ANALYSIS OF SITE, SITUATION AND THEIR IMPACT ON RESETTLEMENT OF PROPOSED NEW BALAKOT TOWN, PAKISTAN: AN EX POST EVALUATION OF 2005 KASHMIR EARTHQUAKE

Amjad Ali[*], Amir Nawaz Khan[*], Atta-ur-Rahman[*], Muhammad Saeed[*]

ABSTRACT

The 2005 Kashmir Earthquake has completely destroyed the town of Balakot. As a consequence the site of Balakot town has been declared as a red zone and for resettlement new Balakot town was proposed at Bakryal. There is uncertainty about the resettlement. The new Balakot town attract the low income and servant class of the old Balakot town for residential purposes. However, the politicians, businessmen and landlords of the community are fear to suffer. As a result, these groups resist the process of resettlement. This uncertainty about the resettlement is the product of human interaction with the site and situation of new Balakot town in post 2005 Kashmir earthquake scenario. The site is feasible while situation is not encouraging in the new Balakot town, which creates uncertainty about the future of new Balakot town. This paper attempts to carry out the analysis of site, situation and their impact on resettlement of proposed new Balakot town, Pakistan. The site analysis provides details of vulnerability to hazards, civic utilities and services. The new Balakot is a planned town and have low vulnerability to seismic hazards. The situation analysis explores the potential growth and development of the new town which is measured in term of economic base. The potential basic and non-basic activities structure is analysed for the study of economic base of new Balakot town. The basic activities infrastructure is not attractive for the residents of the Balakot town as there are least business and other employment opportunities. It was found that initially the property business and high level of non-basic activities and later on the basic activities will support the growth and development of this new town.

KEY WORDS: *Site; Situation; Resettlement; New Balakot; 2005 Kashmir Earthquake*

INTRODUCTION

The old Balakot is a historic and a tourist attraction site. It is the tehsil headquarter and served the entire Kunhar valley[1,2]. In 2005, the estimated population of Balakot town was 30,000. The town of Balakot was completely destroyed by massive 2005 Kashmir Earthquake. As a consequence, the site of Balakot town has been declared as a red zone[3]. Keeping in view this scenario, the Government of Pakistan has decided to abandon the old Balakot town. A project worth of 12 billion rupees (US$ 200m) has been sanctioned to rebuild a new Balakot town at Bakryal[4]. Bakryal is located almost midway of Mansehra town (11km) and old Balakot (23km) (Figure 1). A well-established plan for the new Balakot town at Bakryal was prepared by Earthquake Reconstruction and Rehabilitation Authority (ERRA) in 2007. It has planned infrastructure and services.

The universe of the study is comprised of new Balakot (Bakryal) and old Balakot towns. After 2005 Kashmir Earthquake, the Government decided to restrict reconstruction activities at high risk areas of Balakot and its surroundings which were called as a red zone area of the Balakot. The red zone area has total five union councils namely, Balakot, Garlat, Ghanool, Sathbani and Kewai. Out of the total five union councils more than 99 % of the total population and area of the red zone is shared by these three union councils (Balakot, Garlat and Ghanool). The Sathbani and Kewai union councils had less than 1% share of the total population and area in the red zone[5].

Site and situation are the basic factors for the location and growth of a settlement. It provides information about the characteristics of a settlement[6]. Site is refers to a spot where a settlement is to be built and gradually it spreads. The determining factors of a site are: topography, geology, water supply, nature of the river, vulnerability to hazards, defence, availability of building material, fertility of soil, power supply, aspect of slope, etc. The situation of a settlement refers to the immediate surroundings of settlement physical, economic and cultural conditions. The situation factors control the
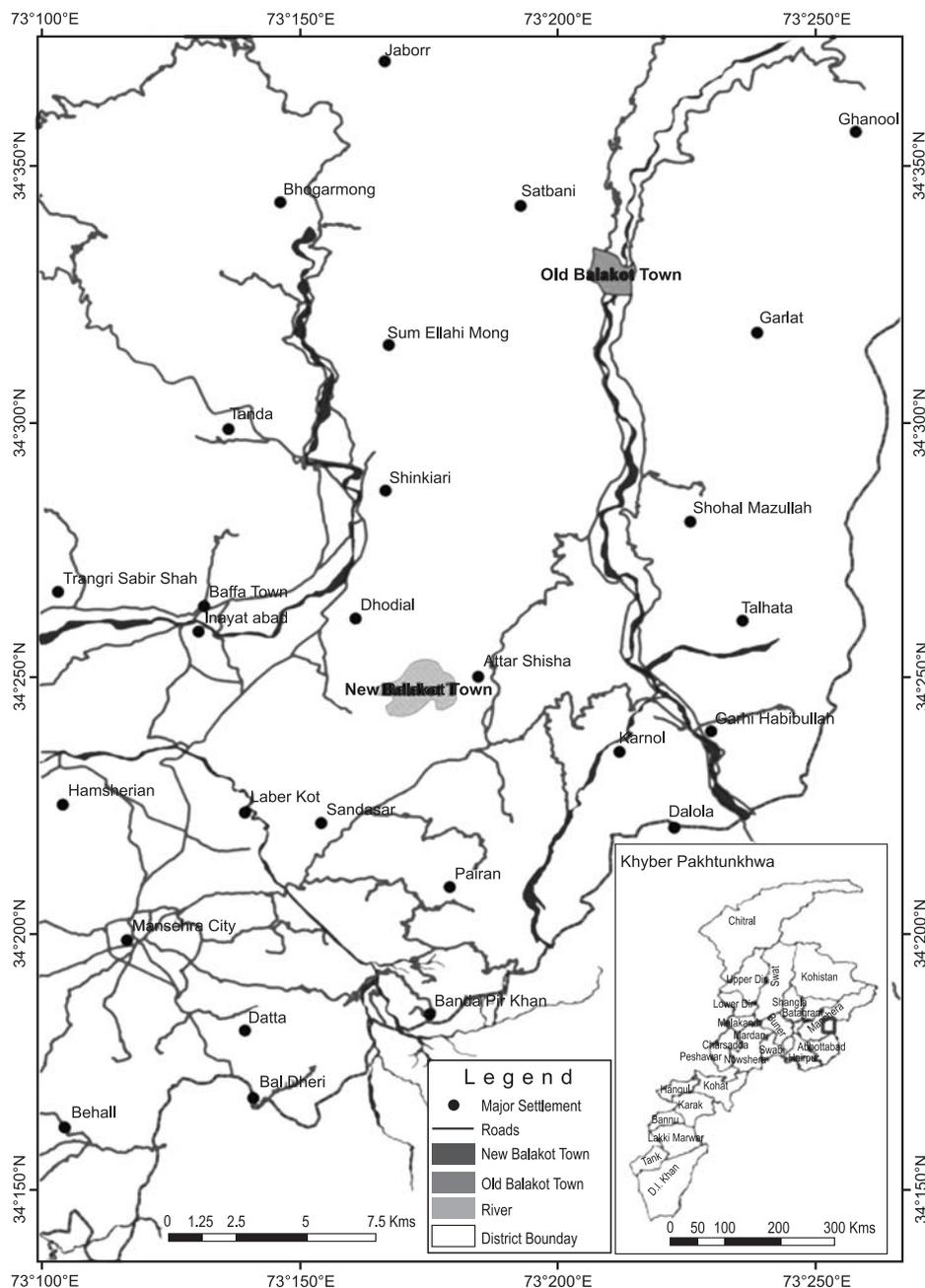
---

*University of Peshawar, Pakistan

Figure 1: Location Map of the Study Area

functions of settlement and their growth. Situation is a dynamic process as it changes over a period of time significantly and may have physical, economic or cultural implications[7,8]. In a developed settlement, the site factors are modified in form of vulnerability to hazards, civic utilities and services[9]. The growth of a town is dependent on the relationship between basic and non-basic occupations of townsfolk[10]. The cities develop in response to demands from other places[11]. The function which brings money into the city is termed as a "basic activities". In

contrast, the second category is termed "non-basic" which serves local demands and simply involves an exchange of money which basic efforts have already brought in[6,10].

Resettlement as instrument of hazard reduction programme is used for the entire process of relocation and rehabilitation[12,13]. Worldwide, the process of resettlement has enormous problems and most often it exacerbates the hardships of affected community[14,15,16]. Particularly, post-disasters resettlements are always far behind the desired results. Turkey, Iran, Peru, Indonesia and many other

countries led to unsuccessful stories of resettlement[17,18]. The post-disaster relocations and reconstruction of the 1995 Kobe and 2008 Wenchuan earthquake, Japan; 1999 Taiwan earthquake; 2001 Gujarat earthquake, India; and recently 2011 Japan tsunami were successfully carried out on part of the government and line agencies. However, the affected population has major concerns of social adjustment and changed livelihoods[19]. The important issue with resettlement in developing countries is the failure of these countries to tackle the problems of displaced hazard-hit communities. These problems exacerbate because of delaying tactics and organizational deficiencies of the government[20]. Pakistan is no exception in such cases. Most of the hazard reduction programmes are unsuccessful[14,16]. The issues pertaining to resettlement are very complex in nature and mostly inter-linked with each other[21]. In involuntary resettlement, the identified risks are landlessness, joblessness, homelessness, marginalization, increased morbidity and mortality, food insecurity, loss of access to common property resources and social disarticulation[22]. Post-disaster resettlement success or failure is determined by crucial issues like site, layout and housing[17,18]. Likewise the old Balakot town, Gediz (Turkey) was totally destroyed by earthquake in 1966. New Gediz was built four kilometres south of the old site. However, situation for business was not really encouraging. As a result, new Gediz city is used for residential purposes only where as people retain their businesses in the old city[23].

This study analyses the causative factors behind the attraction of population for residential purposes and repulsion of business activities at Bakryal. The method of site and situation analysis provides a mechanism to understand the opportunities available for streamlining the process of resettlement and enhancing the growth and development of this new town. Similarly, it identifies the problems that create hurdles for the process of resettlement. The study has two parts. In first stage the site and situation variables of the new Balakot town have been analysed. In second part, the selected variables are analysed for the assessment of impact on the process of resettlement and potential growth of new Balakot town. The process of resettlement could be streamlined through enhancement of site and situation factors of the new Balakot town. This study is an attempt to enhance the understanding of site and situation and its relationship with the process of resettlement.

MATERIAL AND METHODS

The research methodology has two major steps. In the first step, the site and situation variables of the new Balakot town are analysed in post-Earthquake 2005 scenario. In the second step, the impacts of site and situation are interpreted with the process of resettlement and growth of the new Balakot. The site analysis variables were selected from site factors of hazard vulnerability, water supply, slope aspect, natural resources, relief, geology, defence, building material, fertility of land, fuel supply, accessibility and natural resources. Similarly, the situation analysis variables were based on present and future potential of employment with particular reference to their basic and non-basic character. Similarly, the potential growth of the new Balakot town is assessed from site and situation analysis. The impact on process of resettlement is assessed through testing response of the residents of the Balakot against site and situation factors. The overall research methodology is portrayed in Figure 2.

Primary data were collected through field observations, Focused Group Discussions (FGDs) and questionnaire survey. In the field observation survey, data of developmental activities, drainage system, slope and soil, surrounding land uses etc. were collected and recorded on a base map of the new Balakot town along with video camera recording. Satellite image of Digital Elevation Model (DEM) was corrected by GPS in the field study. FGDs were conducted with staff of ERRA and National Engineering Services Pakistan (NESPAK) to collect data about the proposed nature of real estate business, employment structure, basic and non-basic economic and agriculture activities in the new Balakot town. In the old Balakot town, FGDs were conducted with local political leaders, landlords, lawyers, school teachers, merchants association and general public to assess their perception and response about resettlement process and future of the new Balakot town. Similarly, data about perception and response about resettlement process, associated problems and future of the new Balakot town were collected from the households, shopkeepers, visitors and customers in the questionnaire survey. In the red zone of the Balakot, there were total 4,244 households, out of which 1,050 households were surveyed. There were 42 *mohalla* and 25.3% of sample size was selected from each *mohalla*. Similarly, there were 1500 shops, more than 80 offices, 03 banks in the red zone area. Based on specialized commercial activities,
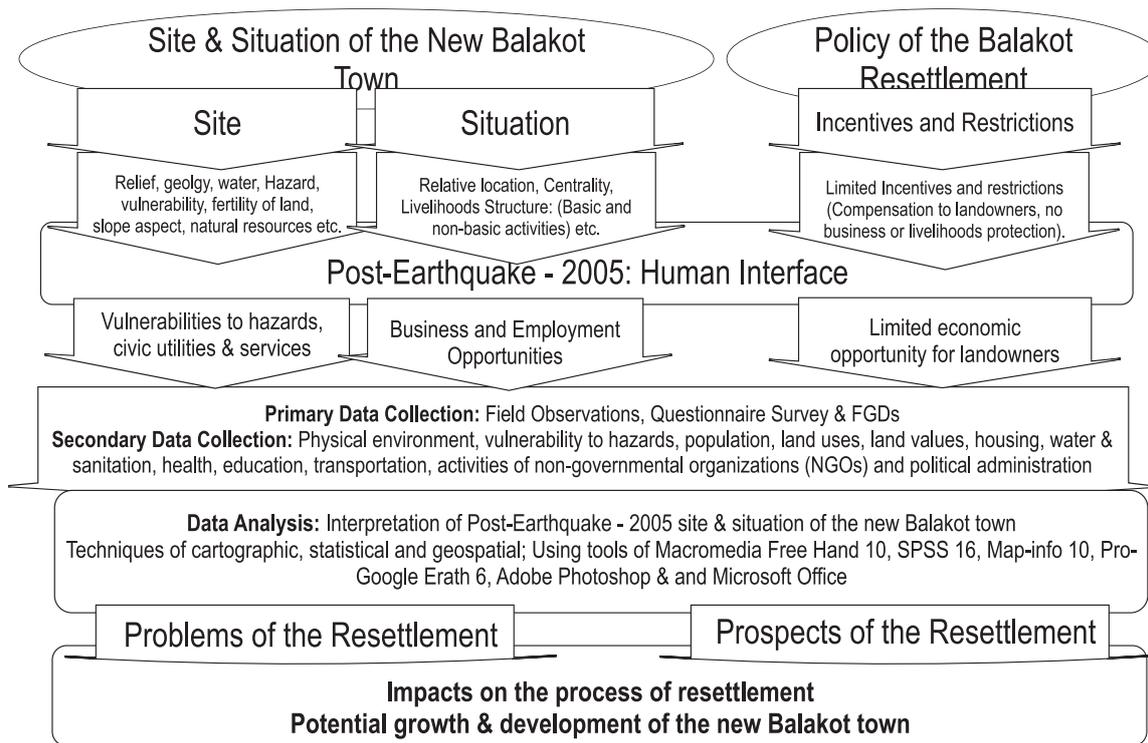
Figure 2: Research Methodology of the Study

300 shops were surveyed with 23.5% sample size. 100 questionnaires were also filled-up from the visitors and customers.

Secondary data were obtained from related organizations and departments. Climate data were collected from Meteorological Department of Pakistan. The data about physical environment, land utilization and vulnerability to hazards were collected from NESPAK, Topographic Sheet, Google Earth, SUPARCO and Geological Survey of Pakistan. Population, land values and voter list data were collected from Population Census Department, Revenue and Estate Collector Office Mansehra and Election Commission of Pakistan, respectively. Data about political administration and non-governmental organizations (NGOs) were collected from District and Tehsil Nazim Offices, Town Committee and Union Councils. Housing, water and sanitation, health, education, compensation, and transportation data were collected from Earthquake Reconstruction and Rehabilitation Authority (ERRA), Provisional Earthquake Reconstruction and Rehabilitation Authority (PERRA) and Sarhad Rural Support Programme.

Finally, the collected data were analysed through cartographic, statistical and geospatial techniques. The data of land use, slope, drainage system, physical features and location were inputted in the GIS. Cartographic and geospatial techniques were used for analysis of vulnerability to flood and landslide; centrality of the new Balakot town; relative location; distance measurements; water supply system; drainage and sewerage system, commercial and manufacturing activities; surrounding land uses; and potential growth using the GIS platform. SPSS was used for questionnaires data base and analysis. Data was cross tabulated and correlations among responses were calculated. Data analysis was presented in form of text, tables and graphs.

RESULTS AND DISCUSSIONS

Site of the New Balakot Town

After 2005 Kashmir Earthquake, Earthquake Reconstruction and Rehabilitation Authority (ERRA) hired the services of NESPAK for site selection of new Balakot town. NESPAK identified 11 sites and Bakryal was selected and a master plan for the new Balakot town was prepared (Figure 3). The climate of the area is cold in winter and pleasantly warm in summer. The area has two distinct seasons; the summer season from April to September and winter from October to March. In June, the mean maximum temperature is 35°C and

in January mean minimum is2°C[24]. The master plan of new Balakot has a total area of 1,425 acres (11,400 *Kanal*) and would complete in two phases. Initially in 2007, the project compilation time was three years but due to land settlement issues it was delayed till 2011. Presently, the developmental work is in full swing[25]. The total area has been divided into seven land uses namely, residential, commercial, public buildings, graveyards, roads and parks and greenery. The new Balakot town has been established with a vision that it will expand in south, east and west directions. It will have the capacity to house 2.5 million people in the next 25 years[5].

In the master plan, the residential area has the largest share of 33% of the total area. It has been divided into three categories of plot sizes of one kanal, 10 and 7 Marla (Table 1). Road has the second largest share of 31%, while the greenery and parks are (23%) of the total area. The public buildings has the share of 7% andconsist of educational institutions, health facilities and civic centres. In addition to this, 4% area is allocated to commercial land use. For water supply the new Balaot town has two collecting sumps from Siran and river Kunhar. Water from these sumps is to be supplied to main water reserviour and from therethe whole town will be served. Intially, the new Balakot town has two sewerage colletion points with capcities of 1 and 1.25 million gallan per day (MGD)[5].

The new Balakot town is located at a distance of 23 km from Bagh-Balakot fault line, which ruptured during 2005 Kashmir earthquake. The new site is relatively flat and slope gently towards east, west and south. During field study, it was observed that the slope is further stabilized through gabion walls along roads and paved streets, afforestation and bio-engineering methods. The new Balakot has a small drainage area with a gentle slope (Figure 4). The drainage analysis reveals that the new Balakot town has very low vulnerability to flash floods. A proper drainage system may also reduce the risk of flash floods. The locally available building material is another attraction and positive aspect of new Balakot. According to NESPAK, the new town will have emergency response system which will further enhance the capacities to reduce the impacts of disasters. It has low vulnerability to hazards of earthquake, floods, and landslides. Overall, the site of new Balakot town has very low vulnerability to hazards as compared to the surrounding urban centres in the region.

Situation of the New Balakot Town

The basic and non-basic activities, relative location and centrality of the new Balakot town are studied to analyse the situation of the new Balakot town. The basic activities incorporate all those aspects of economic activities which support the growth of new Balakot town. The basic activities in the new Balakot town can be divided into administrative, political, socio-cultural, commercial and manufacturing activities. Similarly, the study of non-basic activities of the new Balakot town provides the level of functions that will be performed for the residents of the town. The master plan of the new Balakot town mainly focused on residential activities with advance infrastructure facilities. According to NESPAK, the tehsil headquarters function will be shifted to new Balakot town. However, the proposed structure of economic activities shows that the basic activities (industries, manufacturing, wholesaling and professional services etc.) has very low share as compare to non-basic activities (Table 2). The Figure 5 provides comparison of economic activities proposed in the new Balakot town against the practiced in the old Balakot town. Initially, the nature of commercial activities will be also non-basic. The residential plots or real estate business will be the far most important commercial activity, which will decide the future growth and development of this new town. The commercial activities are divided in neighbourhoods, which directly support the non-basic activities. The higher hierarchy of non-basic activities will attract the high-class residents of the entire district Mansehra and especially of Hazara University. In long run, it will definitely attract customers from the region for these services.

The centrality analysis reveals that the proposed new Balakot town is located at the south-western edge of the Kunhar valley. The link road to Karakorum Highway and Hazara University is under construction, which will increase its nodality. The developmental work is under progress in the new Balakot town including roads, streets, sewerage, sanitation, public buildings etc. The new Balakot town has been planned for population of thousands. The well-planned site and easy accessibility for the residents of nearby urban centres will make it attractive residential suburb. The new Balakot town is located almost in the centre of major towns, which will directly restrict its trade and market capacity. However, the residential activities and productive land in surroundings will provide limited opportunities for market and trade activities. The administrative and political activities
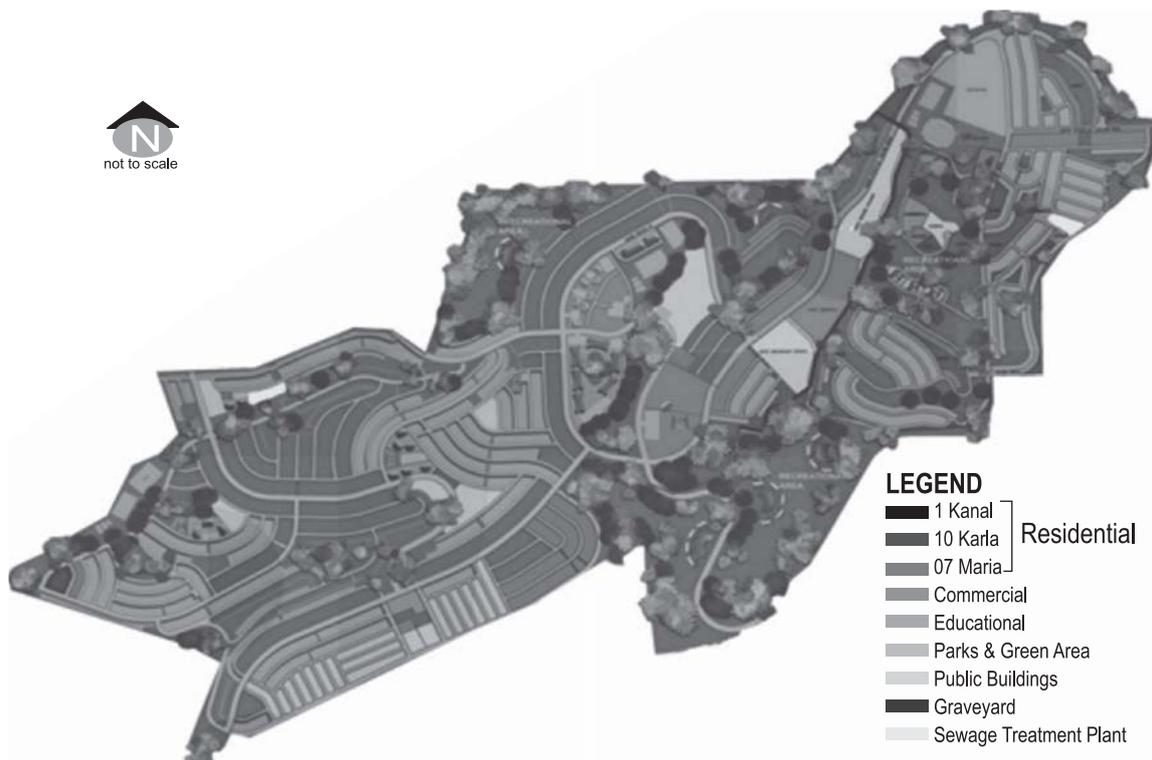
Figure 3: Layout plan of the new Balakot town at Bakryal

Table 1: Proposed Land Uses in New Balakot Town

S. No.	Land Use		Percentage Area
1	Residential	7 Marla = 1444 Plots	33
		10 Marla = 2052 Plots	
		20 Marla = 504 Plots	
2	Commercial		4
3	Public Buildings		7
4	Parks/Green		23
5	Graveyard		2
6	Roads/Streets		31
Total			100

will further enhance the centrality of the new Balakot town. The relative location of the new Balakot will further support the growth and development. In term of commercial activities, it is very difficult to replace or replicate the old Balakot town. However, this new town has importance in regional or district perspective.

Impacts on the Process of Resettlement of the Balakot town

The resettlement of the Balakot town has been carried out under the ERRA's urban programme. The theme of urban recovery was to build back better planned cities under the shared vision. The urban recovery included all activities of restoration, rehabilitation and reconstruction. According to the policy of resettlement of Balakot, the residential and non-residential lands were treated differently. The residents were entitled for the ownership of residential land in the new Balakot town as well as to continue entitlement of the land in the old Balakot town. All sort of commercial activities were allowed in the old Balakot town except of hoteling. Equitable commercial land has to be allotted in the new Balakot town. However, availability of commercial land to all affected commercial land owners is a question mark[4].
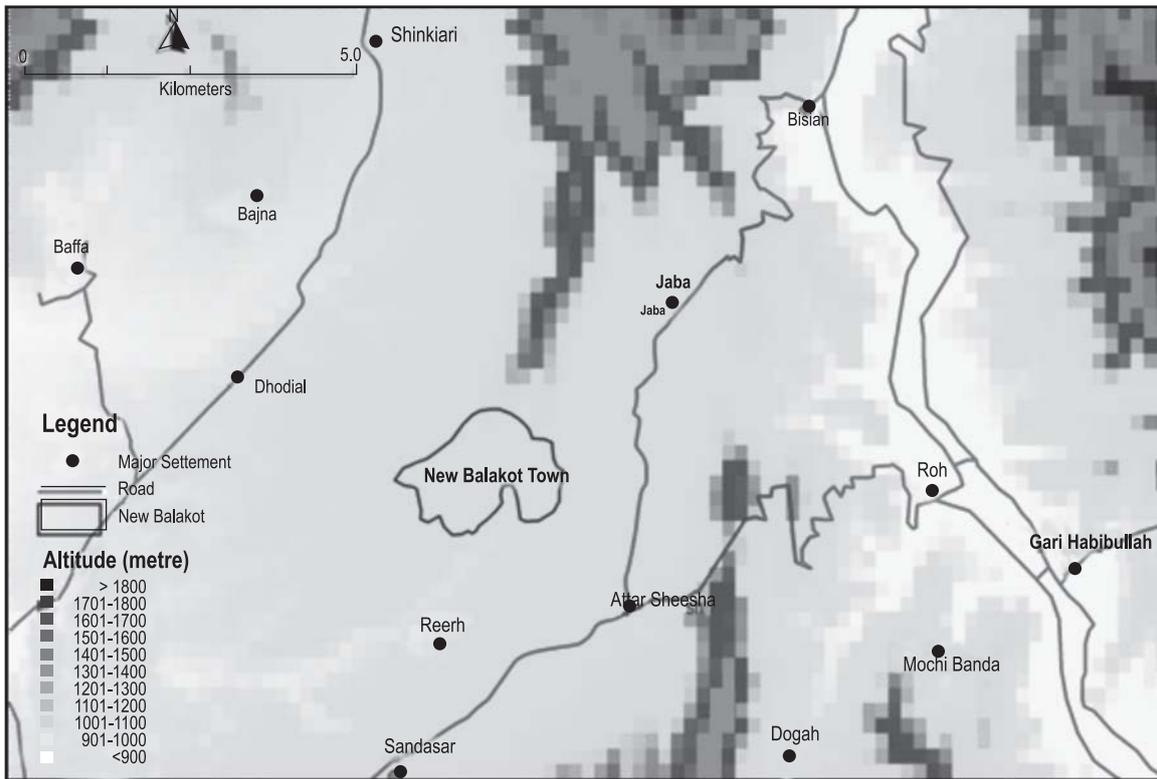
Figure 4: Digital Terrain Map of the New Balakot Town and Surroundings

Table 2: Proposed Economic Activities in the New Balakot Town

S. No.	Type of Activity	Frequency	%age
1	Govt. Services	520	12.35
2	Industry	9	0.21
3	Livestock/farming	110	2.61
4	Private business	1432	34.02
5	Private service	281	6.68
6	Professionals	14	0.33
7	Trained labour	1156	27.46
8	Not mentioned	687	16.32
Total		4209	100.00

Table 3: Willingness in Shifting to the new   Balakot Town

Response of Correspondence	Frequency	Percentage
Willing	3934	93.47
Not Willing	152	3.61
Indifferent	123	2.92
Total	4209	100.00

The residents of the old Balakot town purse this situation as an opportunity for development. Almost, the whole community is ready to avail the residential plot in the new Balakot town (Table 3). This policy encourages business activities at the old Balakot town and provides no protection for livelihoods.
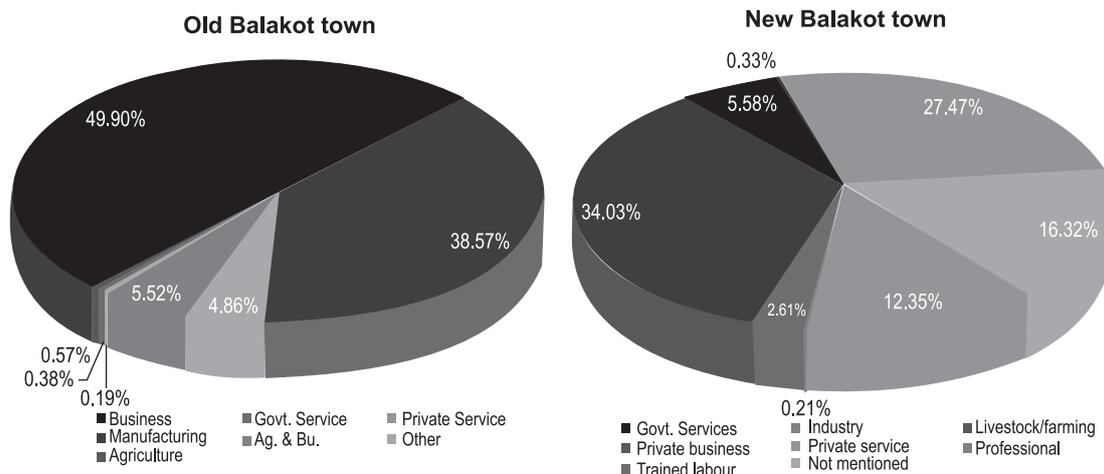
Old Balakot town

New Balakot town

Figure 5: Comparison of Economic Activities of the Old and New Balakot Town (% age share)

In the Balakot town, there are four major stake-holders at community level i.e. low income, public servant, business and elite class. The low income class is consisted of labours, working in shops and hotels, peasants, private services and low profile businessmen. The public servant class has well reputed public service and/or some agriculture land in the old Balakot town. The business class has well established business and most often with some agriculture land as well. The elite class comprises of landowners of agriculture and commercial land which has more than 40 kanal agricultural land or more than two markets. Each of the stakeholders has different problems associated with the resettlement of the Balakot town which is directly linked with the site and situation of the new Balakot town.

The site and situation of the new Balakot town provides some opportunities and risk that affect the process of resettlement. The site of new Balakot town offers opportunity in the form of safe and sound residence. While the situation creates problems for resettlement as it has very limited jobs opportunity. The site of the new Balakot has low vulnerability to hazards and high level of civic utilities and services. Consequently, the low income class which is almost more than half of the total population and public servant classes are attracted to the new Balakot town as their livelihoods are least suffered due to resettlement. Similarly, the commercial activities like general stores, restaurants, hawkers etc. have least reservation on resettlement as their activities are liable to suffer less than any other commercial type of activity (Table 4 and Figure 6).

The situation of the new Balakot town is dependent on non-basic activities which mean limited business op-

portunities and lesser commercial landuse. It is obvious that it will be difficult for landowners of agriculture and commercial land to manage their land property from the new Balakot town. The statistical analysis show that the business class is constantly resisting the process of resettlement as their business interests will severely suffer. Similarly, the visitors / customers have strong reservation on resettlement as their travelling costs will increase. This situation adversely affected the process of resettlement (Table 5, Figure 7). The responses of the respondents from households, commercial activities and visitors and customers were tested for correlation. For household, the correlation value for Pearson's R is 0.727 and Spearman Correlation is 0.759 which show the strong correlation among major problem in shifting from the old Balakot town and their major concern about new Balakot town. The value for Pearson's R is 0.581 and Spearman Correlation is 0.49 for commercial's respondents among reason for business/living in the old Balakot town and their major concern about new Balakot town which shows positive correlation. Similarly, positive correlation is present in visitors/customers responses as the Pearson's R value is 0.568 and Spearman Correlation is 0.538.

Growth of the New Balakot Town

The new Balakot town has been planned with modern concepts of growth pole and green city. Before site selection and structural planning a detailed geolog-ical and seismic study was carried out to ensure low vulnerability to hazards. The standard of utilities and services in the new Balakot town will be the same as any modern towns in Pakistan. The site of Bakryal has

32

Table 4: Choices of the Residence

Households							
Permanent Residence	Continue living in the old Balakot town				Shifting to the new Balakot town		
	Yes	No	Not sure	Total	Yes	No	Total
Outside District Mansehra	0	11	3	14	14	0	14
District Mansehra	4	13	3	20	16	4	20
Valley	1	10	2	13	12	1	13
Balakot	124	265	1	390	279	111	390
Garlat	429	130	8	567	201	366	567
Ghanool	38	8	0	46	12	34	46
Total	596	437	17	1050	534	516	1050
Commercial							
Permanent Residence	Continue living in the old Balakot town				Shifting to the new Balakot town		
	Yes	No	Not sure	Total	Yes	No	Total
Outside District Mansehra	34	0	1	35	9	26	35
District Mansehra	33	0	0	33	1	32	33
Valley	31	1	0	32	1	31	32
Balakot	131	7	2	140	1	139	140
Garlat	47	7	1	55	15	40	55
Ghanool	5	0	0	5	0	5	5
Total	281	15	4	300	27	273	300
Customers & Visitors							
Permanent Residence	Continue visit to the old Balakot town				Shifting to the new Balakot town		
	Yes	No	Not sure	Total	Yes	No	Total
Outside District Mansehra	8	1	1	10	1	9	10
District Mansehra	0	0	1	1	0	1	1
Valley	51	0	11	62	1	61	62
Balakot	8	0	2	10	0	10	10
Garlat	13	0	0	13	1	12	13
Ghanool	4	0	0	4	0	4	4
Total	84	1	15	100	3	97	100

Source: Field Data, 2010

huge expansion capacity with low seismic vulnerability[4]. The contours are comparatively gentle so the landslide hazard vulnerability is very low. Most of the area has drainage towards river Siran (a tributary of river Indus). The new town has only one major issue and that is of water supply. The new Balakot town has central location for Mansehra town, Hazara University, Gari Habibullah and the old Balakot town. This relative location makes the new Balakot town very attractive as a satellite town for residential purposes. According to NESPAK, the new Balakot town has been established with a vision that it will be expanded in three different directions i.e. south, east and west. The expansion areas available in these three different directions are 1600, 1400 and 1500 Hectares, respectively.

The site and situation variables are the prime factors for the establishment of new Balakot town and for its future growth and prosperity. The site of the new Balakot town is feasible for the present development and as well as for future growth and expansion. The site based standard civic utilities and services are the basic centripetal forces for its establishment and growth. The commercial activities are distributed in residential neighbourhoods. The infrastructure in the master plan

Table 5: Response about Resettlement Process

Households							
Major problem in shifting from the old Balakot town	Major concern about new Balakot town						
	Not possible	Injustice	Employment	Business	Social status	No issue	Total
Business	12	51	8	459	0	0	530
Family	6	2	0	0	43	0	51
Social attachment	2	6	0	0	16	0	24
Agriculture land	2	0	0	0	0	0	2
No hurdle	12	24	0	0	0	399	435
Other	1	4	0	0	2	1	8
Total	35	87	8	459	61	400	1050
Commercial							
Reason for business/ living in old Balakot town	Major concern about new Balakot town						
	Not possible	Injustice	Employment	Business	Social status	No issue	Total
Economic/Business	64	33	4	179	0	0	280
Family	0	0	0	0	2	0	2
Emotional/Religious	0	0	0	0	1	0	1
Social	0	0	0	0	1	0	1
Compel	0	0	0	0	0	15	15
Other	0	0	0	0	0	1	1
Total	64	33	4	179	4	16	300
Visitors/Customers							
Major problem in shifting from the old Balakot town	Major concern about new Balakot town						
	Not possible	Injustice	Employment	Business	Social status	No issue	Total
Travelling cost	3	15	2	0	0	0	20
Social attachment	0	4	0	0	0	2	6
Both	3	27	12	8	7	0	57

support non-basic activities. The high level of non-basic activities will enhance the attraction for the residence of elite class of the surrounding towns. The ownership of residential plot in the new Balakot town is certainly an economic opportunity. Initially, this opportunity will be availed by business class of the old Balakot town. As result, real estate business in the new Balakot town will be started. With the passage of time, the low income class of the Balakot town will not be able to bear the cost of services. This real estate business will enhance its growth and prosperity.

The new Balakot town has very pleasant environmental and climatic conditions. The favourable situation factors are existed for establishment of restaurants and hotel businesses. These factors includes: the distinguished infrastructure of utilities and services in the region; central location for access to Karakorum Highway and tourists spots; pleasant weather conditions; market based demand for high class restaurants and hotels. Similarly, the new Balakot town and its surrounding have fertile soil, forests and well network of transportation facilities. These conditions are highly favourable for wool spinning industry, wooden industry (furniture), paper mill, dry fruit and fisheries industries, match factory, soft drink industry, poultry and livestock farming. These activities are practiced in the surrounding regions with less favourable conditions. So there is a high probability that new Balakot town will provide a new nucleus for these activities. Eventually, the situation of the new Balakot town has the capacity to support the growth and development of a regional city. Indeed, the new Balakot
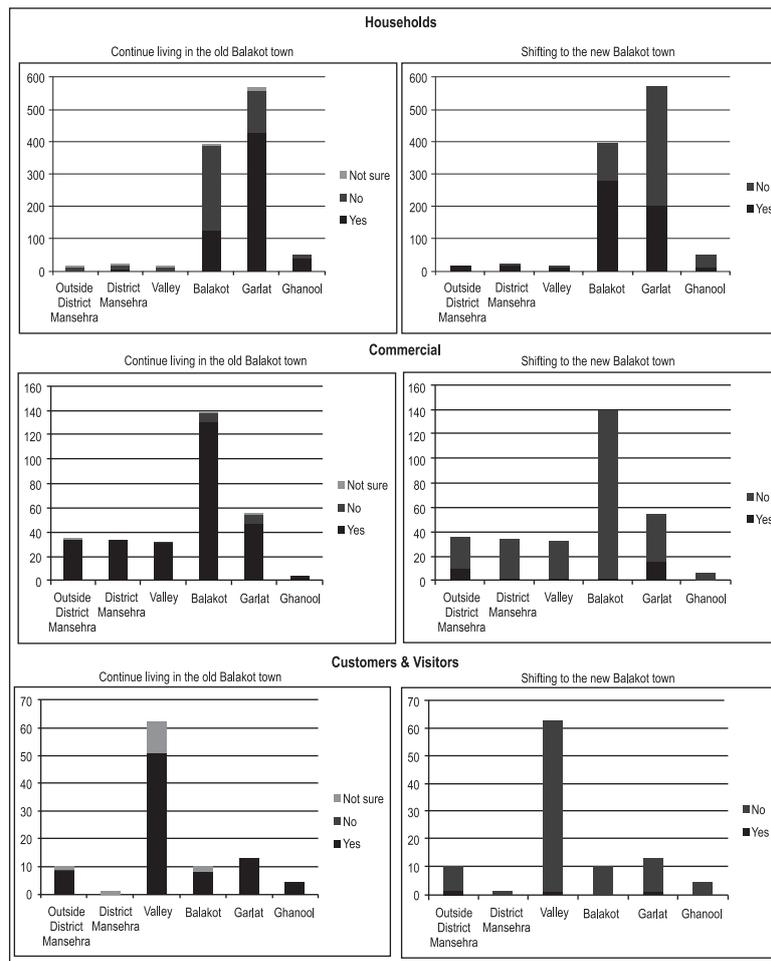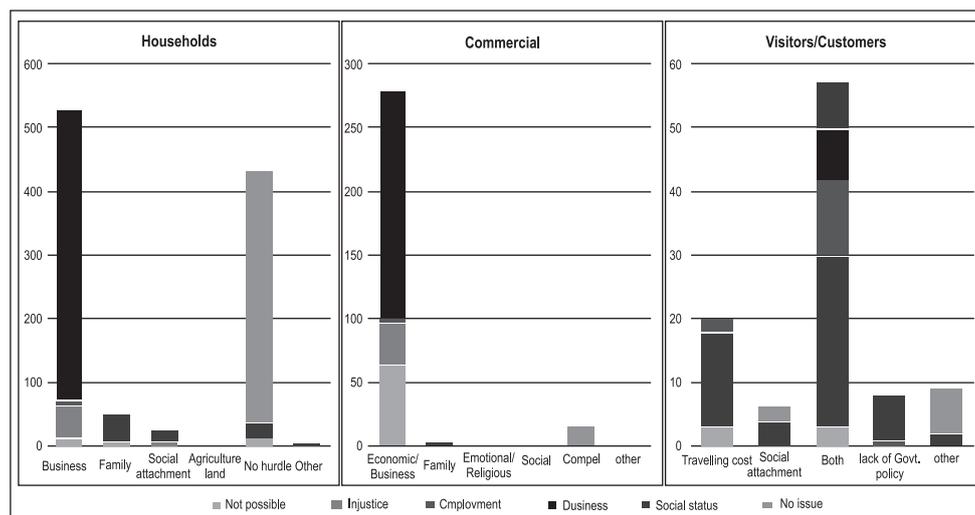
Figure 6: Choices of the Residence

Figure 7: Response about Resettlement Process

town will play a key role in the development of this mountainous region.

CONCLUSION

The new Balakot town was proposed for the residents of old Balakot town at Bakryal. This new town

is well-planned following the modern planning concept of green cities. This town has very low vulnerability to hazards and is facilitated with modern utilities and services infrastructure. The water supply facility is based on outside water collecting sumps in the new Balakot town. The new Balakot town is offering advanced and facilitated utilities and services infrastructure with very low vulnerability to hazards. These site factors made this town very attractive for residential purposes. It attract the low income and public servant class of the of old Balakot town as well as the elite class of the region particularly of Mansehra, Gari Habibiullah and Hazara University. Presently, the basic activities infrastructure in the new Balakot town is not encouraging. These situation factors of the new Balakot town lead to undesirable situation for the process of resettlement.

The residents of the old Balakot town are uncertain about the resettlement because the site is feasible while the situation is not encouraging in the new Balakot town. The business and landowners classes of the old Balakot town resist the process of resettlement as their current economic, social and political interests are likely to suffer. The allotment of residential plots in the new Balakot town is an opportunity in terms of economy for the residents of the old Balakot town, which they will avail in the same spirit. This new town has the capacity to grow with time but certainly not to cater the needs of the residents of the old Balakot town. It seems to be very difficult to replace or replicate the functions of old Balakot, particularly these of commercial and social. The new Balakot town has very prospect future in the region as a modern green town. The high level of utilities and services; incomparable non-basic activities infrastructure; favourable environment for hoteling; and high potential for manufacturing sector will support the growth and development of this new town.

REFERENCES

1. *Watson, H. D. (1907) Gazetteer of the Hazara District, Directorate of Archives, Govt. of NWFP, Pp.2*

2. *Ahmad, Akbar S. (1988) Pakistan Society, Oxford University Press, Karachi, Pp.101*

3. *GOP (Government of Pakistan) (2007a) Earthquake Reconstruction and Rehabilitation Authority (ERRA). Zonal Office NWFP (Monitoring), Mansehra, Pakistan, http://www.erra.gov.pk*

4. *GOP (Government of Pakistan) (2007b) Build Back Better Planned Cities. Urban Development Strategy, Earthquake Reconstruction and Rehabilitation Authority (ERRA), Prime Minister's Secretariat (Public), Islamic Republic Of Pakistan, Islamabad, http://www.erra.gov.pk*

5. *National Engineering Services Pakistan (NESPAK) (2007) From Disaster to Resettlement. Nespak House, 1-C, Block-N, Model Town Extension Lahore, Pakistan 54700, [On Line], Accessed 2007, http://www.nespak.com.pk*

6. *Carter, H. (1988) The Study of Urban Geography. Third edition, Edward Arnold, A division of Hodder and Stoughton Limited, 41 Bedford Square, London, UK.*

7. *Barcelona Field Studies Centre (BFSC) (2013) Site and Situation: Barcelona Site and Situation Analysis. Geography field work, Barcelona Field Studies Centre S. L., Ribera de Sant Pere, 11, 2-2, Castell defels, Barcelona, 08860 Spain, [On Line], Accessed July 24, 2013, http://www.geographyfieldwork.com*

8. *BBC (British Broadcasting Corporation) (2013) GCSE Bitesize: Settlement site and situation. Geography, Settlement characteristics, Settlement site and situation, [On Line], Accessed 2013, http://www.bbc.co.uk/schools/gcsebitesize/geography/urban_environments/settlement_characteristics_rev2.shtml*

9. *Roberts, K. B. (1987) The Making of the English Village: A Study in Historical Geography. Longman Scientific and Technical, Harlow, Essex, England.*

10. *Batty, M. (2009) Urban Modeling. International Encyclopedia of Human Geography,N. Thrift and R. Kitchin (Edit.), Elsevier, Oxford, UK, 51-58.*

11. *Mayer, H. M. and Kohn, C. F. (1964) Reading in Urban Geography, Vol. 1, Pp. 393, The University of Chicago Press, Chicago, USA.*

12. *ADB (Asian Development Bank) (1998) Summary of the Handbook on Resettlement Guide to Good Practice. Information Office, Asian Development Bank, Publication No. 010298, P.O. Box 789, 0980 Manila, Philippines.*

13.   GOP (Government of Pakistan) (2002) National Resettlement Policy Draft. Ministry of Environment, Local Government and Rural Development, Pakistan Environmental Protection Agency, [Online], Accessed 2008, http://www.pakistan.gov.pk/redirect.jsp?action=book_markandgoto=174

14.   Khan, A. N. (1992) Landslides and Housing: A Case Study of Murree, Pakistan (Unpublished Ph. D. Thesis). Environmental Planning, Institute of Planning Study, University of Nottingham, UK.

15.   Khan, A. N. (1993a) An Evaluation of Natural Hazard Reduction Policies in Developing Countries with Special Reference to Pakistan. Pakistan Journal of Geography,3(1 and 2):81-100

16.   Khan, A. N. (1993b) Towards an Appraisal of Hazard-Response Theory with special reference to landslide hazard. Journal of Rural Development and Administration, 25(4):42-63

17.   Smith, A. O. (1991) Successes and Failures in Post-Disaster Resettlement. Disasters,15(1):12-23

18.   Norio, M., Miura K., Kobayashi M., Hayashi H. (2003) Relocation Process at Resettlement Site after 1992 Flores Earthquake and Tsunami Disaster. Journal of Architecture, Planning and Environmental Engineering, Y0894A, ISSN: 1340-4210 Vol. 566, Pp. 1-8, Japan.

19.   Iuchi, K. (2012), Policy-Supported Social Capital in Postdisaster Recovery: Some Positive Evidence. Public Administration Review, 72: 428–429. doi: 10.1111/j.1540-6210.2011.02569.x

20.   Zaman, M. Q. (1991) The Displaced Poor and Resettlement Policies in Bangladesh. Disasters,15(2):117–125

21.   Wehrwein, G. S. (1942) The Rural-Urban Fringe. Economic Geography,18:217–28, Clark University, Worcester, Mass, USA.

22.   Cernea, M. (1997), The Risk and Reconstruction Model for Resettling Displaced Population. World Development,25(10):1569-1587

23.   Mitchell, William A. (1976) Reconstruction after Disaster: The Gediz Earthquake of 1970. American Geographical Society, Geographical Review,66(3):296-313, [On Line], Accessed 2008, http://www.jstor.org

24.   GOP (Government of Pakistan) (2010) Pakistan Meteorological Department. Headquarter Office Sector H-8/2, Islamabad, Pakistan, http://www.pakmet.com.pk/PMD/pmdinfo.html

25.   GOP (Government of Pakistan) (2011) Activity Report: New Balakot Progress, Earthquake Reconstruction and Rehabilitation Authority (ERRA), Prime Minister's Secretariat (Public), Islamic Republic Of Pakistan, Islamabad, http://www.erra.gov.pk