year. The prices increased not only because of bad harvests in Punjab but due to scarcity and demand in Sind, Bombay, Calcutta, and London. This trend remained so in succeeding years after 1860s to 1920s until the great economic Depression of 1930's that dropped the prices of agriculture (Mukherjee, 2005, p. 57).

Trade orientation and preferences of the people of towns changed. There were few examples like of Kasur, Rawalpindi, and Multan. The merchants of Kasur used to send it wheat and oilseeds to Lahore, but started to export directly to Multan and Karachi (Bal, 1997, p. 10). Another example was of Rawalpindi. It started to get an extensive trade from Peshawar to Attock, Makhand to Sukkar, and from other southern ports on the river with the construction of canals; also supported roads, and railway in commercial activities. In case of Rawalpindi, it was pointed out that the "greater part of the district of Rawalpindi may be described as a rough rolling plain", (Punjab, 1895, p. 2&206). Similar case was of Multan another cantonment town. As all the infrastructure of transport and communication was developed in the town and in the cantonment, Multan arisen as a central hub to collect cotton, wheat, wool, oilseeds, sugar, and indigo from the surrounding areas of the region to export them to Karachi and to import fruits, drugs, raw silks, and spices for the region (Punjab, 1884c, p. 160-61).

Overall the trade and commerce was agriculture dependent. British expansion and commercialization of agriculture attempted to exploit the natural resources of Punjab

and transformed its agriculture in sync with the requirements of global capitalistic economy. The cropping pattern was altered whereby importance was given to cash crops to serve the industries in England and satisfied the new global consumption. British manufactured goods were brought back to sell in local markets, which destroyed the domestic industry of Punjab. All these developments served the metropolitan interests of exploiting the Punjab for imperial purposes (Chatta 2012: 204-205).

4.4.2. Military Recruitments and Exposure: Social and Economic Changes

As Punjab became preferred recruitment area for the British in post-1857 and under the policy of martial races, military was largest employer in the province. The share of Punjab increased in post 1880 and remain so till the partition of Punjab. This importance and prevalence of military in Punjab empowered it in extending influence to other components of life courses of local inhabitants like divorce, marriages, and cohabitation; socio-economic attainment; crime and delinquency; and health (Teachman, 2012).

Brayne (1929) seen the ex-servicemen as would-be 'cipher of development' in the rural society. He wished state should make most of this opportunity by turning ex-soldiers as harbinger of progress and modernity. He would teach his family the values of hygiene, importance of ventilated kitchens, education, and other lessons that they learnt during service time. In this regard, Punjab provincial Government published a literature for the returning soldiers to take home such as a chart of vegetables, family budgets of cultivators, and one hundred agricultural proverbs. Other than these schemes, soap making, livestock-breeding, crafting crickets balls, bats, and others wooden toys were started to tap their energies in constructive direction (Khan, 2015, pp. 313-314). These returning men found themselves dithering between missing their families and missing the army. Over the years in the service they had reformed subtly and now had to turn time back and find their old place in village hierarchies and relationships. They found it hard to indulge in the hard manual labour on the fields. Some left the village behind and moved ahead to towns. They moved to towns and cities to work as watchmen, guard or if lucky in the police (Khan, 2015, p. 316).

M L Darling in his tour of countryside of Punjab found that in their gatherings at village and towns, candid and best informed minds were those of the soldiers. The soldier's horizon always remained vast; does not limited to village and even to India since the end of World War. He posit that if all the men had some service in the military there would soon an end of illiteracy in Punjab. Military could be called as 'Peasant University' in Punjab as commonly attributed to Russian Army (Darling, 1934, pp. 330-331). He noted that military mitigated the severity of fall in prices and brought prosperity in the region. "First and last it was one of the Punjab's greatest advantages that two-thirds of the Indian Army was recruited within its borders" (Mazumdar, 2003, p. 30).

The preceding year to World War I marked by the financial crisis that emerged due to failure of indigenous banks and joint stock companies dependent upon them. But the rural economy was saved by the great increase in number of soldiers recruited to army and the steady improvement in the rates of the army pay and bonus that brought extra sums of money into the Punjab. The best of the fighting districts received more than enough money in the form of money order remittances to pay the land revenue for the year. A few enterprising Punjabis made fortunes out of army contracts. And, as we shall see, Government showed great generosity in the matter of rewards for war service (Leigh, 1922, p. 15).

The World War I and II broke the isolation of villages and provided them exposure that self-consciousness dawned in the villages. These wars offered to military men and people of Punjab happy and rich prospects for interaction with the world beyond the colonial and imperial confines. Many Sikh, Muslim, and Hindu settled in Britain after the partition who were earlier brought for wartime services. The learning of English during the services helped them a lot in employment and entrepreneurial pursuits. The talking about his experience of the World War II with an English veteran of that war secured a job to Rajinder Singh Dhatt as an affinity developed between them (Khan, 2015, p. 318).

Military recruitments transformed the social behaviours and status of soldiers and their families and relatives, and break the social taboos. Military establishments promoted the social contact between the men and their families; as it was considered as an essential for morale of the soldiers. In the World War II, Defence

Department even paid the difference on parcels and letters that were insufficiently stamped, finding that returning them to senders 'could give wrong impression'. Even the authorities provided the 'free safe arrival' postcards to soldiers to send to their kith and kin (Khan, 2015, p. 37). The soldiers were made immune to any court proceeding naming them. It could be suspended if soldiers were serving overseas or in war (Khan, 2015, p. 38). Darling (1934) succinctly narrated his travel experience across Punjab to highlight these changes in rural geography. The slew of examples of his visits were worth mentioning such as: modern way of life and cash in villages, breaking caste taboos, and attitude towards women.

Military promoted the modern way of life and increased the flow of cash in rural hinterlands. Military men had latest instruments and gadget in their houses that were difficult to find in the villages during those days. He narrated "In the house of an ex-soldier once in the Guides, we found an old Gramophone (the first I have seen in a peasant's house)' bought after the war when he was discharged with a pocketful of money…" (Darling, 1934, p. 10). Cash played very little role till the end of 19th century in the village life. In post-World War I, the importance of the cash increased in significant proportion but varies tract to tract. The maximum of the dealings was in cash, approximately 75% in the neighbourhood of big towns where people had connection with cantonments and military service like Rawalpindi; where countryside was enriched by large agricultural export like canal colonies; and where emigration of the people was high, like Jalandhar (Darling, 1934, p. 17). Dulmial, a village of Aswan's enrolled more recruit in the war than any other village in India. 460 served out of a population of 879 males. "Holdings are small in all only 335 acres but miscellaneous income mainly from soldiering amounts to ₹12,000. The army has not only saved these people from penury, but has even made them prosperous. It was much the same at Buchhal Kalan." In the field of education, village performed reasonably well. The number of boys of school going age was put at 150 and of these 59 were at school, 12 in the local High school. Three Newspapers published by Army, Rural Community Council and the Punjab Co-operative Union come to village (Darling, 1934, p. 51). Lending rate never got affected in Tatral village as in plains because military income kept the inflow of money at high level. Moneylenders here too were cautious (Darling, 1934, p. 54). In Gurah Village, every Zemindar family had one or two member in Army as the land

holding was too small. Military income affect was so remarkable that village was full of newly constructed houses. Forty to fifty houses were constructed in post-World War I period with good finishing design and floors (Darling, 1934, p. 61). Here, literacy rate was high and people supported the education of children but oppose the co-education. All the children of school going age of soldier went to school, but people had reservation against the co-education. Education helped them in taking care of cleanliness for which pits were sunk to make manure (Darling, 1934, p. 61).

In breaking caste taboos, the influence of military was seen in the changing attitude of Zemindars towards the trades other than agriculture such as engaging in poultry and vegetables selling. Its clear example was the Risaldar from Nowshera a village on Tarn Taran to Sirhali road. One of the soldiers narrated the guiding and life changing experience of France behind this. He posited that "we see very good men growing them in France and thought came to us why is it shame to grow them here". He hopefully predicted that whatever shame has left will melt away gradually as now schoolboys have to work 40 minutes a day to grow vegetables on the farm attached to the local middle schools (Darling, 1934, p. 87). Another example was of ex-soldier of Lilla village who had experience of Hong Kong shared that Chinese peasant doesn't give a thought to his izzat that's why they work better. Fortunately things were changing here and Zemindars started to sell milk; a thing he would not have done twenty year ago, somewhere around first decade of 20th century (Darling, 1934, p. 50).

Military service and World war experiences changed the attitude of the people towards women. In South east of Punjab, status of women started to improve as army and education of men was best ally of women. The soldiers from Beri village forwarded while mentioning about domestic works that "since the war we have been trying to give them less to do." Even some of them relieve the women from many day-to-day chores like work of manure, cleaning of byres, and making dung cakes; assigned to sweeperess whereas cutting and gathering of thorn bushes for fuel and hedges were stopped by village Panchayat. A Jat substantiated that ten year ago his wife did all these work herself and only gave up recently as "we are educated and said it was not good." In canal colony of Shahpur, women would no longer fetch the water or take out the mid-day meal (Darling, 1934, p. 290).

4.4.3 Education and Literacy

British administrators tried to improve the educational system, which was considered to be "primitive and of religious" in nature (Chhabra, 1962, p. 135). John Lawrence constituted an education department in 1854 started the 30 schools at district headquarters, 100 village schools and four normal schools. A cess of 1% on the land revenue was charged to support the education system as the earlier schools were having no proper premises and even the teachers were not given fixed remunerations. Persian and Urdu were promoted by the system and as a result Punjabi rapidly felled in destitute (Thorburn, 1970, p. 182). Female education also received the attention of the British, since the annexation of Punjab, though the progress was slow and response was meagre. In spite of 52 girls schools opened in the state, number of girl students was only 1168 in 1862. The British as a result embarked on a mission to generate interest among the people towards female education, particularly the Punjabi nobility was targeted in an attempt to convince them to provide education to their daughters (Chhabra, 1962, p. 152-153). In 1864, Government College at Lahore was opened alongside another one at Delhi which was closed in 1877 because of financial consideration and also to have fully equipped college at Lahore. The Mayo School of Industrial Art was established in 1875 at Lahore. Subsequently, in 1881, Central Training College was established for the supplying trained teachers for English schools. In 1865, Anjuman-i- Panjab was founded with the aim to open an Oriental University. Though a university was proposed by Punjab Government, but it was finally opened only in 1882 at Lahore to affiliate the colleges and schools in the states, which were earlier link to Calcutta University (Chhabra, 1962, p.140-45).

The improvement in western education system and European knowledge brought modernity and created a room for western thoughts to penetrate into Punjab. This knowledge was connected with the progress of European powers and assisted in justification and facilitation of imperial expansion in Asia and Africa (Diamond, 2009, p. 162). At the same time, it allowed societies like Punjab to look inwardly and see some of its socio-cultural maladies, which unleashed a robust movement for social reform. The introduction of western education provided a push to transform the vernacular language. It provided space for the local languages to grow according to the modern norms to seek scientific inquiry. For instance, the period witnessed the

transformation of Urdu from a poetic language to a language of debate, education and scientific inquiry (Diamond, 2009, p. 167). British achieved a desired rate of success in women education too. In Lahore district, they opened six girl's schools, under the management of the Deputy Commissioner; one school was at the Bhatti gate of the Lahore city, one at Patti, and four at Kasur, (Punjab, 1884a, p. 117-118). Other schools of districts, which were all independent from control of the Deputy Commissioner, also spread new wave of education; such as Anglo-Vernacular grant-in-aid middle school, the normal school, and St. John Divinity School (Punjab, 1884a, p. 117-118).

The women welfare scheme got boost in 1927 with the joining of lady superintendent. The school of Domestic Economy were established with the objective to train the village girls, in the age group of 16 to 35 years old, to teach in co-educational schools all over the Gurgaon for at least one year to two years. To draw a good response from villages, ₹ 15 was provided as stipend. The school teachers were also encouraged to send their wives or other female relatives, so that they work together in their schools. It was also considered that women could do more good to villages than other strangers. The Scheduled caste women were also encouraged to come forward for teaching. The proposal was to teach them sewing, simple home nursing, and care of babies, and personal cleanliness and the use of soap in the evening for an hour (Brayne, 1929, p. 95 & 208). Gurgaon District Board started a rural school for short service soldiers to impart vocational training to them. This step was praised by the Army authorities. Even the Co-operative Department used the Boys Scout training camp facilities to train their staff other than of rural and domestic schools (Brayne, 1929, p. xv).

The ability to read and write is basic requirement for people to get out of ignorance and backwardness. The literacy rate is quite reliable source of socio-economic development of area though remained fluctuating throughout the British era in Punjab but overall condition improved in post first world war years. The cantonment towns and canal colonies had good proportion of literate persons; being domesticated by military men and government employees (Grewal, 2009, p. 113). The opportunity to serve in a professional army provided prospects to obtain new skills to secure salary hike and promotion. Military Service provided an opportunity to Muslims to become literate otherwise they lack opportunities other than school

as compare to Hindus and Sikh, who gain literacy in their pursuit of day to day business activities (Khan, 1933a, p. 252). Khan (1933) mentioned that Ambala and Rawalpindi seemed to comprise more literates due to cantonments. These two cities had 84 and 119 English literate person per mille above the age of five years much more than Lahore and Amritsar. Overall both cities had 16180 and 27523 literate persons. (Khan, 1933a, p. 251). The large numbers of ex-soldiers or the presence of cantonment affected the literacy rate in districts like Ludhiana, Rawalpindi, Jhelum, Amritsar, Ambala, Hoshiarpur, Jullundur, Kangra, Shahpur, and Multan. The census report of 1931 submitted that a group of districts in Punjab "Rawalpindi, Jhelum, Gujrat, and Mianwali also owe the increase in literacy to the return home of demobilised soldiers, who very often pick up reading and writing in Roman or any other of the vernaculars in the course of their military career" (Khan, 1933a, p. 250). Most of the Punjab soldiers voluntarily enrolled in the British Indian Army from small rural villages. They could not read or write before joining the military service. Night School were started by the Co-operative Department. The improvement in English literacy was significant in sub-Himalayan region. It improved from 68 male to 104 male literates per mille from 1901 to 1931. The strength of literate males improved to 230,390 from 128,242, and females 19,217 from 11,293 in the period 1921-1931 in Punjab (Khan, 1933a, p. 259).

Eynde (2014) done an analysis that confirmed that, literacy rates (as well as the number of literate individuals) improved and augmented among the favoured martial races and communities between 1911 and 1921. This improvement was significant in the age of men eligible for recruitment, which highlighted the uniformity with his hypothesis that "soldiers learned to read and write on their foreign campaigns". In post war, as Eynde suggested, the number of literate persons was increased by three on an average, against the recruitment of every ten additional soldiers. It was a significant improvement if we compare it with underinvestment in public education. Military promoted the reading habits among the recruits as they distribute them materials to boost their morale. Therefore, military service would reduce the cost of acquiring literacy skills by the individuals in comparison to civilians. Family members of the soldiers could also have benefited from a similar mechanism; as there were chances that those who remained in India also developed literacy skills informally.

As they were dependent on newspapers and letters for news of their loved ones on foreign missions (Eynde, 2014).

4.4.4. Health and Hygiene

After 1857 uprising, a huge amount of Europeans migrated to most of the cantonment cities, which primarily forced the British to develop necessary health infrastructure in such places for their folks. Drastic changes were unleashed in the health system of Punjab during the British rule and most of the new health institutions were attached with the military cantonments. The undeveloped nature of many of these places and lack of health facilities led high death rates and became a major concern for the British. Initial objectives of the British was to keep the Europeans healthy in the insalubrious sub-continental environment. But, the local people also got benefits out of this as they were slowly attracted towards western medicine. Railway and roads links made it easy to provide the health facilities to the common people (Krishan, 2004, p. 79). In Lahore, number of hospitals were opened at different places supported by a medical college and veterinary school. A lock hospitals were opened at Anarkali and Meean Meer cantonments. The lock hospital at Meean Meer was opened in 1859 whereas in Anarkali cantonment was founded in 1879 (Punjab, 1884a, p.122-125). The British also gave special attention to women's health. The Lady Atchison hospital for women opened opposite the Mayo hospital in the Lahore cantonment (Punjab, 1916a, p. 239-240). Four dispensaries respectively at Kasur, Patti, Chunian, and Sarakpur were also established for the purpose of providing special hospital arrangements for women in Lahore, which brought a lot of changes in the direction towards improving entrenched notions of health (Punjab, 1916a, p. 241-242).

Gradually, the civil hospitals became part of the cantonments. A civil hospital was opened at Sialkot cantonment and at Amritsar after its occupation in 1849. These were the principal health institution in the district during the early British rule. Another hospital was completed in 1905 in Amritsar and placed under the control of civil surgeon (Smith, 1895: p.169) (Punjab, 1914, p. 174). Beside these hospitals, beyond the confines of the cantonment, British opened the lines of dispensaries in the district at Ajnala, Fatehabad, Chabhal, Majitha, Serai Amanat Khan, and Tarn Taran (Punjab, 1914, p. 174-175). In Multan, they established a 'general hospital' to

the east of cantonment, which was under the control of Multan cantonment (Maclagan, 1902, p. 363-365). Apart from these, two more health institutions, namely the civil hospital and the 'Victoria Jubilee hospital' were established in the Multan, which were also situated near the Multan cantonment (Punjab, 1926, p. 263). The military hospitals were another innovation of the British time such as the station hospital for British troops opened at Delhi, the Indian infantry hospital at Daryganj and the Indian cavalry hospital in the Rajpur (Punjab, 1912 p. 214). These hospitals met the basic requirements of the European military officers and Indian troops. Women health also received an attention of colonial masters and steps were taken in improving the women's health; by imparting health education to them (Punjab, 1912 p. 214). Such efforts greatly accommodated local concerns and local health needs of Punjab. Hygiene was a part of rural uplift program started by Brayne in 1920 especially of women and home. He observed that dirt was the cause of nine-tenth of the diseases in the villages and concluded that cleanliness of person, of home, and of village would inculcate desire to rise to better things. He started a rural uplift program (Kuryenson, 1950, pp. 59-60). The District Board in Gurgaon used ex-soldiers for vaccinations during the vaccinations season after the First World War. Even excused the required average vaccinator's educational qualifications was the passing of vernacular middle examination (Brayne, 1929, p. 189).

Military influenced native women when they came directly in connect with military through married men quarter. It pushed the native women to keep themselves clean as quarters were regularly inspected. Soldiers' wives realized the importance of clean midwifery, and learn how to take care of themselves and their children (Darling, 1934, p. 332). Military service developed the faith in western medicine and it use. For example: "In one Sikh regiment, Sepoys began sending for their wives to have their babies in the regimental lines under expert medical aid instead of in the village with only the untrained midwife to look after them" (Darling, 1934, pp. 332-333).

4.4.5 Modernization, Cultural Assimilation and Recreational Activities

Military cantonments, other allied institutions and corollary developments brought the change in mentalities of people of Punjab, giving way to its modernisation. Western education played a pivotal role in these transformations, alongside with

other developments such as transport and communication infrastructures. New transport infrastructures helped in unification of Indian sub-continent by linking different provinces with each other through the English language; that facilitated interaction and exchanges to support the greater cultural assimilation and in promoting nationalism. The ideas of modernity embodied in western education and western law had a profound effects on local elites. Working class employed in new factories or offices, unhindered by any class based sanctions and other stigmas imposed in rural areas or native cities, broke class inhibitions. British colonialism was harbinger of modernity though divided modernity, difference between rich and poor, visible through their settlements planned and open in contrast to congested places of poor but closed to their workplaces (Shaw, 2012, p. 17).

Military service opened the prospect of travel and to see the wider world for the recruits from Punjab. It opened up the spaces for cultural assimilation and to migrate; as many youngsters from peasant backgrounds were enlisted in the British Indian army, fought two World Wars, and visited a number of countries as a part of their military assignment. These soldiers were captivated and mesmerised by the dazzling and ravishing social life in the western cities. Their interaction with the educated women, led them to co-relate the status of women in Europe and in their respective villages of Punjab. They tried to bring back significant social changes seen in west (Soherwordi, 2010, p. 19).The sanitation, hygiene and cleanliness along with other engineering achievements generated awe among the Indian soldiers such as underground train network. It left an indelible impression on all of them as collections of their letters to their families and friends revealed. The influence and social clout enjoyed by soldiers in the society was well depicted and captured in the folk lore and songs of the Punjab. In post retirements, as they were infused with new thoughts and concepts, they made changes in their villages, family lives, and surroundings. This was all because of their exposure to the outside world that brought prosperity and positivity in rural landscape of Punjab (Soherwordi, 2010, p. 21-22). The presence of cantonments and institutions of modern education exposed the local population to the modern western culture and offered chances of learning to localities. In this regard, missionaries played an important role, though their primary aim was to spread the Christianity. The schools run by them imparted the western education alongside build the solid path for the exchange of cultural

values in the long run (Aujla 2012). Modern means of transport and communication connected the people within and outside the province. It facilitated the human interaction and movement of goods, which helped in development of composite culture and cultural affinities by breaking barriers of spoken dialect. This could be seen in three cities of Punjab around capital city Lahore and other two were Amritsar and Ferozepore (Aujla, 2012).

Europeans had their own leisure pursuits at-homes such as theatre performances, musical concerts, cricket matches, horse-racing and so on. Entertainment was provided by touring, circuses, magic lantern shows, performances by minstrels and operas. All these were also brought and introduced in Punjab. As in the case of Lahore, the focal point of off-duty activities of the station was always the Gymkhana. A club with tennis court and dance floor was opened for leisure pursuit before dinner. Lahore that was already renowned as a centre of learning and culture, a number of libraries and reading rooms were opened to make a supportive learning atmosphere for the scholars (Punjab, 1884a, p. 164). Lahore mall which laid out by Colonel Napier in 1851 was the most attractive place for the European people in the city. It linked Anarkali with the newly-established cantonment at Meean Mir, which was some three miles away (Punjab, 1884a, p. 164). Gradually, new and imposing buildings sprang up along 'The Mall', and became the hub of activities. Among these buildings were the Government House (1853), the Lawrence and Montgomery Halls (1861-66), the School of Art (1874), the Senate Hall (1876), the New Cathedral (1887) and the Municipal Hall (1890). The new gardens and parks and planting of trees along all the connecting roads around the cantonment provided abundance of greenery to the city, changed the picturesque of the Lahore (Punjab, 1884a, p. 164-166).

A new culture of recreational life were also initiated in the other cantonment and cities/towns that influenced the surroundings. In Ambala cantonment, the British erected several beautiful hotels and a staging bungalow, which provided ample accommodation for the travellers, and at the north-east end of which were the Pager gardens and the Sadr bazar (Punjab, 1893, p. 126). Besides this, there was a small church and Sirhind club, frequently visited by Eurasians. An English church and a school belonging to the American Presbyterian mission were also established in the Ambala cantonment (Punjab, 1893, p. 126-127). Similar staging bungalows, church,

and schools were opened in the cantonment of Dera Ismail Khan. British spread all western recreational institutions like badminton court, swimming pools, cricket grounds, etc., which resulted in the spread of western recreational and sport culture in and around the cantonment (Punjab, 1884, p. 198-199). In Sialkot cantonment's finer and broad metalled roads and bazars were established. The Sadr bazar in the cantonment fulfilled the needs of the troops and emerged as a big market space for the consumer goods (Smith, 1895, p. 167-170). British endowed the cantonment with massive western style buildings in Multan too, prominent among were the two churches, Protestant and Roman Catholic (Maclagan, 1902, p. 365). Shimla was the most attractive place for the British troops from the atmospheric point of view. British established a Roman Catholic Church and a school (Punjab, 1883, p. 86-87). British also built parks, clubs, theatre, etc. to maintain a healthy urban living standard and thus converted a normal hill place into a beautiful city. A new post office built in the centre of Shimla. Two Europeans breweries all added to the beauty of the hill city. In Shimla the British also planted Deodar (Himalayan Cedar) and Cheel (pines) trees abundantly to make it naturally rich and beautiful (Kanwar, 2007). The Western culture of planting grass and making lawns has taken place especially in the cantonment areas and in the officer's bungalows, which has changed the look of the landscape of many of these places. For instance, the British created two big beautiful grass farms and a dairy farm within the Sialkot cantonment (Smith, 1895). The planting of trees not only made the cantonment and the cities beautiful, but also ensured plenty of water supplies. For instance in Rawalpindi, availability of the water was slightly easier that helped in planting of trees. British freely planted trees in a massive volume due to that the military station got a very pleasing appearance and attracted the wild fowls, hares, jackals and foxes, which roamed in the Rawalpindi cantonment. It increased the beauty of the town during the colonial epoch (Punjab, 1895, p. 253). This also created ideal ambiance for walking, jogging and games like golf.

Darling (1925) observed that in post-World War I, the taste for travel had developed among the people and at places associated with military men. "The villager may now be seen going off to view the sights of Delhi and Agra, the beauties of Kashmir. Some even go as far Bombay" (Darling, 1925, p. 159). In Lyallpur villages, "the taste for gardens is spreading and is a part a result of the war, when many a Punjabi

enjoyed the luscious fruit of France." The orchard gardens sprang up around the villages with the possibilities of oranges, bananas, and loquats harvest (Darling, 1925, p. 158). Lyallpur was major centre for farmers to procure better variety of seeds and implements. In 1909, Agricultural College and experimental farm established at Lyallpur whereas Rawalpindi, Gurdaspur, Hansi, Sirsa, Multan, Montgomery, and Jalandhar had extension of this experimental farm (Singh, 2000, pp. 65-66) (Grewal, 2009, p. 153). In Multan region, the cultivation of Indigo thrived with the construction of canals and also because of being an important revenue generating crop of the state (Punjab, 1884c, p. 161). The Agro-Horticultural society introduced potato and several other new crops and varieties in the Punjab. The presence of Europeans affected the food and vegetables trade also. New vegetables were introduced and started to be cultivated in Punjab to cater their needs. Besides these, the grocery and retail stores emerged on the cultural landscape that sell imported items like wines, liquors, cigar, clothes, hosiery, books, magazines etc. (Grewal, 2009, p. 153).

One 'taste' that was deliberately encouraged in the army was of alcohol intake, which came to be firmly associated with masculinity and masculine behaviour. Drinking alcohol was an intrinsic part of rural society. But the British Indian Army's influence on alcohol consumption had been a very decisive one as it had always been in plenty in military provisions and stores departments. The easy availability of 'cheap' or subsidized liquor led to heavy drinking among soldiers. It was provided and encouraged to suppress soldier's fears, reward their efforts, overcome their social inhibitions regarding aggression and violence, and help them numb the pain of combat. The army recruits on visits to their villages took back bottles of rum and whisky, relatively high in strength compared with the home-brewed liquor to be shared with the fellow males. This also meant an increase in drinking places in the rural areas which acted to cement the power and legitimacy of a masculine collective drinking in rural landscape. At these drinking places, male community and power came to be displayed; a dominant understanding of legitimate masculine behaviour came to be defended and continually refurbished in villages of Punjab (Chowdhry, 2013).

Conclusion

It can be concluded that British were well aware of strategic and economic value of Punjab. Its strategic value as frontier region and economic value as gateway to Central Asian market through Afghanistan and Kashmir. This was one of the driving factor for investment in public works by the colonial rulers. Thus the economic value of region was exploited through web of canals laid in Punjab to support agriculture (Trevaskis, 1931). However, the actual driving force behind all these transformation was military geography that necessitated the establishment of cantonments and supporting infrastructure in the province.

Chapter Five

AMBALA CANTONMENT AND "CONVERGING AND DIVERGING MILITARY GEOGRAPHY": TRANSFORMATIONAL EXPERIENCE OF ITS ENVIRONS

"No phenomenon on earth surface may be considered for itself; it is understandable only through the apprehension of its location with reference to other places on the earth" is a famous quote of Alfred Hettner (Carlson & Philbrick, 1971). The essence of this appraisal squarely relate to the Ambala cantonment. The identification and selection of Ambala cantonment site and its transformation along with its environs could be attributed to a converging and diverging point for the empire's military geographical needs. The converging and diverging military geography defines in time and space specific orientation, depending on the exigencies of internal and external security or expansion and consolidation position of the empire. Military activities diverged from here in two direction- one toward the North-western frontier of Punjab and other towards the northern traditional trade routes above the Shimla Hill states- sharing border with Tibet and Ladakh. Ambala cantonment emerged as a converging military geography's landscape when the British Indian empire was planning to annex the Sikh Empire in the post first Afghan war period. The troops and logistics set-up of British Indian Army (Bengal Presidency) converged here and around its environs. During the Anglo-Sikh Wars the movements of the troops underscored the diverging military geography's landscape. Another facet, but reverse, of convergence and divergence sprout in the times of mutiny and remained attach to it in post 1857 periods with regards to the protection from the Gangetic plains uprisings. Troops from Punjab and Hill Stations amassed here and embarked upon the mutineers to save Delhi. In this way, it was a converging as well as diverging military geography point for the empire and central to embark on external frontiers, and guarding and securing the domestic space from native uprisings.

It could be argued that the process of conversion of Ambala just 'as a place' to Ambala 'as a cantonment' was simply one which acted as a nodal point of growing networked space (Figure 5.1). Sandwiched between princely states in north and south directions Ambala was strategically well positioned to facilitate the British requirement (Figure 5.2). The relevance of Ambala cannot be relate to any major

battle or skirmishes, but as an extra-ordinarily connecting place and necessity of the time and space.

While analysing the transformation of environs two kind of methods were employed. First was cartographic sources and other was data information from census, gazetteers, contemporary sources, and other narrative of the period; and secondary sources such as research papers and books. The GIS tool was employed on cartographic data. The cartographic sources includes two maps of Ambala cantonments and its environs of 1868 and 1891. Maps were sourced from British Library, London (U.K.) and Punjab State Archive, Patiala.

5.1 AMBALA AS A HATCHWAY: GEOPOLITICAL AND GEOSTRATEGIC SETTINGS

Ambala cantonment and its environs' geo-strategic importance for the empire could be traced back to mercantilist craving to set-up Trans-Himalayan trade link with Tibet and Central Asian region in the early 19th century; and emergence of Shimla as a summer capital of the British Indian Empire in second half of the century. During those times, geo-political reality was the presence of Sikh Empire under the Ranjit Singh on the most frequently used North-western passes. Only viable option left with the British was through largest northernmost Shimla hill state Bushahr (Kanwar, 2007, p. 13). British had heard about this state that it subsist only because of its trade with Ladakh and Tibet. James Baillie Fraser[13] pointed out that that Kinnaur traders were the exclusive commercial couriers between Hindustan and Tartary also Tartary and Kashmir (Bajpai, 1981, p. 86). The traders of plains of Hindustan met the merchants from Yarkand, Tibet, and Ladakh at its capital Rampur. The alluring prospects of connecting to the Silk Road and to had a trade with cities like Bokhara, Yarkand, Samarkand, and Lhasa compelled the East India Company official to establish its control over the region in 1815 by getting it freed from the Gurkha Empire. In addition to that company saw an added geo-political advantage of this strategic place was prospect of monitoring transaction of Russia, Chinese Xinjiang,

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[13] A Scottish traveller, writer and artist who travelled in unexplored regions of British India, Persia, and Mesopotamia. He travelled from Delhi, Nahan, and Garhwal region in 1815 (Wright, 1994).

and Tibet (Rangan, 2000, pp. 73-74). A political agent was stationed here for Shimla Hills States whereby gradually Shimla hill station emerged.

Figure 5.1: Princely states in India and Location of Ambala

Source: (Peers, 2012)

In Indian subcontinent, British established over eighty hill stations both as sanatoriums and holiday resorts in various regions. The largest number of them were in foothills of Himalayas that mitigated the severe ordeal of hot and humid environment to the civil and military officers (Smith, 1883, p. 35). In 1827, Lord Amherst, Governor General also stayed here for two months (Ross, 1883, p. 236), and the Lord Dalhousie spent consecutive summers here from 1849 to 1851 and looked for the possibility of trade to Tibet via Bushahr state. At the time of mutiny, Punjab had twelve regiments Europeans troops, out of which no less than seven were either at Peshawar or at hills stations in north of Ambala leaving five regiments

to garrison the country from the Indus to the Sutlej (Punjab, 1890, p. 96). This signified that Ambala was a connecting point in Cis-Sutlej territory to move to central and western Punjab or went to up-hill in north of Ambala to avoid the heat waves of arid plains of Punjab.

Figure 5.2: Princely states in Punjab
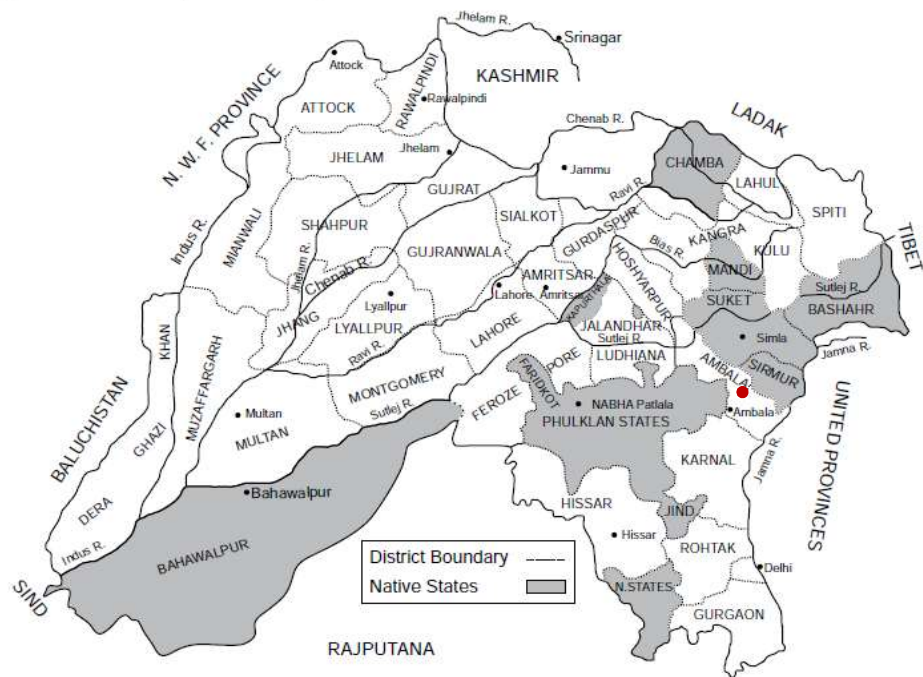
Source: (Douie, 1916)

In post 1857 period, geo-political settings of the British Indian Empire compelled to look for a centrally located capital instead of Calcutta whereby imperial authorities could take swift action against any rebellion of natives. Other probable compelling reason was North-western frontier of Punjab, where the Russian or Afghans intrusions were expected, was far away from the Calcutta (Kanwar, 2007, p. 38). In the words of Commander in Chief Sir Charles Napier, "it takes a regiment five months and a half to march from Peshawar to Calcutta; and from Calcutta to Assam, four to five months more" (Ludlow, 1858). In this context, it becomes vital to think about centrally located capital. John Lawrence suggested for Agra or Delhi or

Shimla as Summer Capital.[14] He argued to Charles Wood (Secretary of State) that this place, of all hill stations seems to me the best for the Supreme Government, among the docile population and surrounded by the martial races of Indian sub-continent on whose character, power, and support we survive. It was strategically near to the Awadh (heartland of North West Province and centre of Meerut Mutiny). In addition, he accepted his argument that there was danger of being cut off from the imperial seat (Calcutta) but latest means of communication like would lessen the danger (Smith, 1883, pp. 425-426).

In addition to above cited reasons, Lawrence not only wished to safeguard the empires north-western frontier but also northern frontiers, and concomitantly to develop Indo-Tibetan trade, and exploit Tibet's rich mineral resources. "Simla and the ring of cantonments around it provided a ready force of British soldiers and commanded access to potential trouble spots in north-west India as well as to Central Asia" (Kanwar, 2007, p. 36). Even during the Mutiny of Nasiri Battalion of Gurkhas in 1857, the local princely rulers or Ranas of Simla hills provided shelter and defence to British inhabitants, and other Europeans, stationed at Shimla. In 1864, the Viceroy Lord Lawrence formally called the Executive council in Shimla with 484 persons being transported for six months there. The railway connected Calcutta to Delhi and Ambala in 1869 and improved the transportation and communication network. This made the acceptance of Shimla as summer capital little easier. In 1874, a traveller calculated that the Viceroy with his staff could reach Ambala within 12 hours after leaving Shimla. From Ambala fifty hour journey would get them to imperial seat Calcutta and Sixty to Bombay. Thus Government had a full control from here over Punjab and North West Province being in proximity to railway connected Ambala (Kanwar, 2007, pp. 39-40). Ambala connects Calcutta, Karachi, Bombay, and Shimla.

In view of strategic location of Shimla, it was designated as permanent seat of the Army Headquarters from 1864, where the British Indian Empire already had the cantonments and hill forts established and occupied by its military in post Gurkha

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[14] Lawrence accepted the Viceroyalty on the account of spending the summers in the hills for which he considered the Shimla as best place with which he had association from the days of commissionership of Punjab (Smith, 1883, p. 73)

war period. The Company retained four strategic forts at Sabathu, Kotgarh, Raingarh, and Sandoch; and secured the hold through treaties with the rulers of small hill states. The political and military vagaries of later period like preparation for annexation of Punjab led to establishment of cantonments at Kasauli (1842), Jutogh (1843), Daghsai (1847), and Solan (1861) to station the Europeans soldiers (Kanwar, 2007, pp. 15 & 25-26). Punjab Government too started to move here for five months in 1871-73 and every year after Viceroy Lytton called upon by the Lieutenant Governor of Punjab for briefing regarding north western region (Kanwar, 2007, pp. 40-41).

In Ambala, the preparation were made for the Anglo-Sikh wars against the Sikh Empire and annexation of Punjab. For the annexation of Punjab, British constructed the hill cantonments and abandoned the Karnal cantonment. It could be accepted that the closing and shifting from Karnal in 1842 involved strategic consideration instead of just recognized and often cited reason of prevalence of Malaria in Karnal and its environs. Later establishing Ambala cantonment in 1843, could be linked to placing the soldiers near to command of the European officers retiring in hill station like Kasauli. The aftermath of settlement of cantonment at Ambala was closure of Ludhiana cantonment in 1845. The Ambala cantonment and others small military cantonments and posts in hills transformed the region as strategic site from where entire cis-Sutlej States and the North West Provinces of Trans-Jamuna could be dominated, but also provided a readymade protective cover for a summer capital of the British Indian Empire. This was exemplified by the 1857 when troops hurried from the north-west province without any hindrance presented by the rivers (Newall, 1882, p. 60). Ambala's geo-strategic location was highlighted by the name of the road stretch sprout from here that was Ambala-Simla-Tibet. It was of 276.59 mile long, out of which 90.14 mile was metalled and 186.45 mile Unmetalled (Mitchell & Kirkness, 1933, p. 57).

5.2 TRANSPORT AND COMMUNICATION NETWORK

Ambala Cantonment was converging point for the administrative set-up of the empire. It held the seats of the headquarters and branch offices of many government offices like superintending engineer of Sirhind canal office, executive engineer of roads and buildings in district office, administrative officers of East Indian Railway

and North-Western railways etc. (Punjab, 1925, pp. 115-116). The railways and roads linked the three port cities Calcutta, Bombay, and Karachi, seems to have converged and diverged from here; as the sea-routes were the only outlet for the British Indian officials stationed at the summer capital, Shimla and cantonments. The transport and communication network of roads, railways, and telegraph competently placed it in the imperial order of the empire.

The Ambala district was connected to the rest of the country through roads in which the Grand Trunk Road (G. T. Road) was the major one. It converged at Ambala cantonment from Calcutta via Karnal and diverged to Peshawar through other cities of Punjab. The British also constructed branch lines like the Ambala-Kalka road (for Shimla) and it was connected to the G. T. road four miles above the Ambala cantonment (Punjab, 1925, p. 99). This made it easy for the mobilization of the people and troops to the summer capital of Shimla for the British as steady communication and the transport network developed between Ambala, Shimla, Multan, Lahore and Delhi (Punjab, 1925, pp. 104-105). Later Hindustan-Tibet Road branched out from Ambala.

There were three metalled roads in the district. First one was 60 miles long Grand Trunk Road that entered from Karnal into Ambala and then passes into Patiala territory by taking north-western turn. Second was Ambala-Saharanpur road that had length of 42 miles and runs south-east via Mulana and Jagadhri. Third and last was 39 miles long Ambala-Kalka road that links Simla to Grand Trunk Road near Ambala Cantonment (Gazetteer 1883: 76b-76c). There was 165 miles metalled and 491 un-metalled road in 1892 returns of Gazetteer. Navigable rivers Sutlej and Jamuna 72 miles and railways 87 miles (Punjab, 1893, p. 93). The District Board maintained 94.31 miles of metalled roads and un-metalled roads of the 280.25 miles of the length (Punjab, 1925, p. 113).

Connectivity of Ambala with Calcutta became essential when it was decided to move the Summer Capital to Shimla during the times of Lord Lawrence. Initially, the plan was to connect Ambala to Delhi by following the Grand Trunk Road through Panipat and Karnal. It was most direct line to be adopted for railway between Delhi and Lahore, following the Grand Trunk Road. It kept the railway track on right bank of the Jamuna after leaving Delhi and converge almost in a straight line to Ambala.

Figure 5.3: Location of Ambala Town and communication network
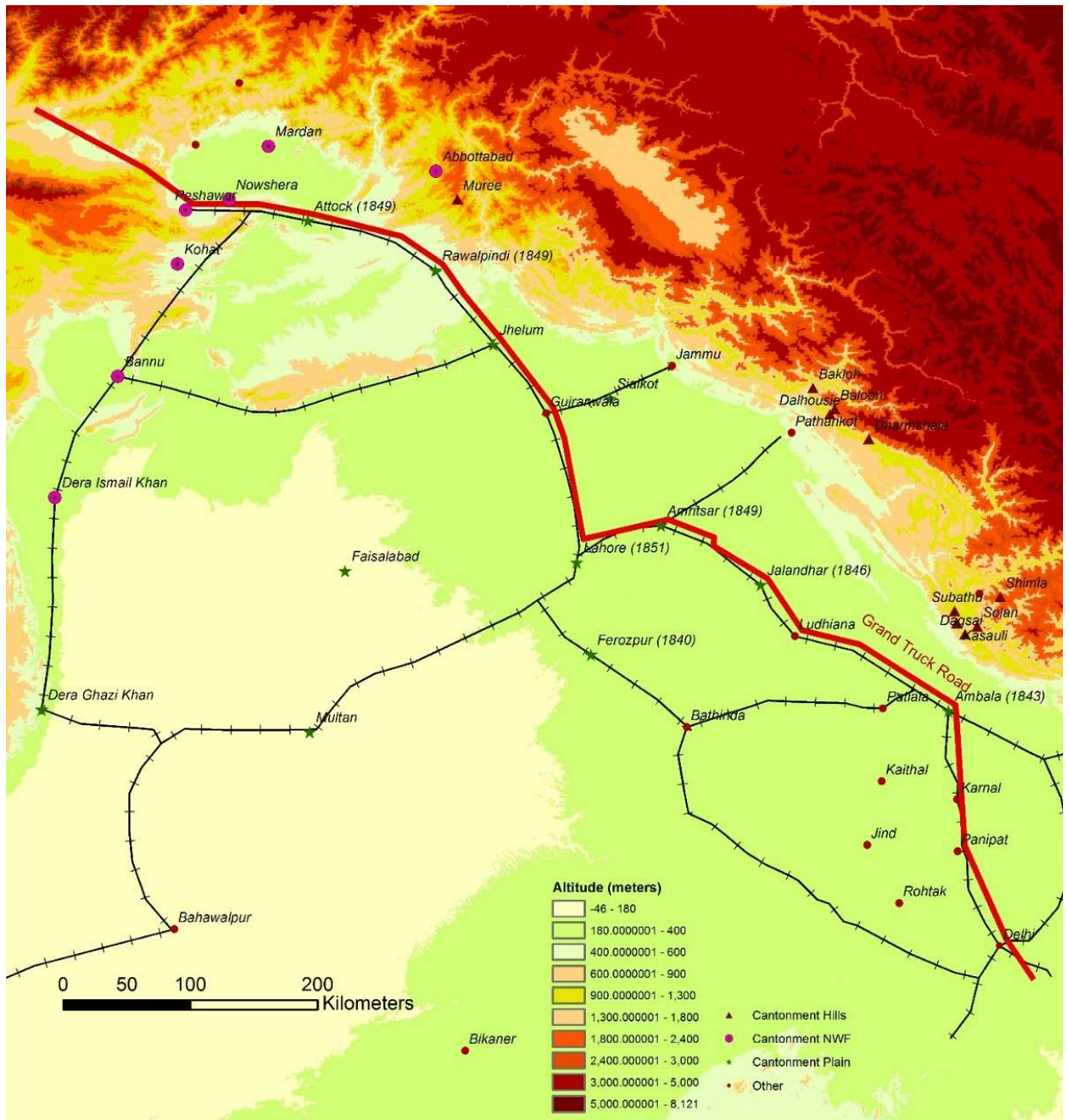
A railway line connecting Amritsar to the bank of the Beas was opened in November 1867. The next sections also included the construction of bridges over the Beas and extended to Jalandhar at a distance of 26 miles in November 1869 and up to Phillaur in April 1870. The bridge was constructed over the Sutlej to connect Ludhiana and Phillaur that connected the three major port cities of Bombay, Karachi and Calcutta by the convergence of track at Ambala cantonment in October 1870. Further the Ambala-Simla-Tibet Road (Hindustan Tibet Road) links it to the Summer Capital of British Indian Empire- Simla (Punjab, 1890, p. 211). In the period from 1870 to 1883 there was no further extension except the repair work and reconstruction due to floods. During the construction of Sirhind canal, a Doraha- Ropar railway connectivity was established over a stretch of 34 miles and extended further 14 miles to Nalagarh where stone quarries were situated. This line was abandon in 1883 by Sind Punjab Delhi railway (Punjab, 1890, pp. 212-213).

Table 5.1: Transport and Communication Network in Ambala District

Period	Metalled Road in km	Unmetalled Road in km	Railways in km
1898- 99	63	448	67
1900-01	63	448	67
1905-06	161.74	383.52	67
1910-11	170.54	348.29	71
1915-16	200.13	290.27	71
1920-21	225.53	320.32	71
1925-26	242.59	320.06	71
1930-31	242.7	321	91

Source: (Punjab, 1936)

Ambala was connected to other cantonments due to railway networks through North-western railway. It linked the Ambala cantonment to Ambala city, Sambhu, Rajpura, Mustafabad, and Jagadhri internally in the district. There was a branch line to Patiala and Bathinda from Rajpura, where a junction joined with the Delhi line. These railway tracks increased the prominence of Ambala as it connected the other western parts of the province with eastern along with rest of the Indian subcontinent.

Transport connectivity afforded by railways and road networks facilitated the mobility of the troops and arms and ammunitions (Bogart and Chaudhary, 2012, p. 9). East Indian Railway ran through the Ambala district that joined the Ambala Cantonment with Chandigarh and Kalka. It was mainly built for the military purposes to connect the hill cantonment and Shimla, imperial summer capital (Bogart and Chaudhary, 2012, p. 9-10).

In regard to communication network- the post offices and the telegraph, the telegraph offices were at Ambala Cantonment and Kalka. In addition to these telegraph offices were available on every railway station as lines runs parallel to whole length of railway track (Punjab, 1885, p. 57). The chief superintendent of telegraph for the Punjab was also stationed at Ambala Cantonment, which was headquarter of the department (Punjab, 1893, p. 106). Post offices of District was controlled from head office at Ambala Cantonment (Punjab, 1893, p. 96).

5.3 URBANIZATION AND DEMOGRAPHIC CHANGE

Ambala cantonment grew into a town from a wasteland supported by new military cantonment and military roads connecting the other cantonments around the city. It was surrounded by several Himalayan and Punjab plains cantonments, and hill stations. Ambala and its environs emerged as a supply centre for goods, services, and labour force for the military and attracted labour force from other parts of the city. The pull factors of newly developed cantonment for workers and service providers resulted in urban development in formerly rural hinterland with concentration of population in the surrounding areas of cantonments.

The population growth of the Ambala town was remained less than 30000 persons throughout the period from the census of 1868 to 1921. In the city population, the major component was cantonment population that increased from little over 25000 to near about to 40000 in the census data period from 1868-1941. According to census of 1941, density of population in Ambala district was 442, provided that it had 11 towns and 1679 villages with an area of 1861 sq. miles. Urban population was recorded as 172043 and rural population 675702 with total population of 847745. The density was 415 in 1881 with 11 towns and 2215 villages with area of 2570 sq. miles.

Table 5.2: Population in Ambala (1868-1931)

Period	Cantonment	Town	Total
1868	26622	24027	50649
1881	40686	26777	67463
1891	51016	28278	79294
1901	50438	28200	78638
1911	54223	25908	80131
1921	47745	28581	76326
1931	40368	37224	77592

Source: (Punjab, 1870) (Khan, 1933b)

Table 5.3 Immigrants in Ambala (1881-1921)

Place	1881	1891	1901	1911	1921
Karnal	4321	5985	18702	17995	16017
Patiala	20243	31824	25224	25196	21813
Shimla Hills	2050	3752	3047	2377	2273
Rawalpindi	283	588	907	846	510
Kalsia	4065	8895	9100	7429	5839
United Province	2881	29423	27552	27501	24331

Source: (Punjab, 1936)

Table 5.4: Emigrants from Ambala (1881-1921)

Place	1881	1891	1901	1911	1921
Karnal	16353	16414	28352	19950	17050
Patiala	35543	47352	37682	36056	82080
Shimla Hills	2387	3361	3766	3190	2826
Rawalpindi	577	735	1339	1008	844
Kalsia	20001	13707	13432	11141	10121

Source: (Punjab, 1936)

The data related to migration of population highlight that there was constant flow of emigrants and immigrants in the district. The census data of 1901, 1911, and 1921 pertaining to Ambala city highlighted a decrease in population of 183242 persons from 864719 to 681477. According Ambala Gazetteer 1936, in this period district experienced emigration of almost 155818 persons to native princely State of Patiala that shows an increase of 92080 persons in total population (Punjab, 1936).

5.4 SECURITY SET UP: ADMINISTRATIVE MACHINERY

The Ambala city was under the charge and control of Commissioner of the Ambala Division. The deputy commissioner and sub-divisional officers looked after the day to administration of their respective areas under their supervision from the Civil Station or Lines. For the effective functioning of the system and to maintain law and order, there was coercive arms of the administration such as police and troops in cantonment with provision of punishment of incarceration into jails. For that there was judicial set up of courts (Punjab, 1925). The troops in cantonment also assisted the civil administration in maintaining the internal law and order. The strength of troop's in cantonment in 1883 was just 3143 that include 106 officers and rest were non-commissioned officers and men. Ambala was headquarter of Transport Depot and Sirhind Division (Punjab, 1885, p. 64). The depot possessed seven elephants, 250 hired camels, 628 pack mules, 102 draught mules, 60 army transport bullocks, including 200 placed at Saharanpur Remount depot (Punjab, 1893).

The hierarchical set up of police force included one Superintendent of police with one Assistant and one or two Deputies under him. The regular police force of the district comprised of 786 men of all ranks. The Assistant Superintendent or one of the Deputies remained at headquarters. Another Deputy held the charge of the Sub-Division. There are four Inspectors, two of whom, were Europeans, the Cantonment Inspector and the Reserve Inspector. The fourth is stationed at headquarters as Court Inspector. Of the 27 Sub-Inspectors sanctioned for the district 18 were posted to police stations and nine are employed on clerical duties (Punjab, 1925, p. 116).

In 1883-84, the strength of police force was 984 persons and supported by 2366 village watchmen. The cantonment had a police force of 144 men. District was headed by Deputy Superintendent and three assistants (Punjab, 1885, p. 58).

Within the span of one decade, police force and watchmen strength declined to 930 and 2242 respectively in 1892-93 gazetteer but strength of cantonment remained same (Punjab, 1893, p. 98). This could reflects the stability or decrease in population, but never signifies the increase in it. The District Jail headquarter had accommodation for 985 male and 29 female prisoners. The jail was temporarily reduced to the status of a sub-jail on 1st March 1918 on account of serious and growing deficiency of water. Prisoners of sentence of six months and under were detained here and others were transferred to the Central Jail at Lahore or the District Jail at Ludhiana. The jail was guarded by a jailor, an assistant jailor, a head warder, and 17 other warders. Convicts were employed on preparing articles for the use of prisoners alone. The contemplated project of establishing a Central Jail at Ambala abandoned because of the insufficient supply of water (Punjab, 1925, p. 117).

The executive staff of judiciary was supplemented by a Cantonment Magistrate stationed at distance of four miles from civil lines in Ambala cantonment. There were seven honorary magistrates in the district (Punjab, 1885, p. 58). Ambala Divisional and Session Judge held their court in Ambala cantonment (Punjab, 1893, p. 97). The cantonment magistrates of Ambala and Kasauli acted as sub-registrars in their respective sphere of Jurisdictions (Punjab, 1925, p. 129).

Table 5.5: Law Enforcement and Legal Suits

Period	Population	Police Staff	Number of Person Convicted	Number of Civil Suits
1898-99	863641	806	1300	8454
1900-01	815924	806	1409	7349
1905-06	815924	570	1326	5957
1910-11	689970	788	987	6020
1915-16	669970	787	716	6892
1920-21	681477	803	444	6585
1925-26	681477	800	746	11881
1930-31	742902	813	574	7197

Source: (Punjab, 1936).

5.5 TRADE AND COMMERCE:

Ambala City had a big grain mart that received grains and cotton in large quantities from the district, and from the southern parts of the Ludhiana district and also from the princely states of Patiala, Nabha, and Jind; and exporting them both up and down country. The traders of Ambala traded in hill products, such as ginger, turmeric, potatoes, opium, charas. From the south they imported English cloth and iron; and from the other parts of Punjab- salt, wool, woollens, and silk products. In return, they manufactured and exported the cotton goods, especially darris in huge quantities (Punjab, 1925, p. 99). There was 953 men and 21 women engaged in trade in textiles and in clothing 510 males. Trade in food stuff involved 988 females and 4650 males. Bank and credit involved 1626 men and 56 women. Transport by rail was means of earning of 3048 men and only five females. The people involved in domestic service were 11041 men and 2335 women (Punjab, 1936).

Ambala, Rupar, and Jagadhri were chief trading centres, were well connected by the railways and roads, and were most populous towns of District (Punjab, 1893, p. 90). Siswan, in Kharar tahsil, was historical centre of an extensive trade with the Shimla States and Yarkand; in spite of it's out of the-way position. There was a thriving settlements of merchants with a large bazaar built by Mr. Melvill in 1850's. But the trade declined owing to the bad faith of the merchants in their dealings with the traders in the far hills and the route was finally given up when the railway from Ambala to Kalka was opened in 1892 (Punjab, 1925, p. 22). Ambala was also centre of export of food grains to Nahan and Shimla along with Jagadhri (Minhas, 1998, p. 121). The Shimla Hills traders along with merchants of Sirmaur used to trade with marts of Ambala, Jagadhri, Yamunagar and Saharanpur and Dehradun (Minhas, 1998, p. 97).

The demands of the export trade led to increase in the area under the wheat and cotton in the Kharar tahsil. The tendency of fixed cash assessments had been encouraged generally for more valuable crops, such as sugarcane, tobacco, poppy, vegetables, and spices. All these crops required favourable conditions of soil and industry, and the area on which they can be grown is necessarily limited. The great, mass of the people still depend on the staple grains and pulses. Wheat and gram in

the spring harvest; and maize, rice, moth, and mash in the autumn, together with a large chari crop grown as fodder for their cattle.

Ambala also had a two major glass work factories known as Upper India Glass Works and Panipat Glass Works; former was specialised in chimneys supplying to Punjab and the North West Frontier Province. Ambala glass work was cheaper due to use of Indian method in blowing the glass. The Workers were earning ₹ 30 a month as compare to six year before in 1909 (Hallifax, 1892, p. 23) (Sharma, 1987, pp. 63-64). Ambala Cantonment had an ice manufacturing company and flour mill. There were small flour mills in Ambala city along with cotton and grain marts (Sharma, 1987, p. 91).

5.6 LOCATION AND PHYSICAL GEOGRAPHY

Ambala is a sub-Himalayan town, located on the foot hills of Shivalik range between 30^0 21" to 30^0 23" north latitude and 76^0 40" to 76^0 46" east longitude. Its average height from mean sea level is 277 meters. It is one of the important cities of Haryana and is located at a distance of about 205 kilometers from National Capital, New Delhi and 45 kilometers from the State Capital, Chandigarh. It is here at Ambala City that G.T. Road bifurcates distinctly towards Punjab and Himachal Pradesh. In terms of linkages, Ambala City is gateway to Punjab, Haryana and Himachal Pradesh. There are two railway stations in the town, one on the Delhi-Ludhiana railway line and other on Chandigarh line named Dhulkot station. Ambala Cantonment is located on the south-east of Ambala City. Ambala Cantonment is an important rail junction of northern India. Ambala has two separate townships- One is Ambala City and other Ambala Cantonment. Historically, Ambala City lies on the outskirts of Patiala State (Punjab, 1893).

The general character and prominent feature of river system of Ambala district was hill streams that vary in breadth from 100 yards to one mile, and remained dry throughout the year except in rainy season when they brought formidable body of water. Almost all the streams between Sutlej and Jamuna unite in Ghaggar that was only one which contains flow of water throughout the year (Punjab, 1885, p. 5). During rainy days, when fully flooded, its currents were too dangerous for boats, but on rare occasions otherwise fordable. The Ambala and Shimla roads were joined

(crosses it) by fords about half way between Kalka and Ambala. The mails were carried on elephants during that time (Punjab, 1885, p. 6). Baliali and Tangri were two streams that form one stream near village Boh in north of Ambala cantonment and used to inundate the cantonment. So, a dam was constructed to divert the water of Tangri into bed of Baliali (Punjab, 1885, p. 9).

5.7 CANTONMENT: MILITARY LANDSCAPE

Ambala cantonment's spatial settings was similar to other cantonments of the British Indian Empire. It comprised station garrison, the club, a few grocery shops catering the needs of officers and their families, few Bazaars with names like Artillery Bazaar or Infantry Bazaar. These names signified the historical association or proximity of particular regiments, when theses bazaars were opened. Roads were straight, broad, and shaded. Monotonous but spacious and well maintained bungalows with great splendour and comfort. It had conspicuous orderliness and tidiness in contrast to town full of irregularities (Saroop, 1983, p. 175). The cantonment was open from all the sides and was not protected by any means of defence.

The cantonment had two Batteries of R.H.A., one British Cavalry Regiment, one battalion of a British infantry regiment, one native cavalry, and one native infantry Regiment. It was customary to send half of the British Infantry Battalion to Solan in summer season. In winter season the troops used to be brought down to Ambala for manoeuvres. Ambala cantonment became headquarter of the Sirhind division. Ambala was also the head-quarters of a Transport Depot. The depot transport comprised of 20 Government elephants, 100 hired camels, and 250 Government mules (Punjab, 1885, p. 64).

The cantonment has a Paget Park on eastern side which was earlier known as Beebeeal Garden but later on the name was changed. The railway line divide the cantonment in two unequal part. The southern smaller part has native infantry line, native parade ground, native infantry hospital, a Mohammedan cemetery, an encamping ground, elephant shed, camel and cattle sheds, ice pits etc. This part also has brick kilns at several locations, which was source of building materials. Other parts of the cantonment had European Infantry line associated with a parade ground, European Cavalry line associated with a parade ground, in north and west.

There was a Bazaar, an infantry hospital, and a post office near to the cantonment railway station. Sadr bazaar of cantonment was in southern direction with serai, custom office, a police station at the centre, mission school. Sadr bazaar was well planned, with equal size of construction spacing's, and streets crossing at right angles. Ambala-Saharanpur road passes from the mid of the cantonment (see Figure 5.4)

Central part of the cantonment had a regimental bazaar, a burial ground, medical depot, garden, cavalry hospital, rum godown, bakery, and a church. Southern part had a race course which was very near to the Paget Park. In northern part there was a native cavalry line with a parade ground, cavalry bazaar, and an artillery bazaar. Another Mohammedan cemetery with ice pits was in the north. By 1890 the major streets of cantonment were assigned name like Alexander road, Albert road, Canning road. Name of the native infantry and cavalry lines were changed to Bengal Infantry and Cavalry lines. A rifle range was set-up near Bengal Infantry line. A gymnasium, rifle range, and a riding school was erected in British cavalry parade ground. A police chowki and a PWD guest house came up in south eastern corner, outside of the cantonment (see Figure 5.5).

Telegraph line runs along the whole length of the railway line, with a Telegraph Office at each station, as well as on the road from Ambala to Kalka with Telegraph Offices at Ambala cantonments and Kalka. There were Imperial Post Offices at Ambala cantonment and several money order offices, and saving banks in town and cantonment. The Telegraph Superintendent at Ambala controlled the regional telegraph lines, and reported by the Assistant Superintendent of the districts like Rawalpindi (Punjab, 1895, p. 255).

The principal public buildings were the Masonic Hall and the Sirhind Club situated on the Mall; and the public library, the post-office, and the commissioner's Kutchery, near Paget Park. There were three good hotels, and a Dak bungalow. The cantonment was formerly flooded periodically by the overflow of the Tangri river; to prevent this a long dam was constructed, but its completion dried up the wells and affected the gardens for which Ambala was renowned. New water works were constructed on Dam, which, it was believed, would supply all the water required for this favourite station (Ross, 1883, pp. 231-232).

Figure 5.4: Ambala town in 1868

Legend:
- Cantonment
- City
- Civil Lines
- Jail
- Jail garden
- River
- Sand bar
- Brickiln
- Cemetry
- Mango Trees
- Grand Trunk Road
- Other roads
- Railway
- Sudder Bazar
- Village
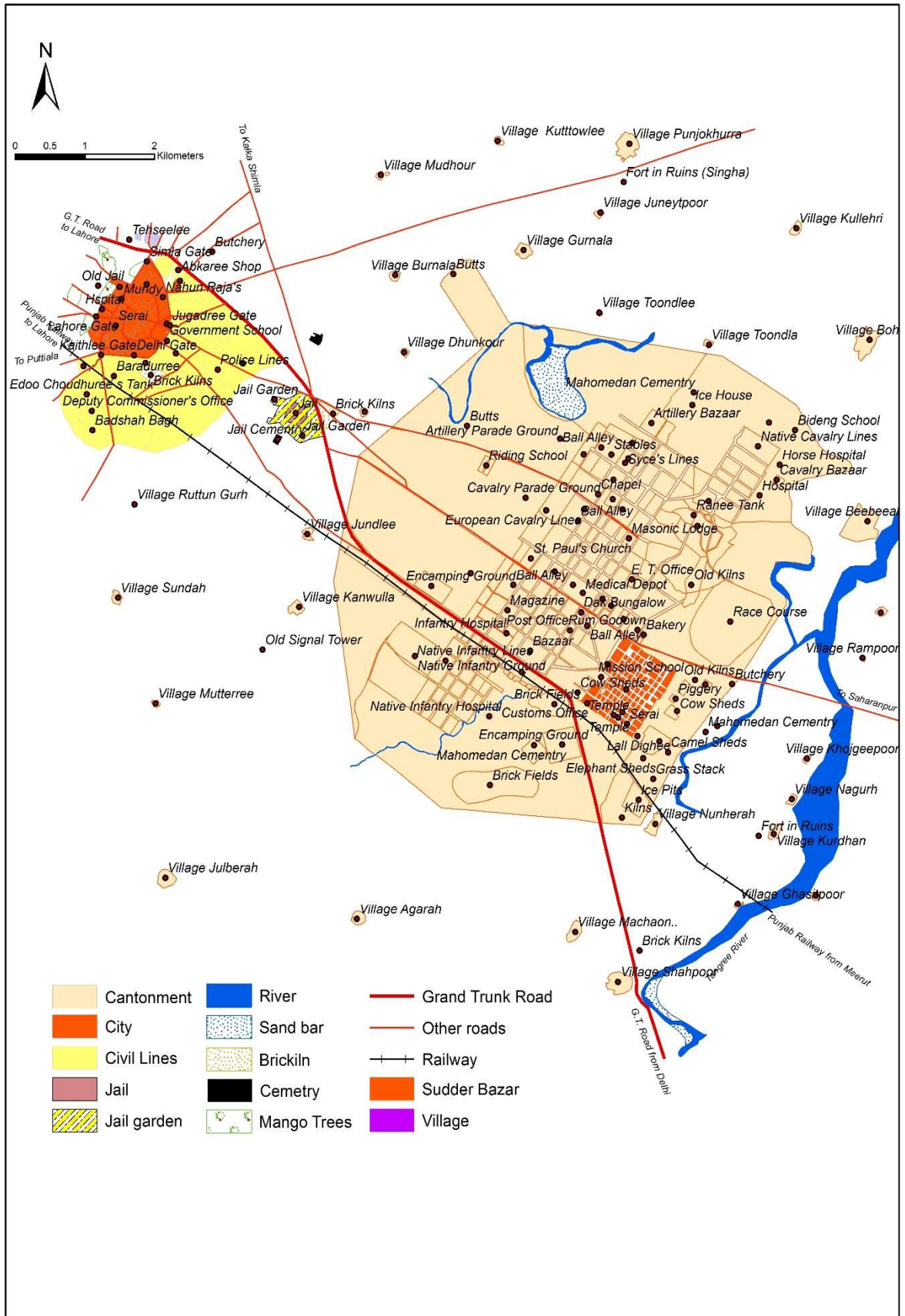
Figure 5.5: Ambala town in 1890
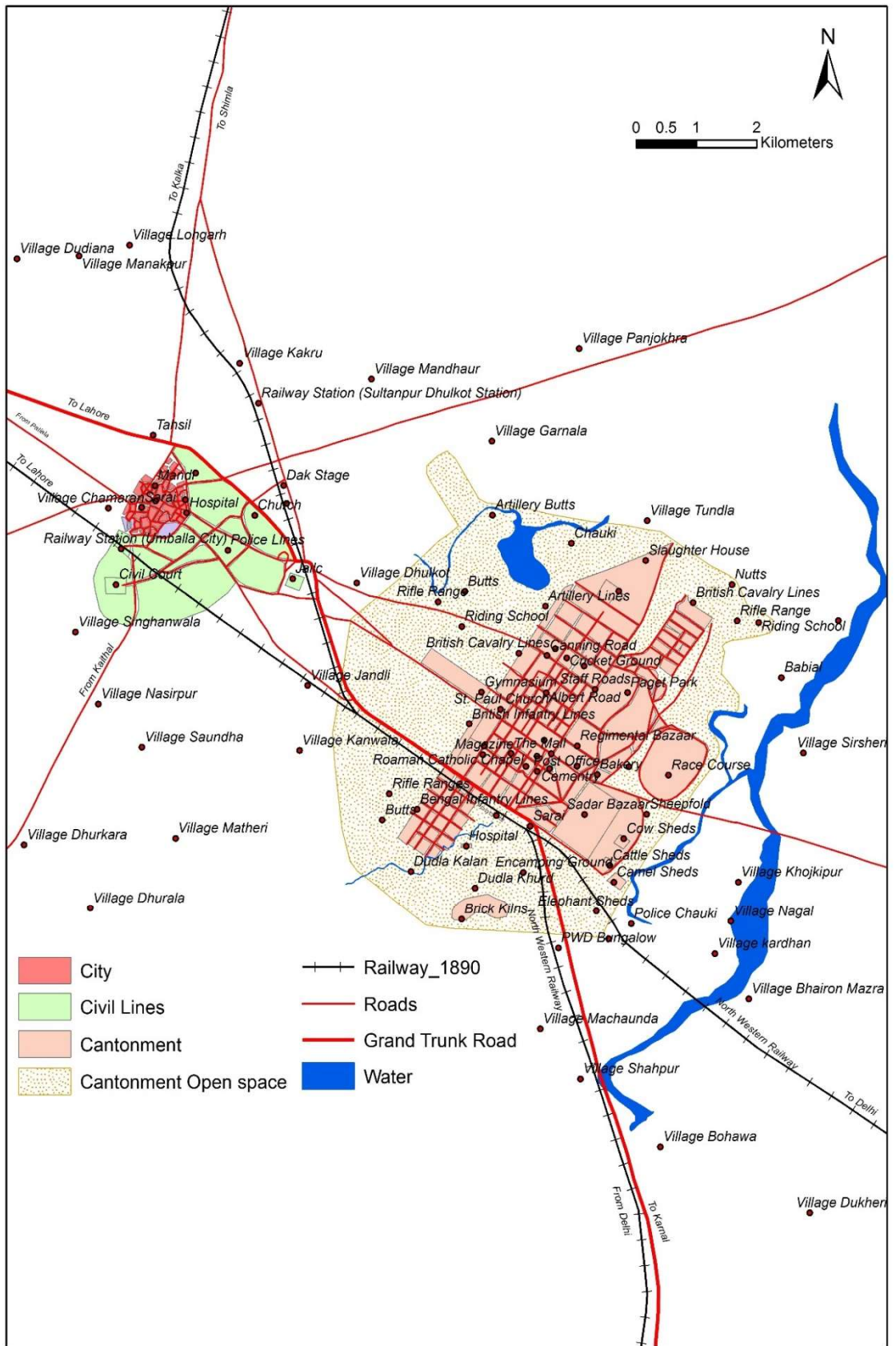
5.8 TOWN AND CIVIL STATION

The town was four miles away from cantonment in north-west direction. Civil station was attached to the town, situated south of it. In the civil station, there was a Government Wards' School; and in the town itself a Government district school, and a school attached to the American Mission. Civil station had District Commissioner Office, court house, treasury, police lines in south western part of town. There is a small Church associated with American Presbyterian Mission. Jail is constructed midway between cantonment and civil station. Apart from cantonment the city also had a large railway station. Hotels and bungalows were also created for travellers. The city, being located on the main line of communication and trading network, was boast of a large grain market that used to receive grains and cotton from the adjoining cities and provinces.

5.9 LINES OF COMMUNICATION

Three metalled road passes from Ambala: GT road, Saharanpur road, and Kalka road. During rainy seasons these roads are interrupted due to flooding in Ghaggar river. During the rainy season the mails were carried across upon elephants. Unmetalled roads radiate in different directions. In 1868 there was one railway line of Punjab railway that connected the town with Meerut and Lahore. By 1890, a new line was completed to connect the Ambala with Kalka and two different lines developed to link Delhi with Ambala.

5.10 HUMAN DEVELOPMENT: EDUCATION AND HEALTH

The District Board involved in various activities for the promotion of education. It upheld six vernacular upper middle schools, five lower vernacular middle schools, 164 primary schools for boys, and 11 Primary Schools for girls. Every New Year ten primary schools were constructed for the promotion of education. A large number of stipends were awarded to successful scholars, and considerable amount of granted-aid was given to institutions, controlled by religious and local bodies. The total gross expenditure on education amounted to ₹84,831 in 1918-19 (Punjab, 1925, p. 113). The language taught in most of the schools was Urdu, and Hindi as second language. The demand of Persian schools were on the decline. They were out of trend in modern age, and only found in the large villages. Generally, the teaching of

Persian was imparted at the home of the parents by an employed teacher, who wanted to teach their children. A teacher was appointed on two or three rupees a month; others who wished to educate their son, send their boys, and gave teachers two to eight annas a month, according to their means of earnings. The teacher usually derived income of up to ₹ 8 or ₹ 10 per month (Punjab, 1925, p. 120).

There was a Government District Schools at Ambala and Jagadhri. Besides this 11 middle schools, one aided school a Ropar, two girl school at Kharar and Chunni, 64 primary schools were available for children. One Government Ward school was at Ambala town that was started by Deputy Commissioner of Ambala Major Tighe in 1866 (Punjab, 1885, p. 62). English was taught at Municipal board Schools at Ambala, Ropar, and Jagadhri; and in aided mission schools in Ambala city, and Cantonment (Punjab, 1893, p. 102). There were 162 primary schools in the district. Kharar had even more schools than Ambala; former consisted of 45 and later of 37 primary schools. The people affiliated to Dev Samaj, and Arya Samaj runs nine schools for low castes with 276 boys. In addition to that, two industrial schools were at Ambala city and Ropar, maintained by the municipal boards. Drawing and carpentry was taught up to fifth grade (Punjab, 1925, p. 123).

Table 5.6: Number of Schools and Students in Ambala District

Period	Population	Number of Schools	Number of Students
1898-99	863641	102	7129
1900-01	815924	108	7207
1905-06	815924	135	7482
1910-11	689970	155	10255
1915-16	669970	297	15371
1920-21	681477	301	16361
1925-26	681477	429	29611
1930-31	742902	476	39592

Source: (Punjab, 1936)

Boys usually sent to the school in the age of 5-6 years and some late as 10 years old. They read up to 8-9 years or sometimes up to 12-13 years. Many of them then found some jobs in between and discard their books for earnings. Sometimes, the parents were too lenient, and did not insist upon the attention of children and at other times parents could not pay the teachers, and the pupils were withdrawn from schools. The educational qualification of teachers were not up to mark. They were half trained. Many of them ignorant of how to read and write. The teacher read out the lesson to pupils and the children repeats after him. They had a repetition day once a week, generally Thursday in the forenoon, and some boys assisted the teacher in the repetition of the previous lesson (Punjab, 1893, p. 120).

The overall educational infrastructure was improving gradually. In 1888, there were 107 schools and that figured improved to 266 schools in 1920. There were only 15 primary schools and two middle schools for the girls. These middle schools were maintained by Christian missionary societies (Punjab, 1925, p. 124). According to Ambala Gazetteer 1936, these figures stands at 476 schools and number of students improved to 39592 from 7129 in the year 1898 (Punjab, 1936).

The Ambala city was not popular on account of its health status. The scarcity of water and also of good quality was experienced by the people. It might also be the cause of urban population's stationary status during the colonial period (Punjab, 1925, p. 35). Ambala city had a civil hospital under the command of assistant surgeon. A large hospital had been built for the City Charitable Dispensary. A new dispensary was opened at Rupar. Leper Asylum was opened in 1856, officers from the cantonment contributed the money for the building, and for the support of inmates. It was superintended by the American Missionaries stationed in Ambala. The medicines were supplied by the City charitable Dispensary (Punjab, 1925, p. 103). There was also a lock-hospital in Ambala Cantonment that was opened in 1866 (Punjab, 1885, p. 63). Besides these, there were Bihari Lal's Lady Hardinge female hospital, a jail dispensary, a female hospital managed by the American Mission, and a police hospital (Punjab, 1925, p. 131).

Table 5.7: Number of Dispensaries and Patients treated in Ambala District

Period	Population	Number of Dispensaries	Number of Patients
1898-99	863641	7	82573
1900-01	815924	8	97840
1905-06	815924	8	110148
1910-11	689970	9	118716
1915-16	669970	9	142870
1920-21	681477	9	278806
1925-26	681477	10	331425
1930-31	742902	26	331425

Source: (Punjab, 1936)

Overall, there were seven dispensaries in the district in 1898 and slowly their number increased to 26 in 1931. The greatest increased came after 1925 before that health infrastructure includes only ten dispensaries. The number of the patients foot fall also increased to 386,421 persons out of total population 742,902. This means more than 50 percent of populations was treated which stand at less than ten percent in 1898-1989 (see table 5.7).

These hospitals and dispensaries also provided a great employment opportunities to local population. In Ambala cantonments Dhais or head women were employed in all Chaklas with the regiments in camp. "They draw ₹ 8 per mensem from cantonment fund except one, who draws ₹ 10 per mensem and is employed in Sadr Bazar Gora Chakla" (Authority, 1888, p. 2). In Lock hospital, the dhai who acts as Matron draws ₹ 12 per month as she gained experience to detect gonorrhoea, leucorrhoea, and primary syphilis in comparison to other ignorant dhais employed in the regimental and battery chaklas (Authority, 1888, p. 2). Six matrons were there in Lock hospital. Matron 1st and 2nd draws salary of ₹ 12 and 10 per month respectively, and rest earns ₹ 8 each. Washerman draws ₹ 6, Bhishti and cook ₹ 5

each, and sweeper male ₹ 4 and female ₹ 5. (Authority, 1888, p. 4). Within four miles of area, cantonments rules and regulation were enforced and estimated population it covers was 90,000. According to annual statement of Cantonment hospital at Ambala for year 1890, matron (1st) draws ₹. 10, matron (2nd) ₹ 8, matron (3rd) and washer man ₹ 6, cook, mehtrani and water carrier ₹ 5 each, and sweeper ₹ 4. It covers area beyond four miles from cantonment limits and populations about 90000 (Authority, 1891, p. 2).

5.11 HUB OF WESTERNIZATION

The highest number of Europeans or Americans or Christians stationed in Punjab districts were at Peshawar (3375) and followed by Shimla (2595), Lahore (2202), Rawalpindi (2072), Sialkot (1535), Ambala (1194) and 906 persons in Multan (Punjab, 1870). The lifestyle of these Europeans brought the change in native life style too. The recent style and fashion for cane and bamboo chairs and couches had to some extent developed in Punjab and industry emerged in Ambala. In the exhibition of 1882 some varieties of wood and cane work were shown from the Ambala district (Punjab, 1890, p. 152).

There was a Lowis Pavillion, called after the name of Major R. M. Lowis who acted sometimes acted as a Deputy Commissioner of Ambala. It had been transferred to the District Board. It was originally constructed for the Lowis Club from funds raised by public subscription. It consisted of suite of rooms close to the Kutchery building and was used by the board for meetings, agricultural exhibitions, and various other purposes. The sarai at Barara constructed similarly by subscription and also called after Major Lowis. It was later transferred to the District Board. One station garden at Ambala City (the Company Bagh), and another at Jagadhri were also maintained by the Board. Bunds for the protection of villages from hill torrents had been constructed in ten different villages with full or partial financial contribution of Board. The growth of reeds and grass on these bunds generated small income for Board (Punjab, 1925, p. 113). Four civil and two district board upheld rest-houses and four Sarai are maintained by the Board. The Christianity got boost in Ambala. There was a large Church in Ambala cantonment and two chapels- one was Roman Catholic, and other was Presbyterian. Besides this, American Presbyterian Mission also maintained a church and school in Sadr bazar. There was another church which

was frequented by Eurasians in Sadr bazar and also in civil station (Punjab, 1885, p. 64).

5.12 CONCLUSION

The transformation of Ambala and its environs came out all because of military geography especially it's converging and diverging military geography. Its geo-strategic importance played important role in the establishment of cantonment and subsequent spin-off transformational experience of its environs, depicted a picture of the new era of modernisation and development; whether spatial, political-administrative, trade and commerce, urbanization, or demographic. It opens a one gateway to recreational activities in hills and other to the North-West Frontier Province, where the clouds of the great game were looming in post Afghan War II period.

Chapter Six

EMERGENCE OF CANTONMENT AND TRANSFORMATION OF URBAN LANDSCAPE: MAPPING HISTORICAL ACCOUNT OF RAWALPINDI TOWN

Establishment of cantonment had brought fundamental changes in the organisation of society; like in ruling class of religious, political, and military functionaries organised and directed the society. The class structured society was one of the basic characteristics of urban civilisation of yore (Childe, 1950). The Military theories of urban growth suggested that people organised against external threats to protect themselves. It was also one of the reason of origin of city states. The imprints of defensive structures like forts and walled around the old cities can be seen as examples of defensive origins of them (Pacione, 2001, p. 49). According to Wheatley (1971), warfare might had contributed to the intensification of urban development in some places by inducing a concentration of population for defensive purposes. It is not reasonable to assign credit to only one theory, as causative factor, for social, economic, and political transformation of a place.

Urban transformation involves a host of factors operating over a long period of time. Punjab also would not have witnessed the spatial-geographical transformation due to one autonomous factor. Several processes would have created a favourable condition for the growth of cities but the military theory postulates cannot be ignored in the case of Punjab, as the military installations provided an impetus for growth of cities. The creation of military establishments had deep impact on the evolution and transformation of rural landscape into urban areas. Punjab experienced a dramatic transformation due to British experimentation during colonial time. The vast fertile land of Punjab offered the possibilities of agricultural development, and the British converted the province into an agrarian state by creating network of canals. These canals irrigated landscape became the reason for emergence of canal colonies (Ali, 1988). The canal colonies had attracted many emigrants that pushed the urban growth in the region. After 1857, Punjab was again experimented with a new form of transformation. It became the "sword arm of the Raj" (Yong, 2005)

The cities which grew in colonial India had unique characteristics. It consisted of a 'cantonment', 'civil station', and rest of the city (old town/city). The cantonment was

like an institution with all required organs for its working. The 'civil station' had all the characteristics of a typical, small town. It had political, administrative, and cultural offices. The colonial cities had tripartite divisions: 'native city', the 'cantonment' and the 'civil station. Cantonment as a more specific term presupposes an authoritative structure, which allows division, and allocation of spatial areas to various functional areas (King, 1976). It signifies a space division; a clearly fenced separation from the native city, and the civilians.

The process of transformation in context to cantonment and military geography is a topical issue and encompasses the process of urbanisation, change in the society and its needs in historical context. It is an ever evolving and habitual process for any landscape and is generally the result of changes in social and economic pursuits of society (Maria, 2007). Transformation is always associated with change in the structure, but it is more of a process than structure. It begins with change in the social and economic processes, and continues with changes in the structure. It is essentially a process of vitality for any cultural landscape; either rural or urban. It is a conscious and deliberate sense of modifying the surrounding landscapes and all the processes involved in it like physical, social, economic, cultural or planning are connected in a transverse way. Being situated on strategic location for the British India, the city of Rawalpindi witnessed transformation for military purposes. In fact, it owed its growth and prosperity to the existence of the large cantonment. The detailed analysis and integration of cantonment, and transformations call for a historical account of the city and its growth.

This chapter analyse the transformational trajectory of Rawalpindi by mapping military cantonment and its locational and spatial geographical characterization with changes in the surrounding landscapes. The analysis is historical as well as interdisciplinary. The concept and formation of urban landscapes are also connected in the analysis as the waves of canal colonies, conversion of Punjab into garrison state, emergence of cantonment and rise of cities of Punjab were deeply connected. The study also explores the role of space and power in massive transformation of landscape. This goal is accomplished by studying the morphological characteristics, social, and economic transformation of the town. The present work has collected cartographic evidences of Rawalpindi for two different

years (1865 and 1931). The cartographic presentation has helped in illustrating the process of transformation in Punjab.

6.1 RAWALPINDI: GEOGRAPHY AND LANDSCAPE

Rawalpindi from geo-political and geo-strategical point of view holds very important place in the history of Punjab and India. The armies of every successive invaders had to pass through it, which was also the reason for its heterogeneous character from racial point of view (Punjab, 1895, p. 43). The history of Punjab, overran by hordes of invaders from Greeks to Afghans and affected by intensive warfare that left its traces on the character of population. There was no district in Punjab that was violent and crime affected like Rawalpindi. The blood feuds, bitter enmities, and the party spirit highlighted the impatience in character of population (Punjab, 1895, p. 53). Rawalpindi became a part of the British Indian Empire in 1849 and had undergone tremendous development that was not matched by any other district of the Punjab since annexation (Punjab, 1895, p. 56). In 1864, Colonel Cracroft stated in his report that "in former years, the high roads were universally unsafe and passing through the limits of different tribes, travellers and caravans had to satisfy the rapacity of each by paying blackmail" (Punjab, 1895). This statement highlighted the improvement in law and order.

Rawalpindi district was divided into seven tehsils: Rawalpindi, Attock, Kahuta, Murree, Pindigheb, Gujar Khan, and Fatehjang. There was no large town in the district. The district was singularly devoid of large towns. Rawalpindi had 73705 residents, Pindigheb had 8462 and Hazro had 7580 residents. The climate of the entire district was to some extent good, as district rejoices longer cold weather and a shorter summers, although later was usually very severe. It was not constant feature of the district but varies in different parts of the district. The hills and spurs of Rawalpindi district had comprised of woodland scenery. These lush green forest had given tremendous beauty to the landscape. Many of the hillsides were cleared for cultivation, but in fear of permanent destruction of forest some were converted into government's reserved and protected forests. Forest woods were earmarked for the supply of fuels to cantonments and neighbouring cities. The Campbellpore railway station of North Western railway was the place to receive woods from forest and to carry to other places (Punjab, 1895).

Rawalpindi town's spatial position was 33°37′ North and 73°6′ East (Punjab, 1895, p. 1). The town had two portions; old and new. The new one was developed with establishment of cantonment in 1850. Beautifully located on north bank of stream (Nullah) Leh, the city was surrounded by the stream in southern direction as well as on western sides. The river separated city from cantonment. Soan River flowed in the southern part of Rawalpindi where Leh ends. The landscape around the city was drained by several minor streams, due to that deep ravines were common feature in all the directions. Kasis (small streams) with water in their beds were valuable to the villagers. This view from the cantonments "is very dreary; a vast undulating plain cut up and broken in every direction by deep ravines stretching away to the horizon, west, south, and east, unbroken save by a solitary peak… (Punjab, 1895, p. 253). The soil around the town were very fertile and suitable for cultivation in northern and on western sides. The cultivation extended from the city up to the foot of the Murree hills, and westwards to the Margalla range. Beyond this agricultural landscape, lied the reserved forest of Marghala and and Maira. The town of Rawalpindi was well connected with Attock in north-west, Muree in north-east, Kushalgarh in south-west and Gujar Khan in south-east (Figure 6.1).

Figure 6.1: Physiographic location of Rawalpindi (Location is shown in inset)
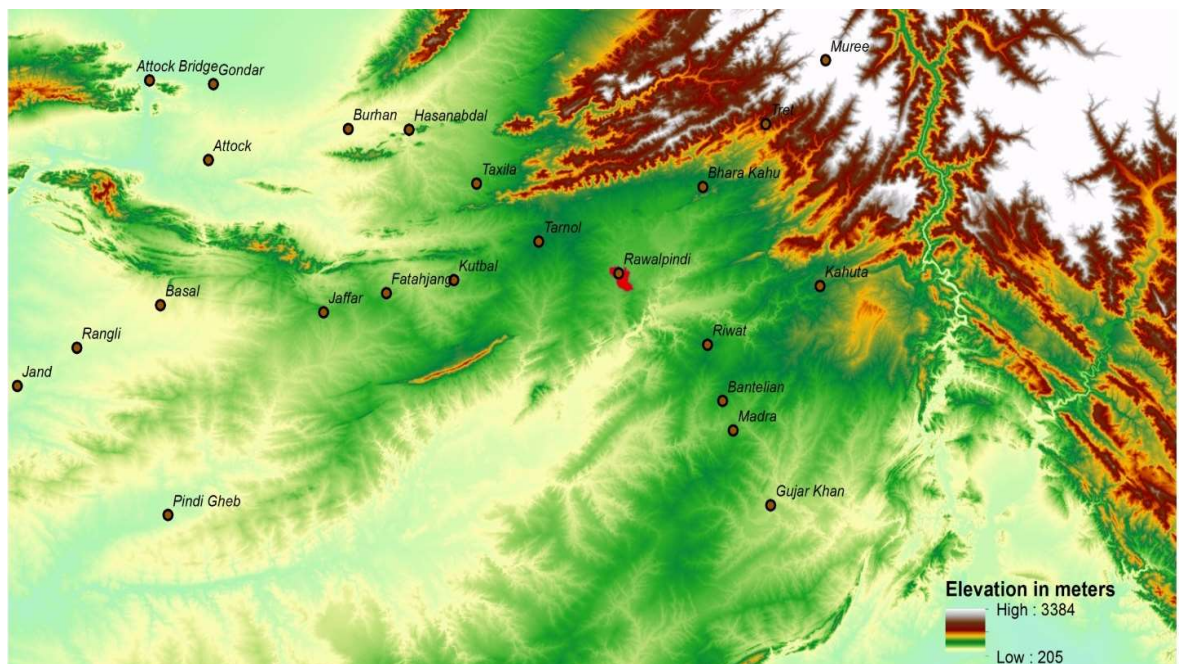
6.2 MAKING OF CANTONMENT

The concept of cantonment as a unique spatial structure originated in mid of the 18th century but the term acquired its broader meaning in 19th century as an exclusive area for the use of army with all the spatial characteristics (Jacob, 1994). The origin of cantonment signified a move of power over space, as a significant portion of landscape had to be earmarked and secured for the troops. Cantonments were established at many locations in the Punjab and military departments were also created to control the Punjab. The events of 1857 drastically reshaped the military geography of India (Nasir, 2014). The way cantonments emerged throughout the British Indian Empire during later colonial times was determined by the need for defence and the maintenance of law and order. The available literatures show that in 1880s, the British Government poured billions of rupees into the Punjab for building of strategic railways, roads and other infrastructures to link cantonment towns. This capital investment on building the necessary military infrastructure in the province was massive. The investment was in the form of military installations, but the presence and strength of these installations had dramatic impact on the local communities. Military persons and others whether Europeans or natives gave birth to dominance-dependence relationship of ruler and a subject.

King (1976) had given insight on the 'Castells's idea of dominance-dependence system' through the lenses of language and culture in the colonial urbanisation process. It is required to understand the multidimensional processes of space divisions and their arrangements in hierarchy of orders. The concept of 'urban' encompasses physical-spatial as well as social characteristics and such characteristics are reflected in languages and culture. The two distinct societies (European and native) in colonial India were connected, on early stages, with economic relationship; and the develop economy transformed them into dominant and dependent societies. In this fragmented power based society, segregated socio-spatial cover provided the dominant one control over the dependent. The terminologies like division, district, sub-division, cantonment, and quarter, all had military context; and central to the concept was division or separation. All these socio-spatial units reflected different levels of administrative, political, and judicial authorities. Castells's idea of dominance-dependence system highlighted that the ultimate power and authority lied in the hand of metropolitan society. Cantonment

was the manifestation of this system, which was located strategically in colonised territories. The civil station was a separate socio-spatial unit with all political and civilian administrative elements. The native town or city belonged to indigenous settlement, and was in the form of dependent society (King, 1976, pp. 75-82). The etymology of cantonment gives a valuable insight both into the physical-spatial organisation as well as its location in relation to other components in the colonial urban system. According to King (1976), cantonment was a permanent military camp and meant to create separation or division. It had divisions within the boundary as well as separation from the rest of the native town and civil station. It is quite evident from the spatial structure of Rawalpindi (see Figure 6. 2).

Foucault concept of 'Power and Knowledge' offers a theoretical perspective of interpreting the urban fabric, as an integral factor in the formation of cultural and social sphere. "Power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions, and attitudes, their discourses, learning processes and everyday life" (Foucault & Gordon, 1980, p. 39). In this way, the advent of power is oppressive but creative too as it created cultural and social circumstances for the progress of individual in the society. Foucault clarified how power is embodied in cultural and material institutions even in architectural manifestations. In the study of panopticon, he illustrated that "architectural apparatus should be a machine for creating and sustaining a power relation independent of persons who exercise it" (Foucault, 2012, p. 201). The conditioning of the individual as docile but productive member of the system was ensured. So, that nobody challenge the authorities and system runs smoothly. It is ensured through architectural formation that helps in establishing a social control (Leach, 1999, p. 120).

Social Control is ensured through twin features like surveillance and visibility. Surveillance provided control mechanism and visibility of power acts as a disciplinary and normalizing force. Bentham laid down the principle that power should be visible and unverifiable. Visibility will ensure the people that they are constantly under observation and spied by the system through various mechanisms. Whereas, unverifiable means the natives must never know whether he is being looked-at at any one moment; but he must be sure that he may always be so (Foucault, 2012, p. 201).

6.3 PHYSICAL-SPATIAL STRUCTURE OF CANTONMENT:

In 1891, Rawalpindi was one of four towns with municipalities in Rawalpindi district. It had a military cantonment and tehsil headquarter. It was a modern town and largely grew due to existence of large cantonment in south. The growth and prosperity of modern Rawalpindi city eroded the entire relics of antiquities, existed in and around newly formed cantonment in south. Cunningham had identified the ancient town on the site which was later on occupied by the cantonment. The towns of Gajipur or Gajnipur was the place known for Bhatti tribes in ancient time. A village named Ghazni was located in north of the town was considered to have preserved the old name of the city. Historical reviews also brought out that the town gained its importance in 1765 at the time of Sirdar Milka Singh who had invited traders from Bhera, Miani, Pind Dadan Khan, and Chakwal to settle in Rawalpindi. Migration of traders from these trading towns to Rawalpindi caused the town to grow rapidly (Punjab, 1895). The town was also a significant place because in March, 1849 the Sikh army under Chattar Singh and Sher Singh had laid down their arms to surrender after battle of Gujarat. The British rule established a cantonment which was first occupied by the troops in 1849. The 53rd Regiment of Bengal Army was first quartered there and by 1851 the cantonment was permanently occupied by the British.

Spatial organisation of Rawalpindi was well in tune with the tripartite division of a town space of colonial urban India. It had dominance of cantonment in terms of spatial coverage and arrangement of structures inside the walls. Grand Trunk road divided the cantonment in to two equal halves. Location of major lines of communication and street patterns inside the cantonment were manifestation of dominance of power over town space. Narrative of spatial structures of Rawalpindi cantonment for two different years (1865 and 1931) travels through a journey of three parallel transformation phases. First one is the surfacing of cantonment and its role in shaping a town sphere, second is the cantonment as a system of environment control and third is the social and economic impact of cantonment.

Conversion of Rawalpindi as a cantonment town in colonial Punjab was done due to two reasons. One was the need to establish a point of defence on the western frontier of Punjab and another was to suppress the rebellion forces. The frontier

(beyond the Rawalpindi district) was the home to many fierce tribes and source of anxiety to British Empire. Geographical location and physical environment had made the city a prominent location, which was conducive to health and wellbeing. Troops were quartered at their first arrival from England to Rawalpindi. The following paragraphs describe the physical-spatial structure of cantonment for 1865 and 1930.

The cantonment was established on west side of Leh stream, which also forms its northern boundary (Figure 6.2). Leh stream separated the town from cantonment and civil station. North western part had a big cavalry parade ground, artillery parade ground and native cavalry line. The north central part had a Sudder bazaar with planned layout. On the left and right sides of the bazaar there were residences of Bazaar Sergeant. Near the bazaar there was a hospital, a kotwali and tannery, brewery and bakery. East and north of the bazaar had open spaces with many brick kilns all around which had sourced the construction materials to the cantonment. The central part had planned street patterns and street crossed at right angles. Important offices of the cantonment were located in central and south central parts. It had post offices, small bazaars at many locations, band stand. The north central part had native infantry lines and native artillery lines. Moving towards south on the left, there was the European Infantry line parade ground. European infantry lines were structurally better than the native infantry lines. It had several European barracks. The cook rooms and wash houses were constructed at some distance from the barracks. Main hospital with store, guard room, cook room and a dead house was located in the south. There were two burial ground on the south, on the left of European infantry line. Soldier's garden, gun sheds, gun-park, married men barracks, and grass cutter huts were located on west side of the Left European Infantry line. Telegraph office and European infantry bazaar were located in between Left and Right European Infantry lines. The bazaar had Kotwalis on two sides. The Right European Infantry line had several barracks, with separate cook rooms and wash rooms and married men barrack. There was one proposed barracks on the left side of it. The encamping ground, European infantry Parade ground were on the south eastern part of the cantonment. The two distinct building structures revealed social differentiation of space, which was quite evident for colonial urban setup. Lavatories were located outside of the building structures

depicted an arrangement of sanitation. A fort was there at the eastern extremity of the cantonment, enclosing an arsenal within its walls. This fort is situated on an eminence, but not the highest eminence in the neighbourhood. Other forts have lately been built at some distance from the cantonments. Between 4,000 and 5,000 troops were quartered in these forts.

The statement that the "armies need land in peacetime to prepare for military operations." had roots that lie in establishment of system of regular army and concomitant emergence of need of training them (Woodward, 2004, p. 20). Rawalpindi had two artillery ranges outside the cantonment boundary and encamping ground too. Three prominent villages inside the cantonment were Ratta, Gowal Mundi (Gawal mandi) and Kahar Mundi. These villages were on the left bank of river and near the sudder (Sadar) Bazaar. The prominent villages outside the cantonment boundary were Mareer, Adhra and Tuncha village. Mareer was adjacent to cantonment boundary and on the other side (east) of Murree road.

The villages that came inside the cantonment had very little chance to experience change in demography and spatial expansion, but the village in the vicinity though had. This is highlighted by analysing the Map of Rawalpindi, 1931 and 1865. For recreational activities there was a cricket ground between sadar bazaar and Ratta village on the right bank of Leh River in northward direction. For religious rituals and purposes cantonment had Eedgah in north of sadar bazaar. In the north, the Rawalpindi town had kachah and Pucca houses. Most of the brick buildings were seen in centre of the town. It was surrounded by villages that kachah houses. The town was very clean with pleasant air. The streets were wide and regular but in the congested areas of markets (Sadar Bazaar) the streets were narrow.

Security, Health, Hygiene and sanitation were the also the main focus areas of British authorities in those days especially in post-1857. The Rawalpindi map of 1865-66 highlighted the colonial orientation of managing all these concerns. Security was deciding factor in the colonial order in Punjab and the sub-continent. In matter of Rawalpindi, its geo-strategic location near to frontier; that was home to fierce tribes, who had habit to make occasional plundering onslaughts and strive to challenge the ruling system in the plains of Punjab. So, it was more pre-requisite to be prepared for all these recurring dangers to be safe. The impressions of defeat of

first Anglo-Afghan war and almost lost empire in 1857 might give them reasons to be vigilant in geography of confrontations. For this purpose, British always kept a vigilant eye on the native settlements. The map clearly illustrated that British establish their cantonment on the right bank of Leh River in the south that cuts the native settlement of Rawalpindi town from British colonial sphere of cantonment and civil station. The civil station was established in the eastern direction, but adjacent to cantonment. The main trunk road i.e. the Grand Trunk Road linked it with Lahore. This road further passed through the cantonment towards west and linked it with Peshawar. An arterial road of it sprouted-out from civil station towards north and connect the Rawalpindi with Murree, a hill station and a sanatorium for the Europeans civil and military officers. Murree road passed near the eastern fringe of native town. Four rifle ranges, two redoubts in the north of city, two curtain redoubts in left west curtain, redoubt and right west curtain redoubts, arsenal in south of city also highlighted the selection away from city and yet visible for deterrence.

Rawalpindi was among the most urbanized and modern town of the Punjab, that too near the frontier. Rawalpindi might had many prominent symbols of urbanization and modernization, but the map highlights- railway stations, post-offices, telegraph offices, Murree brewery, post offices and telegraph offices (in cantonments only), wireless station, telephone exchange, electric power station, Attock oil refinery, imperial bank, fire station, hospitals, leper asylum, dairy farm, heavy repair shop, hotels, circuit house, rest camp, golf club, acid factory, water works (saran), pumping stations, reservoirs or kund and the post offices at sadar bazar, Lodhra had post-office on railway line near Mankiala railway station, and Riwat had post-office on G. T. road.

The figure 6.3 gives sense to appreciation of the arrangement of security and hygiene in town. The town had main ring roads on outer side. The triangular face of town had several police chownkis outside on west, north, and east for security. Kotwali was located at the heart of the town. All the public toilets were approximately 100 meters away from the outer road encircling the town in all the direction.

Figure 6.2: Rawalpindi City and Cantonment in 1865

Prepared by Maninderjit Singh and Kiran K Singh
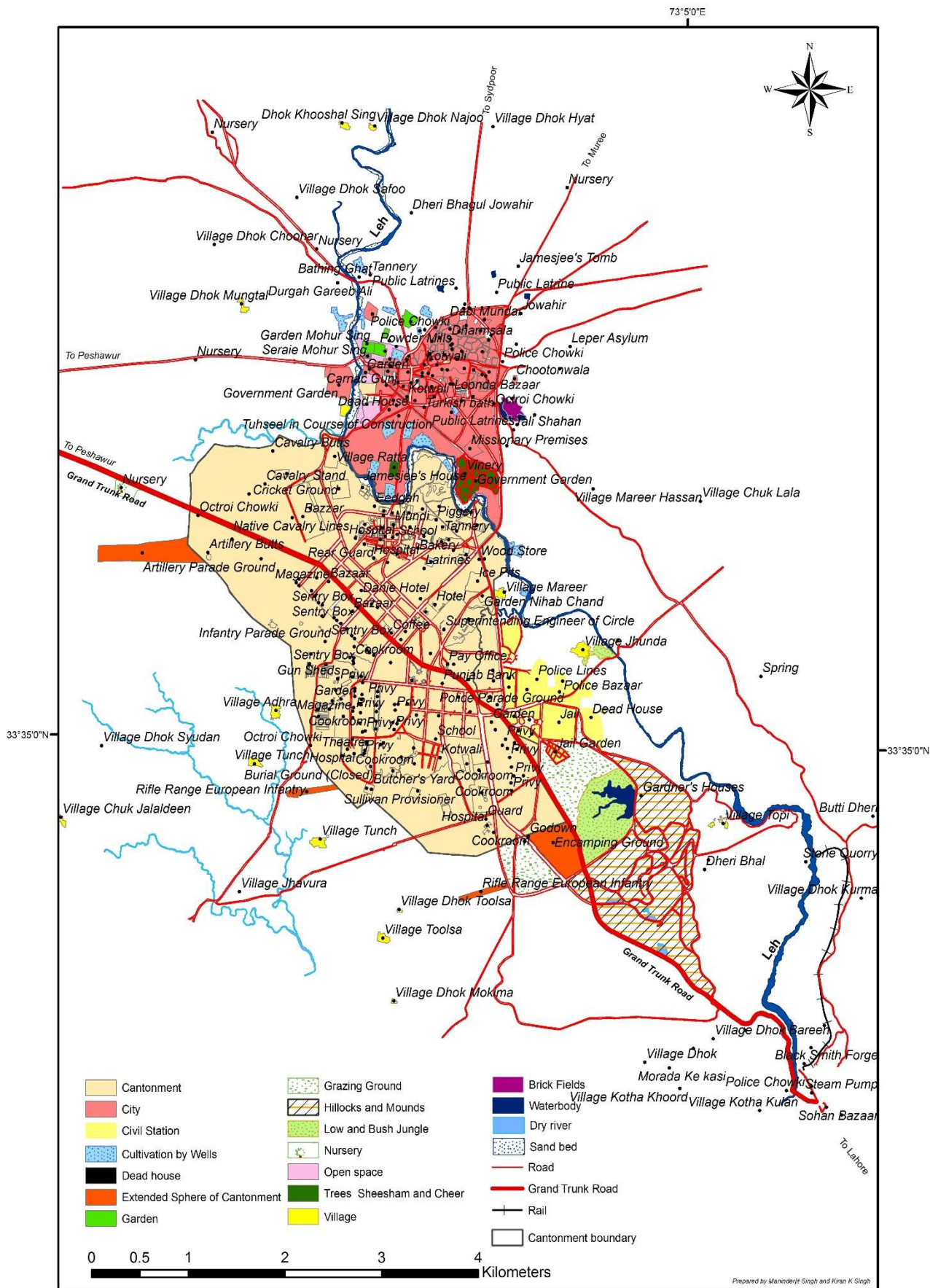
Figure 6.3: Rawalpindi City in 1865

Legend:
- Cantonment
- City
- Civil Station
- Cultivation by Wells
- Dead house
- Extended Sphere of Cantonment
- Garden
- Grazing Ground
- Hillocks and Mounds
- Low and Bush Jungle
- Nursery
- Open space
- Trees Sheesham and Cheer
- Village
- Brick Fields
- Waterbody
- Dry river
- Sand bed
- Road
- Grand Trunk Road
- Rail
- Cantonment boundary

Prepared by Maninderjit Singh and Kiran K Singh
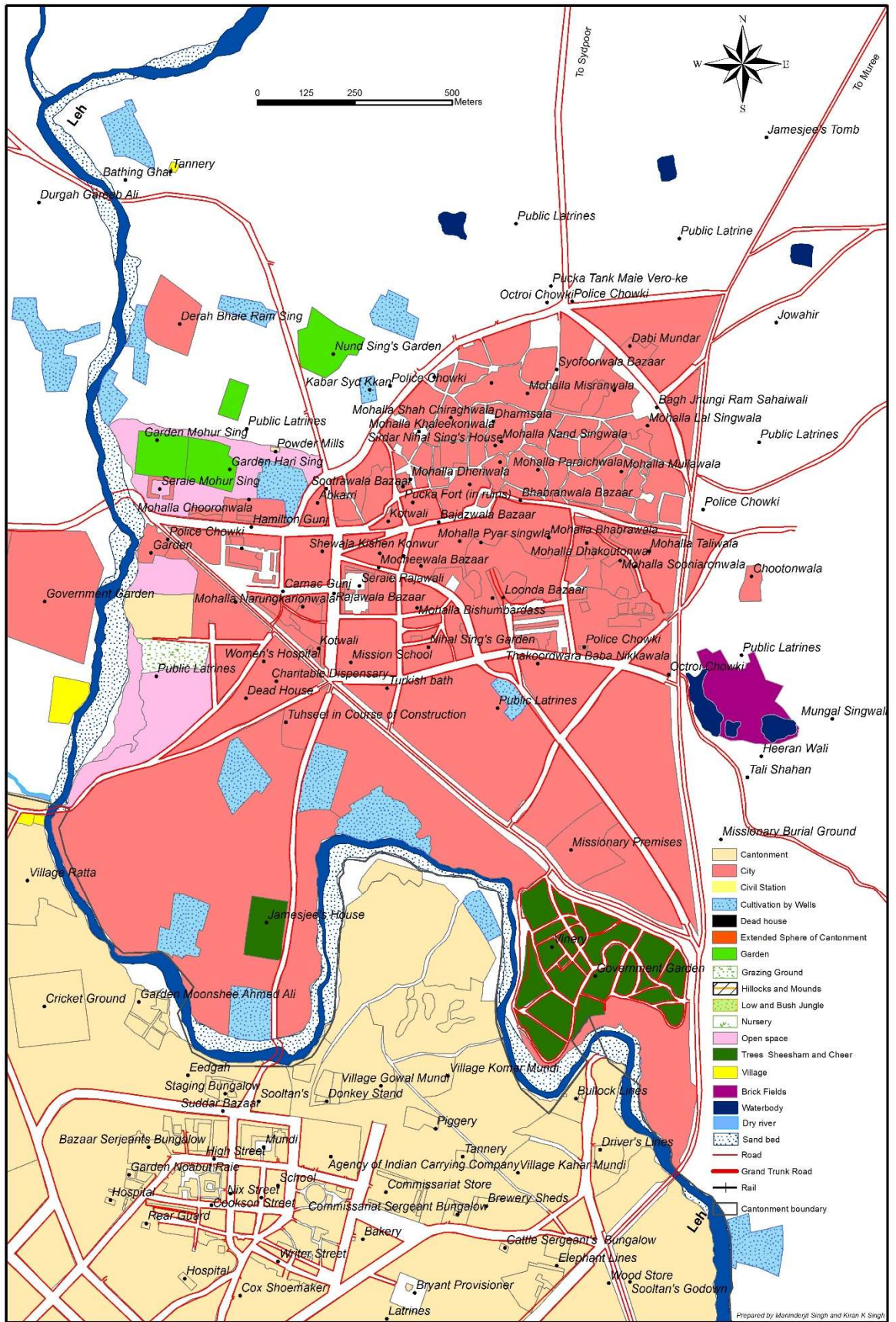
Figure 6.4: Rawalpindi Civil station in 1865

Legend:
- Cantonment
- City
- Civil Station
- Cultivation by Wells
- Dead house
- Extended Sphere of Cantonment
- Garden
- Grazing Ground
- Hillocks and Mounds
- Low and Bush Jungle
- Nursery
- Open space
- Trees Sheesham and Cheer
- Village
- Brick Fields
- Waterbody
- Dry river
- Sand bed
- Road
- Grand Trunk Road
- Rail
- Cantonment boundary

Village Mareer

Village Dhok Jhunda

Village Jhunda

Leh

Districrt Superintendent of Police

Extra Assistant Commissioner
Police Lines

Executive Engineer Lahore & Peshawar Road
Police Bazaar

Assistant Commissioner
Police Parade Ground

Police Cavalry Lines

Road Officer's Godown

Commissioner's Kutchery
Kutchery

Dead House

Garden

Jail

Married Men's Barrack
Treasury

Hawalat

Privy

Magazine

33°35'0"N

Fire Engine Shed

Cookroom   Quarter Guard

Jail Garden

Privy

Cookroom

Privy   European Infantry Parade Ground

Cookroom

Privy

33°35'0"N

0   125   250   500   Meters

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6.4 SPATIAL DISTRIBUTION AND GROWTH OF ADMINISTRATIVE ARMS

The Rawalpindi map of 1931 illustrated the distribution of state machinery quite well. There were some prominent villages that had many symbols and medium of states presence such as post-offices, police stations, railway stations, camping grounds etc. In north-eastern direction of city on Murree road, a village Bharakao had a police station, a camping ground, a dak bungalow and post office. In the south-eastern direction on G. T. Road, a village Riwat had everything like Bharakao except a Dak Bungalow. In the western direction, Golra and Shah Allahditta were important villages that had a police station and post office. Golra was prominent village linked by metalled road to Golra Junction that bifurcated by un-metalled road from Allahditta to Rawalpindi city. Sihala (Sihala Mirza) was important village on the metalled road linking GT road to Kahuta. It had post office and railway station.

Besides these, some villages had presence of only one administrative arm. The villages that had post office could be listed as- Saidpur in the north of city, Kuri in the north-east of city, Tarlai Kalan and Kirpa in the east of the city, Lodhra had a post office in the south east of city. Takht Pari had a post office in the south of Rawalpindi. Information and Communication channels present were Telephone Exchange, Wireless station (Lal Kurti), Telegraph Office, Post offices, and Railway Station. The exclusive Telegraph office and Post office were present in Sadar Bazar. A Post and Telegraph Office were there in Chaklala Cantonment and West Ridge each. Chaklala cantonment was constructed on the west of village Chuck Lala. McGregor Lines (IASC) was on the north of Chaklala cantonment railways station Chaklala cantonment was a site of Post and Telegraph Office too, on south of railway station. Heavy Repair workshop was there on the west of Chaklala cantonment adjacent to railway line on south of it. Murree Brewery and Attock Oil Company were well connected through railway lines. Dairy farm was there on south east of Jhanda village, Murree brewery near the railway line on the Topi Park, and an acid factory on north-west of Topi village were prominent service sectors other than agriculture

Railways were one of the prominent connecting and transportation medium. For that there were several railway stations in the vicinity to support the mobility of people and administration. On railway lines between Rawalpindi to Lahore, stations were

available Chaklala Cantonment, Lohi Bher, Sihala (that had a tunnel) to Mankiala. On North Western Railway towards Peshawar- Bokra and then Golra junction had a Railway stations. Mill near Dhok Darzian on Sihala west and a mill near Chuchkal on Sihala east. A Pumping Station near Morgah village south of Attock oil refinery. Water works in north of city on the road linking Saidpur in the north- west of city near Dhok Saffu. Tower Reservoir was available in north of Chaklala Cantonment.

The Rawalpindi and its Environs, 1865-66, maps illustrated the spatial distribution of town and cantonment and civil Station. Spatial extent of city was smaller in the comparison to cantonment and civil station, though congested. The 1931 map of Rawalpindi depicted the changes happens in the span of sixty-five years. The military footprints and native civilian population growth underscored the respective territorial expansions. The military footprints were illuminated by the growth of Chaklala cantonment on the eastern side and the West ridge in the north-western side of Rawalpindi cantonment. The native city shows growth towards the north and south.

The map of 1865-66 apparently illustrates the spatial extension and distribution of colonial power through the well-structured system of surveillance over the native population and visibility of the military might of colonizer to them. The 'Leh' river emerged out a dividing feature between native and colonial culture as spatial extension of cantonment was on the right side of its bank and native town was on the left side of the bank. The landscape in the view gave the impression of being under a military control. Distinctive and exceptional in what it represented and contained in those days in the native social and political order of Rawalpindi. The spatial span of Rawalpindi cantonment typified and underscored the fundamental point about the military geography that "they are about land and its control, at a most fundamental level" (Woodward, 2004, p. 12). The military presence made an essential contribution to the pursuit and consolidation of British military power in the region.

Figure 6.5: Rawalpindi in 1931

Legend:
- Cantt
- Chaklala Cantt
- West Ridge
- Civil Lines
- Open space
- City builtup
- City open space
- Attock Oil Company
- Sand bed
- Waterbody
- Rail
- Road
- Grand Trunk Road
- Telegraph Line
- Telephone Line
- Telephone and pipeline

73°0'0"E

Bokra
Railway Station (Bokra)
Village Dhok Saffu (Safoo)
Village Dhok Hassin
Acid Factory
Rifle Range
Village Dhok Mangtal
Camel Corp's Lines
Connaught Barracks
Alexander Barracks
To Peshavur
Grand Trunk Road
Village Chuhar Harpa
Post and Telegraph Office
Rest Camp
Railway Station
Fire Station
Rifle Range
Palmer Lines
Market
C R E's Office
Cantt General Hospital
Supply Depot
Edwardes Lines
Post Office
Village Marir Hasan (Mareer)
Flashman's Hostel
District Headquarter
Telephone Exchange
Imperial Bank
Margalla Barracks
Village Adhra
Victoria Barracks
Village Dhok Saiyidan (Syudan)
British Military Hospital
Village Tanch (Tunch)
Wireless Station, Lalkurti
Golf Club
Rifles Ranges
European Cementry
Village Jalaldin
Village Tahli Mohri
Dheri
Village Jhauran (Jhavura)
Village Dhokan
Rifle Ranges
Village Tulsa (Toolsa)
Village Kotha Khurd
Oil Tanks
Village Mohra Chhappar Village Dhamial
Post Office
Oil Tanks
Attock Oil Company
Village Malikpot
Village Jaurian
Village Hayal Ranial

Village Dhok Nur (Noor)
Water Works Saran
Village Shakria
Pumping Station
Village Tahlian
Left City Redoubt
Right City Redoubt
Leper Asylum
Jamia Masjid
Leper Asylum
Rawalpindi City
Village Ratta - Tahsil
Municipal Office
Tower Reservoir
Chaklala Cantonment (Village Chuk Lala)
Railway Station (Chakla Cantonment)
North West Railway
Heavy Repair Shop
PTO
Village Jhunda
Dairy Farm
Court
Treasury
Muree Brewery
Circuit House
Reservoir
Village Dhok Chaudhr
Arsenal
Leh
Village Dhok Hayat
Village Chharprawali (Dhok Chuppur)
Village Kotha Kalan
To Lahore
Kund
Soan River
To Muree

Kilometers
0   0.5   1   2   3   4

73°0'0"E

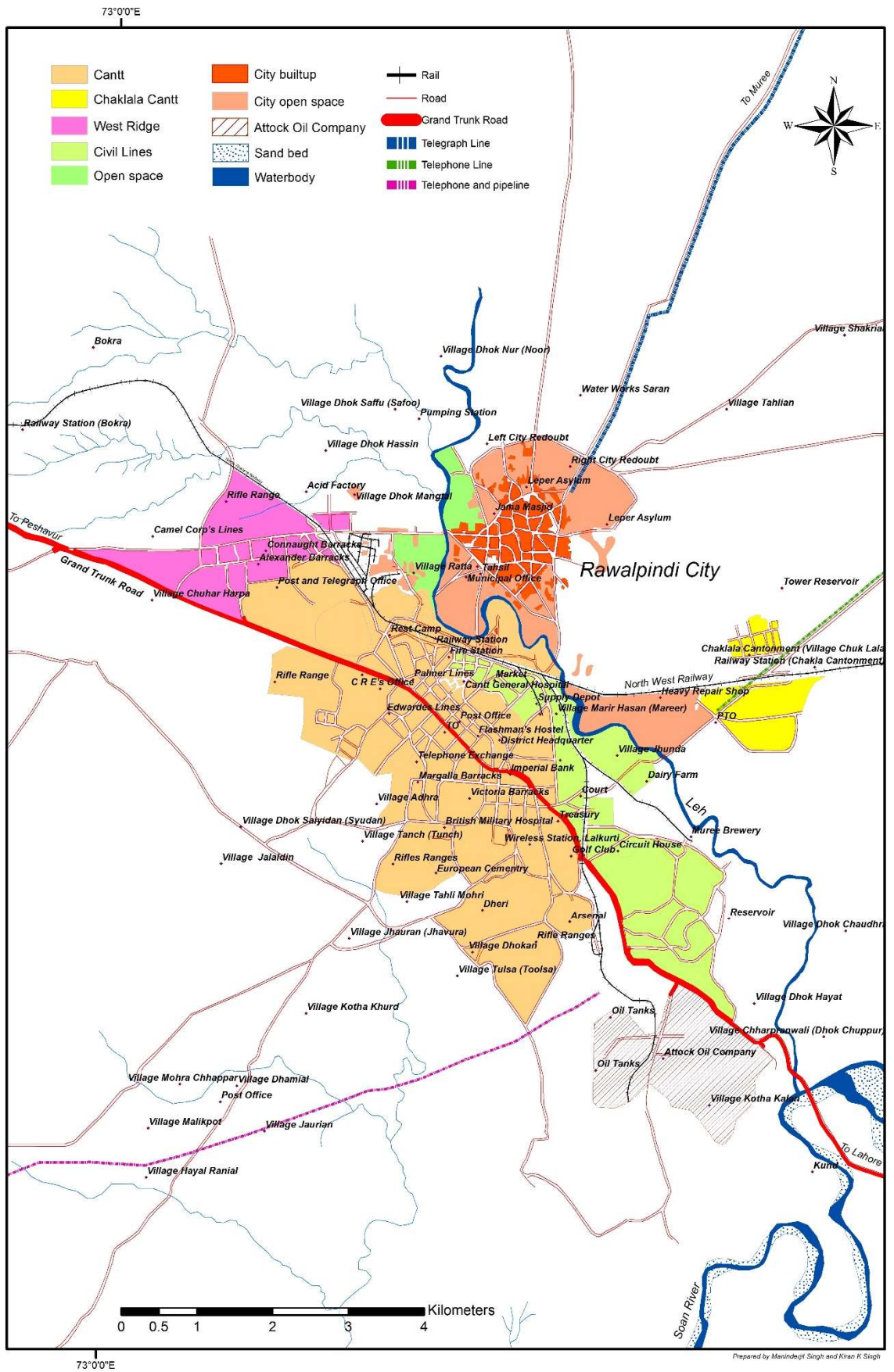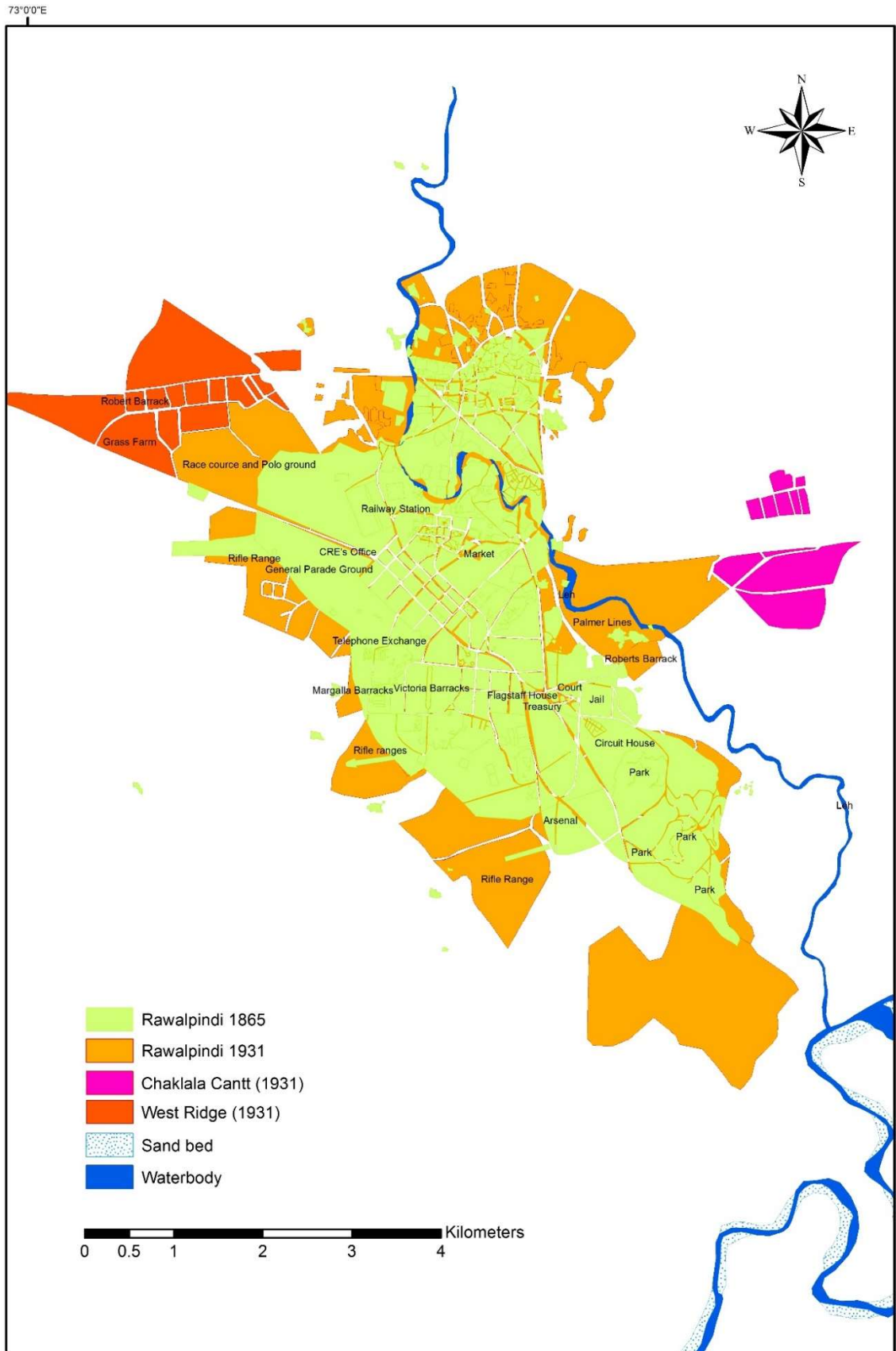*Prepared by Manindegit Singh and Kiran K Singh*

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Figure 6.6: Transformation in structure of Rawalpindi from 1865 to 1931

6.5 TRANSPORT AND COMMUNICATION

Probably no other district in the Province had undergone greater development since annexation than that of Rawalpindi. Rawalpindi city was well connected, by Grant Trunk road, with Gujar Khan in south east, Attock in the North West and Kohat via Kushalgarh in the west. The G. T. road crossed from the centre of the cantonment. Murree was connected with the city through the Rawalpindi-Kashmir road. Outside the city and cantonment, there were several cart roads that gets muddy during rainy season. The city was also well connected with the nearby places by several unmetalled roads. In 1873-74 length of metalled road in the district was 128 miles which increased to 216 miles in 1892. Later on length of metalled road was increased in Rawalpindi by Defence department to connect the different forts of Rawalpindi defence work. Grand Trunk road was mainly the line of military traffic.

Figure 6.7: Connectivity of Rawalpindi Town with other places
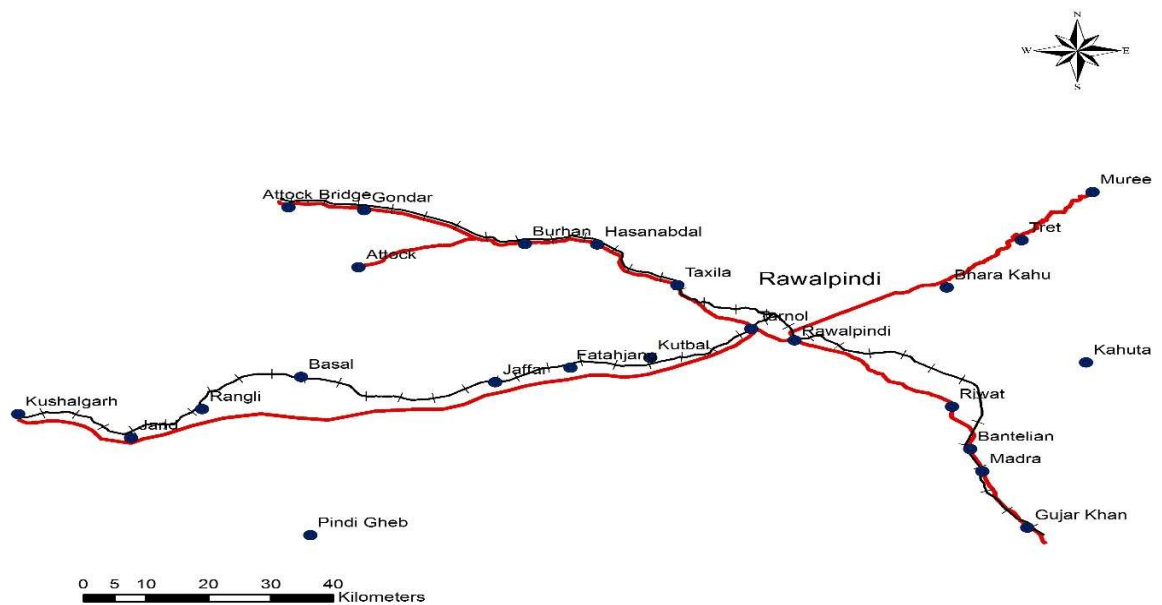
Source: Drawn in Google Earth with the help of Rawalpindi District Gazetteer, (Punjab, 1895, p. 340)

Railways were the most important infrastructure development in Indian sub-continent from 1850 to 1947. It had not only connected the social life, but also integrated economy and trade of Punjab. In the entire district of Rawalpindi, there was no metalled road or railways by 1874. In January 1886, the North Western State

Railway was formed. It initially started the military and strategic project for securing the border with Afghanistan. North Western Railway had merged most of the military lines in Punjab and border regions. Huge amount of money was spent on construction of railway lines and development of railway. Approximately 33 million pound was spent as a hidden military expenditure (Sweeney, 2011). North Western Railway had made up 26 percent of the total mileage of the British Indian network. In Rawalpindi district the construction of railway line had started, but it had not reached to the city till 1865. A small section of line was constructed up to east bank of Leh stream. Ratial to Rawalpindi main line construction started in October 1880 and Rawalpindi to Attock in January, 1881. By 1895, the main line from Missa Keswal to Attock of 98.5 miles and from Golra Junction to Kushalgarh of 70 miles were constructed. Total mileage of North-Western Railway in the district was 263.9 km. It was site of a large military cantonment (Punjab, 1890, pp. 195-197). Table 6.1 and 6.2 and figure 6.7 shows development of road network and railway in Rawalpindi district (1873-1931). The table 6.2 gives date of beginning of construction of important rail line and its length in North-Western Railway.

Table 6.1: Development of Road and Railway Network in Rawalpindi district (1873-1931)

Details	1873-74	1893-94	1915-16	1920-21	1925-26	1930-31
Un-metalled road in Km	-	348.34	250.92	213.91	294.39	302.12
Metalled road in Km	-	226.48	1324.26	1312.99	1307.43	1204.49
Railways in Km	-	24.44	125.96	164.95	178.25	178.25

Source: (Punjab, 1936a) (Punjab, 1913).

Table 6.2: Punjab Northern State Railway

Type of Lines	Stations	Date of Opening	KM
Temporary Lines (metre gauge)	Lahore to Wazirabad	12 April 1875	99.8
	Wazirabad to Naurangabad	10 April, 1876	48.3
	Naurangabad to Jhelum	14November 876	4.8
		Total	**152.9**
Main line	Lahore to Jhelum	6 October 1878	165.8
	Jhelum to Ratial	1 January, 1880	24.1
	Ratial to Rawalpindi	1 October 1880	90.1
	Rawalpindi to Attock	1 January, 1881	101.3
	Khairabad to Peshawar	1 May, 1882	66.1
	Peshawar City to Peshawar Cantonment	December, 1882	3.2
		Total	**450.6**
Khushalgarh Branch	Golra to Langar	1 April 1881	103.0
	Langar to Khushalgarh	16 April 1881	12.9
		Total	115.9
Salt Branch	Lala Musa to Bahauddin	1 January 1880	46.6
	Bahauddin to Hariala	1 February 1880	16.1
	Hariala to Miani	10 April 1880	24.1
	Miani to Bhera	2 February, 1882	16.1
	Pind Dadda Khan to Khewra	15 January 1883	8.1
		Total	111.0
Sialkot Branch	Wazirabad to Sialkot	1 January 1884	41.8

Bridge over Ravi was opened on 12th April, 1875. Bridge over Indus near Attock was completed on May 1883 but opened on 01 June, 1883- a great engineering feat in those days when people and army used boats and ferry. Lahore was junction point of PNSR and Sind Punjab Railway.

Source: (Punjab, 1890, pp. 195-197)

Figure 6.8: Development of road network and railway in Rawalpindi district (1873-1931)
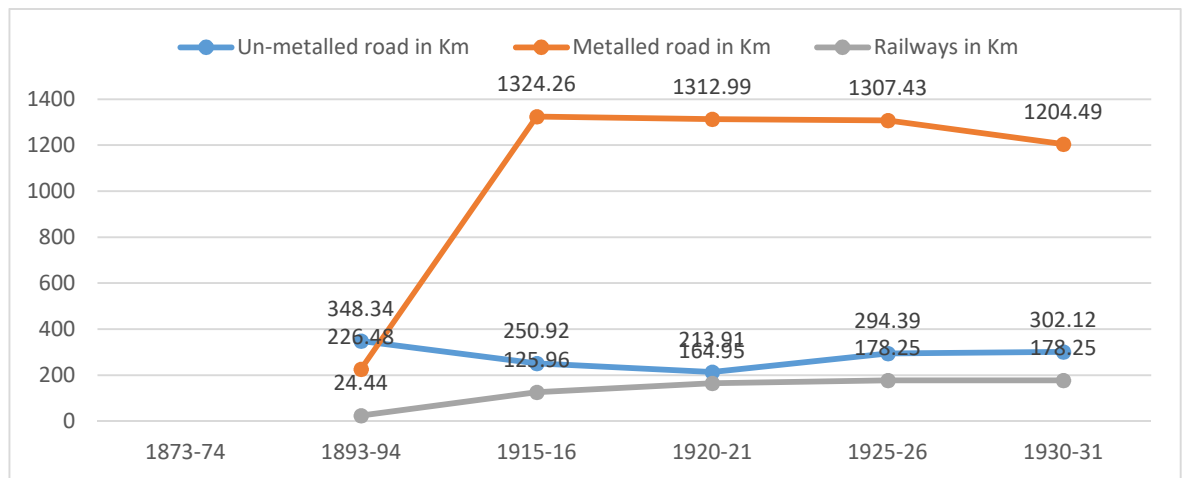
The economic opportunities provided by the expanding transportation networks, like Roads and Railways, was highlighted by earning of persons through the principal occupation of transportation. According to Rawalpindi District Statistical Tables 1935, Road transportation was principal occupation of earning of 2212 males and seven females whereas Rail transportation was 1363 males and four females. Out of total male persons dependent on road transportation 252 had subsidiary occupation of earning also whereas 19 men dependent on rail transportation had subsidiary occupation to substitute their income. Post office, telegram and telephone services as medium of principal occupation of earning were of 405 males.

According to Rawalpindi District Statistical Tables 1935, the Post office contribution to society as medium of information and communication and of money transfer for locals and outsiders in Rawalpindi had started to grow. The period 1906-07 to 1910-11 revealed noticeable increase in average Money orders paid in comparison to period 1901-02 to 1905-06. It stood at 528,371 in former against 69,530 in latter period. The highest number of letters received for delivery was in 1924-25 that was 9,943,544. Overall in the year 1931-32, letters issued for delivery were 6,004,638; money order issued were 208,095 and money order paid were 188,555 (Punjab, 1936a, pp. cvii-cviii).

Figure 6.9: Map showing transformation of street structure, transport and communication in Rawalpindi (1865-1931)

6.6 DEMOGRAPHY AND SOCIETY

Population of Rawalpindi district was primarily rural and growth was due to natural increase. But as the construction of cantonment and North-Western Railway lines started people from adjoining areas started to settle in the city. The construction work required labourers and collies and Rawalpindi attracted enormous population from other city (Punjab, 1895, p. 62). British administrator stated about migration of labour and its demand in railway construction and infrastructural development as:

> extraordinary demands for labor which -.York on the Punjab Northern State Railway and the transport arrangements in connection with the Kabul campaign had created at the time of the census; and consequently we find that, with the exception of Peshawar and Kohat, where precisely similar circumstances had produced an even greater demand, Rawalpindi takes from every district in the list. The immigration is to the emigration as 349 to 100, yet 93 per cent of the village population and 96 per cent of the village females, are born in the district; while of the town of population only 52 per cent of the persons and 44 per cent of the   males are indigenous. The fact is that, apart from the actual work in progress at the time of the census, the construction of the railway and the temporary fixing of its terminus, workshops, and head-quarters at Rawalpindi attracted an enormous foreign population, the number of souls in the town of Pindi itself have risen from 28,586 to 52,975 since 1868" (Punjab, 1895, p. 62).

The number of population in town of Rawalpindi had grown from 28,586 in 1868 to 181169 (see table 6.3). Large immigration from the North-Western Provinces was observed due to the cantonments and movements of troops. Demand of labour also attracted migrants from famine stricken Kashmir. Migrants from Afghanistan had mainly been employed as coolies on the new railway sites. A very large increase of population took place due to greatly increased security and prosperity of the tract. The increase was greater in urban than in rural population. Population of city was 73,795 in 1891 out of which 51 percent was in cantonment. In 1941 the population increased to 1,81,189 and 65 percent was living in Municipality limit. Military and civil population of Rawalpindi cantonment was 9043 and 34,474 respectively in 1931 (Khan, 1933b, p. 23).

Table 6.3: Variation of population in Rawalpindi city from 1868 to 1941.

Period	Cantonment	Town	City
1868	9358	19228	28586
1881	26190	26785	52975
1891	37870	35925	73795
1901	40611	47077	87688
1911	39841	46642	86483
1921	45891	55251	101142
1931	43517	75767	119284
1941	62994	118175	181169

Source: (Punjab, 1870) (Khan, 1933a) (Fazl-i-ilahi, 1941).

The town was occupied by people from different religious groups; Hindu, Sikhs, Jain, Muslims and Christians. To large extend, Muslim dominated the countryside while Christians settled either in north of river Leh (near to cantonment) or as British force in Cantonment. The strength of the European and American Christian rose rapidly between the years 1881-1891. A new language and the culture was introduced to the society by these Europeans through their evangelical missions, anglicised administrative and educational infrastructures.

6.7 EDUCATION: GOVERNMENT, MISSIONARIES AND CHARITABLE WORKS

Education formed very important component and concern of British Administration on Punjab. Status of educational attainment was very low in Rawalpindi district which is reflected in the words of Mr. Steedman (1881):

> The population of this district appears to be remarkably illiterate. Of the male population only 8 in 100 can read and write or are at school. The great mass of the population is utterly uneducated. The females are worse than the men. About one woman in 300 has been or is being educated; only 763 out of 371,225 can read and write (Punjab, 1985, p. 258).

Overall Condition of literacy in the whole district was very poor. In terms of literacy, Christians and Parsis were in better condition, while male literary was better among Sikhs, Jains and Hindus also but female literacy was very poor. Condition of female literacy among Muhammadans were worst at that time in the whole district. A female school was opened in Baba Khem Singh Kallar Syedan in the district. The table 6.4 shows the status of literacy among different religious groups in the district.

Table 6.4: Status of Education in Percentages according to Religion (Census of 1891)

Religion	Males in Percentage			Females		
	Learning	Literate	Illiterate	Learning	Literate	Illiterate
Hindu	6	29	65	-	1	99
Sikh	8	35	57	-	2	98
Jain	9	52	39	1	1	98
Muslim	1	3	96	-	-	100
Christian	7	87	6	27	52	21
Parsi	6	84	10	4	60	36

Source: (Punjab, 1895)

Western Education in the district was introduced by the American Presbyterian Mission which was established in 1856 in the district. The mission premises were constructed on the north of the river Leh just in front of the municipal garden. Schooling was started in 1892 by the Mission and the Christian community connected with the mission. Near Sadar bazaar a Mission School compound and buildings were constructed. The school has enough space to accommodate students and to encourage athletic and sports. The Mission had one college, two city high schools and one Sadar bazaar branch school which had enrolled 20, 663, 129 and 211 boys' students respectively. There were three girls school under mission which had enrolled 210 students but schooling was up to upper primary standard only. There were five Sabbath Schools; one for Christian with 35 pupils and four for non-Christian with 95 pupils. The main bazaar of the city had one

bookshop, where religious books and texts were sold which were in vernacular languages as well as in English.

Apart from missions' schools, there were also few indigenous schools. There was a branch of Arya Samaj in Rawalpindi city, which was established in 1877. Arya Samaj imparted knowledge on Vedas and laid emphasis on learning Sanskrit. Wachar Samaj was started in 1881, which had aimed to extent knowledge and impart moral education. The Singh Sabha was established in 1881 in Rawalpindi city which was a charitable as well as a religious society. The Gurudwara Singh Sabha was established in 1883 as a religious institution. The Anjaman-i-Islamia was also a religious society established in 1893. In the whole district there were 435 indigenous schools all for boys and 228 for girls by 1893-1894 which had registered 6,910 boys and 2,711 girls. Besides, there were also seven Zemindar schools which taught arithmetic in native method. The institutions imparted knowledge to the students on the principal of making them useful and intelligent. Girls were engaged in doing needle work, sewing cloth, while boys were engaged in carpentering, household work etc. The Rawalpindi Norman School, established in 1857, had the objective of preparing students for employment as teachers in vernacular schools.

According to 1907 District Gazetteer literacy in the entire Rawalpindi district was better in the whole province. This was due to the great influence of city and the cantonment. At tehsil level literacy was better in Rawalpindi and Gujar Khan Districts i.e. 6.4 percent population was literate in Rawalpindi district while in Rawalpindi Tahsil 6.7 percent people were literate. City had not only influence the rate of literacy but it also caused rise of advanced education. The city was the centre of education and the Inspector of Schools was stationed at Rawalpindi city. By 1907 there were one college (Gordon Mission College) and five high schools, seven Middle schools, and 93 primary schools for boys and 34 for girls in the entire district. The Rawalpindi city had one government high school, one mission high school, one DAV high and one Islamia high school for boys. Rawalpindi cantonment had one high school and one Middle school for boys. (Punjab, 1909a).

Expenditure on public instructions show that the amount of money spent on educational institutions was highest for the Rawalpindi city. In 1907 the district board had spent approximately ₹ 34000 on education out of which ₹ 14000 was given by

Rawalpindi Municipal Committee. In the entire district expenditure on education increased from ₹ 102731 in 1890-91 to ₹ 147424 in 1910-11 (Punjab, 1913).

Table 6.5: Literacy in Rawalpindi district and tehsils (1911)

District/Tahsil	Total Population	Literates			Percentage of literates to total population		
		Total	Male	Female	Total	Male	Female
Rawalpindi Tahsil	249833	16657	14311	2346	6.7	9.8	2.2
Kahuta	92849	3143	2642	501	3.3	5.8	-
Muree	56570	1027	908	119	1.8	3.1	-
Gujar Khan	148575	6578	5774	804	4.4	7.10	1.1
Rawalpindi district	547827	34883	29839	5044	6.4	10.1	2.0

Source: (Punjab, 1913) (Kaul, 1912)

According to Rawalpindi District Statistical Tables 1935, Education infrastructure includes two aided universities college were there for males in the field of art and science. There were total 13 high schools for boys and only one aided high school for girls. Out of these, for boys, two were run by government, one by District Board and ten were aided. In the matter of middle schools, total ten English middle schools were there, five were run by District Board and one aided English middle school for girls. Besides English middle schools, 140 vernacular schools for boys were in Rawalpindi run by District Board and Six for girls- three aided and two run by District Board. The status of primary schools included total 111 primary schools run by District Board for Boys and total 65 schools for girls (39 run by District Board, four

by municipal Board and 22 aided schools). There was one Technical and Industrial Training School (Punjab, 1936a, p. clxii).

The view of map 1865-66 highlighted the spatial acreage of missionaries between Rawalpindi city and the cantonment compels to frame the case to analyse the game of cultural imperialism as Andrew Porter put forth the discussion that "to explain the role and impact of Christian evangelism, it has been argued historians must turn to the concept of 'cultural imperialism', the purposeful aggression by one culture against the ideas and values of another … accompanied by political, economic, or military pressure" (Porter, 1997, p. 367). Missionaries School, churches and other organisation shows them as a main actors of an intrusive 'culture imperialism' (Porter, 1997, p. 367).

6.8 ECONOMIC TRANSFORMATION AND EMPLOYMENT

Military Geography and security requirements pushed the establishment of cantonments and subsequently later provided the economic opportunities for economic development of rural economy based on agricultural. The set-up of cantonment provided the pull factor for migration in the shape of emigration from rural areas. This economic development opened the doors of social mobilization, and political awakening of rural masses (the repercussions of political consciousness could be seen especially in post-World War I period).

The surrounding areas of cantonments naturally experienced the boom in small businesses catering the needs of the soldiers especially on the roads connecting the cantonments with others cities, hill stations, military camps and cantonments. These small businesses included the recreational and amusements trades such as bars, restaurants, souvenir shops, hotels, and apartments. The rent paid by soldiers, who had to find the accommodation near the cantonment economically supported the local landlords. These economic transformation by virtue of militarization made the Rawalpindi society deeply dependent on the military income.

As clear from table 6.6 and figure 6.10 that in some occupational categories, there was apparent and drastic decrease in employment opportunities. It is very difficult to single out the particular reason as censuses reports of Punjab mentioned about the multiple factors for the decrease in some professional classifications, and even

easily figure out the reason from them. The decrease in numbers in some cases attributed to strict classification of professions and occupations of the persons as there was apparent increase in number of sub-classes and groups under occupations table in every successive censuses and gazetteers. In the Public Administration and liberal arts class, the sub- classes discussed were: Public force, Public administration, Professional and liberal arts. Second class was about Preparation and Supply of material substance. It further divides into three sub-classes such as Industry, Transport and Trade. Third Class is Miscellaneous that included sub-classes like domestic service etc. These sub-groups were divided into numbers of orders and groups; and few of them discussed as under:

6.8.1 Military and Police: In public force category, Army was most crucial entry about citizens' principal occupation and number of persons dependent on them. In Rawalpindi district, Army and police provided economic opportunities to number of men. 3441 men found job in army and 1416 men in police as primary source of earnings. Many had army and police as subsidiary occupation as 53 men belongs to Army and 108 men from police (Punjab, 1936a, pp. xlix-li). The analyses of two gazetteers of Rawalpindi district, part B of 1912 and 1935 depicted the apparent decline in both. This fall was of 5485 persons from 8926 to 3441 in the period 1912-1935 (Punjab, 1913, pp. cxii-xiii; Punjab, 1936a, p. clxii). The Census of 1931, mentioned about the demobilization as the reason of decrease in public force (Khan, 1933a, p. 330).

Table 6.6: Occupation and Dependents (1911-1931)

Type of Occupation	1911		1931	
	Principal	Dependents	Principal	Dependents
Army	8926	4331	3441	22
Public Administration	1007	1891	1108	20
Law	84	343	247	5
Medicine	645	703	676	56
Instructions	474	882	1320	82

Post office, Telegraph, and Telephone services	272	391	405	6
Transport by Road	1706	2809	2219	129
Transport by Rail	3779	3807	1367	15
Transport by Water	105	231	77	2
Construction of means of Transport	21	68	135	13
Trade in Means of Transport	732	448	51	1
Trade in Textiles	661	1287	1811	195
Trade in Metals	5	45	87	22
Trade in clothing and toilet articles	72	192	264	142
Trade in Skins, Leather and furs	78	325	32	--
Building Industries	1266	2022	260	9
Domestic Service	8613	7163	6550	135
Hotels, Restaurants, Cafes, etc.	215	225	200	11
Beggars, Vagrants, Prostitutes	5455	3641	3016	185
Trade in other sorts	6611	11043	3767	397
Trade in Fuel	127	163	86	7

Source: (Punjab, 1936a)

Figure 6.10: Number of persons employed in various sectors.
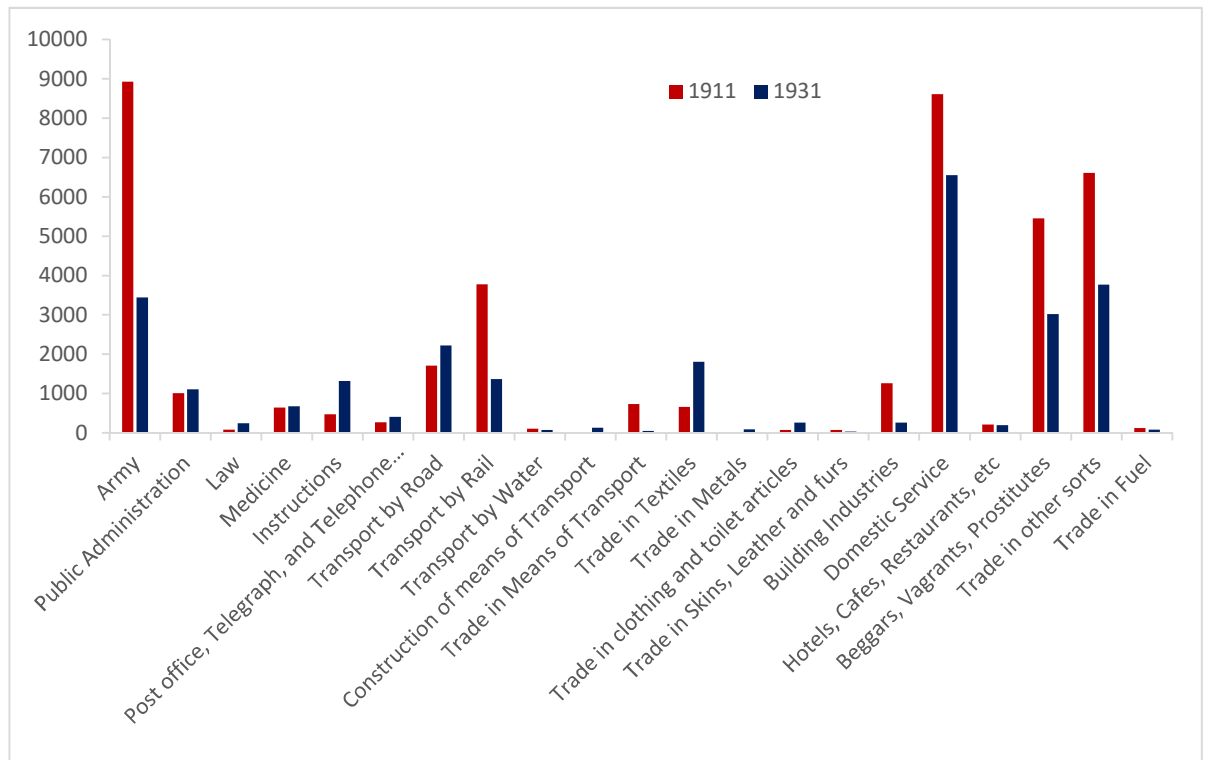
The retrenchment and major re-organization of army in 1921-23 commenced and subsequently new classes were removed or numerically reduced their strength. The reduction in numbers symbolise the policy of retrenchment followed in post-World War period to modernised and mechanised the army. It reduced the numerical strength of Indian army much below the pre-war strength.[15] This decade also marked the reduction in Pathan recruitment with change in ethnic policy perhaps due to unrest in frontier areas (Ellinwood & Enloe, 1981, pp. 125-126). This was also followed by the economic recession in the world market in 1930's affecting the world trade and India too.

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[15] This retrenchment was such that on the eve of Second World War, strength of British India Army was much less than on the commencement of World War I. It was just 205038 in contrast to 269954 in 1914 (Barua, 2003, p. 102). Retrenchment was followed by modernization of Indian Army by British. The reason behind this was it reduce the financial burden and help in modernization.

6.8.2 Public Administration: The Public Administration gained strength consistently with the growing requirements of the increasing population in the district. This categories excluded professors, teachers, doctors, and the employees of Irrigation, Postal, and PWD department involved in laying roads and buildings. The statistics of gazetteers of Rawalpindi district 1912 and 1935 educed this facts apparently depicting the increase in principle workers from 1007 to 1108. But it also illustrates the striking decrease in dependents from 1891 to mere 20 persons.

6.8.3 Pasture and Agriculture: It was main pursuit of occupation of 92,286 males and 8,190 females in Rawalpindi district. It was subsidiary occupation of earnings for 5,631 men and 487 females. There were group of persons living principally on their income, this includes 470 men and 105 women as primary occupation of earnings. This category was subsidiary occupation of earning of 1,191 men and 21 women (Punjab, 1936a, pp. xlix-li).

6.8.4 Medicine: The medical profession experienced a positive growth in the province. The increase in the number of medical practitioners, like midwives, vaccinators, compounders, nurses etc., underscored the people were opening to medical science and moving away from old hereditary untrained hakeems, vaids and dais. Similarly Rawalpindi too experienced it but minute. The decrease in the females medical practitioners from 345 to 224 provided the negative pull to the figures otherwise males experienced a growth from 300 to 452. Overall, medical profession highlighted the increase in the principal occupation from 645 to 676 persons. It experienced decrease in the number of dependents from 703 to mere 56 persons.

6.8.5 Instructions: The spread of education marks the growth of teachers in instruction category. It experienced very significant growth in principal occupation from 474 to 1320 persons and dependent classification experienced negative growth from 882 to 82 persons.

6.8.6 The Post, Telegraph and Telephone Services: These services were the exclusive means of support of 405 persons in 1935 as against 272 in 1912. The reason was just an imperial policy of extension of postal, telegraphic, and telephone services in the Rawalpindi. In 1912, there were 29 sub-offices and 74 Branches that

increased to 39 and 88 respectively in 1935. In the case of the number of dependents, the gazetteer depicted the fall to six persons from 391 persons in the just two decades (Punjab, 1913, pp. xvii-xviii) (Punjab, 1936a, pp. cv-cvi)

6.8.7 Transport by Road: This group of transportation not only included the people engage in transportation but also involve in construction and maintenance of these networks (Kaul, 1912, pp. 510-511). This category showed a great improvement in number in comparison to other categories like through railway and water. Transportation through road included pack animal owners and its drivers. Construction of new roads boosted this medium over other two railway and water. Railway station and neighboring tracts provided the opportunities of employment. The principal earner in this categories experienced growth from 1706 to 2219 in the period between two gazetteers 1912-1935. There was decline in dependents from 2809 to mere 129 in this period.

6.8.8 Transport by Railway: It experienced a sharp decline according to statistical figure. It might be due to stricter specification in mentioning of the sphere of employment in the 1935 that was lacking in 1912. Earlier, persons working in railways workshops too were included in this category; might be removed in 1935. This category experienced overall increase in the province but decline in the Rawalpindi. The gazetteers brought out the decline from 3779 person to 1367 in the case of principal occupation. In the dependent case it also nosedived form 3807 to mere 15 persons (Punjab, 1913) (Punjab, 1936a).

6.8.9 Transport by water: This category dealt with the transport by river or canals. It was on the decline in the era of railway and road networks. In this categories, persons employed in irrigation department for construction and maintenance of water channels included. Rawalpindi gazetteers statistical tables illustrated the decline from 105 to 77 persons in the principal earners entry and dependent category a decrease of 229 persons in the 1912-1935 period (Punjab, 1913) (Punjab, 1936a).

6.8.10 Construction of means of Transport: Transport sector experienced a boom with development of roads linking to nearest town and cities and nearest railways stations. The medium of transportation and its construction naturally

experienced an upward growth and became source of employment for the people of Rawalpindi. There was two factories at Rawalpindi such as Coach building and Motor car, works with 30 operatives and Coach building and Harness making with 35 workers (Kaul, 1912, p. 515). According to gazetteers, people involved in it as a principal occupation rises to 135 from 21 and dependents on them fall to 13 from 68 persons in 1912 (Punjab, 1913) (Punjab, 1936a).

6.8.11 Trade in Means of Transport: In this category, according to 1912 statistics, 732 persons were involved with 448 dependents but the figures fall to two digit in the case of principal earners to 51 and with dependents merely one. This great fall could attributed to the fall in sale of traditional means of transport like Bullock-cart and horse drawn carts with the coming of locomotives like railway, buses, and trucks.

6.8.12 Trade in Textiles: The people involved in trade of textiles item increased. Textiles items were principal source of earning of 1811 peoples and only 192 persons were dependent on them in 1935 as compared to only 661 person's main earning source and had 1287 dependents on them in 1912

6.8.13 Trade in metals: Trade in metals category included sale of sewing machine, steel trunks, cane press, and other machinery such as scissors, hinges, and locks. This group was insignificant but coming in prominence lately with increase in sale (Kaul, 1912, p. 515). Trade in metals experienced the growth from 5 to 87 in the period 1912 to 1935 with respect to principal occupants. In the case of dependents upon them, it fell by 23 persons from 45 to 22.

6.8.14 Trade in clothing and toilet articles: This group symbolized the modernization of society and was strongest in town. It included sellers of readymade clothes, shoes, boots, socks, umbrellas, soap, lace, scents, combs, trousers, powders, talcs etc. The people involved in trade of clothing and toilet articles experienced an increase. These items were principal source of earning of 72 peoples in 1912 and 192 persons were dependent on them. These figures improved in case of earners to 264 and decline in number of dependents to 142 in 1935. (Punjab, 1936a) (Punjab, 1913)

6.8.15 Trade in skin, leather and furs: The principal earners decreased in this group from 78 persons with 325 dependents on them in 1912 to 32 persons with no dependent in 1935. The figures in trade in skin, leather and furs depicted the general overall decline in the state. According to census report, in the whole province, there was decrease of 126,423 persons or of 17 per cent, in dependants on the leather industry. According to Latif, this would be attributable to the decline in the export of tanned leather in consequence of the imposition of prohibitive duties on tanned as distinguished from raw pelts, by most of the European importing countries (Latifi, 1911, pp. 100-101).

6.8.16 Building industries: Building industries classified the people who involved in job related to lime burners and cement-workers. This group experienced a great fall from 1266 principal earners to 260 with decline in dependents also from 260 to mere nine in 1935 (Punjab, 1936a).

6.8.17 Banking, establishments of credit, exchange and insurance: This category experience a decreased in the span of twenty years. The principal earners decline from 1033 persons with 2942 dependents to 274 persons with five dependents. The reason of decline was money lenders who were reducing it business due to legal protection to the peasant proprietor borrowers and tendency of him of taking advantage of this clause, rapid growth of co-operative societies, and thrift societies and counter-attractions of other trade for him. Other reason was strict classification of professions, and filing of income tax returns as earlier this category included the agricultural money-lenders and women money lenders who had it as subsidiary occupation (Kaul, 1912, p. 229). The strength of brokers declined as the establishment of agencies that promote direct dealing with fixed prices reduced their necessity to common man like in transfer of property (Kaul, 1912, p. 515).

6.8.18 Domestic Service: This sector too experienced a fall from 8613 persons as principal earners with 7163 dependent in 1912 to 6550 person with 135 dependents in 1935. The decrease in domestic service was due to rise in wages of private servants as compare to earlier times and concomitantly due to scanty means, not able to afford the half of the number they earlier could. Modern inventions and means were also the reasons of this fall. Like water works impacted on the employment of water-carriers in towns and adjacent villages (Kaul, 1912, p. 519).

6.9 THRIFT CO-OPERATIVE SOCIETIES

Thrift co-operative societies were other significant feature that emerged during the colonial times especially due to military influence. Military was very much concerned about the extravagance of soldiers so it promoted the thriftiness among the military men but it had an economic orientation too.

> Thrift is one of the lessons that the army is beginning to teach and it provided both the opportunity and the need; the opportunity because it pays its men so well; and the need because to keep its men fit it is obliged to give them a higher standard of living then most of them enjoy in their homes, and without thrift they cannot hope to maintain it on the expiry of their service. The best way to encouraging the peasants was to give him a co-operative society and the certain number of regiments have started societies accordingly (Darling, 1934, p. 331).

According to Rawalpindi District Statistical Tables 1935, there were seven thrift co-operative societies with 103 register members in Rawalpindi in 1926 that augmented to 22 thrift co-operative societies with 974 registered members in 1932. Stock-broking co-operative societies were also started to emerge in 1920's. In 1925 there were only 2 societies with 31 members that arise to 16 with 402 members in 1931. Moral improvement co-operative societies were also established by some people. In 1928, there were 4 with 100 members. It started to draw good support from people. These societies augmented to 26 with 1040 members in the district (Punjab, 1936a, pp. lxii-lxiii).

6.10 SERVICE SECTOR AND INDUSTRIES:

Out of the total population (9429445) of the Province, actual workers were 39 percent. It clearly highlighted that one out of every three inhabitants of the province works for his livelihood, whether personally or through his servants, and he supports the other two (Kaul, 1912, p. 493). Trade and Public administration had almost 65 percent dependents i.e. seven workers supports thirteen dependents. The most prosperous people, Class A, had largest proportion of dependents and Class B came next to it. Beggars and Domestic service category had very least numbers of dependents (Kaul, 1912, p. 493). Banking, credit and insurance etc. was primary

occupation of 273 males and one women. This category was had secondary source of earnings of 27 men. The other service sectors that had become job providers was hotels, cafes, and restaurants on which 193 men and seven women were dependent as a primary occupations. The dealing in Food stuff was main occupation of 1992 men and 37 females. Public administration was occupation of 1088 males and 20 females. This sector included 42 men who had this as subsidiary earnings source. Domestic service was also primary occupation of significant number of men and women. 5823 males and 727 females draws their earnings from this sector. For 133 men and 52 female domestic service was secondary source of earnings (Punjab, 1936a , pp. xlix-li).

According to Rawalpindi District Statistical Tables 1935, the factories made apparent contribution to the economy of Rawalpindi. Major contributing factories that had noticeable connection with military were North Western Railways Locomotive Workshop, North Western Railways Carriage, and Wagon Workshop, Murree Brewery, Rawalpindi Arsenal (cantonment), Royal Engineer Workshop, Murree distillery. The Averaged daily workers involved in these factories in 1931 were 1153, 692, 143, 500, 77, and 45 respectively. Besides there were many factories, farms and mills contributing to local economies like flour mills, military dairy farms, base mechanical transport workshop, ice factories, MES workshop, Heavy workshop etc. (Punjab, 1936a, pp. xciv-xcvi). Table 6 shows persons employed in various sectors in 1911 and 1931.

Rawalpindi had exclusive Piggery and tent making industries of the Punjab. Piggery and Dairy farms was run by the Government with 37 and 52 operatives. Tent making industries had 68 workers. Other State own dairy farm was there in Patiala State (Kaul, 1912, p. 496 & 508). At time of census 1911, Rawalpindi had 13 brick and tile factories employing 735 operatives- 606 males and 129 females. The customers of these kilns were railways, government, and citizen for buildings and bridges. One of the largest bakery, belongs to the Army Supply and Transport corps, of the Province was there in Rawalpindi having 34 employees (Kaul, 1912, p. 505). The Railway Workshops including the Locomotive and Carriage Departments were 19 in number, distributed as noted in the margin. Rawalpindi had three workshops. Rawalpindi had three workshops that employed 2218 persons in 1911 (Kaul, 1912)

6.11 CONCLUSION AND DISCUSSION

Military geography of Punjab attracted the attention of the British to this frontier Kingdom. This developed the initial political links and to some extent trade and commerce link. After annexation, the region was important to pacify as the martial instinct people from the frontier region support outward defence and inward attack of the invading people from the north-west region. So the network of cantonment was laid to make the people compliant and peaceful to new rulers. The necessities, compulsions and contingencies of the colonial rulers guided the selection of the particular cities and towns as its centre of administration. These centres became the focal point of introduction modern amenities like networks of road, railways, telegraph, post office, educational opportunities and economic opportunities etc. All the advantages not only attracted the immigration of the people to these centres and made them as fastest growing urban areas, but also influenced the intensity and pattern of urbanization in these centres (Kerr, 1980, p. 212). The availability of better network of information, communication, and transportation provided opportunities for trade, and manufacturing, which in return attracted the labour force. British railway policy had a profound impact upon the patterns of urban population that was guided by strategic, commercial, and administrative requirements of the Raj. Europeans in Punjab according to census of Punjab 1868 were 17574 including the army (Punjab, 1870, p. 35).

Over a fifth of the cantonment came to be located in the Punjab and NWFP. Cantonment was established at almost a distance of 2 to 5 km away from native town and kept free of cultivation for health and security reasons. Thus town caters the needs of the cantonments without impinging upon the military (King, 1976, p. 98). On an average cantonment covered an area of 18-20 sq.km and laid to meet the residential and training requirements of soldiers and officers and other ancillary persons whether Europeans or native. The principal of racial demarcation followed in all cantonments such as barracks for British troops, lines for natives and Bungalow for British officers. There were distinct parade grounds, exercise grounds, canteens, hospitals, churches, cemeteries, and shopping areas for the Europeans and natives. Sadar Bazar was a regimental bazar for sepoys. (King, 1976, p. 111). There were other extensively spread areas marked to meet the needs of military men like shooting ranges, magazines, horse lines, gunsheds, workshops, and

farms. Soldiers Garden that in general terminology called as company bagh was there. There were some worship places like churches and idgah and temples for native troops (King, 1976, pp. 10-22).

Since the colonial rule depended ultimately on the armed forces, it was ensured that cantonment had effective means of communication like metalled roads, rail links, post offices, telegraph lines, telephone connections. The administration of cantonment was overseen by committee under direction of the commanding officers of the area. With passage of time the cantonment came to have good sanitary conservancy and lightening arrangements and regular water supply. Race course, club houses were there for Europeans and some shops to cater there needs (Grewal, 2009, p. 98). In the case of Rawalpindi, it became third largest city of Punjab by the time of partition was all due to cantonment and military requirement of the British Indian Empire especially during and post Anglo-Afghan war II period. Thus urbanization and modernization ushered in frontier society that had chance to be neglected.

Chapter 7

CONCLUSION

Military Geography and transformational trajectory of the Punjab (1849-1947) is an appraisal of transitions that Punjab undergone through as a part of British Indian Empire. It experienced number of transformational phases in almost a century long British rule and boldly entered into and accepted these transformations. Although the new organizations that sprout up in Punjab following the collapse of Sikh regime, had used alternative means and tools of stabilization in Punjab by ignoring the aristocracy and military elites but they adopted the paternalistic orientation in Punjab in post 1857 mutiny due to military requirements. Therefore, this research has been a modest endeavour to apprised transformational experience of the Punjab through the optics of Military Geography.

As already stated that Military Geography is present in every nook and cranny of the habitable world where Military forces and their activities touched, shaped, viewed and represented in some manner in every corner, as they required control over the space to create the necessary preconditions for military activities (Woodward 2004: 3). Military control over space is exercised by physical presence and by the social, economic and political influence of military establishment on the state, a territory, and people. The study of appraisal of military geography and transformation find out that the Punjab experienced a multi-layered transformations affecting wider sphere of society due to militarization.

Military geography beckoned by colonialism had unleashed a wide ranging transformations in Punjab. In order to understand these transformations driven by the military geography, the development of military and its allied institutes and other organizational set up like Cantonments, District Soldiers Boards, Medical and Hospital Boards, Postal and telephone service, and Public Works Department along with the multifarious infrastructural transformations in Irrigation, demographic set up, urbanization process, health and medicine, sanitation and education was analysed and interpreted. Therefore, certain regions within Punjab assumed pivotal importance in this regard, not only in supplying manpower to the army but also for stationing massive military infrastructure like Ambala and Rawalpindi. Punjab is a

typical case in point, as it was major recruiting ground for British Indian army and had the largest number of military cantonments. The proposed research mapped this interesting history of Punjab from perspective of military geography.

After the annexation of Punjab, the military occupation by the British Army militarised the landscape, which institutionalised through the establishment of cantonments. These cantonments were connected through roads and railways to other administrative centres of the empire and with each other concomitant. This phenomenon ushered an era of urbanization in Punjab. The cantonment town became pull factor for migration, where vast opportunities of employment were available for the natives. Slowly other infrastructural development like dispensaries, schools, industries, dairy farms and other shops emerged. Another post-annexation feature was liquidation of the Sikh army, disarming of the people of Punjab and turned its 'warlike' people to peaceful business mainly into agriculture as farmers or peasants. Many of the disbanded soldiers later made their way into the Punjab Irregular Frontier Force (Piffers) to protect the British subjects from attacks of marauding bands of Pathans, to keep trade route secure, and to maintain law and order in the frontier districts. A chain of forts and garrisons, which were connected by the military roads, were constructed along the border to support them. As far as the trans-Indus territories were concerned, the British did not extend the boundaries of Punjab beyond the erstwhile Sikh state and respected the independence of trans-frontier tracts, with the unruly tribes being dealt with both conciliatory measures and coercion.

The British attempts to bring stability and order to Punjab was aimed at mollifying the general public of Punjab and the north-western tribal region, so that they would not pose any danger to them by joining the invading army of Russia or Afghanistan or Persia. The reforms initiated by the British in the form of canal system, land and revenue settlements, roads, railway, navigation of rivers, promotion of trade, and modern education have to be understood in such a context. The construction of canals and canal colonies was pushed in the western Punjab to support the new agriculture and imperial defence. The land in these colonies was primarily given to the Sikhs from eastern Punjab, mainly ex-servicemen, with an apparent motive to change the demography of the Muslim majority area. The settling of military men in these areas was also thought to be useful in case of dangers emerging from across

the Indus. The Board of Administration had also done the settlement of land and revenue and tightens the noose over aristocracy alongside creating new constituencies of support (Malik, 1983, p 182). In post 1857 another imperatives of security was emerged that was employing of Punjabi men into the Bengal army. In post Second Afghan war period, the recruitment was further supported by the martial race doctrine. Punjab became sword arm of the empire and largely supported it in two World Wars with manpower often connoted as "Cannon Fodder."

Punjab was one of such areas which got implicated in the 'Great Game', which altered its subsequent historical trajectory due to its geographical location on north-western frontier region. The mighty state of Maharaja Ranjit Singh was made an ally to keep it as buffer between British Indian Empire and Afghanistan. It was annexed when British intended to make the Afghanistan a buffer state as well as to keep it away from Russian influence. But the challenge was to integrate the newly annexed province by pacifying the people and thereby bringing stability and peace. The laying of roads and railways facilitated the movement of troops and commerce. On these railways and road networks military cantonments emerged in Punjab. The navigation of rivers in Punjab especially Indus and Sutlej was undertaken with the aim of augmenting commerce upward to Central Asia and downward to Karachi. It could also support the war effort in the case of north western region. British attempts to bring Central Asia under its commercial network had also Punjab in the centre of the plan, as all the trade to Central Asia was carried through Punjab, whether it was via Kashmir or Afghanistan; with Delhi, Amritsar, and Peshawar as the major trading entrepots of Punjab. By 1870's, Punjabization of Indian army, started after the mutiny of 1857, acquired greater pace. Punjab became main recruiting ground for the British Indian army. The constructed theory of 'martial class' and the geographically conditioned physical features of Punjabis, alongside their loyalty, largely determined this crucial choice, particularly when a third war with Afghanistan with Russian involvement was anticipated in mid-1880's. Army recruitment was also instrumental in increasing the social prosperity of rural population, as soldiers sent remittances to their villages. Measures at ensuring the loyalty of the soldiers and the population of the areas they hail from, included heavy investment in physical infrastructure at a scale unmatched by any other province of British Indian Empire (Mazumdar 2003: 53-60). This along with agrarian expansion and the making of a

market economy through new agriculture and commerce allowed the British social engineering through which they created supportive groups in Punjab apart from manufacturing community, reconfigurations and new identities- for instance the making of Jat Sikh community as chivalrous and agrarian. Such persuasive transformations were indeed coincided by strong repressive and surveillance mechanisms. The long term implications of this interesting historical unfolding of the region are many. The modern urbanization of Punjab is largely interwoven with its history of 'cantonmentization' associated with the endeavours of the British to stockpile manpower and ammunitions in the frontier region due to the Russian scare.

It is not surprising that by the 1920s seven cities of the Punjab were dominated by cantonments, where practically half of its urban population lived (Mazumdar, 2003, p. 62). The Punjabization of Indian army has taken many Punjabi soldiers abroad particularly during the world wars, giving them experience of transnational migration and overseas life. This has proved to be pivotal in fashioning the migration culture of Punjab as evident from the making of Punjabis as a transnational community through migrations and diasporic life. Punjab was also transformed well in advance in its tastes. It could be pointed out that between 1890 and 1920, tea consumption in the Punjab doubled and white European-style bread appeared even in villages, while the consumption of fruit and vegetables increased fourfold (Mazumdar, 2003, p. 35). So also was the development of middle class social values and notions of gender (Malhotra, 2001). The 'general wellbeing' and social control through loyal elite groups also apparently made Indian nationalist movement relatively weak in Punjab and it remained fairly peaceful except the turbulence in connection with the Gurudwara reform movement of the 1920s (Yong, 2005) (Sharma, 2009). The military-agrarian base of the Punjab Unionist Party, the popular political party during that time with its cross communal base, irrespective of the Kisan movements of the 1920s and 30s, remained supportive to colonialism soothing the disquieting voices (Talbot, 2007). The present study suggest that the often highlighted Punjabi 'exceptionalism' and its making as the 'sword arm' of India had to be understood also in the context of the imperial rivalry and calls for serious studies on the same by deploying primary sources, particularly the colonial archive and the local resources from Central Asia, Russia, Persia and Punjab.

As the military geography and transformation, and its effects on the lives of the people and landscape are under researched in the history of Punjab's human geography and even in urban studies and sociology of change. In such a context, the proposed study significantly and minutely unravel the role of militarism, military activities and related developments in shaping the colonial times and spaces. For this it looks at the specific military geography of Punjab's two sub-Himalayan towns: Ambala and Rawalpindi. These towns experienced a different trajectories of the transformation. Both the cantonment towns had similar number of population from the beginning but Ambala town growth remained almost stagnate whereas Rawalpindi emerged as class I city by the year of 1941. The spiralling growth of Rawalpindi was in post 1880 settings that could be contributed to Great Game exigencies. Because pf this World War contribution from these tracks were good but in Ambala it was extreme opposite to it. That leaves a research gap for future research for why Ambala's contribution was negligible. These experiences of two towns established the Foucault statement that transformations "do not constitute homogeneous process that takes place everywhere in the same way." In fact "it is always a discontinuity specified by number of distinct transformations; between two particular positivity" (Foucault, 2012, p. 193). The decline of one positivity and the rise of another implies several types of transformation that requires an analyses of what these changes consist of and the abstract principle of their succession.

One of the major future research direction in the area of methodology in Military geography, as explained by Woodward, is accessibility in ways that have quite pronounced effects on what can, and cannot, be studied, because of the nature of military institutions themselves. The directions had called for a methodological innovation. The present research faced similar difficulties as other military researches face in terms of accessing the data. This difficulty was overcome by visual interpretation and critical analysis of geo information for achieving fourth objective. Critical analysis of geo information data in the form of maps, relief or landscape models provides insights of various dimensions. It present the idea of military strategies, landscape planning, spatiality, place and environment. Besides, these geo information available at archives are rich sources of valuable information. These maps are portrayal of power and produce power. The present study has highlighted the role of Geographical Information System (GIS) in study of power

based spatial transformation. It is substantiated by the detailed study of Rawalpindi and Ambala.

The present work reinforces military theory postulates in urban development as in the case of Punjab the military installations worked as impetus for growth of cities. The way cantonments emerged throughout the Raj during later colonial times was determined both by the need for defence and the maintenance of law and order. Creation of military establishments had deep impact on the evolution of transformed landscape into urban areas as is evident with the case of Rawalpindi and Ambala. Cantonment was the manifestation of dominance-dependence system which was located strategically in colonised territories. Civil station was a separate socio-spatial unit with all the political and civil administrative elements. The native state or native city belonged to the indigenous settlement and was in the form of dependent society.

Emergence of Ambala town is widely accepted a result of accidental decision but the study reveals that the location of Ambala sandwiched between princely states in north and south directions was strategically well positioned to facilitate the British requirement. Relevance of Ambala cannot be related to battle or skirmishes but as a necessity of the time and space. Ambala cantonment emerged as a converging military geography's landscape when the British Indian empire was planning to annex the Sikh Empire in the post first Afghan war annihilation. The troops and logistics set-up was massed here and around its environs. The study gives various insights on the factors that led to decision of converting Ambala into a cantonment city. The study also indicates that the location was chosen at equidistant from major cities, capital city and summer capital and various line of communication facilitated Ambala to become a site of reinforcement.

Conversion of Rawalpindi as a cantonment town in colonial India was done due to two reasons. One was the need to establish a point of defence on the western frontier of Punjab and another was to suppress the rebellious native tribal forces as the frontier (beyond the Rawalpindi district) was the home to many fierce tribes and source of anxiety to British Empire. Geographical location and physical environment had made the city a prominent location which was conducive to health and wellbeing. The town experienced tremendous growth in span of 60 years which can

be attributed to the presence of cantonment. Nothing remained untouched. Militarism affected spatial structure, infrastructure, demography, economic activities, health, education and the whole society.

In sum up, it could be concluded that Military geographies theory advocated by Rachel Woodward successfully applied to this research that how continual preparations which states make in order to be able to wage war and engage in military operations shape wider social, economic, environmental and cultural geographies and produce their own ordering of space. Thus Military Geography provoked and produced transformations in the Punjab.

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