

**UNDERSTANDING
THE IMPACT OF URBANIZATION ON APATANI TRIBE OF ZIRO
VALLEY, ARUNACHAL PRADESH: A SOCIOLOGICAL STUDY**

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CERTIFICATE

This is to certify that the thesis entitled “**UNDERSTANDING THE IMPACT OF URBANIZATION ON APATANI TRIBE OF ZIRO VALLEY, ARUNACHAL PRADESH: A SOCIOLOGICAL STUDY**” which is being submitted by Mr. Padi Hana for the award of the degree of Doctor of Philosophy under the Department of Sociology in the faculty/school of Social Sciences, Rajiv Gandhi University, Arunachal Pradesh, India, is a record of original research work carried out under my supervision and guidance. Mr. Padi Hana has fulfilled all the requirements prescribed under the Ph.D regulations of Rajiv Gandhi University in submitting the thesis for the degree of Ph.D.

To my knowledge, the results embodied in this thesis have not been submitted to any university or institution for the award of any research degree.

(Prof. Soubhagya Ranjan Padhi)

DECLARATION

I, Padi Hana declare that the thesis entitled “**UNDERSTANDING THE IMPACT OF URBANIZATION ON APATANI TRIBE OF ZIRO VALLEY, ARUNACHAL PRADESH: A SOCIOLOGICAL STUDY**” submitted for the degree of Doctor of Philosophy to Rajiv Gandhi University was done by me under the guidance and supervision of Dr. Soubhagya Ranjan Padhi, Former Professor of Sociology, Rajiv Gandhi University, Arunachal Pradesh, India.

The results incorporated in this thesis are the outcome of original investigations carried out by me and I have distinctly cited and referred about the sources by observing honesty and integrity. I would also like to declare that I have not submitted the thesis or any part thereof for any degree to any other university /institution.

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(Padi Hana)

FULL FORM OF ABBREVIATION USED

ACGF	- Apatani Career Guidance Forum
ACLS	- Apatani Cultural and Literary Society
ASU	- Apatani Student Union
AWAZ	- Apatani Women Association of Ziro
AYA	- Apatani Youth Association
CD	- Community Development
CGI	- Corrugated Galvanized Iron
CHC	- Community Health Centre
DIPRO	- Directorate of Information & Public Relations Office
DIU	- District Industrial Unit
DSHB	- District Statistic Hand Book
DTH	- Direct To Home
ILP	- Inner Line Permit
ITI	- Industrial Training Institue
MSME	- Micro, Small &Medium Enterprise
NEEPCO	- NorthEastern Electrical Power Corporation
NEFA	- NorthEastern Frontier Agency
NEFT	- NorthEastern Frontier Tract
NGO	- Non Governmental Organization
PDS	- Public Distribution system
PHC	- Primary Health Centre
PRI	- Panchayat Raj Institution
RCC	- Reinforcement Cement Concrete

SDO	- Sub Divisional Office
TSD	- Tanw Supun Dukun
UA	- Urban Agglomeration

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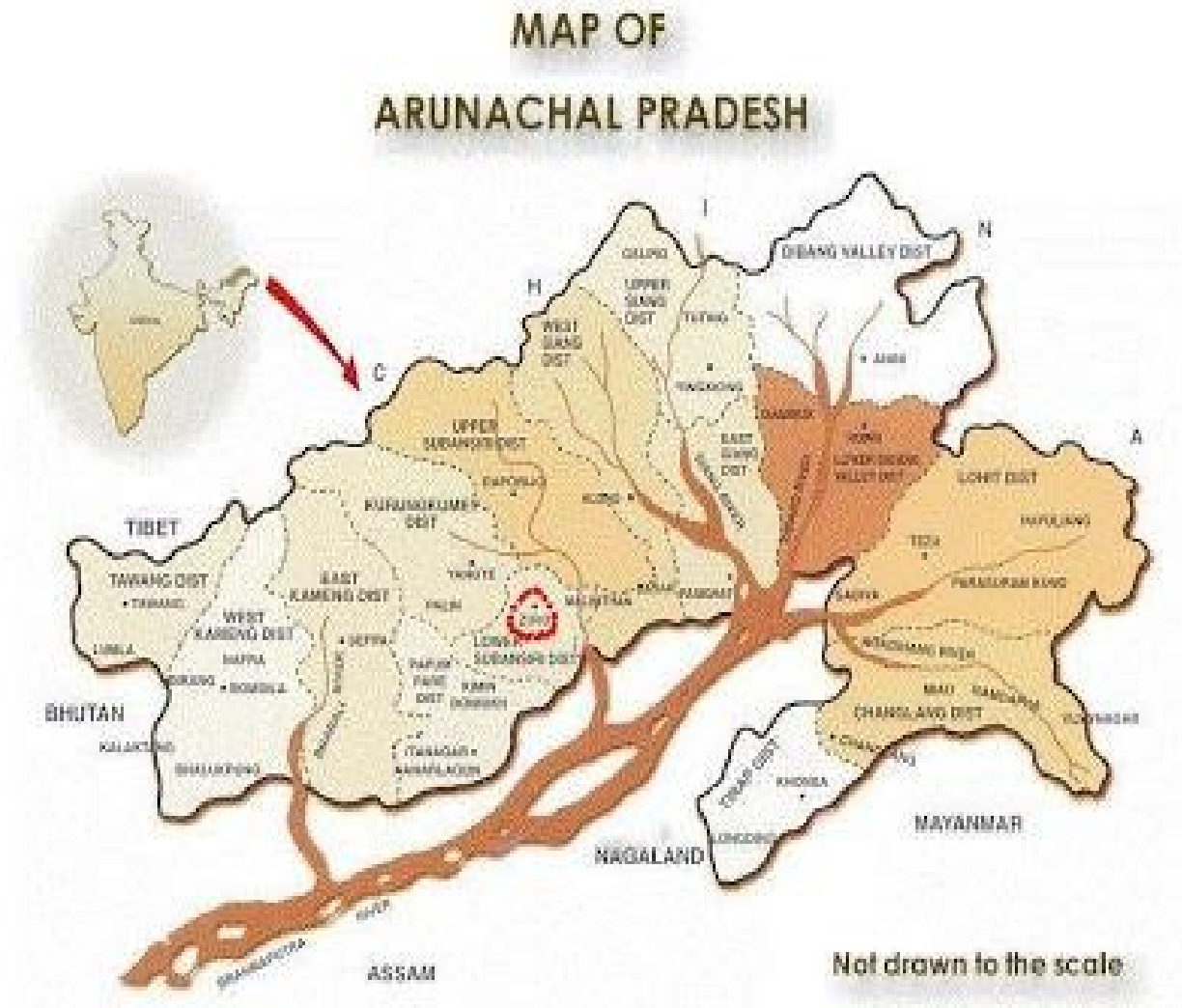
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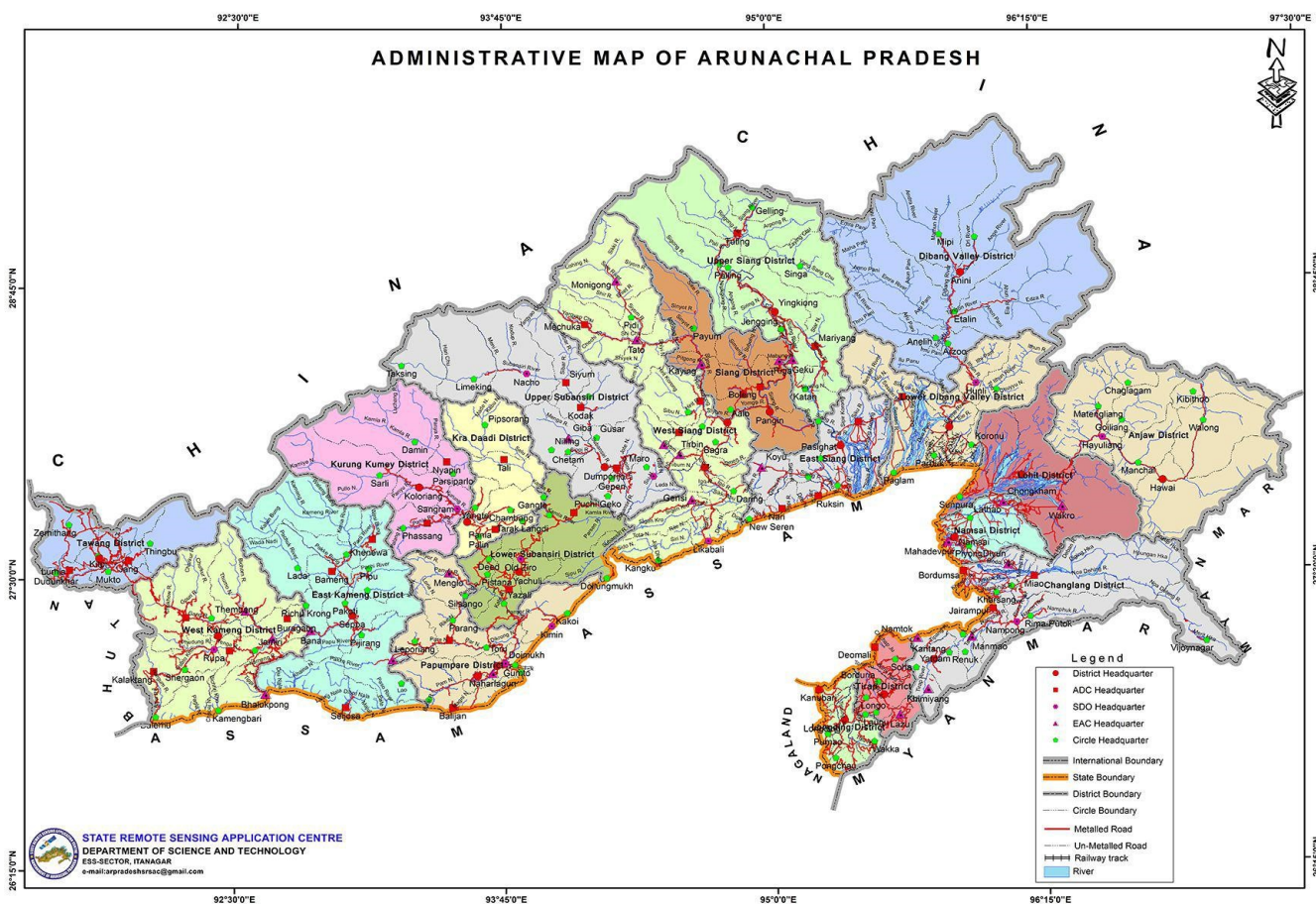
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Figure 0.1: Map of Arunachal Pradesh



Sources: mapsofindia.com

Figure 0.2: The Present Administrative Map of Arunachal Pradesh



Sources: www.arunachalipr.gov.in 2018/01

ENGLISH MEANING OF LOCAL TERMS

1. *Abotani*: Fictional Ancestor of the Apatani tribe
2. *AjiYala*: The dying of paddy crops due to pest intrusion.
3. *Alyi lalo*: Bringing down the ritual pig during Myoko festival
4. *Apa Tani*: The name which was used by CVF Haimendorf for Tanii/ Tanw community of the Arunachal Pradesh settled in Lower Subansiri district.
5. *Buhnii Ajing*: Myoko ceremonial friends
6. *Builyang*: The representative member of the clan who wields the authority as the Village Council.
7. *ChiriIlyo*: Tibetan sword, a precious sword/machete used by the priest and given as a gift to bride parents during the engagement ceremony.
8. *Daru and Dorii*: The season of summer and winter.
9. *Dree*: A socio-religious celebration oriented towards agriculture prosperity and bumper harvest.
10. *Gale*: A apron clothwoven over the waist to feet by the female.
11. *Gyuchi and Gyutii*: A patrician and plebian class group
12. *Gorra*: Committee; community ritual organizers; socio-religious volunteers
13. *Kiile*: The river
14. *Lemba*: The Village
15. *Miti and Miira*: Master and slave

16. *Mabo Inchi* :An environment of the settlement of marriage proposal by both bridegroom relatives and bride relatives.
17. *MederNello*: The worshipping place of Doni Polo religion.
18. *Mida* : A major nuptial ceremony duly organized by bride parents for their daughter and son-in-law.
19. *Sukun*: Spring well
20. *Ziro*: a dwelling place of Apatani tribe named after the Ziro tribe

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CHAPTER – I

INTRODUCTION

1.1. **Meaning and Process of Urbanization:**

Urbanization is an index of the transformation from traditional rural economies to modern industrial. It is a progressive concentration of population in urban areas (Davis, 1965). The urbanization is a process, phenomena, and sources of social change occurring in different parts of the country; it is becoming inevitable and unavoidable at present development of world affairs. Urbanization is the process whereby large numbers of people congregate and settle in an area eventually developing social institutions, business set up and governance system to support themselves (Orum, 2004). The phenomenon of urbanization brings social change, it is foreseeable and dynamic happening gradually and drastically to the social and physical structures of the area, community, and space is modified at a large extent. The course of direction is taking place as a natural consequence due to economic change that takes place as a country develops (Mohan, 2009). The urbanization course generally takes place because of the large population migrating especially from the nearby rural areas into the town or city area along with the increase in the natural growth of population in a particular area. The degree of urbanization of any area is intensified by the provisions of industrial growth, administration center, development of road and transport, availability of health facility, employment scope, education center, and any other economic scopes provided by the town and cities, even the lure of cosmopolitan culture attract people to migrate. According to Gottdiener and Budd(2005), urbanization is popularly known for the process of city formation and its growth. Urbanization involves social activities according to societal development and change. Urbanization is also a process of learning and inheriting the

values and culture of the urban environment by the migrated population from the rural areas and adopting the lifestyle.

In many occasions, it is observed that, the urban act as a pull factor by attracting the nearby rural populations for diverse reasons. The rural community is becoming a static environment for the youths and husband who are dire needs of employment and job; it creates an atmosphere for any individual or family to shift temporarily or permanently to urban areas. The rural conditions always act as a push factor. Both the push and pull factors are significant and different from each other for intensifying the rate of the urbanization process and growth. Each element is understood from their point of influences and references. The urban community acts as a pull factor because of its dynamism in economic opportunities, culture, and lifestyle and facilities found in cities also attract people to migrate. The conditions of migration towards urban generally happen due to overgrowth of the population in the village, scarcity of cultivable land, political issues, communal violence, displacement, etc.

The theory holds for a moment that industrialization had to produce urbanization process in the European history, but now it is found that the urbanization process is not always caused by industrialization; rather there are some other external variables that could influence the course of action. In this regards, R. Mukerjee (1940) underscores the knowledge that the process of urbanization is not necessarily correlated with the operation of industrialization nor both of these processes is identical to each other. There is always a scope of possibility that the process of urbanization might have accelerated to a great extent without even the advent of industrialization. He suggests that both these processes should be understood as independent of each other, having different meanings and effects.

Urbanization as a continuous process accounts for taking place with the assistance of both endogenous and exogenous factors-culture contacts, migration, the growth of infrastructure development, industrialization, plan policies, developmental programmes and modernization of the technology and techniques are exogenous elements. The urbanization impact led to the different use of the land for different purposes and its functions, to increase the growth of the income, changing of consumption pattern and improvement of housing is an endogenous element. These elements are strongly influencing the tribal life and their social institutions.

The meaning and definition of urbanization and its nature are stated by various thinkers and scholars relating to their discipline. The definition of urban centers itself has become an important issue in determining the level and growth of urbanization (Sivaramakrishnan, Kundu & Singh, 2007). Historians study the growth, development and decline of cities and their functions at different periods of time. Economists analyze the economics of land use and value, occupational diversity, tracing migration trends over time and their implication on macroeconomic indicators. Political scientist examined the power and authority in the urban area; at a time analyze local politics concerning regional and national structure (Patel, 2009). Geographers have defined the meaning in the context of geospatial and landscape transformation. The demographers speak on the level of population structural changes and its quality. The sociologist tries to understand urbanization with the idea of the impact of the city on groups, growth of the urban institution, group dynamism, social change. It focuses on changing aspects of the social institution.

The accounts of urbanization are not similar to every nation. The origin of sources and factors worked according to prevailing time and space. Today, we have an advanced society of

early industrial society of European and American nation, and developing nations those who have attained late urbanization with the help of colonialism. Therefore there is a discussion among the social scientist to have different approaches and perspectives to understand the urbanization process. To understand the meaning of urbanization and its impact on the tribal society there should be a formulation of different approaches and perspectives delineating from the mainstream society. Several countries defined the meaning according to the context of their societal and cultural background. The construction of approaches and perspectives will guide us to have uniformity in the nature of defining the issue.

The concept itself is complex and need to approach from different dimensions and perspective to understand and apply it scientifically. Fairchild (1958) define urbanization as the process of becoming urban; the movement of people of processes to urban areas; the increase of urban areas, population or processes to an urban area; population or processes. The definition touches the elements of both demographic and social context. The concluding remarks made by every discipline are made on the backdrop of its impact and changes happening in the society and projecting as a prime indicator of the socio-economic development of a region. Great civilization and city began with the urban revolution which took places in those areas already had experienced different elements and frequent contact with diverse cultural groups for various socio-culture and economic aspects.

Any country could use the census as an important source of urbanization (Ramachandran, 1989). Certain qualities and features are measured statistically to gauge the pattern of urbanization. European consider urbanization as growth in urban infrastructure, employment, and living standards while Latin American does not compare well with the European quality

instead they set by the proportion of population growth and external constraint as a variable leading to economic and cultural dependence in urban Safa (1982). Several scholars held the growth of population as one of the important features of urbanization; Anderson has adopted the social point of view to understand the urbanized way of life in acquiring the character of urban life for the same phenomena Rao (2012). There is no fixed universal meaning for urbanization and urban, different disciplines of social science and their scholars have defined it according to their compatibility with the subject of understanding. Urbanization entails with a broad aspect of processes of dimensions that are closely associated with modernization, industrialization and the sociological process of rationalization.

According to William V, Scott(1999), 'Urbanization is the movement of population from rural to urban areas, and the resulting increasing proportion of a population that resides in urban rather than rural places. The massive growth of cities and metropolitan areas and the striking shift in the percentage of the people that is urban has been a characteristic phenomenon of the modern era. Urbanization is the effect of industrialization revolution which created a demand for large numbers of workers at a centralized location it also led to agriculture revolution which permeated a small proportion of the population to be engaged in the production of food and raw materials for the city population. Thompson Warren(1935) states that the urbanization process is people's movement from small communities concerned solely engaged with agriculture to larger communities whose activities are primarily oriented in government, trade, manufacture or allied interest.

1.2.Urbanization in India:

The urbanization process in India can be understood from three historical and sociological perspectives on the basis of societal growth. The stages could be elaborately discussed on the principal of dynasty and empire periods, the colonial period and post-independence. It is the critical background to understand contemporary urbanization (Patel, 2009) that India had a long history of urbanization which can be date back to the first instance of urbanization in the Indus Valley in the year 2350 BC. It had the first kind of human-environment which was very different and contrast to rural settlement. The ancient and medieval history tells us the city's growth and decline. The second instances of urbanization and urban growth in India came with great Empires and kingdoms by building and rebuilding their fortress and cities. The pre industrial cities of India presented a static population growth rate, a society based on closed and hierarchical caste system representing a traditional social order (Singh, 2011). Each reign has contributed a lot about making the country an urban place and finally, the third wave of urbanization was carried over by British Empire during the colonial period by introducing industry, modern means of communication, modernization in agriculture and industrialization and expansion of administration centers. Post-independence carried forward the legacy of colonial structures and planned the nation's growth with extending infrastructure development. Indian urban scholars tend to analyze and understand the urbanization issue from demography perspectives. As per Present view, there is understanding and awareness that the historical growth of towns goes through successive stages with each stage having its own character. Change or its absence from colonial to post colonial stages cannot be ignored (Advani, 2009).

The definition of urban adopted in India assumes that urbanization is the consequences of industrialization and therefore urban areas must have a preponderance of non agriculture activities. It considers only male workforce in the non-agriculture sectors as the quality of census data over women workforce is doubtful Bhagat (2002). To identify the urban area the census of India has adopted a quite elaborated distinction and rigorous definition of urban in 2011 with the following characteristic:

1. All municipalities, corporation, cantonments or notified town areas and;
2. All places which satisfied the following criteria:
 - a minimum population of 5,000 persons
 - at least 75 percent of the male working population employed in non-agriculture occupations; and
 - Population density of 400 persons per square mile.
 - In addition, certain areas are considered as urban areas if they come under the vicinity of the city or town or it can occur by the outgrowth of the main urban units which is defined by census as urban agglomeration.

India is a fast growing economy nation the degree is indicated by the growing urbanization in recent times. It is estimated that 72 percent of the Indian are rural and 28 percent in urban (Advani, 2009). In the 20th century of the beginning, there were only 25.85 million, representing only 10.84 percent of India's population which increase to 285.35 constituting 27.78 percent of the total population in 2001. The growth rate was high during 1971-81.

Table 1.1: Trends of urbanization in India, 1901-2011

Census year	Urban Population (in millions)	Percent Urban	Annual exponential
1901	25.85	10.84	-----
1911	25.94	10.29	0.03
1921	28.07	11.17	0.79
1931	33.46	11.99	1.76
1941	44.15	13.86	2.77
1951	62.44	17.29	3.47
1961	78.94	17.97	2.34
1971	109.11	19.91	3.24
1981	159.46	23.34	3.79
1991	217.18	25.72	3.09
2001	286.12	27.86	2.76
2011	377.10	31.16	2.76

Sources: Bhagat & Soumaya (2009) and Bhagat (2011)

The tribal state of India was brought under industrial planning after the attainment of independence and the process of urbanization was intensified thereafter. The idea of political development grew among the educated tribal people and led to the growth of the movement for a separate state and autonomous region for their self-development and identity. Likewise, several tribal states were formed and carved out from the provinces they had attached. The state formation began with the establishment of administrative centers and districts centers for administration and executing the law and jurisdictions of government. The introduction of administrative centers brought the modern machinery, technology and skills within the tribal

landscape. It shows that at the beginning the tribal was passing through cultural urbanization. There is an incidence of variation in urbanization and urbanized among the tribal population. The urbanized tribes are those who have received the first fruits of having an administrative and industrial center at their area. The more distance away from the center of the administrative location less the urbanized. The opening of the centers has led to increased of rural to urban migration. Similar to any part of the world, industrial growth brings economic development and thereby urbanization takes place. Urbanization in the tribal belt passes through many enormous challenges - isolation, scarcity, underdeveloped and poverty. Just as long as cities grow in size and multiple in numbers, urbanization is taking place. Urbanization is a process of a movement from a state of less concentration to a state of more attention, (Tisdale, 1942). The determinants of urbanization and spatial concentration in developing countries condition is found in the forces that determine the location of employment opportunities, the nature, and pattern of industrialization, the pace of agriculture development and the growth of transport and communication network is the indicator (Clark, 1996). Louis Wirth analyzed the impact of concentration of numbers of society's culture such as size, density, and heterogeneity while discussing the theory of urbanism and urbanization as a way of life. Urbanization in total bring cultural representation and lending it as a part of the new culture of transformed individuals and consumerism found in the modern society and creation of symbolic capital in the forms of beauty contests, music festivals, and sports events (Harvey, 1987). The urban has the capacity of adopting of new social capital accumulation in the form of organizing festivals and celebration such as Christmas, Hindu religious festivals, sporting events and film, music shows creating a kind of social relationship that is share and promotes. Urbanization process not only examine migration and raise of the population, it considers other factors such as the availability of

infrastructures – transport and communication, health, education and other ecological factors that differ across space are also kept into consideration. According to Singh (2011), ‘urbanization change traditional structural forms, although it does serve the goals of modernization through new structural innovations in the spheres of industry, transport and communication, leisure and recreation and the mode and pattern of social interaction’.

1.3. Urbanization in Northeast India:

Northeast region comprises of eight states recently Sikkim has joined the group. The historical and political background of the states is similar in nature. The region is diverse in nature filled with distinct ethnic, culture, language and religion. The diversity of culture and ethnicity led to the movement of segregation and separation within and outside of the region. The movement developed into political agitation and domains set up for self administration and autonomous power within the same state. The states were formed from Assam after re-organization of Assam after independence.

The state formation after re-organization after independence led to new political development in the region. Several administrative centers and capitals were established for the new states. The establishment's centers become the urban centers, these urban centers serve as administrative purposes. With this development, settlement of population has acquired a distinctly urban character.

Here in the Northeast region, the expansion of the administration system could be equated with industrial growth in terms of urbanization. Establishment of the administrative center was one of the most effective mechanisms that changed the structure of the region at every

level of dimensions; political, economic, demographic. The impact could be measured that of the industrial city for bringing the social change and transformation in the society as it happened in western industrial society. The description of social change is largely elaborated on the context of modernization and westernization rather than urbanization. Conceptually, the meaning of urbanization is not used in common parlance that is related to the development and change by the people. There are demographers and academician of the region forecasting the dynamics of urban influences and urbanization at the regional and local level. Understanding of change in society by modernization is more dominant than urbanization in the eyes of the people.

The urban community in the northeast region is represented by having a considerable contrast to traditional rural society. The tribal populations of the region are enriched by their traditional practices and customs. The ethos and practices of indigenous are held high esteem among the members of the group. The sense of community feeling and kinship bond plays a significant role in the life of the people at large. Each individual is identified to the association of the community and clan.

The northeast region as a traditional based society also has the ability to adapt and practice the cultures of the other groups or communities into their way of life. With the growth of states and administrative centers and expansion of towns, the tribal people are imbued with modernization and westernization. The political development in the region has led to open several paths of other development which is a new avenue and platform for the people of the region. In this way, the traditional way of life is gradually being intervened with modification and change by the forces of modernization and urbanization elements. Therefore urbanization and modernization are independent as well as dependent variables that cut across structural

changes in the social system that moves on to modifying and changing the simple society into a complex fashion.

The Urbanization process is related and goes along with modernization without modernization there cannot be urbanity. Both are just like the same side of the coin. Growth of modern infrastructures brings forth the urbanization process rapidly. The Northeast region is undergoing rapid urbanization process due to the growth of infrastructures and civic avenues. The villages of the nearby urban/town area are influenced by the urban facility and provisions. The modernization process is understood and identified, with the growing urbanization in Northeast India (Bahadur, 2008). The phase of modernization is determined with the process of urbanization.

Urbanization brings up new and alternative changes in social life. It is observed from the formation of a secondary association among different communities in the urban environment. The process of association and interaction in the cities and town of the regions provide secularism and integrity among the different tribes of the region into pan northeast ideology. The intensity of the social interaction and changing social relations are emerging phenomenon the valley and town (Gihar, 2003). Generally, urbanization is related to inducement caused by economic growth, demography transition and political development, and in the course of time it affects the human aspects of life, taking places in people's culture, interactions, changing of lifestyle, and taste. Urbanization is a dynamic process and a pattern in transforming the urban morphology of both physical and social aspects rigorously.

There was a time when a tribal society of the state remained isolated and separated from both geographically and socially away from the modern civil society of Indian civilization due to

its topography and unique culture. Now, the community is brought under the influence of the planning process and management directly and indirectly by the state (Singh, 2013). The policy of isolation is immensely taking over by gradual assimilation by the ongoing national projects and developmental schemes directly into the tribal society. The said projects and developmental schemes are administered and managed by the mainstream people in the beginning; this has led to contacts and interactions with the advance community. It has induced the growth of sharing the ideology between the communities.

The developmental phase brought various forms of regional renovation and contributed to the growth of new areas. Currently, the urban area of the tribal region is characterized by heterogeneity, association with modern institutions. The urbanization process has substituted traditional occupations with the scope of earning. The livelihood of the people is changed and they try to respond and react to individual needs. Division of labor and specialization in the urban areas has given them an opportunity to get the work done efficiently. The dependency is growing among the tribal population. Some of the service based occupations are still given by those caste groups in terms of the washerman, barber, sewerage cleaner, sweeper, cobbler, a rickshaw puller, cart puller, housemaid, etc. This service group is mostly found in the urban area of the region. Tribes have adopted new modes of economic living by replacing the old age tools by modern tools and up-gradation of the skills. The availability of the factory made goods made tribal people a consumerist life rather than producers for urban life. Urban populations have already started to experience the social complexity and heterogeneity. The present situation tells a diverse story of the remote regions of tribal society, evolving as one of the fast-growing urban areas due to administration and rapid urbanization process at the same time and more

significantly bridging of contacts with outside communities. Perhaps, the region's urbanization may not base on economic progress but to administrative and contingent factors.

Different perspectives are given to two contrasting communities. Generally, the rural life of the country represents a type of the old, poverty-ridden, religious orthodoxy, backward, unproductive economic, traditionally bound, anti-change attitude society. The urban as a new form of modern community engaged with secondary and tertiary sectors. But, the urbanization process is associated with various environmental problems attached firmly to a number of delicate issues concerning environmental quality, hazards, and degradation of the surrounding. The lackadaisical attitude of the urban local bodies and citizen are creating serious environmental issues where many lives are in compromising state. Other than environmental problem there are social problems emerging from the urban development and urbanization which is related to urban law and order problem, crime, the status of health, sanitation, random use of corner space of colony for dumping garbages, the spread of communicable diseases.

Urban lives are invaded by the rural migrant's population. This has led to space problem and unplanned housing and slum settlement in the cities. Frequent of migration from the nearby villages and states have created a problem of population explosion in urban areas thereby the distribution of basic civic amenities becomes scarcity and limited. The basic human needs like drinking water, shelter, electricity, proper drainage, and sanitation maintenance, disposable for solid waste and management, fresh air to breath that need to be appropriately addressed especially in the city and big towns. According to Kingsley Davis 'urbanization is a revolutionary change in the whole pattern of life. Itself a product of basic economic and technological development, it tends in turn, once it comes into being, to affect every aspect of existence'.

The growth and augmentation of the urbanization process are mainly contributed by several factors in the region. Establishment of administrative centers brought the regions into the urban map of India. The process of creating and bifurcation of districts have accelerated the urbanization process. Development of trade and commerce plays a significant role in its contributions. Industrialization is rapidly taking place in the region. Considerably there are large scale industry, medium scale and small industry providing employment to the local and other state population. Industries are established and helped for spatial expansion of the town and cities

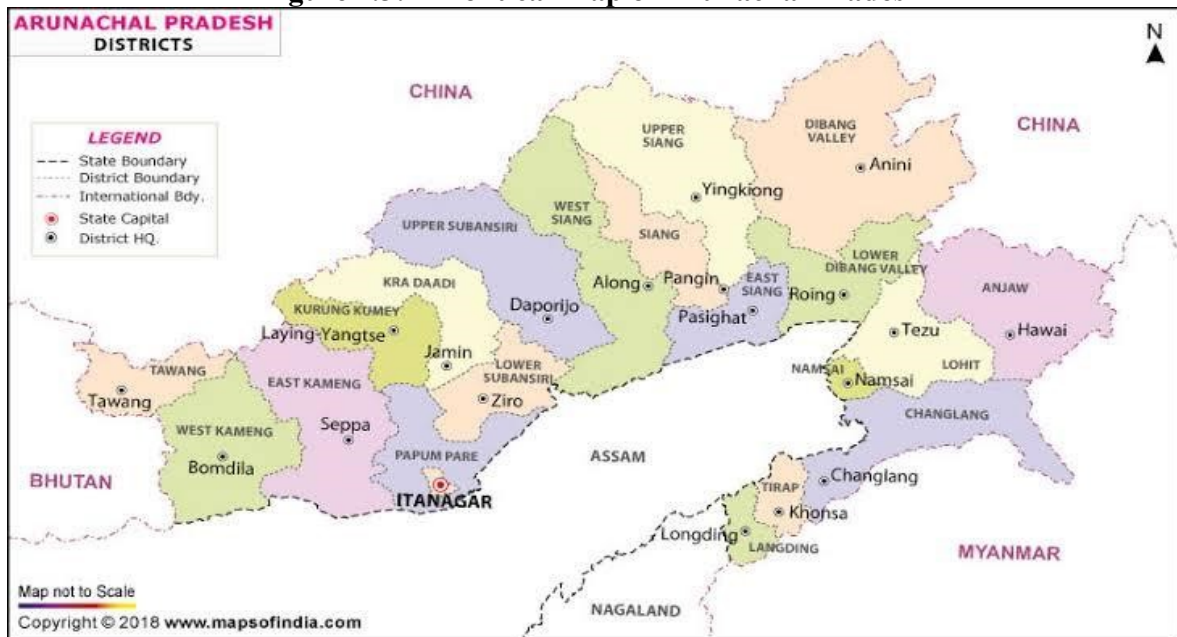
1.4.Arunachal Pradesh: An epigrammatic statement of the state and urbanization:

Arunachal Pradesh is popularly known as ‘Dawn Lit of Mountain Landscape’ and ‘Land of Rising Sun’. The state beholds different multi-culture and ethnic groups settled across the vast region of the state. Each tribe groups represents their own distinct features from others - cultural practices, language, religion, political institution, marriages, and family system. Arunachal Pradesh is located in the extreme part of Eastern Indian and Northern side of North East India between the latitude 26 28’ N and 29 30’ N and 91 30’ E to 97 30’ E longitude with the total area covering 83,743 sq. Km. The state is strategically located and bounded with three crucial neighboring countries. The state shares Boundary area with China is 1080 km; Myanmar to eastern part is 440 km and Bhutan to the west about 160 km. The people of the state share identical culture and racially belong to the same stock. Though the boundaries are heavily guarded with security personal internally, there is migration and mobility of individuals between the countries. The state also shares the national border with two Indian states, Nagaland on east

and Assam on the south. Most of the interstate migration takes place from the Assam state. Both states share historical and cultural values.

The knowledge about people and the region is old as Hindu religion it is profoundly found and referred in the verses from the legends and oral literature and numbers of historical ruins found in the foothills of the state. Legends propagate sage Parashuram atoned for his sin, sage Vyasa meditated, King Bhismaka founded the kingdom, and Lord Krishna married his consort Rukmini in this region. According to Puranas, it is believed to be the Prabhu Mountains. The widely scattered archeological pieces of evidence and artifacts like Malinithan, Bhismaknagar, Rukmini Nagara, Parsi Parlo site, Naksaparvat, etc tells many stories and testifies its rich culture and heritage and linkages with rest of the country and civilization since ancient. The medieval period of the Buddhist monastery of Tawang which was built in 1681 is one of the largest monasteries of the state (DIPR Govt. of Arunachal Pradesh, 2017.). It is evident that urbanization was there and old as when civilization flourished in the region before coming of British and the introduction of modern administration.

Figure 1.3: A Political Map of Arunachal Pradesh



1.5. Political Evolution and Administrative Development:

The foundation of urbanization and urban growth in the state could be understood from the discussion of the growth and development of political state and districts formation. The first line of administration had begun since the adoption of Inner Line Permit regulation in 1873, 1st November which was popularly known as ‘The Bengal Eastern Frontier Regulation I of 1873’. Initially, the state was introduced as North East Frontier Tract (NEFT) for a separate administrative unit with notification in the year 1914 by the colonial regime. NEFT became the foundation ground and historical in administrative growth for the isolated region for the first time distinctively comprising of three administrative units – i) The Central and Eastern Section ii) the Lakhimpur Frontier Tract iii) The Western Section. It was extended to hill tribes of the state and got separated from the Darrang and Lakhimpur Districts of the province of Assam exercising power under the regulation of 1880. The state could not experience early urban life because it

was administered and functioned from Assam in those periods. Assam was the central point of administration and facility center for entire northeast India. In the year 1954, a full-scale administration was inaugurated with the initiation of North East Frontier Areas (Administration) Regulation of 1954, and the North East Frontier Tract was rechristened as North Eastern Frontier Agency (NEFA) after independence. Formation of NEFA in 1951 further divided the Frontier Division into Division named after their principal river with the name of headquarters. Subansiri - Ziro, Siang- Along, Tirap- Khela and Lohit- Tezu. Ministry of external affairs controlled NEFA in those days, but in 1965 it was shifted to the Ministry of Home Affairs. The Northeast region came under the policy of State reorganization which helped the other states of the region to have their independent and political autonomy from the Assam. Which later in 1971 the nomenclature was changed into Arunachal Pradesh and received the union territory status and attained its full fledged statehood status on 20th February 1987 (Pandey & Tripathy, 1997). The political attainment further led to the growth and development of urbanization in the state act as a factor for bringing transformation and social change in the state.

1.6. Society and culture of Arunachal Pradesh and its changing pattern:

Arunachal Pradesh is a land of diverse culture and unique destiny in itself. It represents unity in diversity in nature and forms. Verities of languages and dialogues are spoken; so far there is no lingua franca for the state as a whole. Due to the agglomeration of diverse tribal communities, different forms of religion and faith are practice at the same time in their respective region.

In the following years, the state has gone through a political upheaval with the creation of new districts by bifurcating from their original one. Three new districts were formed – Kamle

district from Lower Subansiri, Leparada Districts and Shi Yomi from West Siang district (The Arunachal times, 2017). The state is enriched with 26 major tribes along with subtribes and lesser-known tribes. These major tribes could be arranged into three regional segments according to their culture, religion, food habits, dress, and ethnicity. It would be desirable to group the whole habitation of the people into different belts (Jha, 1988).

The Eastern belt comprises several major communities like Wancho, Tangsas, Nocte, Mishmi, Khamti, Singphos, and Lisus and they found in the districts of Tirap, Changalng, Lohit, Namsai, and Longding. These tribes are gifted with the technique in making artistic handicrafts and wood-carving. They are associated with headhunting in the previous history. Khamti tribe of Lohit District and Singpho, Tikhak Tangsas tribe are practicing Theravada Buddhist religion, but ethnically they are different from Monpa tribe of the west Kamen district. Monpa tribe practice Hinayana Buddhism while Khampti and Singpho practice Mahayana Buddhism (Tripathy & Dutta, 2008). There are other sub-tribes such as Membas and khambas who live in the highland of the border with China of Upper Siang and West Siang are culturally similar to west Kameng and Tawang District Buddhist culture.

The Central belts are occupied by *Tani* tribe; which they all believed to be descendent of fictitious Legendry forefather name *Abotani*. The Central belt communities have a similar pattern of culture and social organizations. This zone represents the state's highest population. The major tribes are Apatani, Nyshi, Adi, Galo, Tagin, Miji, Aka, Idu, Mishmi, Sulung, and Khowas. They believe and practice animistic forms of religion. These tribes are expert in baskets making, fine arts from bamboo and cane.

The Western zone is attached with Bhutan and Tibet country, therefore, Buddhist religion and culture influential are highly found. There are many major tribes such as; Monpas, Aka-Miji, and Sherdukpen of Tawang and West Kameng. Their culture and lifestyle are quite similar to Tibetan culture. These communities are popularly known for color making, beautiful weaving and handlooms cloths, and yak herding.

Historically the people were confined to their settlement area only due to the opening of an administrative outpost in the adjoining regions of Assam and later within their areas have altered the way of life. Many new ideas have traveled due to frequent contacts with plain people. The barter economy has converted into the monetary system. With more significant connections with outside people, the tribes of Arunachal Pradesh have learned the different languages of Indian states. Introduction of modern education has paved the way for the greater upliftment of the backward and isolated communities.

The material culture of modern society is found in different communities of the states. The woods, cane, and bamboo usage have been substituted by plastics, iron, aluminum, brass, etc. The ornaments and necklace beads are worn by women which are now made from the factory, weaving cloths are preferred over by readymade clothes. The design of the house is a blend of both traditional and modern commonly found in the towns. This has gradually influence the rural communities' practices; generally, the traditional tribal house does not have ventilation and windows which is now becoming an ideal part of house construction.

The uses of fertilizers and pesticides in the agriculture fields have increased among the farmers. Verities of high yielding seeds are grown for extensive farming; more of the lands are brought under the cultivable form. The pattern of land use both at farming and settlement is

significantly changing in the state scenario. The permanent type of cultivation is gradually replacing the primitive method of shifting cultivation. The horticulture is another part of the new changing agricultural practices in the state which is encouraged by the government by giving away the facilities to the farmers.

Before the independence the health status was in the worst state there was no modern health facilities and infrastructures. The *Nyibus* priest/shaman was the ultimate place and tackle the sick person and the diseases; offerings and ritual were highly associated with the traditional and religious healing system. The association between health and spirits were always looked upon. Due to ignorance attitude and superstitious beliefs, the tribal population of the state had gone through many epidemic moments. Setting up modern health units have solved many common health ailments and mysterious diseases of the people. The lifespan of the people improved much better.

1.7. Patterns of urban growth and urbanization in Arunachal Pradesh:

The process of urbanization in the state is not because of industrial growth or economic development instead it is induced politico administrative growth. The newly emerging urban centers in the states have registered a higher growth rate. This is because the urban centers have occupied a larger area and encroaching upon the surrounding villages, as more and more people are pouring into urban areas, this increase has also been encouraged by migration both within and outside the state and by the extension of development administration in the state(Gopalakrishanan, 1994). The regulation of interstate migration is purely restricted by Inner Line Permit (ILP), and intrastate migration was entirely unknown and not frequent due to feud and absence of proper road and transportation system earlier time. Due to the lack of road-

transport facility and the absence of industry and factory in the state, a large scale of migration could not take place, and therefore urbanization was reported nil till 1961 as per the census.

Fundamentally, urbanization is understood from the increase of population in a specific area and growth of economic development. In other instances, many factors are considered helpful for urbanization processes like industrial set up, education center, religious place, administrative center, and ports, etc. There are vast numbers of the population coming from other states for finding a job in the public sector, doing business and trading, and private sectors. The emergence of urban area and urbanization process is a new process for the tribal people of the northeast region, especially for Arunachal tribal population. The communities of the state have just come out from its isolation and primitive stage. The processes of growing urbanization rest similar with the other states of the northeast region as with the Arunachal Pradesh efforts of creating new districts and headquarters leading to the establishment of urban infrastructures and utility sectors for the population. The creations open the scope for increasing the avenues for the local inhabitants to engage in diversified economic activities other than agriculture and traditional occupations. The first sign of urbanization begins with many small shops like cycle shop, repair shops, transistor and watches shop, photo studios, restaurant, tea stall, groceries stores, cloth shops, electronics and watch, garages and line hotel opened they were mostly run by non-tribal people with the license of the local tribe. The locals learned the art of doing business and took up the advantages of being local and manage their own business, but many of them did not take up the business and gave away their license in a lease and rented form for a handful of rental amount to a non-tribal businessman. This economic relation was taking place in those emerging new urban district headquarters; it signified the process of urbanization rapidly by letting the scope for nontribal businessman and workers in tribal society. This is a new

dimension of urbanization brought an issue that collides with the ethos and ethics of tribal socio economic life and gradually affected the tribal way of life and led to the transition of the society. The contribution of a local tribal population to the urbanization process is remarkably below in compared to a share of the total population. These could be enhanced the urbanization process by providing the provision of basic urban amenities and infrastructures, facilities for urban dwellers (Neog, 1995).

The table given below tends to show the population is increasing in every count of the decade in the state which is a vital sign of urbanization.

Table-1.2: Increasing trend in population

Year	1961	1971	1981	1991	2001	2011
Total population	3,36,558	4,67,511	6,31,689	8,64,558	10,91,1117	13,83,727

Source: Census report 2011

The feature of the state’s population is that the density of the population has increased to its double in the span of 40 years. The state is showing a faster growth rate of population in the urban centers. The growth of urban centers and static rural life is gradually creating a line of the degree of difference prominently in the state.

Politico administrative processes are bringing changes in society and have empowered the innocent and ignorant tribal people. The laws of the tribal were not reformed directly by the planners and administrator rather the customary and tradition got influenced and modified along with the time grew.

The reorganization of the state in 1956 and attainment of statehood from centrally administered union territories, the state passed through different political changes and development. In combination with other factors, the politico-administrative processes generate urbanization orderly (Manzoor & Reddy, 1987). The newly created district headquarters assumed the urban status because of its administrative features, the market set up, hotels, amusement space that is quite distinct from the rural features. Arunachal Pradesh as a state was not popular and known by the Indian mainland people prior to the Indo-China war in 1962.

The state's population is mostly rural nearly about 87 percent of the population is still engaged with primary occupation and depend purely on agriculture products and income (Gopalakrishanan, 1994). Systematic bureaucratic organization of the state came with the introduction of modern administration and modern political machinery in the year the 1970s onwards. It is recognized as the beginning of the new dawn of civilization in traditional tribal society. Essentially the major tribes of the state had district headquarters in their respective places and the areas were declared as urban. Therefore it is estimated that the population is in the process of urbanization.

The process of urbanization began with the promulgation of the North Eastern (Re-organization) Act, 1975 comparatively same with other northeastern India. The five year planning also encouraged state development programmes. The planning policies of the central government have impacted to the grass root level of the state. The impact could be augmented from the desired change in agriculture production and practices. Agriculture packages, tree plantations, financial assistance received by the farmers changed the livelihood of the tribal people. The urban centers act as the center of distributions of goods and services for these

farmers. The experience of the tribal people is changed dramatically – social, cultural, economic and political since the inception of a five-year plan and its achievements. The change was phenomenal and visible in the villages and urban areas. The isolation of the tribal people has been broken by various steps. The entire area was brought under the folds of the economic picture of the country by connecting up with the marketing system of India. The improvement and progress of the agriculture growth are achieved from the experts and technician established in the state projects.

Monetization system has completely changed the financial and economic system of barter and exchange and it has revolutionized the internal economic system by facilitating better communication between the customer and seller, trade and commerce, investment, and production. Because of the increase in income, there was a pattern of change in consumption and people's attitude towards everyday activities.

The district headquarters and sub-divisional were connected with road, telephone and post office and there were other facilities which an urban area required utmost. The urban status of the several districts headquarters and Sub Division Office (SDO) circle is recognized as per the criteria are given in the census of 1971 and 1981

i) The urban area based on statutory status: An area with Municipality Corporation, cantonment board, and notified area.

ii) The Urban area based on Census enumeration: A density of not less than 400 sq km, a population of 5000, and three-fourths of the working population engaged with non-agriculture

activities, 75% of the male involved in non-agriculture and the places should have pronounced urban feature with built infrastructures and amenities.

The second criteria were mostly followed by the state government to identify any area like a town or urban for the census record. Accordingly few district headquarters came under the umbrella of the criteria and declared for the first time in the history of Arunachal Pradesh, the four district headquarters were – Pasighat, Bomdila, Tezu and Along (Aalo) was declared as a census town in 1971 and then it was followed by Ziro, Roing, Namsai and Khonsa in 1991.

Figure-1.3: Map of urban areas of the Arunachal Pradesh



Sources: www.mapsofindia.com

Ziro remains headquarter of Lower Subansiri district even after it was bifurcated into Papumpare District in 2001 and Kurung Kumey in 2008 and recently new district Kamle carved out again from lower Subansiri in 2017.

The ostentatious transformation and changes in the state came with the shifting of the state capital from Shillong to Itanagar in the year 1974. The administrative work and building were shifted to Naharlagun (Old Itanagar) and New Itanagar. The declaration and mobilization itself was the benchmark for bringing the state under the process of urbanization and determining the fate of the state and its people towards modernity road and development.

The establishment of state capital brought demographic transition and changes over the years by natural growth and migration from other parts of the districts and states. The in-migration from other states happened to be one of the reasons for rapid urbanization and urban growth. Records show that in the year 1971 the percentage of the urban population was 3.70%, 6.56% in 1981, 12.80% in 1991, 20.75 in 2001 and 22.94 % in 2011(DIPRO, 2005). The record could not show urban percentage in 1961 census because the whole state was declared as rural. It is analyzed that the state recorded two-fold growth of population in every census study.

The growth of towns has been increasing in successive forms, and it is a significant sign of growing urbanization in the state. There were 5 class V town and VI class type in 1981. Presently the state is undergoing a rapid trend of mobility from one class to another level of class type. Today we find various type of class VI, V, IV town have upgraded to class II, and III cities in the state (Sharma, 2008).

Table -1.3: Population size and percentage of the towns of Arunachal Pradesh

Sl.no	Town	Population in 2001	% of total urban population	Category of town
1.	Itanagar	34970	15.70	III
2.	Naharlagun	26912	12.09	III
3.	Pasighat	21973	9.86	III
4.	Seppa	6685	6.72	IV
5.	Daporijo	15468	6.95	IV

6.	Ziro	12289	5.52	IV
7.	Aalo	16834	7.56	IV
8.	Tezu	51014	6.74	IV
9.	Roing	10105	4.53	IV
10.	Namsai	11582	5.20	V
11.	Changlang	6394	2.87	V
12.	Bomdila	6685	3.00	V
13.	Basar	3834	1.72	V
14.	Jairampur	5918	2.66	V
15.	Khonsa	9229	2.72	V
16.	Deomali	6060	2.86	V
17.	Tawang	4456	2.00	VI

Source: Statistical abstract of Arunachal Pradesh, census 2001

Table -1.4: Percentage and population size of the towns of Arunachal Pradesh

Sl.No	Town	Population in 2011	% of total urban population	Category of town
1.	Itanagar	59490	4.29	II
2.	Naharlagu	36158	2.61	III
3.	Pasighat	24656	1.78	III
4.	Seppa	18350	1.32	IV
5.	Daporijo	13405	0.96	IV
6.	Ziro	12806	0.92	IV
7.	Aalo	20684	1.49	III
8.	Tezu	18184	1.31	IV
9.	Roing	11389	0.82	IV
10.	Namsai	14246	1.02	V
11.	Changlang	6236	0.45	V
12.	Bomdila	8370	0.60	V
13.	Basar	4248	0.30	VI
14.	Jairampur	7151	0.51	V
15.	Khonsa	9928	0.71	V
16.	Deomali	6648	0.48	V
17.	Tawang	11202	0.80	IV
18.	Dirang	3750	0.27	VI
19.	Rupa	3810	0.27	VI
20.	Sagalee	1315	0.09	VI
21.	Boleng	2979	0.21	VI
22.	Yingkiong	6540	0.47	V
23.	Miao	5841	0.42	V
24.	Khonsa	9928	0.71	V

25.	Longding	4234	0.30	VI
26.	Koloriang	2345	0.16	VI
27.	Anini	2384	0.17	VI
28.	Hawai	982	0.07	VI

Source: Statistical abstract of Arunachal Pradesh, Census 2011

Arunachal Pradesh is one of the least populated states in the country with a total population of 13, 83727 of which male are 713912 and female 669815 with a density of population 17 per sq km. According to the 2011 census report, the urban population of the state was 22.37% against 27.78 % of Indian figure. According to 2017 report, the state has 22 districts headquarter they all were considered as urban town signifying urban character and features due to its administrative center and concentration of heterogeneous population with non-agriculture occupation diversity and adoption of modern amenities that distinguishing it from traditional way of life.

There are several linkages and causes for urbanization process and organizational growth, which are relative and associated with each other in the growth of the state. It is acknowledged that in India, industrialization and migration are mainly accounted for creating the atmosphere of the urbanization process and urban development in any region. At the outset, administration as a component helps the local area to get the urban amenities and development of infrastructure requirements. It paves a way for opening a gate for other cultural groups to mingle up with the local population and turning it into a different kind of environment from the origin place. This new environment area forecast an urban community varying in size, heterogeneity with specialization and division of labor.

The developed urban areas connected with road communication and modern amenities provided to the people. The inclusion of modern elements percolates easily into little traditions of the frontier tribes.

Shifting of capital from Shillong to Old Itanagar (Naharlagun) in 1974 has potentially put the state into the map of growing urban list. One-third of the state's population is from other states. A caste and community groups like Assamese- Northeastern region, Bengalis, Bihar's, and several South Indian and Rajasthanis are the prominent migrant groups that have come as a government employee, laborer, business, trade, and commerce, etc. The capital town and other administration towns of districts are becoming a melting pot for culture diversities and acculturation process.

The phenomenon of urbanization taking place in Arunachal Pradesh is quite unique and different from the other industrial states having industry as their foundation for urbanization. Urbanization as a process is a recent event for the people of the state that had begun with a humble note by adopting the gradual assimilation and integration policy of Nehru and Elwin philosophy patronizing the development without disturbing the essential nature and fabrics life of the frontier tribes. The administrative infrastructure is the only variables that are claimed to have brought the urbanization process in the state. The state has intelligently selected the locations for the administrative centers and purposively developed in ideal places for running the administration, where large population could be benefitted from the administration, urban amenities and public utilities by constructing roads, connecting electricity, education center, banks, hospital, markets and residential quarters for workers of the various departments. Therefore it was induced and planned process.

Table -1.5: Growth of census towns in Arunachal Pradesh

Year	1971	1981	1991	2001	2011
Total	4	6	10	17	28

Sources: Census of India 2011(MSME-Development Institute Itanagar, Arunachal Pradesh)

The table shown above gives the picture of the pattern of urbanization in the state in raising trends. The level of urbanization increased from 3.70 percent in 1971 to 24.21 percent in 2011 as against all India average of 27.78 percentages. Arunachal Pradesh has one class II town(Itanagar) 500000-99999 population and three classes III type(Naharlagun, Pasighat and Aalo) having 20,000-49,999 of the population, there is class IV and V mostly found in the state population ranging from 5000 to 19999. The percentage of 19.12 of the total urban population lives in these two categories of towns.

1.8. Transformation in the state:

The report entails very excitingly about the new faces of the state since the urbanization and urban growth has been taking place. Various new chapters have been added in terms of social and economic transformation. Introduction of currency rupee has replaced the old traditional barter and exchange system. There is a rise of individual ownership of land over community ownership. The rise of the modern economy has resulted in institutional transformation in land, labor and capital market system (Planning commission of India,2009).Growth of urban area has brought new and varieties of products into the isolated tribe of the state. The traditional consumption pattern of the native has altered as new commodities and goods have entered into their consumption list.

Arunachal Pradesh state is represented by 35 percent of nontribal population symbolizing the state of demographic transition. According to the 2011 census report, the Schedule Tribe Population constituted 68.7 percent and non- schedule Tribe 31.2 percent. The percentage speaks about the growing urbanization in the region. These bring the sharing and contribution of the workforce at a different level by the immigrants' population. A sharp declining tendency is observed in the share of the primary sector and a moderate rise in the secondary sector and tertiary sector. The changing work forces have altered the distribution of labor in the state. People are moving towards tertiary sectors and sliding down of agriculture share.

1.9. Statement of the problem:

In technological terminology, the “statement of problem” of this research is to trace the depth of this problem and study the relationship between the variables affecting the process of urbanization in the Ziro valley. Hence to go deeper into the relationships the researcher has explained various aspects or phenomena influencing the process of urbanization in this chapter.

The stages and development of the region are happening purely on the background of growing administrative infrastructure which has further push to process of urbanization and urban growth in the valley. Both the administrative work and urbanization is acting as external forces, that have altered the tribal way of life considerably to a large extent. The process of change has given a positive and negative effect on the Apatani society.

There are various dimensions to understand the impact of urbanization at social institutions level which needs to be scientifically analyzed the phenomena with the help of data collected empirically and developed a theory to explain. Urbanization as a process is considered

as an agent of social change in the state which is experienced recently in the history of Apatani society.

The introduction of setting up administrative infrastructure was politically induced development in Ziro valley (Hapoli) in the land of *Bamin Michi* village. Hapoli is a lonely stretch long deserted, the lands were not grazed by the villagers due to fear from neighboring tribe raid and kidnap (Bower, 1953). This stretch of land was donated to the state for setting up of the administrative units. This has shown the seed for modernization and urbanization for the first time in isolated Himalayan tribes of Apatani. The administrative units established for entire Subansiri region, the district was one of the largest administrative posts; gradually, the district got bifurcated into several separate districts with the growth of political advancement. Since then the Ziro valley has been experiencing a lot of physical change in and around. The Changes are brought by developmental programmes by government initiatives but today we find private firms and company are playing a significant role in shaping the economy and physical structure. The human resources are hier from the other part of the states to work in the state at the beginning of the development phase. The conglomeration of migration populations has raised the heterogeneity into Ziro valley.

The Ziro town is looked after and managed by Bazaar Committee a small group consisting of a local businessman, traders, public leaders and youths of Hapoli area. The members of the committee are temporary and it runs on a selection system for a period of years. On the other hand, administrator also perform their role as caretaker and guide the maintenance, safety, facility for civic amenities, drive revenue, law, and order. The provisions for urban local bodies are yet to come very soon.

The bazaar committees as an urban based organization don't have enough power and responsibility to dispense their works. Their authority is limited to a few subjects and monitoring level. The committee lack manpower, source of revenue generation, infrastructure, tools, and machinery. In many occasions, the Urban and Housing development department take up the role in taking care of the town sectors and colonies. But, the work is very irregular and sometimes it is noticed regarding their lackadaisical attitude when it comes to cleanliness and sensitization of the issues.

In the last three decades, the social structure of the Apatani society has been undergoing in the process of few modification and changes. The parameter of changes is profoundly made in cultural traits of family and marriages ceremony. The society has adopted and infused with the foreign culture into their culture. The synthesis process began since the coming of mainland people of different socio cultural background into the valley. The Apatani society was a conservative and rigid society in terms of their customs and tradition and interaction with the outside world. The nature of rigidness and reserve attitude has been silently broken by modernization and culture contacts are now welcoming those broad thinking and adapting quality.

The expansion of the town is taking place with the growth of the human population in the valley gradually. The urban growth has brought nearby agriculture land, bamboo grooves and swampy land into urban use. There is direct destruction of the natural setting of the environment. Verities of land and water organism are destroyed by growing urbanization; by turning natural habitat into human settlement site. The valley in the recent decade is experiencing demographic transition due to the natural growth rate and migration from other parts of the country. The rising

number of population in the villages has led to the expansion of the households towards agriculture fields and bamboo groves and many of the families have shifted to Ziro town and capital of the state.

The number of participants and transferring of indigenous-based knowledge to the younger generation is declining rapidly, because of the migration of population from village to urban area. The demographic structure of the village is changed because of mass migration to urban and other parts of the region only the older generation is found in the village.

Basic human amenities like school education, health clinic, the supply of potable water and electricity came to the valley since the administrative offices start functioning. Road and communication Infrastructures have enhanced with the growing urban development in the valley. The physical and social contacts are getting more magnificent and intense with the flow of other caste communities within the time and impacting the culture of Apatani as a whole. The significant impact is be found in the major social institutions of the society – economy, political, family, religion and traditional knowledge of education, health and significantly on environments.

The administrative offices have turned the strip of isolated land which was unused by the community people into one of the busy and valued places in the valley. The establishment brought the changing pattern of land use and rise in the land values depend on the urban morphology. Each area of the town had its own significant aspects, competition for the center location is high among the community people and community from another tribe also have acquired few pockets of land at a high price in Ziro valley. The dissension of selling out to

outsiders is becoming an issue at the community level and different level of meetings and rules are framed to prevent the deed.

The Apatani community is self sufficient community; they had trading relation with neighboring tribes, neighboring state and it is been told that Apatani traders had traveled into Tibet to exchange the goods. Therefore many Tibetan culture materials are found in few of the families' possession. Apatani tribe is considered industrious, for their livelihood they had gone to Assam for seasonal work in tea garden as a laborer and harvest in paddy fields of the Assamese. In this way, the essential items and money came into the valley which was again commercialized into higher value and exchanged took place. The situation changed after the market has come to the valley along with administration, the populations received more than their wants. It induced the parasitic mode and started depending more on the supply of vegetables, fruits, rice, clothes and household items from Assam and government subsidies.

It is observed that the capital and resources are going out from the valley to other parts of the states. The outsiders who have come to work in the government department, private sectors and organizing a business unit, their savings are used in their hometown for construction of buildings, industrial units and buy lands. The immigrants' population here acts as a capital drainer. There is an increasing number of a petty businessman from other parts of the communities in the valley since the development of the urbandown. Though a trading license is not issued to them, they run the business with the help of local people license. Gradually, the outsiders had captured trade and commerce activities. The only handful of the local population takes up running a shop. The native people migrate to town to get the opportunity, better life and

avenues. But they often indulge in harmful social practices because of their unemployment and end up with debt to meet their daily needs to survive in urban areas.

The culture contacts and exchange between natives and outsiders have brought additional elements in the culture of the native community. The tendency to follow the outsider's culture is high among the present generations. They see it as a kind of popular culture preferred than their own. This is a symbol of creating a sort of urban character of the area as a center of a melting pot of cultures, heterogeneous and complexity. Social interactions among the different groups have brought into different types of relations which were not found in the Apatani society. The people are entering into motive oriented relations.

Urbanization has social, economic and ecological implication in the valley which needs attention and interpretation. From the recent past, there are increasing numbers of automobiles and pollution in the valley. Increasing numbers of vehicles have increased a different type of problems and issues in terms of health, accidents, theft and traffic in the Ziro town. The administration is not yet able to deal with the situations properly. On the other, the rising number of automobiles raises the percentage of pollution and chemical gas into the atmosphere creating greenhouse effects. The valley is experiencing an increase in temperature and climatic change over the decades.

The rise in temperature in the valley is also related with deforestation for road construction, the valley is surrounded by two upper and lower ring road running over more than hundreds kilometers. It has caused a serious issue for the depletion of natural beauty and forest resources. The population of the valley fed on the rainwater which is channelized from small streams coming directly from the forest. The forest helps to generate water sources, the quantity

of water is determined with the trees and plant in the forest. Today we find the water quantity has receded alarmingly for both drinking and irrigation purposes due to development activities and felling of trees in the jungle.

Due to the better road communication and transportation system, the growth of trade and commercial activities is increasing and there is the scope of social mobility among the community people too. Agriculture as an occupation is now confined within the village and practiced by villagers only. Nevertheless, most of the youths are now flocking into urban for the hope of good earning and employment. Urbanization has also created many opportunities for women of Apatani society; women are taking up working in a government department as clerical staff, office assistant and multipurpose workers. After the urbanization and engaged in a non-agriculture occupation, the women are now facing the consequence of role conflicts between their domestic and professional life.

In recent time, the rate of crime is one of the highest occurrences in the valley. Different types of crime are being committed and heard which was not known or understood by the Apatani people.

The urbanization process is acting as an agent of change for bringing dramatic changes as the valley are undergoing through the process of urbanization. Out-migration is one of the issues associated with rural areas. The housing structures of the traditional village are modified or replaced into modern housing pattern by the persons who have moved to urban and earned.

The villages and town of the Ziro valley are connected with all weather roads covering within a 7 km radius. Unlike neighboring tribe villages, the Apatani community is having easy

access to reach the town and avail the facilities either by vehicles or by foot walk. These could be the reason for which the Apatani community migrates frequently and commutes to urban areas and easily get urbanized.

The wealthy class people prefer their residential house at the outskirts of town and many of them have converted their village house into a concrete building structure with all the modern elements. There are many Reinforced Cement Concrete (RCC) buildings across the village, and the traditional houses of rooftop are replaced by corrugated galvanized iron (CGI) sheets. The true essence and picturesque look of the tribal village are disappearing gradually.

The previous class structure of the community in the valley was based on a simple hierarchy. The positions of the hierarchy were measured from the possessions of agriculture lands, slaves, *Mithun(bos frontalis)* animal, beads, Tibetan sword and PLATEs. The community divided themselves on social distinctions- *Gyuchi* and *Gyuth*; patrician and plebian as mentioned by Haimendorf (1968) in Marxist language. All the patrician clans did not come from the wealthy class and they remain to be poorer than plebian clans. Today the line of class division is rather complicated. The affluent class is coming from the top bureaucratic officers' family, political leaders, businessmen and contractors. These wealthy class families possess a large wealth and landholding in every part of the valley and capital city. Most of it is located in significant areas of the town with huge structures constructed in the forms of hotels, shops, residential buildings, etc. A number of Apatani populations belong to the middle class and they are government servants, small business owners, and entrepreneurs. The low class group are coming from those occupations engaged in a part-time job, government contract job, and petty traders and small businessmen. In recent times, the difference between the haves and have not

been making its way and prominent. Due to the lack of economic resources and saving, most of the lower income level group are dipped with debt. The society is now observed with social ranking based on economic power, and political power the role of religious influence is absent. The emerging wealthy class of the community is beginning to take the roles of the new elite of the society which have access to the social, political and economic resources and significant status in society.

Today we find lots of elements of foreignculture which have been incorporated into the traditional way of life. Many of the original elements of culture are dying away with the coming of modernization and urbanization in the valley. The urban environment has a different setup and it required adaptable conditions to live in. We-feeling and emotional attachment among the kin group are weakening in the urban area due to the nature of work and lack of time to engage with social gathering and participation. The face to face contacts is substituted by a secondary relationship. The primary relationship is gradually shifting towards the secondary type of relationship within the kin relatives and groups in the urban area. People living in the urban community are always in the state of role strain because of their professional work and lack of social obligation and social participation. Family relative members take out time to gather only when there are significant issues or occasion arises. Therefore the mental stress of Apatani in an urban area is more than rural. Apatani tribe is one of the conservative and they adhere to their old age traditional structure, social organization, social system and quite introvert at their approach to mixing with the other people. However, due to urbanization interaction with outside community groups have significantly increased.

Ziro valley can be made into two urban zones - Old Ziro town and Hapoli town, and it is commonly known as Ziro town. The purpose is to understand the identity, length, and breadth of Ziro valley and its impact on its surrounding Apatani villages. According to Desai, (1969) rural and urban difference is based on the occupational difference, environmental difference, the difference in the size of communities, difference in the density of the population, the difference in mobility, the difference in direction of migration, in social differentiation, stratification and system of social interaction. Old Ziro is an old small town before the growth of Hapoli administrative town. The morphology of Hapoli town is more complex and heterogeneous in physical structure – the center of the town is dominated by administrative offices and adjacent to it lies the markets, outside the market zone there is a civil line- staff quarters, private residential, schools, religious place, and other public utility center. The transportation roads run through every colonies and sector, population are densely settled in the Ziro town, people are engaged in nonprimary occupation sectors. Old Ziro has got few government offices and shops are aligned into two rows along the districts highway roadsides. Old Ziro is originally habituated by more than four different village groups they are Hija village, Dutta, Hari, and Bulla. Old Ziro site is the heterogeneous location. The urbanization process is steadily taking place with the small town old Ziro, and it is growing larger by people coming from neighboring villages and other caste groups.

Ziro (Hapoli) town is experiencing rapid urbanization process in recent decades. Several colonies have emerged and it is still continuing to grow. There are other factors for the growth of urbanization and urban rather than being as an administrative center now. Each settlement area was established for the departmental quarters and office units. In the beginning, the administrative staffs were non tribals, therefore the colonies had comprised of a mixture of

people coming from the different socio-cultural background. Culture exchange and social contacts took birth with the process, the first sign of urbanization impact upon the tribal life.

The life in urban compared to rural is not getting contrast for Apatani community. The changing is observable from the daily life activities of interaction, behavior and inclination towards more rational thinking and indulging more in economic activities. Some of the rural dwellers go to office from his village; many of the individuals are engaged in non agriculture activities. Most of the village houses are connected with pipe water supply, it is fully electrified, the household is having their own Direct to Home television (DTH), automobiles are there to access to the town. In this way, we can find the juxtaposing of both traditional and modern culture. The blending of modern cultures is found in the traditional social institutions of the Apatani. The overriding of modern culture over traditional customs are judiciously managed by the community groups. The decisions are always made in favor of the maintenance of the traditional practices involving the modern elements at the same time. Among the Apatani community there lays the differences in a few aspects of cultural practices. Therefore there is variation in certain norms and regulation to each village. The continuity and change hold very true for Apatani society.

There is an issue for the Apatani population living in the urban area when it comes to continuing the traditional practices. With the change in time and environment, the community people are upholding the traditional outlook and practices by opposing the strong force of modernization. The urban dwellers are burdened with traditional obligation and modern occupation. Social obligations and responsibility are very strong in the society and these relationships are produced by the kinship bond. Every individual in the Apatani society holds

some status and position which is expected to be performed by the person. The new modern society is affecting the proper functioning of the kinship role for the Apatani society. The give and take relationship are strongly taking place in the family and kinship groups. Therefore to continue the interrelationships an individual has to carry on the traditional practices at any place and time. People are compelled to observe and manage the social organization during the celebration of Myoko, and Murung because it is related to the socio-religious organization. The problem of choice and action to participate or not is running across the urban dwellers which are becoming a contemporary issue. The Apatani families are attached strongly to a traditional belief system. It would not be an easy task to shake off its community identity and philosophy.

In the recent decade, Apatani tribe is experiencing the emergence of new forms of economic class rising from bureaucratic, professionals, contractors and business community. They are now acting as new elites of the community. There are several organizations formed by these professionals trying to play a decisive role for the upliftment and moderation for the Apatani community as a whole. In the community-based organizations, they are usually being appointed as the members of the group. They are economically sound and held social position and status in society. Till today many of the socio-cultural changes were brought by these elite educated classes. Some of the changes and modification they brought were heavily priced for poor people. The practices got percolated and proliferated towards other lower class groups of family. The modified system got customized deeply and adopted by a mass as the new form of practices which was never opposed and corrected by society.

1.10. Relevance and significance of the study:

The study would be significant to understand the dynamics of social change in tribal regions of Northeast India especially on the Apatani tribe of Arunachal Pradesh through the impact of urbanization process which is occurring rapidly. The study is the first of its kind and good documentation on the community and for the state of Arunachal Pradesh in general. Since no work has been done in this field the study has tried to make a pathway for understanding and interpreting the phenomena of urbanization in tribal society.

There is a lack of theoretical explanations of urbanization and urban growth in the state especially about social, cultural and institutional and environment level. The study has attempted to provide a conceptual understanding of the urbanization process.

The present study has practical relevance also. It may unfold and analyze various elements of social structure and human network created and destroyed by urbanization. It will point out the uneven degree of urbanization and its impact on social and cultural life of the tribe living in different localities of town, and villages. This shortcoming could lead to maladjustment and tension relationship within the tribe. Therefore, the present study could point out the pros and cons of the urbanization process and its impact on the socio-cultural and physical environment of the valley. It will also suggest specific measures and means, through which the negative effects of urbanization process can be minimized or atleast pointed out for further investigation.

1.11. Objective of the study:

There are many core issues and problem to look at the growing urbanization in the valley. The researcher tried to focus on those items which are very challenging and significant for understanding the changes vividly found in the society. The following are the primary objective of the research:

- To study the nature of urbanization and its properties.
- To understand urban planning and development in the valley.
- To examine the impact of urbanization on bringing change in the socio-cultural, economic, political and religious aspects of Apatani life.
- To study the relationship between urban growth and the physical environment.
- To find out the limitation and challenges of the urbanization process.
- To provide certain suggestive remarks to eradicate the problem of urbanization.

1.12. Research questions:

1. How urbanization has significantly brought social changes in Apatani society?
2. How the nature of urbanization is likely to the identified in terms of certain structural-functional, demographic, morphological, and occupational?
3. In which way urbanization has enhanced the development process in the Apatani valley?
4. Whether the rural-urban continuum prevails or not?

1.13. The Approach to the study:

The researcher used an exploratory research design to explore the process of urbanization and its impact on the Apatani society. This particular research design was adopted to understand the core issues of societal changes which are happening by the phenomena of the urbanization process. The subject of the field also offers new ventures to investigate the problem. The present study is an impact assessment on an institutional level. It is a descriptive as well as analytical study. The exploratory research design supplied the resources for description and analysis of the impact of urbanization in Apatani tribal society. To evaluate the socio-cultural transformation and the growth of economic development it has been envisaged through a comparative approach. The comparative approach facilitates to delineate the attitudes and behavior patterns towards the emergent process of social change between the old and new generations.

The area of the study is Ziro valley, the district headquarters of Lower Subansiri. As per the proposed study, the researcher has divided the Hapoli town into several clusters for the convenient of the study, Old Ziro town and seven main villages are also brought into the part of the area of study.

1.14. Distribution of areas of study:

Ziro valley is vastly spread community area comprising of more than twenty thousand population both rural and urban. Therefore, the researcher has divided the Hapoli town into three Clusters. Cluster I is the central business area of the valley, most of the important activities are taking place in this zone because of the location of administrative offices, banks, post office,

hotels, shops, district hospital and the town market. Several private education institutions are located within this cluster. This zone is both commercial and administrative zone.

Cluster II for the study purposes is located to the western part of the Cluster I. This zone has lesser number of administrative centers in compare to Cluster I. This area cover few important infrastructures like education institution, defense quarters, district session court, police station, churches and sawmill with iron wielding industry and its vicinity cover with residential houses.

Cluster III lies on the eastern side way to Old Ziro, this area includes higher secondary school colony, motor vehicle repairing center, telephone Exchange office, district industrial center office, and residential area for both private and government staff quarters, veterinary office and a fire police office. The inter-district Trans highway passes through this cluster area. The places are encircling by private residence and numbers of government staff quarters.

Old Ziro town was taken into consideration for the study area because of its emerging changes in both population and spatial growth. Old ziro is the oldest town established as an administrative district headquarters in 1952. It consists of 2359 household divided into three segments –i) Lower Old Ziro ii) Middle Old Ziro iii) and Upper Old Ziro. The place is settled by various populations from different neighboring villages, and the spatial area is mostly covered by Bulla village. Most of the sectors are a residential area containing both private and few government staff quarters and government offices.

The researcher also attempted to conduct fieldwork at seven main villages taking 10 households from each village as a sample for data collection and analysis. The sample population

represents the village population of concisely. The reason for choosing the entire colonies of the town and seven villages is to examine and assess the degree of impact and level of urbanization in the valley.

1.15. Universe of the study:

The researcher selected the Ziro valley as the universe and the total Apatani population of the Ziro valley constitutes the population of the universe for the present study. Ziro town is an administrative town and commercial area. The Apatani tribe constitutes 74 percent of the tribal population and one of the dominating tribe of Lower Subansiri district. The total population of the Ziro valley constitutes the population of the universe for the present study.

The Ziro town is the only urban area for Lower Subansiri district. According to 2011 census, the total urban population of the districts is 12806; male population 6383 and female 6423. The total household in an urban area is 3004. The structure of the colonies of the Ziro and old Ziro town is given in the sampling procedures.

1.16. Selection of the sample and respondents:

As discussed above in the universe of the study, the universe of the study is Apatani tribe of Ziro valley. The total number of respondents is 520 from five different zones as created for the purpose of the study. The researcher consulted the voter lists of 17th Ziro I constituency to identify and select the respondent's area wise. The electoral voter list helps the investigator to identify the respondents of their location accordingly, from which village they are, it also gave the gender type and age from five different areas of study zones, on that basis the

respondents were randomly selected and chosen. The researcher has used cluster sampling by dividing the area of the study into separate five zones.

Stratified sampling is selected to take the respondents according to their social attributes. This method divides the population into separate subpopulation or strata. Firstly the respondents were identified from each zone and grouped them separately according to their social background like; Women association members, Government employees, Public Leader, Businessman, Youths, Religious Groups, Public. After the strata have formed a separate sample is drawn from each stratum on the basis of simple random sampling. The categorization was made to get more inputs from different background of the community. Besides social categorization, the age factors was another variable for the qualification of selecting the respondents. The stratified sampling method was used for gathering the data from the various strata of respondent because of the criteria based study was required, and they would represent the universe for qualitative and exploratory study.

The model of the study is designed by deducing the sampling scope from state to district level and then entire colonies/sectors of Hapoli and Old Ziro towns with seven main villages were selected for the research study and analysis.

Table - 1.6: Population table of Ziro valley

Sl.No	Name of town/Village	Households	Population	Schedule tribe
1.	Old Ziro town			
	<i>Suhya (old Ziro-I)</i>	74	475	448
	<i>Old Ziro II(Main Market Area)</i>	233	1047	1385

	<i>Old Ziro III(Lower market)</i>	196	837	1090
2.	Hapoli Town:			
	<i>Hapoli town</i>	3004	12806	8537
3.	Seven Major Villages			
	<i>Hong I</i>	181	1193	1193
	<i>Hong II</i>	155	936	931
	<i>Hong III</i>	65	480	480
	<i>Bamin Michi Dukur</i>	35	153	147
	<i>Bamin</i>	42	251	242
	<i>Mudang Tage I</i>	61	369	364
	<i>Mudang Tage II</i>	167	1021	1011
	<i>Hari I</i>	70	637	630
	<i>Hari II</i>	176	894	887
	<i>Reru I</i>	129	872	872
	<i>Reru II</i>	130	663	659
	<i>Tajang</i>	136	891	891
	<i>Kalung</i>	108	792	792
	<i>Hija I</i>	170	1087	1086
	<i>Hija II</i>	101	623	621
	<i>Hija III</i>	136	637	634
	<i>Dutta</i>	86	385	377
4.	Total	1512	27049	23277

Sources: District Handbook of Lower Subansiri 2013-14

Table -1.7: Division of universe of the study with the zone-wise distribution of respondents

Sl.No	Zone –I	Total households Respondents
1.	i) Market area cum DC office area ii) Club Road, iii) Gurudwara Colony, iv) Engineer Colony, v) Medical Colony vi)Pari-Ami Colony, vii) Hilltop Colony	7X18= 126
2.	Zone –II	
	i) Paraline Colony ii) Police Colony iii) Quarry Line Colony iv) Pai Gate colony.	3X40=120
3.	Zone III	
	i) Treasury down colony ii) School Gate Colony iii)Industry colony iv)SSB Gate	114
4.	Old Ziro Town	
	i) Lower Old Ziro ii) Old Ziro Town area iii) Upper Old Ziro	30X3=90
5.	Seven Main Villages	
	i) Bulla ii) Hari iii) Hong iv) Bamin-Michi v) Mudang Tage vi) Dutta vii) Hija	7X10=70
6.	Total households	520

1.17. Techniques of data collection:

Considering the sampling size and spatial distribution of the population a variety of method and techniques have been used to collect the data. In order to test the validity of the techniques, the researcher has conducted a pilot survey.

1.18. Pilot survey:

The pilot survey of Hapoli Town, Old Ziro and seven major villages were conducted and took 12 days for collecting the basic information from 100 households with the help of interview schedules. The survey has been conducted mostly with close ended questions and short interaction to get first-hand information. The pilot survey helped the researcher to design the interview schedule for the main research. The pilot survey brought several insights which were unknown. It has helped to eliminate a few unnecessary questions. The research design was prepared from the idea and knowledge based on the pilot survey. The method was helpful to test the compatibility of the techniques in order to conduct the main research work smoothly.

1.19. Primary data:

In the present study, the researcher has used different methods for collecting the data in the form of i) Interview schedules ii) observation iii) focused group interview iv) mailed questionnaires.

The population of the study was stratified into different social attributes as per their occupations. Each group was asked the same pattern of questions during the interview. The interview schedule was prepared in a structured format with open and closed questions. In-depth interview was conducted for a few selected respondents. Those selected respondents belong to politician, bureaucrats, religious leader, businessman and women. The entire interview process was recorded by voice recorder and diary notes. The researcher also adopted a focus group interview to reach the depth of the issues, therefore, Open-ended questions were often used for

those administrative officers and political leaders because of their education and administrative experiences.

The interview questions were prepared on the background of research questions and statement of the problem. The interview schedule comprises of three parts. The first part of the schedules contains personal details. The second part of the schedule comprises about the social institutions – economic, political, religion, education and culture of the community and its changing aspects with the effects of urbanization. The third part of the schedule comprises of various problems of urbanization found in Ziro valley.

The first hand information was gathered by using the observation technique. During the study period, the investigator visited the study area quarterly in a year for new observation and recording of the current development and social change taking place in the Ziro valley. This gives the researcher the privilege and advantages of observing the changes in close contact, being an observer and participant in every aspect of the occasion, the comparison between the before and after modernization and urbanization in the valley has been observed carefully. Self-introspection and examination helped a lot in the process of investigation and analysis of the study.

Participant observation method was useful for understanding the decision taken during the meeting of the local urban bodies, workshop organized by department and civil society, family organization, community mobilization, and activities. The researcher was invited and got permission to take participation in the social gathering by various the families, institutions and civil organization that helped for observing the social events and to examine the impact of urbanization on structural-functional differentials of family, social structure and various

institutions and infrastructures of Apatani community. During the observation, process researcher has maintained a personal field diary to record the incidence and another unintended part of the research.

Mailed questionnaires were sent to those respondents who were not available for face to face interview and remain outside during the fieldwork. Many of the selected respondents' questionnaires were sent through email, watts app and face book, and other social media whichever was available and reliable. The same pattern of questions was used for social media respondents. Several questions were asked in compliance with the objective and hypothesis of the research studies.

1.20. Secondary data:

Apart from primary data, the varieties of data had also been collected from secondary sources. Secondary sources comprise both published and unpublished materials. The published sources were collected in the form of government reports, survey documents, and statistics from District headquarter and District statistical office, the Office of the Department of Urban Development. Unpublished data were collected from the records of various offices of the Block, District library-Ziro, Central library- Itanagar and Rajiv Gandhi University Library. In addition to that, extensive reviewing of the relevant literature was done from journals, newspaper, magazine, and district statistical handbooks, gazetteer, census report, and unpublished thesis documents, publications from civil society. The video footage and images from Google and local cable operator was consulted.

1.21. Classification of data:

The classifications of the data were categorically made for easy compilation and generation of valid categorization of the elements of data from the fieldwork. The data were classified to study the relationships among the variables that influence urbanizations and its impact. It also helpsto facilitate comparison. Data were converted into tabulation format for easy understanding and calculation.

1.22. Analysis and discussion of the data:

Both the primary and secondary data are processed and analyzed. The data are presented and organized in the forms of various tables, bar graph, pie chart, and diagram to make an easy understanding and interpretation of the data from the questionnaires and interview schedules. The data collected through schedules, interview, observation and secondary sources have been analyzed using both qualitative and quantitative methods. The researcher then tried to identify the relationship between the independent and dependent variables and their impacts on each other. The researcher has attempted to present the findings and make generalization of the study precisely through this analysis and understanding facts observed from the research. The discussions are elaborately discussed according to the findings,which are presented in the form of various tables and figures through statistical analysis.

CHAPTER II REVIEW OF LITERATURE

The researcher in this chapter has attempted to review the relevant research studies and documents those which might be significant for this research work. Due to scarcity and lack of work done on the issue at the local and regional level, the researcher has consulted and managed to assimilate various papers written on urban studies on the state and its people from different sources and from different disciplines.

Abrian J. L. Berry(1973) illustrated the phenomena of urbanization in the world of the twentieth century. The author has delineated the explanations by augmenting the process of urbanization which is happening similar in every part of the world. The variation of urbanization lies in the differences and diversity because of its historical and cultural background. He referred to the phenomena of urbanization process from continental perspectives beginning from North America, European, and third world countries.

In the process of urbanization, there are multiple effects that take place like the suburban adjacent to the urban center has developed as a new pattern of the system which is quite contrary to the main urban area. The discussion linked with the changing dimension of spatial relations among the minority people moving towards the core of the city because of poverty and it pushes the white people to the suburban zone. The total population in the central city tends to decrease with the expansion of outer space for other activities. Here the author also cited the role of government agencies for intensifying the urbanization process by initiating urban development projects. The author also suggested favorable prospects about the future and the planning for urban policies.

Amitava Mitra and Dani Chobin (1998) discussed the element about the growth of entrepreneurship in the town of Ziro valley. The discussion and finding of the paper are based on the fieldwork conducted in the Apatani valley. They used the case study method to understand the emergence of entrepreneurs in relation to urban facility among the Apatani. The authors agreed that due to the shift in the internal policies and various major steps taken by the state government led to rapid growth and development of urbanization and micro industrialization in the area. The studies also revealed that half of the industries are run by nontribal communities which are mainly concentrated in urban areas. Due to the attainment of school education the local youths are engaging themselves to run their own business and the majority of the entrepreneurs was having their secondary level education. The study reveals that women are still lacking to come forward to be entrepreneurs and businesswomen. Most of the local entrepreneurs are the first-generation entrepreneur not having any knowledge about doing business.

Anil Kumar and P. S. Ramakrishna (1990) focused on the kind of energy flow in Apatani society by consumption pattern and way of spending the body energy. The study was based on the fieldwork done in the Ziro valley and furnished its analysis. The study touched upon the system of consumption and spending of energy practices in a particular village. The authors intended to explain the rural way of life and consumption of the energy in the form of diet intake and spending of body energy during the working hours. Villagers working in the field spend more amount of energy than those urban workers working in offices. During the study process the authors have found that womenfolk work more than men in the agriculture field, therefore, the distinction was drawn between them regarding energy intake and spending. Since the urbanization and availability of transportation system the valley is receiving different types

of foods from the Assam and it is abundantly nourishing and supplying the ecological energy flow in the Apatani valley.

Aruna Gyati (2012) in her book, has elaborately discussed the modern political system and its impact on the traditional village councils of Apatani community in specific. She explained the participation of the people through self governance and participation through popular representative institutions. More or less the political changes and transformation are directly and indirectly affecting in the social, economic and cultural transition in the valley. The significant of the work is finding of the uniformity in political practices, broke isolation and brought integration among the people with the representative form of government.

Ashan Riddie (2004) illustrated the changing aspect of Himalayan tribal villages and villagers brought by external factors. The author specifically mentioned about the growth of administrative offices and development of urban center as external factors that have influences the youths and villagers to migrate towards the urban center. The reasons for migration was to seek opportunities, employment, escape from poverty, and avail the urban amenities and facilities. Living independently and finding own space for self development was also one of the issues to migrate towards town. The process of immigration has brought a different type of communities and form of interactions between local people and other communities. The author focuses on modern machinery system and changing attitude, and beliefs system of the people living in the town. Development of infrastructure is bringing all round changes in the valley. Connecting roads are laid down, telecommunications are provided to the people, electrification and supply of water in every household is made. The community is experiencing new types of social mobility and the emergence of new forms of socio-economic class groups within the

traditional social structure, and it is gradually changing with the forces of new agencies of urbanization.

Atul Goswami(1984) Analyzed the situation of the common state and environment from two dimensions of time and spaces. The discussion began with the idea of unexplored and non-intervention of the outside world and rise and influence of capitalism which he expressed as a nonavoidable agent in the modern world. Modern tribal society should be planned from socio-political context not from economic only to integrate into the mainstream. The tribal society has changed over a period due to exposures and benefits from national policies and programmes. The traditional egalitarian society is gradually converting into a stratified society due to the rise of private property, a division of labor based on the specialization of skills. There is an emergence of a social movement by seeing and learning the practices from the outside people. The Tribal is gradually learning the taste of the industrial products and there is a threat to tribal traditional products and their identity. With the fast-growing development and modernization, the institution of the tribe stands as invalid to functions.

B. Bhattacharya (2010) explained the three aspects of (i) Urbanization, as per its definition and variation. (ii) The level and growth of urbanization with references to socio-economic and environmental perspective of the third world (iii) intervention of the globalization in their transformation and impact of national policies in cities. It had also discussed urban sustainability keeping into consideration the role of globalization and transforming the feature of urban.

Bert F. Hoselitz (1962) extensively compared the economic development, the process and pattern of urbanization between western European and India especially. The essay tried to explain the process of urbanization bringing changes into the socioeconomic level from two

different regional blocks on the basis concerning economically, politically, culturally and historically distinct from each other. The author brings the idea that urbanization process is initiated due to the availability of facility and opportunities offered in the urban areas and later it expands its structure and scope of economic activities to the surrounding villages. His paper also touches on social mobility regarding employment and resources mobilization which is highly characterized in the more industrial and advanced city of both the regions advance cities.

BinoybrotRajkhowa (2016) works have concisely stated the role of urbanization for bringing the change in the economy of the region. Accordingly, the area is witnessing a dramatic movement of population from other parts of the states which have accelerated the rate urbanization and enhanced towards the contributing to the growth of the economy. With the growth of informal sectors and their activities, the city is having an enormous level of income. The increasing income of the city is not affecting the face of poverty. Many of the urban areas are still lacking the proper functioning of urban facilities.

Brij RajChauhan(1970) explained the correlation between the township and tribal population. The author explicitly explained the different features of the town, its surrounding areas and established the pattern of its relationship. He has indicated the process of urbanization with the establishment and growth of education centers, increase in literacy rate, an extension of modern medicines and health clinics, and the rise of formal organizations. An administrative development has brought the population to involve and participates in the modern democratic political system and civic roles. Growth of administration and town set up changed the mental aptitude of the tribal people they have started using modern equipment and tools instead of primitive and outdated tools and kits at household and agriculture level. The author has systematized the already existing data and presented the findings of inquiries from the variables

used for the study to understand and analyze the process of diffusion taking place and signifying the study of planning. Information was gathered and arranged from different schedules technique from both rural and urban. There were huge urban influences over the surrounding villages and it was taken into consideration as an extension of the urbanization process.

C.V.F.Haimendorf (1978) described the transition phase of Apatani tribal society from traditional to modern because of the establishment of administrative set up in the valley. The book was written after his second visits to the valley. The author has added four new objectives and contents from the previous work to understand the changing dimension in the valley over a period of decades. The book is written from the anthropological perspective based on descriptive research. It explained about the type of society that Apatani is and its changing aspects with the touch of modern. The study discovered the whole area and its recent transformation in environment, a new mode of settlement spatially which was not common, uses of nonlocal or factory made materials in the construction and household uses, agriculture and farming and land tenure system, an increase of shops to cater the needs of the growing population. He saw the administration as a new force of executing and implementing agency and migration from other states which have triggered the population growth, development and brought complexity in the valley. The discussion argued relayed about the prospect for the Apatani tribe by concerning with the present existing structures going in the society. Cultivable lands are being invaded for expansion of residential houses and commercial purposes. The local students, on the other hand, are influenced by religion-based education institution both in and outside the valley which has indirectly affected native religious practices and belief systems. Haimendorf commented, "*The future development of Apatani as a distinct group will largely depend on their ability to retain*

their tribal cohesion and their self-image as a dynamic community proud of having created by their efforts the most closely integrated economy among all the tribes of Arunachal Pradesh.”

D. Narain (1960) mentions the growth of urban areas in both the western and Asian continent and he understood from his analysis that the nature and characteristic of both the continents are entirely different and produce contrasting forms of social problems. The findings and discussion of the essay were based on the comparative study. The author emphasized that fast growing urban areas are causing the various kind of social problem due to the inflow of impoverished migrants from the rural sections and randomly spread their settlement area land without any proper planning. The city and its governing bodies became helpless to accommodate the large populous coming from different regions of the country by providing them the housing, sanitation, and employment. In the concluding part of the paper, the author declared that the social problems of the urban are due to over-urbanization process.

D.K. Bora, et al. (1997) has elaborately discussed the impact of urbanization process and its changing aspects on the traditional life of a tribal community of Arunachal Pradesh. The study has used a cross-sectional survey with the schedule, and interview method for collecting the data from different tribal families settled over a period of time in Daporijo town. The examination of the impact due to urbanization is illustrated and explained with various variables in the form of modern material objects used in their household and in everyday life, changing pattern of entertainment and amusement, housing type and design, and adoption of the culture traits or material from other communities in the process of prolong contact and interaction as a neighbors or occupation groups. The identification of the change happening in the town is measured from the external structural appearance and internal change of the individual in their attitude, behavior, beliefs, language, and practices.

The introduction of a modern political system gave political power to the community and weakening of the traditional village councils. The distribution of the power and authority was invariably possessed among the political leader, administrator, and Panchayat. The village council's authority was greatly reduced to socio-cultural. In this way, the power structure relationship of the tribal community was interfered by the urbanization. The modern democratic system of politics proved more egalitarian than the village council. There are an instance of changing the economic life of the community from traditional agriculture, hunting and fishing practices. People are diverted towards modern and education based occupation like working in administrative offices, running a business, doing contract works. These new types of economic practices proved better provision for securing social security, convenient in putting physical efforts, lucrative, broad scope for earning and occupational diversification and specialization. The society has witnessed some changes in their family structure and its functions. The joint family is decreasing gradually in the town area and has made its way to the nuclear family or nuclear. Demographic transition was taking place due to immigrants coming from different states and districts as a government servant, business, and laborer. Authors also described and explained the environmental problems taking places due to urbanization and developmental activities.

David Foot (1981) discusses the using of urban modeling technique for establishing research tools in assessing the possible repercussion of major damage in the land because of human activities. It technique provides various models for planning which can be applied in planning practices particularly about land use for urban – residential purpose, industrial and rational development and changes in the transport networking system. The discussion of the issue gives us the great importance to the empirical development of the models and the uses can

be examined from numerous operational models found functional in a different part of the world. It has also given the consistent reliable introductory level in the field of urban modeling and designs.

Kingsley Davis (1955) examined and illustrated the process of urban growth, and urbanization in the world. The discussion corresponds to a sociological study of the social change occurring owing to urbanization path now and then. According to the author's understanding, there are three phases to detect the origin of urbanization and its development-dealing with the division of labor, size of the city and phase-wise growth of the town. He made comparative studies of various civilizations to understand the origin of the urban and the growth of the urban area. The author was careful in handling the using of indexes like economic development, cultural activities, and migration from the rural areas as some of the main criteria is identified for marking the degree of urbanization happening in the world.

Kingsley Davis (1981) discusses the nature of rural and urban communities lucidly. The contents talked about the effects of the urban environment upon the individual and group. It also touches on how the impacts are different and vary with people migrating outside or inside the area. The urban area becomes a center of diffusion, generating new forms of association groups, development of new cultural traits, growth of new institution and organization based on various new associations comprising of different personality from different background. The author tends to focus more on the dynamics of the population to understand the dynamism of an urban society. The dynamism of the urban was found in the concentration of diverse population belonging to different race, cultures, religion, ethnic and language. The city is becoming a place for secularism and democracy. Most favorably, it creates a breeding ground for new biological and cultural hybrids. As it has brought people together from different part of the world because

they are heterogeneous and thus they are useful to one another. Because of specialization and division of labor dependency has increased in urban for different purposes, therefore the urban contacts have become segmental in nature. The author agreed that urban life is regulated by the impersonal relationship in order to find a social tolerance agency.

Debjani Roy (2009) has illustrated the relationship between Urban Planning and Ecological Balance. The discussion reveals the relationships tells that the urban growth and the impact of urbanization on ecological settings of a nonindustrial urban center. He discussed the nature of urbanization in bringing changes and development and also highlighted several maladies and problems for humankind and its environment due to urbanization. He observed that ecological balance is disturbed with the exploration and exploitation of abiotic and biotic component for expanding and intensifying the urban growth both in the form of population growth and physical set up. The purpose of the paper is to understand the impact of urbanization from the ecological perspectives and perceived sustainable urban planning for the emerging urban growth in the nonindustrial areas. At the end of the discussion, the author gave the suggestive measures for combating ecological disaster and balancing ecological settings.

S.C Dube (1990) discussed in one of the chapters regarding the urban and urbanization process in the Indian context. The section covers the concept of urbanization and the relation between rural and urban. The discussion reflects some of the nature of urbanization and its impact on bringing the change in social and personal life who has moved to town and cities. The author wrote the differences by comparing the larger towns. He observed that smaller towns have got lesser impact on their social institution and practices unlike the big town though both town areas are experiencing modernization. The discussion is taken from the sources of Historical

writings, Anthropology, Indological and Sociological Essays. The author concluded with suggestion and implementation of proper planning for urban, to eliminate the problems of the city environment.

Duncan Mcduie-Ra (2012) examined the situation of the tribal population of North East India both in Metro city of New Delhi and cities of North East India. The author saw the different tribes of the northeast population settled in the town developed the blending of their traditions and modernity and found juxtaposed and intertwined in the city life. The study area covered both the working population and students of the metro. He found that besides enculturation of modern lifestyle tribal people still followed their tribal way of life and they were not totally shifting away by urbanism as a way of life. The quality and nature of the sentiments of helping each other to own community in an impersonal world still exist and it is highly observed in helping own community members in search of getting a job and employment, finding rent house and community social gathering. Some of the communities have broken the taboo of food habits after they have migrated into town. The author observed that many of the tribal communities of northeast migrated towards metro due to both pull and push factors. Some states have a higher degree of insurgent activities and other political issues that pushed them to find a better life in metros and others are pulled due to the attention of educations.

ElaMukhopadhyay(1992) work is based on her participant observation and case study. The author appries about the growing militarization and civil administration as the factor for bringing the overall changes in the tribal society. The changes could be noticed from the urbanization processesand immigrants' movement into the districts during the pre statehood period of the state. The area of transformations was vividly found in forms of road and

communication, employment, monetization of the economy, participation and anticipation into new political socialization, the introduction of industrial units with the banking system, etc.

W.G Flanagan (2010) discussed the urban and urbanization with ecological context. Urban areas are shaped and mapped during the political and economic process which led to the formation of different cultures and experience. The book covers the major aspects of the community in the urban setting and their continuity of identity, the emergence of minority versus majority groups, various types of crime rate, poverty, and power relation. Description of urban areas and their unique distribution of population and resources are observed. Another significant analysis is made on the relationship between urban concentration and development and under-development. The entire description provides a rich historical account of urban and urbanization and helps to formulate theoretical view for industry and urban-development in general. The author attempted to provide an understanding of the changing urban forms and discussed the critical tendency in urban development.

Gideon Sjoberg (1955) examined the western American society that existed between preindustrial and industrial period. The features of each stage are distinguished and compared to understand. It has denied the theories put forward by Pirenne and Weber of their distinctiveness of claiming western industrial from pre-industrial-based cities. The author has put a holistic discussion, emphasizing on elements of urban and causes of urbanization on the lines of demography, ecology urban, the existence of social classes, changing pattern of family, economic organization, the dynamism of political institution and education as an indicator of urbanization even in the pre-industrial society. Gideon understood the urban as a point stand between folk society and industrial society.

M.S. Gore (1973) discussed the significant topic on social development and a strategy for the urbanization process in India and its growth pattern in that metro city and its effects on rural areas. Gore examined the urbanization process from the employment problem point. He observed that the migrants have created a village type in the urban itself. Their way of life didn't change; the slum is no better than. Moreover, it added more severe problems in cities. It has taxed the town with overpopulation with the demand for water, housing, electricity, and health leaving the city in a shortage of services. The author wanted to reveal the fact that rural migrants still holds and carries the rural traditions and nature in them though they live in urban areas. The Author concluded with the statement *“the net consequence of the absence of a positive attitude on the subject of the urbanization has been an unregulated imbalance growth in urban populating. It is without corresponding resource allocation for civic bodies and without the essential physical and social infrastructure to meet the needs of the growing population”*.

Gurudas Das (1995), explains the growth of induced urbanization and its impact upon the socio-economic structure of the tribal society of the state. The industrial growth as emerging avenues for the state located at district headquarters and capital plays an important role in urbanization and urban growth. The extensive growth of urbanization could have been better if the deficiency of secondary source materials in the state is adequate. The paper explains with his empirical work and the analysis of data that was collected through field survey, case study and interaction with people to explain the features of urbanization and industrialization. The growth of the township began with the establishment of government institutions and infrastructures. The author summarizes and concludes that urban settlements were not an outcome of the social process but rather an induced administrative effort. He established the associated factor of internal social dynamics, intrastate and interstate migration. He concluded with the

understanding that urban center was fragile because of the local economy was not related with upcoming industrialization rather it became the end of the center for consumerist culture to the people and surrounding rural areas. The urban area has become a facilitating ground for those population who have come from outside.

Hage Bida (2018) has discussed the whole aspects of traditional culture and beliefs system practice by the community people. The essay contains the details about the conventional system and beliefs, festivals of the community, family organization, life cycles and the role of shamans. The author has significantly noted the change in the belief system and its factors. The difference in religion and religious practices is strongly highlighted because of the Christian religion is recently coming into society. In reaction to Christianity, the traditional Doni Polo religion is undergoing transformational change and being institutionalized by having the structures, hymn books, weekly sermon, etc. The author also mentioned the role of modernization, education, and migration of the outside population as a mark of urbanization has integrated into the society.

Hiranmaya Sharma (2014) discussed the requirements for maintaining the sustainable development process at the various level keeping in consideration with social, economic, political and environmental status. The essay highlights the significance of common property resources found in the tribal practices which should be protected in the era of urbanization. The paper guides to understand the recent extent, trend, and pattern of urbanization and its consequences, found in the socio-economic setting in Arunachal Pradesh. The impact of urbanization is mostly found in the capital and district headquarters. The author has highlighted the huge impact of urbanization in the form of large dams, shifting of occupations from primary sector towards secondary and tertiary, development of infrastructure setups, etc. The

article lacked primary data since the whole study and analysis is based on secondary sources of data. The impact of urbanization on biodiversity of the state is understood from the points of population growth, roads and railway construction, and dam construction. The author has tried to find remedial measures to curb the menace of urbanization affecting the biodiversity in very clear points. The author concluded with the notes that urbanization is a continuous process for human betterment, but care should be taken into certain consideration by adopting the method of sustainable development.

Joseph ZamchinhainTungung and Subash (2016) discussed the urbanization process and its impact from the perspectives of both physical and spatial growth in the city. City growth and spread of urban sprawl with buildup areas, loss of more agricultural lands and other areas due to human settlement and activities in and around the city. The discussion left untouched on the social institutional level. The level of discussion was found on the role of the city influencing the people and changes in the area. The essay was mostly compiled from the secondary sources and statistical analysis from the census tabulation and data.

Louis Wirth (1964) explained exhaustively about the pattern of lifestyle in an urban area that is different from the rural. The essay discusses life in a city and how a person is in the transition stage change his lifestyle by living in an urban environment. Louis Wirth also tried to distinguish between urbanism and urbanization as two different concepts. Here, urbanism is a state of adopting different lifestyle and culture found in the town and city by people to match the environment and continue to exist in the system. Urbanization here it refers to the adoption of a different mode of life by the traditional bound community wholly or partially during the processor after the contacts and interaction with urban elements and culture. Adoption reflects

the impacts of urbanization. According to Wirth, "*the complex of traits which makes up the characteristic mode of life in the cities and urbanization which denotes the development and extension of these factors*". Urbanism and urbanization are two sides of a coin when it refers to their contributions and effects. Urbanism is determined by density, heterogeneity, and size while it is urbanization that brings these determining factors into the function. The author firmly believed that the impact of the city was found in promoting individualism, anonymity causing superficiality in maintaining a close social relationship and declares urban residents are transient.

M. N Srinivas (1974) in his writing of the industrialization and urbanization of rural areas extensively discussed the changes in the rural social structure due to the impact caused by urbanization and industrialization in rural India during the pre and post-independence period. The social change and mobility were understood and observed at a horizontal and vertical level. The author tends to disagree with the concept of rural as a self-sufficient community. He observed rural India as relatively isolated, and said is a self-sustaining entity. The essay broadly highlighted the external factors as the leading causes of change in Indian society. Changes came through the British policies by introducing modern machines and communication, and administration leading to rapid industrial growth and urbanization. The studies were conducted in three south Indian villages- Manhali, Rampura and Kumba Pettai(Tanjore). The author understood Brahmin caste group were mostly urbanized having modern outlook due to migration to the urban area and taking up different types of occupation in the urban areas and this happens due to an anti-Brahmin movement which led to Brahmin caste to move out from the villages.

M.A. Salam (2008) explains the changing tribal occupations with the introduction of the induced programme by the state machinery. Industrialization takes account with the change of the

working population from agriculture to non-agriculture work. Industrialization took the shape by creating local resources and local labor in the initial period associated with many link outlets for the finished products. The later period state had tremendous growth of small-scale and medium scale industries which has contributed to the growth of the middle class, changes in real income and mobility in the social hierarchy.

M.C. Behera (1995) explains how the state got urbanized both physical and growing demography pattern of the native. The author had used personal observation of the state urbanization process with comparative analysis from census reports and along with state government record sources and established standard facts and figures. The census of 1971 was consulted for urban amenities as a criterion for identifying and defining the meaning of urban as used by the state government for description. Female population constituted and contributed a major part of urban economic; it was taken as a variable into account for analyzing the urban economic development and urban growth. Purpose of the article is to the understanding of how local inhabitant participates in the process of urban growth and urbanization by moving towards town and changing their traditional occupation from primary to secondary and tertiary types when administrative centers were newly established in the different parts of the state. Along with urbanization the changes also came from the growth of education and occupational diversity. The author identified it as a significant impact indicator of urbanization and used development as an impact assessment of the urbanization process.

M.S.A. Rao (1974) broadly discussed the issues brought by the urban impact. The author tends to describe the changing economy in the village which is connected and influenced by large urban cities. The explanation of the essay is an assessment of the discussion and analysis

from his fieldwork. During the research, author has used different research tools for collecting the primary data. Beside primary data historical material helped to demarcate the data. The book also discussed the ecological and social structure found in the village level and their changing reality which is influenced by external forces. The approach to understanding the impact of urban is formulated under three levels of change coming into the village. The understanding of the impact was explained from variables of development of physical structures, erection of modern buildings, infrastructure development and benefits received by families comes from rural. The conceptual clearance of urbanization and social change was highlighted from the influx of immigrant workers coming into industrial town or administrative town is created which is further leading to demand of houses and markets; it becomes problematic in maintaining the relationship between the native resident and immigrant. Lastly, it explains how the growth of town and cities accounts for taking the entire villages during the process of urban growth.

Manish Sharma(2008) describes the evolution of urban growth and urbanization process since the state has received few district headquarters as urban status. It tells that the rate of urbanization in the nation is happening rapidly in comparison to other countries. The author produces the role of an administrative and political leader as factors that were responsible for creating the urban and urbanization phenomena in the country. The author concluded that the impact brought by urbanization in the tribal society is found in the institution of economic, political, languages, culture and pattern of settlement is enormous.

Manju Mohan, Subhan K. Pathan (2011) explain the explosion of populations and its unplanned land settlement and uses by the people is giving a signal for rapid intervention and reformulation of the urban development policies especially on land use and land coverage in Delhi areas. The authors have profoundly used the method and technique and collected the data

with the help of Indian Remote Sensing, topographic sheets, geometric correction to detect the change. Besides this, fieldwork was also conducted to understand the ground reality of the situation. The paper discussed the changing pattern of land uses, the periphery area being encroached and converting into urban regions thereby decreasing the natural areas of the city.

Mark J. McDonnell, Amy K. Hahs, and Jürgen H. Breuste (2009) extensively discussed the ecological understanding of the urban area. It focuses on the impact of growing cities and urbanspace and creating an imbalance between the natural and social atmosphere. The author has considered the city and its ecology as a functionally and structurally correlated to each other for maintaining the external and internal system. To understand the issue, it was further made a comparative study and try to approach in interdisciplinary science. The approach deals with various aspects to understand the city as a being which studies the variances in the physical environment, soils, fauna, and flora of the city. What the exceptional growth of cities and towns has attached with anonymous effects of global change has created an urgent need to increase the ecological understanding of human settlement. The concluding part of the discussion prefers the city as an urban system distinctively peculiar ecosystem.

Mitra Amitabh (1995) explains the evolution and growth of urban areas in the state. It is a holistic attempt to study the entire state's districts urban scenario from the sources being collected both empirical work and secondary data covered. The author presented some significant changes came along with the process of urbanization. The census study helped to understand the population growth and characteristic of urbanity. The entire discussion seems to be lacking the institutional aspects of impacts urbanizations except on economic development. The state has been shifting the mode of occupation to industrial and non agriculture organization.

The process of migration is accounted for the rapid urbanization both from rural areas and neighboring states.

Mitra Arup (1994) attempts to make an exploratory study. He elaborately discussed the issues and problem generally found in the process of urbanization and in the later period. The book examined the three basic issues involved; relating the employment structure and their economic activity in the absence of rapid industrialization of the workforce to estimate the working labor force in informal sector and poverty which could be understood and analyzed from the framework of supply-demand theory and understanding employment problem. The author focused on the conceptual framework for analyzing the issues and examining the pattern of urbanization-employment structure, the impact of migration towards urban. The secondary form of data is used to analyze the sizeable informal sector. At the concluding part, suggestions have been made to emphasize upon productive employment generation in the urban areas to prevent the issues of urban employment.

Nandhini. C. Singh (2013) discussed the issue regarding migrants coming from outside the state from various age strata, especially for domestic workers. The author had related the growth of urban with migrations as the indicator for the urbanization process. She interestingly had thrown some interesting fact about the urbanization in the state from an economical perspective. The economic structure of the tribal society is changing with exposure to the new concept of reorganization and the complex nature of the economy. The social consequences of urbanization by 'transformation of the tribal ethos, societies breaking up its own the age-old tradition and getting reshaped as a result of being exposed to the new culture and the waves of change in them'.

Narendra Pandey (2009) elaborately, wrote on a few aspects of urbanization and its impact on the tribes of the state. The article reveals the growth of the town and many important aspects of town and urbanization issues especially on the institution level and environmental impact. Lastly, he tried to focus on the issue of Adi tribe of Pasigaht and the details furnished are adequate to understand and examine the total impact of urbanization in tribal society. The author has used the method of census records to analysis and cross-examined the growth of urbanization.

Neelmani Jaysawal and Sudeshna Saha (2014) in their article, discussed the growing impact of urbanization in Indian society at large. The study shows the alarming growth of thousand million populations living in urban areas. The problems of urbanization are being explained as a manifestation of lopsided urbanization, urbanization with poor economic base and faulty urban planning without functional categories. The effects are being discussed from negative impacts of urbanization from various lines found in the form of physical structures components and environment.

Phillip Modi (2011) illustrates the concept and functioning of informal microfinance groups of the Apatani community in capital town which is utterly urban model of resource pooling and generating self-help group. This concept has been passed down from the Ziro valley into the capital of Apatani population. There are various microfinance groups in the urban area formed and organized by the friend circle, neighborhood, family, clan, etc. The formation of groups helps to strengthen the financial system, natural way of borrowing money and besides it keeps intact of the social relationship between friends, neighbors, and family, especially for urban dwellers. Sometimes amounts are distributed among the members collected from the interest rate, and this gives each financial security for the members. The discussion is based on the

fieldwork conducted within the twin capital of the Arunachal Pradesh. The studies show a new form of the economy system managed by the Apatani tribe in any part of the world completely different from the rural economic system.

Pragati Gihar (2003) discussed elements of the spatial and social structures existing in the urban cities of India. The book explains about understanding the theoretical aspect of spatial and social structure and its degree of uneven urbanization and consequences upon the socio-cultural life of people living in cities. The author has done intensive fieldworks with stratified random sampling method for getting the primary report and based the study design on both descriptive and explorative.

Praksh Rao (1983) has identified three distinct underlying processes of urbanization in India: i) Politico: the administrative process of urbanization, ii) Agro Based urbanization, iii) Polarized Industry: Mining Oriented Urbanization, iv) Multifunctional metropolitan oriented urbanization. Each of these processes has diversified functional characteristics stimulating large scale of intensive development. Urbanization added new dimensions to the development of the urban system in India. The discussion also speaks about the country's transformation and consequently innovation and modern elements entering into the social life through the process of urbanization. The entire discussion is based on both the pre and post-independence era.

Priyanka Koire (2014) has discussed the rapid growth and pattern of the urbanization process in North East India. The author has chosen the seven states of NE Region as an area of study. The author has used the method of Census town directory and elementary education for the collection of data and to understand the level, pattern, and degree of urbanization and migration, several ways such as degree-level assessment, hyper-urbanization concept, and pace

of urbanization has been used. The author also used the Z-score and composite index to showcase the facilities of the town. The objective and purpose of the study are to analyze and to examine the socio-economic factors affecting the urban and tempo of urbanization in the NE region. Here, it is reviewed purposefully and specifically focused more on the facts and details about Arunachal Pradesh state. The writer indicates about Arunachal Pradesh in a very progressive and advancement phase at the various level of degree of urbanization comparing to its neighboring states. The state has rapidly increased its exponential growth rate and urban growth rural-urban differential from 1981 to 2001. District wise urbanization, Subansiri district have more urban population than the national average, but there has been a slight decrease at a tempo of urbanization. But in the essay, the author did not touch on urbanization impact at various social, institutional levels and environmental dimensions. The author concludes with the argument that there is rapid urbanization process in the region and emerging urban-rural growth rate differential this could be met by enhancing the provision and scope for rural employment and facilities to prevent from mass migration, could danger the urban situation.

Pura Omo & Kamin Modi (2015) in their articles, have discussed on Ziro town and its new pattern of changing landscape due to the process of urbanization and how the natural setting is affecting the flow of tourists in the valley. The methodology for the study used is effective to get the desired results. Authors have used GIS software for mapping the area and geo-reference tools and conducted a field survey and consulted secondary sources for analyzing and compiling the data. The core area was to understand the impact of tourists' inflow but the study shows various forms of description of the advent of urbanization and its impact upon the society from the level of socio-economic, land use and ecological changes. It is also brought notice of social problems which has evolved with urban growth like crime, haphazard of building structures,

drinking water, health issues, etc. The paper also describes the physical structural changes of the valley especially the natural environment of the valley and its deteriorating process. The valley's agriculture land has been converted for urban settlement during the last span of 12 years with an increased number of populations. The authors have specified urbanization as a positive symptom which native locals have enjoyed the fruits of modernization and civic amenities and it is drawback sign for bringing the social problems.

Pura Tago (2005) elaborately discussed the political institution of an Apatani tribe and changing aspects of other social structure structures. It explains the introduction of the Panchayat Raj system and taking over the traditional village council- *Builyang*. The study also supported by showing the impact of the modern political system towards the traditional political structure. The shifting of power based from heredity to elected leaders and thereby secularization of the political institution for everybody. The discussion is also laid down on the changes came after post independent in the form of the rationalized administration. In due course, a further extension of the changes came seen from road and communication, education, and democratic institution. The author highlighted the Indo-China war of 1962 was an ice-breaking situation that has brought radical changes in the region itself. Since the defense and administration manpower started coming to the states changing the demographic structure of the state.

R. Arumugum(2005) had discussed the urbanization in ArunachalPradesh very concisely and briefly in end of the chapter but the impact of urbanization on hills tribes was not explained. The author deals only with trends and pattern of urbanization in Arunachal Pradesh. The description of population growth and town growthis taken from 1991 to 2001census records. The author also briefed about the economic aspects and social problems related to urbanization

occurring in the state in the recent period. In the concluding part, suggestions are given for government intervention in policy making for proper urban management and development.

R. Gopalakrishanan (1994) he discusses the distribution of the population of the state, the density of population, rural-urban composition, the migrants, pattern and process of urbanization. The explanations are supported by statistical census report from 1961 onwards. It gives us the information and knowledge about the beginning of urbanization in the state due to the ruling establishment of administration after 1961 depicting the physical transformation of the area and its people through transportation terminal points and commercial locations in the state. He argued in the concluding part that urbanization as a mechanism break the isolation and different ethnic and tribal diversity were accessible to each other by urban services.

R. Ramachandran (2012) gives the detail accounts of the urbanization process in India. The author touches every aspect to understand the urban growth and issues relating to defining the urbanization process, changes in the urban structure and constructing a theory based model to understand and explain the procedures. The book also attempted to understand the fundamental issues in framing a national urbanization policy. The author analyzed the urban development, relating to three dimensions aspects of historical, socio-economic and geographical settings and explains the interdependence of each city and its hinterlands.

R. Rukmani (1994) explains the process of urbanization into phase wise from 1901-1991 and its underlying socio-economic factors as dependent variables. Author used method of a decadal percentage to measure the change in urban population and urban-rural difference and growth rate to measures the growth of towns from class to class category. Impact of migration for the rapid growth of urbanization is discussed. While discussing factors for underlying the process of urbanization author highlighted the British policies of commercialization of

agriculture as an important landmark for the urbanization process leading to the development of the urban-transport town and market town infrastructure. The author finds that after such a long process of a pattern of urbanization saturation point has come about. The essay fails to discuss the impact of urbanization on the socio-cultural aspect while it focuses only on the physical growth of towns.

R.B Bhagat (2011) discussed the growth of the new urban town and declining of the natural growth of population. The study is based on two census decade analysis and it tends to study the growth and distribution of the people. A considerable number of people increased due to rural-urban migration and reclassification of urban areas by the census commission. The author tried to measure, the growth of cities and town from the level of urbanization which has increased from 27.7 % in 2001 to 31.3% in 2011. Henceforth, it was also found the symbolizing effects of economic growth that bring faster urbanization in the country like India. It was seen that new small town/cities were growing at a more rapid rate than those metros. These processes have further enhanced for providing urban infrastructure and civic facilities to the urban evolving town.

R.B Bhagat and Soumya Mohanty (2009) examined the role of economic reforms and emerging economic power growth after 1990s, which led to study the country's urbanization process with reference to regional inequality and the contribution of the components of urban growth, its natural increase, appearance of new towns, and the disposable contribution of rural to urban migration. According to the author, India's urban population lives in 35 metropolitan cities. It covers 28 percent of India's population. Authors have recorded the rate of urban population growth slowed down during the 1990s despite the increased rate of rural to urban

migration due to a significant decline in a natural increase in urban areas. This has led to a noticeable slowdown in the pace of India's urbanization.

R.D.Mckenzie(1924) has broadly examined the human settlement in an urban area and how they are influenced and modified. It was built around the significant location and the processes of invasion and succession taking place as a part of the natural ecosystem. The underlying theory of the idea of the essay was to explain the human community from the ecological perspectives of the presentation of the different levels of interactions in the city by scientific analysis. Communities are formed and dissolved through competition and accommodation and with the change of environment. Mckenzie classified communities into four groups from the standpoint of ecology- primary, secondary, industrial town and economic base. The articles assumed the growth and decline of a community determined by ecological factors. The community tends to increase its size and structure by the introduction of new variables to the existing situation. The city is built by transport and communication and continuous flow of migration creating a successive stage for growth and structural changes. Community's social organization is affected by ecological changes. Here, migration as a phenomenon has caused for expansion of community and on the other hand brought danger for disorganization in the community when the community is no longer in position to sustain with the given growing population, poor resource, and economic base. Emerging innovation brings changes in the community structure which could change the previous one and change the face of the population.

R.P. Bhattacharjee(2003) briefly discussed the urbanization process in Arunachal Pradesh. He used census reports and practical experience to theorize the urbanization process, he too agreed the fact that state's urbanization was born out from the socio-political reason rather than an economic event. The state reorganization of the state and district is the result of urban

growth in the country. There is a positive relationship between district growth and urbanization. He concluded the discussion by citing the unplanned growth of structures around the urban areas which directly hamper and destroy the natural environment causing many natural disasters and public problems.

R.P.Singh, R.Padaria and Prem Lata Singh (1992) explained the positive and negative aspects of urbanization from the perspective of development and changes in structural-functional level in India. The discussion is based on the changes in the function of the social institution-family, economic and land relation. The establishment of a factory and their made products challenge the local products, artisans and narrowing down the scope for rural laborers. Due to the impact of the challenges migration takes place and there is the likelihood of environmental degradation and threat to the natural environment due to massive immigration into the city or towns. On the other hand, both urbanization and industry provide better facilities and opportunity. The end of the discussion, the authors have decided to note that there are dire consequences of urbanization and industrialization for rural instead opted for sustainable development or Gandhian approach of development.

Radhakamal Mukherjee (1932) explained the ecological outlook in Sociology and has ignited the knowledge of understanding the urban community with the perspective outlook of an ecological framework. It expresses the origin and growth and expenses of area and community by process of selection and competition with its species. Human adopts the new pattern of life, culture; diet, etc with the new environment to which they are adapted. There is a significant change of population with a change in occupation, income, and philosophy over the prevalent with a new gradation of the population, building upon old structure indicating a newly changed ecology exhibiting the dynamic social relation of community life.

Rakesh Mohan (2009) discussed extensively upon the condition and consequences that he had observed in urban areas due to population immigration towards it. The author deliberately emphasizes and examines the pattern of growing urbanization in India and elaborated the issues emerging in the form of employment, development, migration, sanitation, poverty, governance and housing. The article also concerns about policies to be framed for the emerging urban issues and monitoring the municipal systems. The discussion of the paper is also based on the statistical reports conducted by the author itself, talking about the growth in the metropolitan area and urbanization concluded with the increase and decrease in the economy. He ended the discussion with the remarks that urban infrastructures should be well maintained and enormous investment to sustain the growing demands of the modern urban economy.

Bhubneswar Ram (2014) explain how the areas in agriculture land are converted for urban-based use and get transformed into different sections of the unique spatial area for commercial use. Generally, the property is utilized and turned to provide the demands of demographic growth, expansions of economy and investment of the metros. Therefore nonmetro area is transformed into four kinds of patterns of transformation consisting of Morphology of the city, community settlement, occupation differential and placement of industry and business center. It suggests that the dynamism of nonmetro economies indicate that land transformation may be driven by the expansion of existing economies or evolution of new economic activities.

Robert E. Park (1936) explained the intriguing relationship between environment and human being. The orientation of the paper is based on the three principal of competition, dominance, and succession describing the nature of growth of the urban community and changing values of moral and physical aspects. According to author human ecology is organized from two levels of biotic and cultural based on competition rather than consensus. Human

ecology talks about the management of equilibrium between environment and culture and movement of transition from relatively stable order to another.

Robert Ridell (2004) deals with practical advancement in planning and its application to ecological sustainability. The content of the book represents as the model for acquiring the sustainable form of the environment facing the rigorous development process on the way. The author is trying to explain and has discussed the urban and regional planning in the context of environmental sustainability for the large agglomeration of land settlement in an urban area. The end note of the book also explained about the orientation towards the elaborate discussion about planning capitalism, development, cultural and environmental preservation.

S.K.Shukla (1992) extensively disclosed many of the significant aspects of transition in rural areas due to the impact of urbanization and modernization. This essay is based on the decade documents and its measurement. The core of the study is made to outline the rural tensions due to development and progress in the form of modern elements transforming both at a physical and societal level. The dimensions level used for analysis were the achievements of technology, economic growth, education, legislature safeguard and information found at an extensive and intensive level. Modern elements have significantly modified the rural life at the level of income and use of technology. It was also found that migration has left the rural population only with women, child and old person, therefore, social interaction was less. Due to this community participation and organization was not dynamic. Secondly, political participation broadens the scope of the people to participate in the democratic process and another hand it tension created for self-gratification. Because of the development process, rural people engaged in changing their way of life and the availability of jobs it creates an attitude of unconcern, indifference, and self-interest.

S.S Mishra and R.P Athoparia (1995) profoundly wrote about the impact of urbanization from the historical point of view. It consists context of both pre and post independence of the tribal community. It expresses how institutions have changed due to the contact of other culture which is more superior. This led to the opening of new vistas and modernization to the isolated tribal community. The authorexplains some of the religious changes of the tribe by converting themselves into other religion, due to frequent contact with nonlocal. There are many positive changes in the economy due to the transformation from agrarian sector to industrial tertiary sector and equipping the youth for a better future. At the end of the discussion, the author observed that impact is profound in the tribal area. There are correlations between literacy and urbanization and economic development. The tribal is gradually delinking from the traditional practices in large urban areas than small urban areas.

Samuel S. Quarcoopome (1998) concluded that tribal society is brought under urbanization due to many external factors as a source of change which the concept was unknown to them. It is one of the most influential single agents for bringing the transformation of society with the consequence of the interplay of conflict, continuity, and change of the culture. The author also highlighted that after the urbanization process the professional and income group tend to select their choice of settlement into different areas and these suburban creates a new form of social relationship within the family and neighbors and the role of women change with their position and status.

Sivaramakrishnan, Kundu, and B.N. Singh (2005) deal with the process of urbanization and analyze the trends are changing from time to time. This discusses and the issue about rural to urban migration, the rise of small and medium towns is the recent phenomenon of urbanization in India. The study and examination are compiled from the record study of 17 states

of India. Statistical census records with analysis were used to identify the pattern of urbanization and urban growth in India. It is also used micro level perspectives to understand district level of development and growth pattern and its trends.

Sovani N.V (1966) profoundly discussed the urbanization and its process in the Indian country into seven papers. It is one of the original pieces of work done on urbanization. Author generalized the meaning of urbanization from two angle, migration towards urban area due to push factor and the other over urbanization in underdeveloped countries due to industrial growth. The author seems to stress more on the concept of over-urbanization and its explanation that there is a coefficient correlation between industrialization and urbanization and more or less the variables are frequently found in the underdeveloped countries. At the end part, the author deals with a household income that determines the factor for migration into the urban area. It was surprising to find that the author mentioned the migrants from the rural getting easily absorbed in any sectors as a worker and those unemployed return back to their villages. The discussion was based on the data collected in a socio-economic survey of the cities of India.

Staurt Blackburn (2008) examines and studied in a broad approach to uncover the profile of isolated Himalayan tribe of Apatani. The book covered significant aspects of oral tradition a localized feature used in ceremonial occasions. These practices have set as a unique cultural identity for Apatani distinguishing themselves from any other tribal groups. The Author vividly discussed the history; culture and society in a very detail way. The book touches the first contact and interaction between the Apatani and outsiders. The author also talks about the growing number of presence of Christianity into the valley, and impact of waves found in indigenous religion reform, and revivalist preservation movement speaks to both the fragility and resilience of the Apatani in the context of dramatic change. The documentation has been

made from his eight years of fieldwork, and it is a comparative folklore research base across the extended Himalayas.

T.C.Das (1962) has elaborately explained the tribal culture in experiencing the changes under the pressure of internal and external forces. It also set attempts to measure its nature and extent which has occurred in a few important social traits of some selected tribes of eastern India including Northeastern Region. The process of changes is through introduction of modern culture-system media, telegraphs, post office, education, mines, market, factories and author also observed the changing aspects from the agrarian mode of production to surplus and commercial purpose production. Other's religion factor also played an important role in bringing profound changes to abandon their totemic culture and belief. The emergence of social differentiation started to take place by coming in contact with the Hindus. Through the method of conversion, absorption imposition, imitation an individual slowly internalized the ways of life of other culture.

TakheKani (1993) discussed the changing aspects of Apa Tani tribe with the modernization phase. The book signifies more on the traditional mode of life rather than a modern way of life. It has touched every aspect of the tribal way of life and changing content by the process of the region getting political status and introducing the rational administrative system in the midst of traditional and customized society. TakheKani has pointed out by analyzing the census report that the population of some villages has decreased in the numbers and he considered it as mass migration from 1981 onwards towards Hapoli and Old Ziro town. Then the newly growing town had 5778 and 796 population strength. The migration took places more with the nearer villages to town.

Tamo Mibang (1994) has extensively discussed the changing patterns of life of Arunachal Pradesh especially on the Siang valley tribe of East Siang district. The study is based on a decadal study on the socio cultural change. The work is being consulted with the help of both primary and secondary sources. The book gives us a pictorial kind of description on the traditional canvas molding with the inevitable agency of modernization by undergoing dramatic changes. It discusses the continuity of the age old heritage and managed to integrate with the fast changing economy and society.

Tarun KumarBahadur (2009) has broadly divided the subject into a different level of discussion about the process of urbanization of the land and communities from the Northeast India perspectives. He tried to explain the concept of urbanization from different dimensions taking place in different states of Northeast India on the background of their socio-historical setup. The author directly deals with the recent and emerging impacts of urbanization in the region from the economic, migration, growth of new urban governing bodies and industrial growth and emerging slum areas. Significantly the author discusses the issue of the detribalization process due to rapid urbanization in the region. The discussion is followed by urbanization and its impacts on environmental impact. The work is assisted by the regular intervention of census data for display of statistical records of decades. The Author has generalized the issue of northeast tribal life. He found that cosmopolitanism is becoming an essential part of new ethnic identity in the northeast, especially in urban areas. They have learned it from other countries and used them in their place. To illustrate this, the Korean wave is a crucial element of bringing the cosmopolitan identity of Northeast India, especially among the youths. People maintain a dual process of the cultural enclosure as well as openness to modernization and globalization. It can be found in their love and reputation for language,

fashion, and music. Most of the call centers would like to recruit NE people because of their language accent, and adaptability.

Tumter Lollen (2015) discusses the urbanization process taking place in Arunachal Pradesh. The author has attempted to explain the urbanization patterns and their process from different social perspectives. The works are majorly indicating the impacts found from economic and social perspectives by citing the conceptual framework. The entire work is supported by statistical and census data to mark the degree that there is an ongoing structural change in the state since the urbanization process has been taking places. The concluding part of the article talked about the side effects of the urbanization which should be deal properly by the state government.

Varrier Elwin (1957) illustrated the philosophy, nature and culture of the tribal society before and after contacts with foreign people. Elwin, specifically, didn't mention particularly about the process of urbanization and urban growth taking place and the effects on the tribal society at large. But he has mentioned the coming of foreign elements in the form of the administrative process, developmental projects and coming of public servants symbolizing the beginning and growth of urbanization and modernization taking place into the tribal society and creating an impact upon the traditional and customs heritage of the people of Arunachal Pradesh at large. The impacts that had been taken are found in the form of detribalization, an extension of central laws into the state, pouring of missionaries in both religious and social reform work, how monetary economy altered the traditional structure and development of administration.

Victor D Souza (1975) explains the process of undergoing in the urbanization and urbanizing of the scheduled caste population in metro cities of India. The author had used hypotheses testing method to verify the variables that had caused urbanization and becoming

urbanism in the city. The process of taking those principles was proved applicable for applying to other parts of India. During the study, the author has understood the complexity of the city being based on specialization and differentiation of the work, highly division of work and occupational structure that was used as a measuring scale of urban influences.

Victor S D' Souza (2001) has related the urbanization as a perspective for social and historical analysis in developing societies of the world. The discussion is made in references to the urbanization process from historical and modern perspectives. The author categorically explained and mentioned about the increasing rate of population and changing economic condition brought by urbanization. Urbanization as a process has evolved two stages of positive and negative oriented with that of development activities. The positive aspect of the impact of urbanization in an urban area provides the essential elements and facilities and creating a symbiotic relationship between rural and urban. A negative point of urbanization is the variation of population composition haphazardly from a different socio-economic background which is a cause for social tension in the urban area. Here urbanization is used as a perspective for social and historical analysis. The author suggested that the consequences of urbanization can be observed when the villages are transformed into towns in which the dominant groups are replaced by another emergent group giving rise to another population composition of a different background.

Virginia Xaxa (1999) begins with the defining issues of the tribe and their distinct identity from the caste groups of India. The article impinges upon issues found in the tribal society and changing nature of their world with the help of constitutional provision and contacts with other caste groups in India. The author understood and agreed the tribal are transforming themselves by changing their language, religion, and occupations and assimilating into larger

caste-based society and have accepted the ethos of caste structure and it got penetrate within their system. The transformation process of tribes is related to the concept of Sanskritization. The essay has generalized the process of transition of tribal society. It didn't say about the area specifically whether it is occurring in urban or rural areas. But the author did indirectly mention that assimilating of the group into a larger society which stands out for migration into the larger urban area.

Winfield Gerald F (1973) has tried to explain the relationship between urbanization and agriculture in the united states of America. The paper explains to us the changing pattern and conversion of agricultural farmland, used for urban uses, and significantly found that there are little effects on the crop productions. The author explains the role of urbanization as taking over the management of farm activities of rural areas by supplying those materials, tools, energy, and chemical fertilizers from the city because of the urban population, directly and indirectly, depending on the food supply. The findings reveal that urbanization has increased the rate of solid waste and chemical products both in cities and on agriculture farm. The conclusion was drawn and suggestions are made with future planning to challenge the problems caused by overpopulation, wasteful land conversion and restoring the significance of the organic matter.

CHAPTER III

RESEARCH SETTING

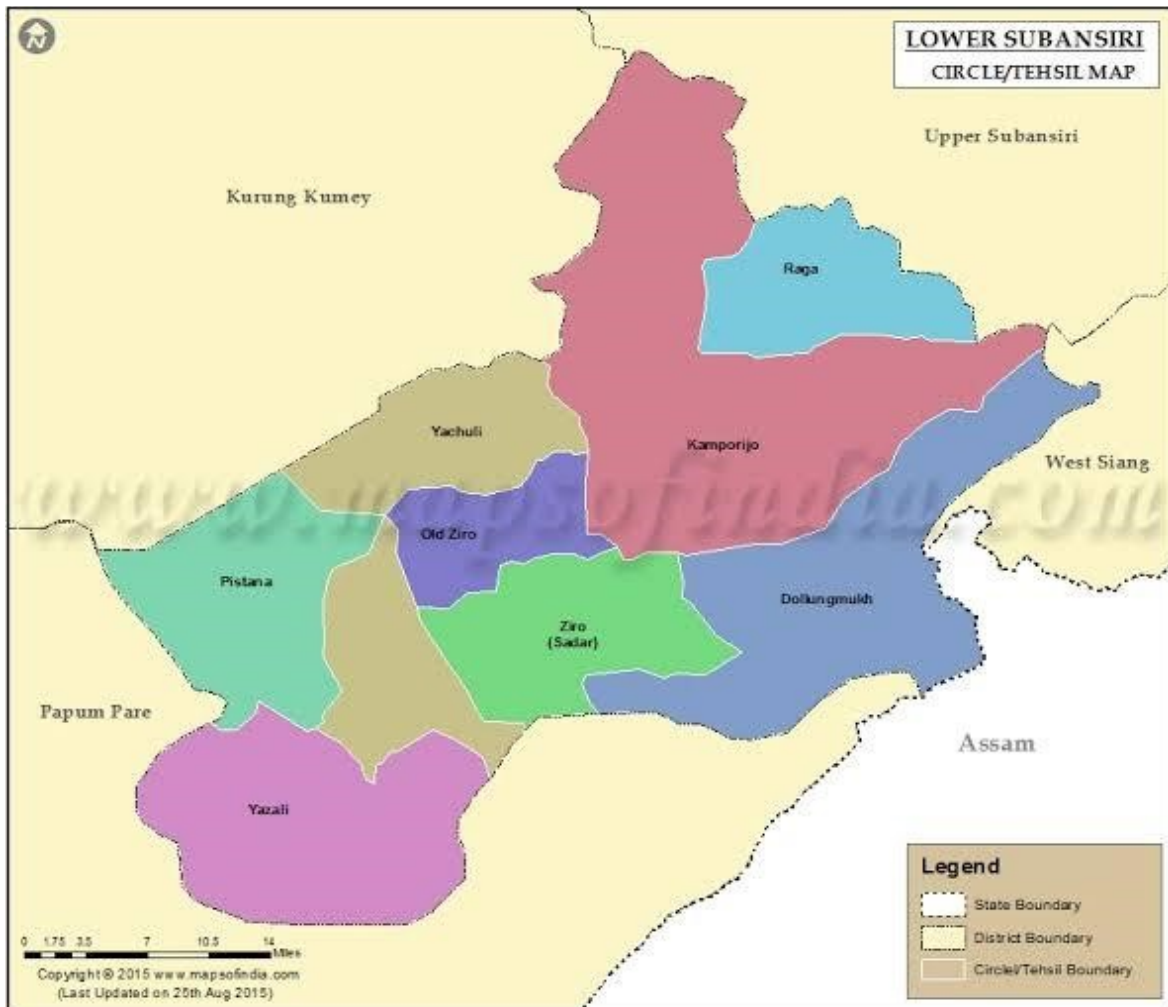
3.1 Historical account of the origin of the Lower Subansiri District:

Earlier the district was known as Subansiri Frontier Division situated to the east of Kameng Frontier division and bounded by Tibet in the North, Assam valley in the south and Siang District in the east (Chakravarty, 1995). The Subansiri area was newly created as a district out of transition period of independent India in 1948. Initially, the functions of district headquarter were performing from North Lakhimpur district of Assam and shifted to Kimin in 1950 the border area lying adjacent to Assam state. In the year 1952, Tribal Administration issued an order to shift the district headquarters to the interior area of the district to closely monitor and administer the people. After that, Ziro became the new headquarter of Subansiri District in 24th March 1952 (Kani, 2008). According to the historical background, the nomenclature 'Subansiri' is named after Subansiri River which is one of the main rivers of the district flowing southwards to meet the mighty Brahmaputra River. The Subansiri River is a tributary of Tsangpo River coming from the Tibet, cutting through and entering from the northern part of the district and draining towards south giving away to many rivulets origin.

The North East Frontier Tract covered the entire western section of Arunachal Pradesh. By 1919 the tract was named as Balipara frontier tract. Later in 1954, the Subansiri area was rechristened as Subansiri Frontier division by bifurcating from the Balipara Frontier Tract, and having its headquartering at Ziro. The Ministry of Home Affairs took away the charge from External Ministry in 1965, it was known as the Subansiri District. Ziro remain headquarter and administrative center for undivided Subansiri district till it got divided into different new districts of Upper Subansiri in 13th May 1980, Papumpare District in 22nd September 1992, Kurung

Kumey in 16th April 2001 and latest Kamle District an official notification made in assembly dated on October 19th 2017.

Figure 3.1: Fragmented size map of Lower Subansiri District



Sources: www.mapsofindia.com

The Lower Subansiri district is separated into 3 Sub-division viz. Ziro, Raga, and Yachuli with eight official circles as per 2011. Now the Raga circle is out from the Lower Subansiri administration system since 2017.

Table -3.1: The name of circles of 2001 census vis-à-vis 2011

Census 2001 Census		Census 2011 Census	
Sl. No.	Name of Circles	Sl. No.	Name of Circles
1.	Ziro (district HQ)	1.	Ziro (district HQ)
2.	Yachuli	2.	Old Ziro
3.	Pistana	3.	Yachuli
4.	Dollungrje	4.	Yazali
5.	Kamporijo	5.	Kamporijo
6.	Raga	6.	Dolling
		7.	Dolluongmukh
		8.	Raga

Source: District Statistical Handbook of Lower Subansiri.

Creation of new districts and its headquarter has given the opportunities to increase the number of urban share in the state. It is significant to discuss the emergence of the district and its contribution to state formation. The Northeast Frontier Areas Regulation of 1954 divided the Balipara Frontier Tract into Kameng and Subansiri Frontier Divisions with Bomdila and Ziro as respective headquarters. With the act of 1954, the tract came to be known as the North East Frontier Agency. The North Eastern Areas (Re-Organization) Bill, 1971 changed the designation

of the North East Frontier Agency that of Arunachal Pradesh in 1972 with its union territory status and the first democratic process of Panchayat Raj Institution electoral representation.

The district is divided into two subdivisions; Ziro and Yachuli recently Raga division formed its own Kamle district. Now, Ziro sub-division comprised of two circle- Ziro and Old Ziro. Yachuli sub-division has got three circles- Yachuli, Pistana, and Yazali. The district is covered by two Community Development (CD) blocks namely Ziro-I and Ziro-II.

Table -3.2: Highlights of the profile of Lower Subansiri Districts

Sl.No.	Items	Units	Particular
1.	Geographical area		3460 (approx)
2.	Sub-divisions		3
3.	Circles		3
4.	Blocks		3
5.	Villages		536
6.	Town		1
7.	Number of households		
	i.	Total	15249
		Rural	12245
		Urban	3004
8.	Population as per 2011 census		
A.	i.	Total population	83030
		Male	41843
		Female	41187
B.	i.	Total rural population	70224
		Male	35460
		Female	34764
C.	i.	Total urban population	12806
		Male	6383
		Female	6423
D.	Population excluding(0-6(years of age		
	i.	Total	72710
		Male	36595
		Female	36115

E.		Density of population	Person per Sq.Km	24 (approx)
F.		Sex ratio	Rural	980
			Urban	1006
G.		Decennial growth rate	2001-2011	(+) 49%
H.		Total literate population	Male	29470
			Female	24587

Source: Abstraction from the statistical handbook of lower Subansiri district 2013-2014

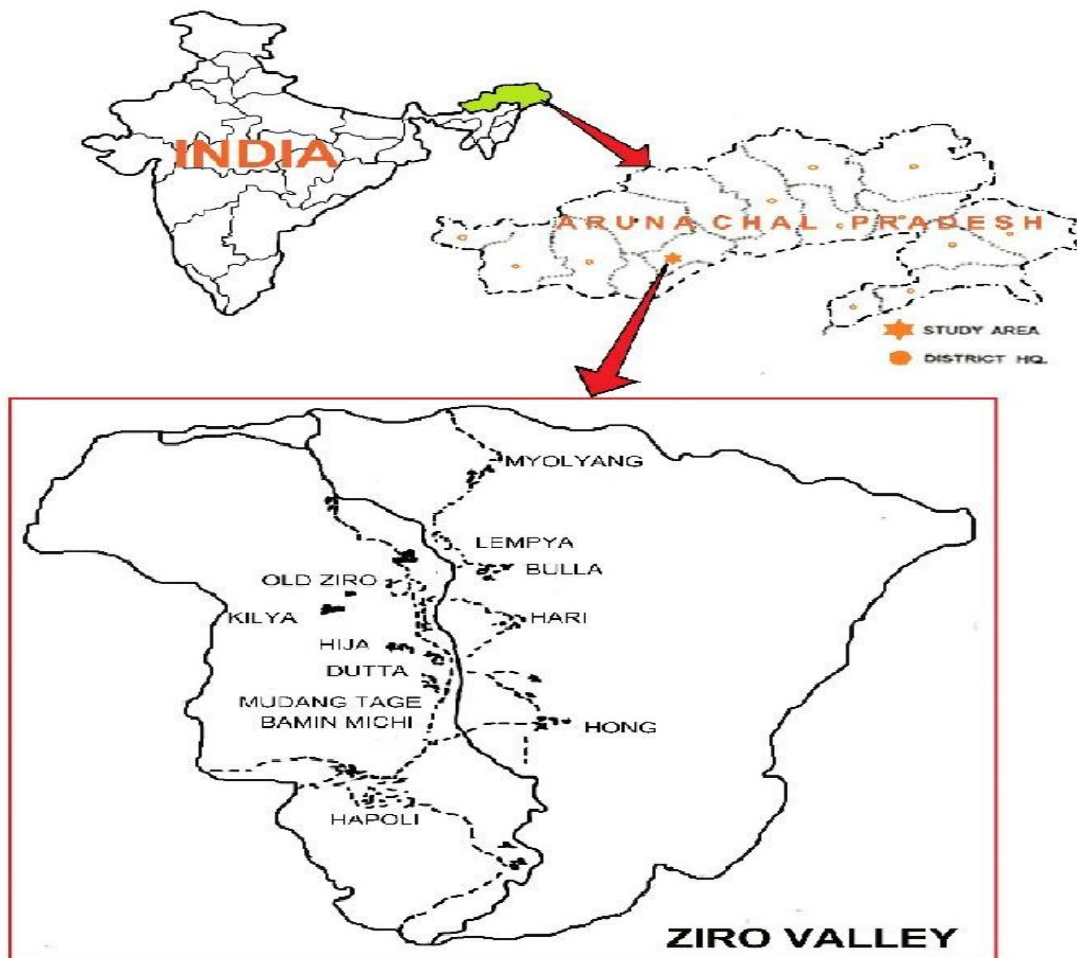
3.2. Profile of the Apatani people and the valley:

The existence of the Apatani tribe was first recorded in the administrative report of 1882-83. H.M. Crowe mentioned the tribe in 1889-90 (Tada, 2013). Several names were associated with the community of the valley as *Ankas*, *Onka Miri*, *Apa Tanag*, *Tanii/Tanw*. The name Apatani becomes popular when it was used by Haimendorf in 1944-45 (Kani, 2012). The word Apatani derived from two meaning. The *Apa* is an honorary name for affection and regards, *Tani* means the race of human being. The name *Tani* comes from the earliest ancestor named Abotani. Apatani person does not address himself/herself as an Apatani to another Apatani rather it is told as *Tanw/Tanii*. But the community people address Apatani to other people. Acclamation of the title is paradox among the educated and scholars of the tribe. Apatani tribe is one of the 26 major tribes of Arunachal Pradesh. They belong to Mongoloid stock and speak Tibeto-Burman language. The Physical structure is characterized by medium stature in height; the color of the skin is light brown in skin color (Goswami, 1990). This tribe occupies a compact area watered by the river *Kali* and drain into *Panior*. It is being recognized for good cultivators, traders and hard working and peace loving tribe.

The Apatani population of each village has their own origin of migration - *Bulla*, *Hija*, *Dutta*, *Mudang* –*Tage*, *Bamin-Michi*, *Hari* and *Hong*, locally Hong is pronounced as *Hangu* by

community people because of administrative records it is now popularly known as Hong rather than *Hangu*. Each village has its different routes of origin and migration from the Northern part of the state known as *Upyo Supung* of *Nyime* which is believed to be at southern Tibet. The facts are foretold every time from the oral history in the form of *Miji-Migung*, and chanting in rituals. Other than the main seven villages there are several growths of hamlets off shooting from the main villages and built around and near the urban area because of administration and urbanization (Kani, 1996).

Figure -3.2: Map of Apatani valley



Sources: www.researchgate.net

The seven major villages are connected with the district highway; all the villages are connected with proper roads. Ziro town is an administrative town established in 1952, it is an area comprising of several colonies which the researcher have divided into three sample area for empirical research.

The Ziro valley is located at an altitude above 1572 meters. The Apatani tribe is confined to an upland valley located in the outer Himalaya of the North East Frontier of India at 27° 35" North, and Longitude 93° 50" East. The valley is surrounded by mountain ranges and its midst there lies the plain areas which are spread over 32 sqkm of the cultivable regions (Izzard, 1951), the rest is covered with hills and mountains suitable for growing horticulture and plantation purpose. The Ziro valley receives the annual rainfall from 2,240mm – 2,910 mm with the maximum precipitation occurring during June and July.

The Ziro valley is located in the center of the lower Subansiri district of Arunachal Pradesh. The 2001 census records show, the total population of Apatani tribes as about 26,650 with a density of 948 peoplesqkm. According to Stuart, Blackburn, 2014, there is total of more than 40000 Apatani populations. The majority of the population of Ziro valley is Apatani tribe and they are spread over large seven major villages and two towns.

The total urban population comprises of 12806 and density of the district population is 24 approx (DSHB, 2012). The Ziro town population represents a variety of population both schedule tribe and nontribal who has come from those seven significant villages and other parts of the Indian states. Growing Population and urban growth in the valley have altered the pattern of land use with the passage of time. The land once deserted is brought under various uses and the neighboring jungle is being cleared for human settlement and for setting up a businessenterprise, infrastructure, and civic facilities. The population dynamism is found in the

valley since the set up of an administrative center. Along with population dynamics, free space is occupied and encroached for private construction and uses.

The district population of the town and rural has varied over the decades. Given below are the figures available from the 1981 – 2011 censuses for Subansiri district.

Table - 3.3: Distribution of the population of Lower Subansiri District

Census year	Total population	Urban	Rural	Density
2011	83030	12806	70224	24
2001	55726	12384	43342	16
1991	83167	8862	74305	24
1981	--	--	--	--

Source: Census (1981, 1991, 2001, & 2011), Government of India.

Table -3.4: Distribution of Apatani population in theZiro valley

Sl.No.	Name of the circle	Population	Schedule Tribe(ST)	Others
1.	Ziro(Sadar)	22747	17742	5005
	Urban	12806	8537	4265
	Rural	9941	9305	736
2.	Old Ziro	19605	18177	1428

Source: District Statistical Handbook, 2014-15.

Ziro is an administrative center for lower Subansiri District, and it became the urban center that was declared in 1991 census report. The Ziro town gives a cosmopolitan and modern outlook, because of the infrastructures building and urban amenities within the town. The people

are attracted from other communities for the scenic beauty and climate and local inhabitants commute to avail the facility and get the necessary items from the market. The town provides the services to the people in various forms of repairing work, medical checkup both in private and public clinic centers, education and coaching, banking services, and enjoying the delicacy of restaurants and hotels. Administratively all the paper works are done and process in the town itself. The neighboring tribe also come to the town for office purpose and other services.

Table -3.5: Distribution of Government education institution in Lower Subansiri

Education Institution	District	Ziro valley
Primary	160	42
Middle	78	19
secondary school	11	5
Higher secondary school	6	2
College	1	0
Non-Formal Education	195	127

Sources: District Statistical Hand Book, 2013-14

Table -3.6: Distribution of private education institutions in Lower Subansiri District

Education Institution	District	Ziro valley
Primary	22	11
Middle	17	10
secondary school	10	8
Higher school	5	3
College	2	2

Sources: District Statistical Hand Book, 2013-14

The health of an individual is one of the social indicators for understanding the range of progress and development in any region of the world. With the passage of fast-growing urbanization and modernization, the health of society and individual is often associated with diminishing health issues. The changing forms of modern healthcare institution are transforming the traditional practices to the medical sciences in the Ziro valley. Gradually the inhabitants are changing their attitude and mentality by realizing the importance of modern medicine and medical practices. The inhabitants are sensitized by the government health policies from time to time through radio announcement, loudspeaker announcement, and message delivery by the Panchayat bodies.

Table -3.7: The status of the medical and public health of the District and Ziro valley

Sl. No.		Dist. Hospital	Community Health Centre (CHC)	Primary Health Centre (PHC)	Sub Center	TB Center	Homeo/Ayur vedic
1.	District	1	2	9	36	1	1/3
2.	Ziro	1	1	0	6	1	1/1

Source: District Statistical Handbook, 2013-14

The trends of population growth in the valley are increasing rapidly; it is evident from the table given below. Both the natural growth and migration population helps the valley to have a diversified population. The following table is going to highlight the trends of the population dynamic of the Apatani.

Table - 3.8: Population & density (people/km²) of Ziro valley and Arunachal Pradesh

Year	Apatani population		Arunachal Pradesh	
	population	Density	Density	population
1961	10,793	415	4	336,558
1971	12,888	496	6	468511
1981	16,580	638	8	631839
1991	22,526	866	10	864558
2001	24,650	948	13	1091117
2011	27,576	1029	17	1383727

Source: Census of India (1961, 1971, 1981, 1991 & 2001), Government of India.

Ziro valley is tiny bowl-shaped geographically located in the heart of Lower Subansiri district of Arunachal Pradesh. It is one of those beautiful and serene places on earth. Several foreign visitors have visited the area and made remarks on the aesthetic beauty of Ziro valley – McCabe (1896 AD) praised the valley as, ‘the sight is one I shall never forget, as we emerged on magnificent PLATEAU our heart warmed at sight of primrose, violet, wild currant, strawberries, and raspberries’ (Chakravarty, 1995.). Mrs. U.C. Bower and her husband who stood and surveyed Ziro PLATEAU from 1947-48 expressed ‘valley is serene as Italian Garden...’. They have enormously written about the Apatani people and its society that can be found in their field notes and many government official records. Many documents are based on anthropological and historical accounts of those days which were written during their stay and visits. They have encountered the tribe and have recorded many significant ethnographic notes about the tribe

which is the only historical and empirical records or data stood to be a valid and reliable source to refer to the past of this tribe. Since the tribe does not possess the art of writing and scripting one has to depend on oral sources which can found through folklore, folktales, dialogue, and chanting, etc.

Apatani people are settled in a scenic valley surrounded by hills and miles of stretched arable plain land used for wet-rice agriculture farming and gardening. There lies a long elongate of a stream flowing across the valley locally known as *Kiile'* it is a perennial source of water supplying to a large vast of paddy fields in the valley. The *kiile* (river) is originated from many sources of smalls' streams coming from the adjoining forest of the valley. It is a lifeline for the local people, their agriculture growth, productions, and sustenance. The name of the river is given differently by each village as it passes through their field area. Till today the cadastral survey of the area cover is not done yet. Valley lies 1564 ft above sea level. The valley is beautifully spread over vast plain area cover with rice filed. Apatani Tribe practices a unique agriculture system came with the introduction of fish as a modern technique of economic-farming recently. Apatani Tribes produces different types of rice, vegetables, and other cereal crops both in winter and summer. Till then it was used for self-consumption and barter purposes. During the agriculture field work both the young and old, male and female involved with activities. The work was based on the division of labor and land relation. Besides farming, male members engaged in maintenance of bamboo grooves and clan forests.

Ziro valley is surrounded with lush green forest and chains of hills. The ecological settings of the valley with its natural resources have provided and managed for the source for surviving the civilization. The depletion and replenishing of resources cycles take place normally

in the community. The plant saplings are planted by individual family members at their bamboo groves, garden, and forest. The community also gives gratitude offerings to the forest deities for the protection and providing the resources. Therefore the Apatani community is considered themselves as an environmentalist.

The Apatani community has the method of calculations for different articles as per their shape and size. Every person learned the art of counting and numbering which becomes the beginning of the arithmetic education in the society. Measurement of time is based on the positions of the sun in the early days. There are 13 months in Apatani community calendar. Each month name corresponds to the agriculture and cultivation activities, and behavior and movements of birds, animal, and vegetation (Rana, 2015). The year has been divided into two season – *Daru* (summer) and *Dorii* (winter). The Ziro valley is cover with lush green during the summer season and dries up during the winter. Seasonally, the winter season is longer than summer which began at the end of October and lasts till the March month. The temperature drops to a minus degree, and it is extremely cold; it experiences frost and snowfall. Most of the Apatani's socio-religious occasion is observed and celebrated during the winter session. Mostly summer season is accompanied by the rain, and sunshine people are fully engaged with agriculture activities and stock up the products for the winter session. Tribal way life in the valley revolves around agriculture activities, forest and social organization, for such the monthly calendar is made to understand the period and time of the significant moment. The months are even named after the particular activities performed in that specific season by the native it symbolizes when the plowing will start with the planting of a sapling from the nursery bed to field till the end of harvesting period even after harvesting agriculture activities goes on. Most of the agriculture works are performed by women. Wet areas are used for paddy cum fish culture

while a dry upland area is used for other crops like millets, maize, and other kitchen garden vegetables. Beyond the end of paddy fields lies bamboo groves and forest which is looked after and managed by the men folks. Likewise agriculture these bamboo groves and forest need timely observation and maintenance, and it is performed in every year.

The valley of Ziro comes under subtropical vegetation forest fills with evergreen and dense forest. Different species of flora and fauna are found in the valley forest. There are highly valuable trees used by the local for commercial and house making materials. Ziro valley is covered with a blanket of blue pine trees and bamboo plants. According to legend the bamboo and pine tree species were brought by the Apatani tribe and grown after they have settled, they are easily grown and found backyards of the every village houses. Both the plants are raised in private land and clan land. It is an essential part of religion and wealth for the family.

Most of the bamboo gardens are privately owned there are few plots that are jointly owned by more than two lineages or a family, but it is not clan ownership land. It lies a few distances from the village and adjacent to the forest land. The boundaries and fences are well demarcated and maintain throughout the years by an individual family. There is a private forest near the vicinity of the village and clan forest are located a far distance. The clan forest is rarely visited for a reason and occasion observed during *Myoko* celebration to pay offerings to god and goddesses of the jungle. At that moment, boundary areas are checked and appropriately repaired from any kind of encroachment and intrusion.

Apatani tribe is scientific at their approach matter relating to the environment and ecological management. Apatani has this moral and ethics of planting saplings after cutting down the trees especially pine tree in every planting season to compensate the loss of trees and

stocked the timber that is going to be used and product resources for the future generation. That's the right reason the valley looks greenery all the seasons. It is generally found that there is a reciprocal relationship between environment and human when it comes to use and replenish system in the community culture. It has got both religious sanctity and sustainable ideology. The community maintains the sanctity of forest and agriculture land, and it is evident from appeasement made during *Murung, Myoko* and *Dree festival*.

3.3. Language:

Apatani belongs to Mongoloid race, and they speak Tibeto-Burmese languages. There are seven main villages, each village speaks the same style, but there are some words used/ spoken in a different tune. Apatani is a tonal language (Rana, 2014). Apatani languages do not have their original script in written form but still qualifies to be leveled as language (Ommo, 2015) *Bulla, Hija, Dutta, and Mudang Tage* speak a common dialect whereas the people of *Hari and Hong* each speak a different dialect (Pandey & Tripathy, 1997). Apatani language is a tonal language (Rana, 2014). The words used during the chanting and ritual and *Mijun Migung* is not as per spoken in daily lives it is entirely different and not easily learned by all the people. Many NGOs have taken steps to preserve and enriched the languages at the school level as third languages and in the form of mass media.

3.4. Demography:

The Apatani population is concentrated in a stretch of Ziro town, Old Ziro and seven main villages- *Bulla, Hija, Dutta, Mudang –Tage, Bamin-Michi, Hari* and *Hong*. Because of urbanization many of the families have migrated to the capital city and in many parts of the

state's districts headquarters basically for economic purposes. As per the census 2011, the total Apatani population is 43,777 living in every part of the world out of which Male 21,254 and female 22,523. Sex ratio is 1059.71; the total tribal, urban population is 15242, male 7103 representing 33.42% and female 8139 representing 36.14%. Urban sex ratio is 1145.85. The percentage of Apatani living in an urban is 34.82 %, contrasting to urban phenomena rural population comprises of 28,535 of the total population; the sex ratio in the rural area is 1016. The percentage of Apatani living in rural is 65.18%. The figure given in table 2.9 shows the Apatani population of Ziro valley only.

Table - 3.9: Total population and Schedule Tribe Population of Ziro town and Old Ziro

Sl. No	Name of Circle	Person	Male	Female
1.	Lower Subansiri District	72911	35803	37108
1.	Ziro(Sadar)	17742	8433	9309
2.	Old Ziro	18177	9057	9120

Source: District Statistical Handbook, 2013-14

3.5. Political system :

Apatanis had been practicing a clan-based representative system by a single family from a particular clan which is known as *Builyang*. It is hereditary, and they all act as a village council of Apatani tribe, bestow with the extent of judicial powers and arbitrarily rules over the village and its people. The *Builyang* is always represented by a malemember there is no place for women. The traditional village councils seldom act as arbitaray and patriarchal in nature, it was not a representative and democratic in system. Other than *Builyang* the institution of *Gorra* also

plays an important role both in the social and religious platform. The consent of *Gorraais* referred to in some of the socio-religious practices of the community. People had to depend and confide on the knowledge they justify as clan heads during their proceeding in a case. The Panchayat Raj system was introduced in the year 1967 comprising of three-tier structure- village level, the Anchalat the block level and Zilla at the district level. The Panchayat Raj system has replaced the role of Village Council. The first ever democratic election took place in the year 1979 to elect for a member of Legislative Assembly.

3.6. Religion and Festivals:

The Apatani is an animistic and naturalistic tribe; they have their own unique way of traditional forms of rituals observation, rites, and worships. They worship Sun (*Ayo Danyi*) and Moon (*Ato Polo*) God as their main deity. Here Sun is referred to as a female and Moon as a male contrasting to Hindu religion depiction. *Donyi Polo* is considered to be the supreme. Besides *Donyi Polo* there are several other *Uei* (deities and spirits) being recognized by the Apatani community having effective power that can be harmful and beneficial for individual or family. Both malevolent and benevolent spirits exist in the religious practices of the Apatani community. Therefore each ritual and rites are performed separately for different spirits whether it is benevolent and malevolent. The spirits demands are identified through different sign found in abnormal or unnatural growth and occurrence of plants, organism, sickness, etc. One has to perform the ceremony to get rid of the omen; it is generally performed by inviting the priest and shaman of the clan or village. The process began by chanting and sacrifice of the animal and bird liver is examined by the priest himself and by experience and knowledgeable person. The liver foretells the demand and suggestion of the spirits.

The philosophy of the religion of the Apatani is based on the principle of functional interactive among the spirits, nature and human being; which contributes the needs of human and human in return must take care and give thanks in the form of offerings in every occasion and celebration. *Murung* and *Myoko* are main socio-religious occasion observed in the month of December-January and March. *Murung* is an individual celebration of the family joined by both consanguine and affine kin members and community also join the occasion. The purpose of the *Murung* celebration can have a different meaning regarding health issues, fertility, abnormal growth within the household and self-gratification. The occasion takes place after several testimonials observation from the egg and chicken liver omen and consultation by the elders and shamans of the village.

Myoko festival is a socio-religious practice, and it is celebrated in the month of March. It is one of the most extended celebrations observed among the festivals of Apatani it lasts for almost a month. According to legend and folktales tales, *Myoko* celebration has originated from the time of *Abotani*. Mainly it was ritualized to appease the spirits of both malevolent and benevolent deities during the time of *Myoko* celebration by *Abotani*. Today, *Myoko* festival is oriented into three groups of village performing alternately in each year in rotation wise. *Myoko* is organised into several stages of celebration representing the philosophy of being religious and social in nature. It is celebrated for well being of a relationship between human and spirits by various offerings and healthy progress of human and its environment. Each family has got their *Buhnii Ajing* (*Myoko* ceremonial friends) either from parents or by solemnizing himself according to his choice. Ceremonial friends are basically chosen from other villages or non-*Myoko* participant villages. At the end of *Myoko* festival, ceremonial friends are invited for lunch within the social gathering many things are shared between them and jolly competition in

Mijun –Mijung to make the environment into a celebration mood. The gifts are given at the end of the occasion. These same rites are again performed by the next villages whose turn is about to. Other than being a ceremonial friend during *Myoko* they have a social obligation to give helping hand during the time of family crisis.

Dree is another form of celebration; it is agriculture oriented and religiously performed in July month. Previously the Dree was performed separately by each village and by 1979 it was made into Pan Apatani celebration. The celebration could be pulled into one by the efforts of some educated and enlightened youths by learning from other cultural groups. Now, the Dree festival has become one of the ideal occasion for the local and other people as well. It is the only type of celebration the entire Apatani tribe celebrates it as one community. The process of worship is observed in every part of the world by any Apatani souls present.

Categorically speaking *Myoko, Subu and Murung* is generally held in March and later is celebrated in the month of the December-January month. It is a special socio-religious celebration. *Myoko* is celebrated in a cyclical pattern and arranged into three groups – *Takum-Putu, Tiini-Diibo, and Niich Niiti*. The purpose of *Myoko* is for universal peace and prosperity, healthy progression, and growth of humanity by establishing the cordial relationship between human and spiritual elements (Rana, 2104). *Subu-Murungis* usually performed by an individual family and joined by clan members and other kin relatives. The participation of the kin is part of the tradition during the process and time of celebration they participate and take it as a traditional-legal position to receive the sacrificed animal parts and gifts from the performer. Each part of an animal signifies the special types of kinship relationship with the couple who is performing *Subu-Murung*. The occasion takes about one month for the completion. Dree is

another rich and popular festival oriented with agriculture. Dree celebration becomes a mass celebration at the end of the 1970s through the effort made by the educated youth of Apatani, before the celebration was confined to each village only. It is celebrated and observed for better cropping and bumper harvest and protection from crops damages and saves from pest and insects and natural calamities like the hailstone, intense rains, and wind. The sanctity of the celebration is observed with laid customs and tradition and concern given by the *Gorra*'sof the village. Any breach may cause penalty and grievances of the person or village for committing such a mistake.

3.7. Social organization:

The traditional social structure of Apatani is built upon a strong kinship system and looked after by a political unit village council '*Bulyang*.' McIver defined society as 'society is web of relationship' Apatani community are well knitted and organized into the lines of web of social relationship relied heavily on clan and kinship that it becomes difficult to ignore and isolate the relationship in social life activities both at urban and rural areas and each person are somehow and somewhere related to each other in terms of matrilineal or patrilineal relationship. Therefore each addresses and identified by the lines of kinship relations during the meeting and interactions. The network of the relationship of the social organization is guided by norms, customs, and tradition that have been followed by the generation. This networking of Social relationship plays a vital role relatively with the economic, political and social administration of the community. It is found in the forms of the social division known by the name *Gyuchi*(patrician) and *Gyutii* (commoner) - *Miti and Miira* (Haimendorf, 1944). The interaction between two social classes is strictly prohibited on a certain occasion. Few distinctions of the division of the community on this connotation are generally found during the observation of

marriages, regarding rituals or consumption of sacrifice pig blood and during the *Myoko* of 'Aalyi Lalo'. In the average period, the division doesn't play any significant role. It is kind of the form of stratification based on socio religious-rites components.

Agriculture laborers belonging to young age group called '*Patang*' are found in every Apatani villages. It consists of the same age group, and typically these groups belong to young teenagers. Each *Patang* members work in turn wise at their parents' field and even they are hired by other people and get their wages as per a day in kind or cash. *Patang* is a unique practice of agriculture system in Apatani society. It is a socio-economic organization. *Patang* can be of a collection of equal gender or mixture of male and female.

The Apatani society maintains the patrilineal, patriarchal, and patrilocal system. Unlike the neighboring tribe, the Apatani family follows the nuclear family system. Apatani family is nuclear in form and joint in functions. The married couple moved away from father house after marriage and established their separate household. The family consists of both husband and wife with their unmarried children. Apatani tribe is endogamous regarding selecting mate within the village or tribe marriages and exogenous for clan marriages. The eldest male in the family inherits power and ancestral property. Eldest son gets the lion share in the properties. Daughter gets all the movable property like beads, ornaments, bangles which are used during the marriage rituals and performing *Subu Murung* and *Myoko* celebrations. Inter-marriage between separate social classes was prohibited and tabooed, and it was also applied to other tribes too. Apatani tribe does not encourage a person to get spouses from other communities and caste could be religious problem or status management problem.

The physical features of the Apatani are unique from other tribes they have a fair complexion, dark brown appearance. It is medium in height with prominent cheekbones, slanted eyes signifying Mongoloid stock. Linguistically it belongs to Tibeto-Chinese-Burmese. Previously this tribe practiced tattooing of faces and piercing of nose and ear as identity and beauty. Male had 'T' shape Tattoo just below lower lip till chin while women had one line began from forehead to tip of the nose and four lines below lower lips and chin. This tradition is completely abolished way back in the 1970s by *Apatani Youth Association* (AYA). Apatani women are independent and hold a respectable position in society. There are certain places where women are not given status like village council, *Gorras*, and priest. But, women are allowed to participate in doing rituals rites and ceremony during the festivals and occasion. The symbols make easily identify of Apatani from any other tribes and groups. The women wore curved wooden nose and ears plug and strings of different beads around the neck for beautification. Apatani women are hardworking and busy engaging themselves from dawn to dusk both at household choir, paddy fields, and gardens.

The rural Apatani tribal-led a homogenous and straightforward economic life by working in their agriculture field, as a worker in others, tenant, and sharecroppers. The economy of the valley depends upon wet rice cultivations and dry farming on a few stretches of land. Both the man and women work in the agriculture field, but women take the most of the responsible right from the beginning till the end of agriculture activities. The man folk occupation is oriented with hunting, jungle work, bamboo grove maintenance, wood cutting, basket making, etc. Fish cum paddy agriculture is a new modern input introduced by the administrators for viable and sustainable development and for earning scope.

3.8. A Bird's eye view of urbanization in the Ziro valley:

Since the inception and establishment of district headquarter in 1952 and granting the status of census town in 1991, the area has been undergoing a rapid urbanization process. According to the 2011 census, there are more than 12806 (6383 males and 6423 females) urban populations in Ziro town. Literate urban population is 9729 representing 75.97% of the total population. The male percentage is 52.35%, and women are 47.65%. The sex ratio of the urban area has recorded 1006 females per 1000 males. The total composition of the tribal population in the urban area is 8537, 3891 males and 4646 female. The urban area constitutes total main workers to the total population is 35.28 percent (67% males and 53.6% females), marginal workers are 9 % (46% males and 54% females), and total non-workers is recorded at 63.6% (46.38% males and 53.6% females). The overall main household industry increased to 39 in number in 2011. Decadal variation of the population is found highest in Ziro CD block with 71.44%. Ziro town recorded urban population of 8419 in 1991.

Urbanization is a recent phenomenon which was brought by the administrative agency after India independence. Ziro valley is a small area with few stretches of a plainfield and surrounded by the neighboring Nyishi tribe. It is observable that the rapid physical transformation of the area has come within a few decades. Many hills and forest are being cut down for human benefits and comfort. The quality of the environment is degrading and decaying year after year due to the urbanization process and increasing numbers of vehicles in the valley. There is no proper urban authority or local body to plan for the town, no management of waste products, and there is a haphazard of building constructions, traffic parking, and public utilities. Improper sanitation and drainage are one of the issue and problem being faced by the citizens. The notion of the flood was only seen and heard from the cases of Assam only but due to the

widespread use of consumable waste materials that choke the drainage gives a flooding effect during the summer season it is seen in urban colonies. Water scarcity is one of the priority aspects looked by the authority and public in the urban area.

The first touch of modernization began in the year 1946-1949 by introducing a few shopping centers and schools in the valley. Political transition followed with the transfer of power from traditional to the modern bureaucratic system used by the state. Economically, people emphasized and preferred a white color job, trade and commerce, and contractors. Infrastructure like advancing landing ground for defense airways is already there at old Ziro without civilian terminals to support, there is a constant supply of electricity from the NEEPCO Hydro project, Yazali gives a supporting status for power which could be an excellent opportunity to established both light and heavy industry and factory, immense tourists flow into the valley provides an avenues for employment to educated unemployed youths. Ziro urban areas come under class IV town and sharing 5.52 total urban population of a state. It is significant to note that the urban female population of 6423 is larger than the male population of 6383. The overall population density is 24 per sq.km larger than state density population count of 17 per sq. Km. The district has got 3 CD blocks out of these three Ziro I is only urban other are still considered as a rural area. As urbanization goes on the division and diversification of occupation is getting more complex and heterogeneous in the valley, statistical figures with facts are given below the table.

Table -3.10: The classification of Main workers of Lower Subansiri District and Urban (Ziro)

Sl.No.	Category	Total
1.	Total Main workers of Lower Subansiri District	
	Urban(Ziro)	4518
	a) Male	3034
	b) Female	1484
2.	Total Main Cultivators of Lower Subansiri District	9552
	Urban(Ziro)	164
	a) Male	62
	b) Female	102
3.	Total Main Agriculture Laborers of Lower Subansiri District	826
	Urban (Ziro)	26
	a) Male	19
	b) Female	7
4.	Total Main household Industry of Lower Subansiri District	244
	Urban (Ziro)	39
	a) Male	27
	b) Female	12
5.	Total Main other workers of Lower Subansiri District	8226
	Urban (Ziro)	3821
	a) Male	2748
	b) Female	1073
6.	Total Marginal Workers of Lower Subansiri District	7533
	Urban (Ziro)	468
	a) Male	178
	b) Female	290
7.	Total Non-workers of Lower Subansiri District	52828
	Urban(Ziro)	8288
	a) Male	3349
	b) Female	4939

Source: Statistical Handbook of Lower Subansiri District 2013-14.

3.9. Theoretical framework:

Burgess (1925) has treated urban area concerning its physical expansion and differentiation in space. Each zone occupying a different category of values respectively and ecologically and socially the zones differ from each other. According to Burgess Theory, the growth of urban takes places into concentric model displaying areas of dissimilarity and

heterogeneity. Again Homer Hoyt (1939), stated that urban space is a valuable space and for identifying segregation of people of different occupation and group, dwelling in the scarce urban area, which is unequal, distributed along with facilities and resources. Louis Wirth (1938) further emphasized the urbanization process on the lines of complexity brought by three elements of size, density, and heterogeneity is not found in the rural. The degree and intensity of modernity and sophistication developed from these three features of urban. While exploring the process of urbanization in Ziro we have decided to observe the process with the help of urban sociologist stated above.

Going through the history and geography of the Ziro valley, it is drawn that various factors have been influencing the process of urbanization of the valley from two angles- old Ziro town and new Ziro town (Hapoli). These two urban spaces act as independent variables in bringing social changes and spatial change in the village level and within the urban structures. The theoretical framework to understand the urbanization process in the Apatani valley is being explained in the following argument. Firstly, it is understood that urbanization is brought about by administrative development in the Ziro valley which led to the establishment of many new colonies, service centers, recreation center, markets, and private residential. This establishment led to the formation of different zones of urban Ziro valley. We can classify the zones of Ziro urban valley into – Business center zone, residential area, and natural areas.

The forms of modern elements and contacts with different culture people into the valley for the first time have created a new way of life. Urbanization proceeds rapidly with the substantial growth of creating different units of administrative offices in the valley furthering the inflow of working population with the growth of offices in the valley. To support and sustain the

growing population in the district headquarter, different kind of public utilities and urban amenities were set up- schools, medical center, police station, shops, banks, staff quarters, electricity, supply water, ration supply, petrol depot and many opened to facilitate the growing administrative center which took its shape and size quite differently from the traditional society which has existed.

Now, there are two forms of a social organization representing in the form of urban and rural society. With this, there are change and continuity of the society's practices and traditions, the nexus between rural and urban is well connected there is no diabolic in the relationship. It can be presumed that the elements of culture both material and non-material brought by urbanization which was new to the society are now being used and adopted by the society as an urban trait. Therefore the old Ziro and New Ziro (Hapoli) act as a percolating system for introducing urban characteristics to their neighboring seven main villages effectively.

To understand the urbanization and its impact on the Apatani society by these two urban centers towards seven main villages of Apatani tribe an Interaction Ecology framework could be fit to explain the urbanization phenomena. According to Interaction or human ecology perspective, it helps us to grasp the kind of changes taking place in traditional society via the introduction of modern elements and explain how the natives are reacting and responding to the changes and challenges they face and molded by this new phenomena call urbanization into their simple and isolated culture. Ecological perspective enlightens us how native people interact and create a social atmosphere in the new urban community. Here, individuals are creating a self-space in a new place and learn the way of life of that particular environment which helps to survive, assimilate, and compete and invasion. In the process of urbanization, human interaction

will take place at a different level from culture to environmental aspect. Contradictions between traditions and modernity will occur frequently. This different process leads to change in the system and adoption of new structures. For instance, the changing and interaction could be found at occupational, philosophy and ideology, attitude and behavior, education, religion, health, family and marriage etc in the Apatani society. Urbanization is an outcome of human interactions and change brought about by administrative development in the valley for more than a decade. Urbanism as a way of life has become a new pattern of living. As urbanization is a new process of dimension acting as the agent of change and causing modification directly or indirectly at the various societal levels for the people of the valley. These urban elements of new traits had shape and modified the existing structures of the urban areas and surrounding villages.

The physical outlay of the valley could be described under the following discussion. There are two urban areas at both ends of the valley, and the distance between is about 8 km. All the seven main villages lie along with the two urban areas, and all are well connected with motorable roads. It is easy to commute between the town center and villages and village to village. The influence and impact of urban in each village are prominent and profound because of its proximity to urban areas. Hapoli town is a larger urban area and representing a more complex and heterogeneous nature than Old Ziro town. The village *Hangu*, *Bamin-Michi*, is closer to urban Hapoli and villages – *Mudang- Tage*, *Dutta*, *Hari*, *Hija*, and *Bulla* are closer to Old Ziro town. The degree and intensity of the urban impact are different from village to village and proximity as a factor is becoming new elements in supporting the causes. The Urban is 'pull' factor, but in Apatani society, rural elements still play a significant role in keeping the constant relationship with rural and urban dwellers. Family or persons may not stay in the village, but they have to perform their traditional rituals and ceremony at their respective village

house from where their forefather's generation properties stood in a year or three years during *Myoko celebration, Murung*, marriage ceremony and when any important occasion arises. Still rural has got many social significant elements and it is impossible to ignore and do away with it. Therefore, individuals maintain an association with rural. In the following page, a schematic diagram is provided to follow the area under study i.e Ziro.

Figure -3.3 Sketch diagram of Ziro (Hapoli) Town and its colonies/ sectors

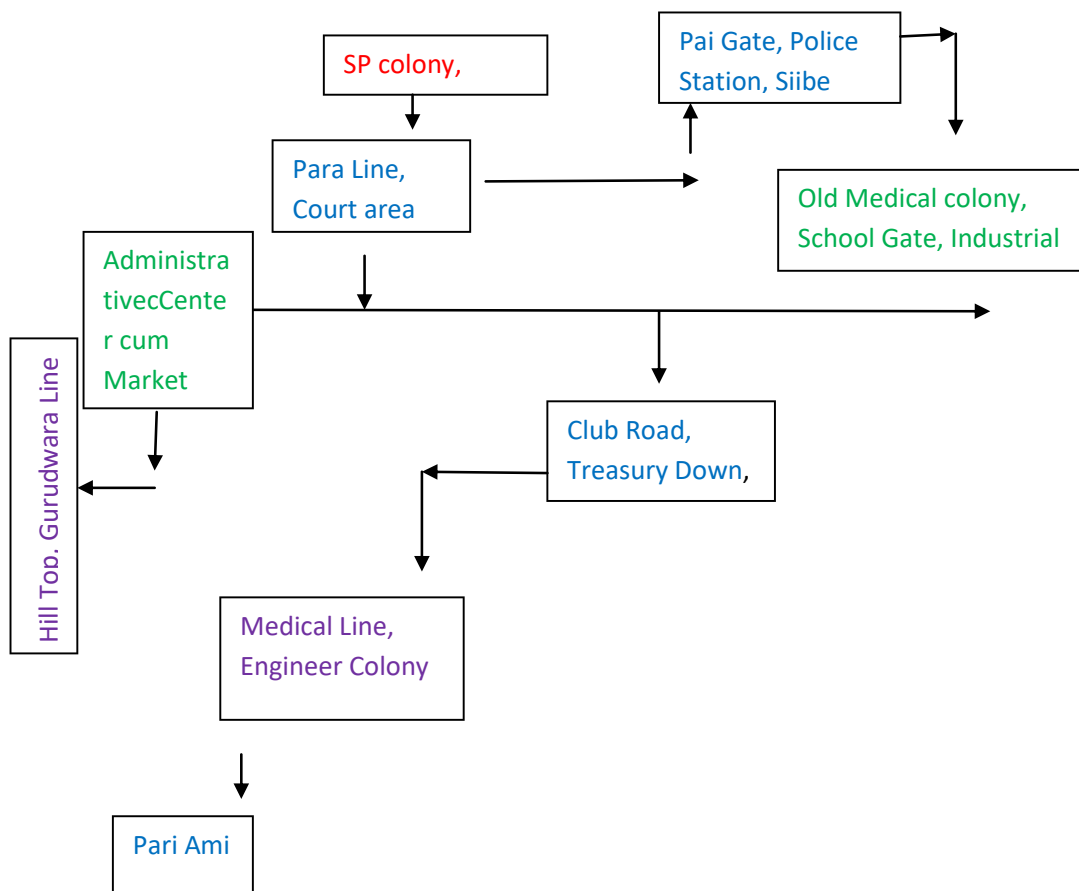
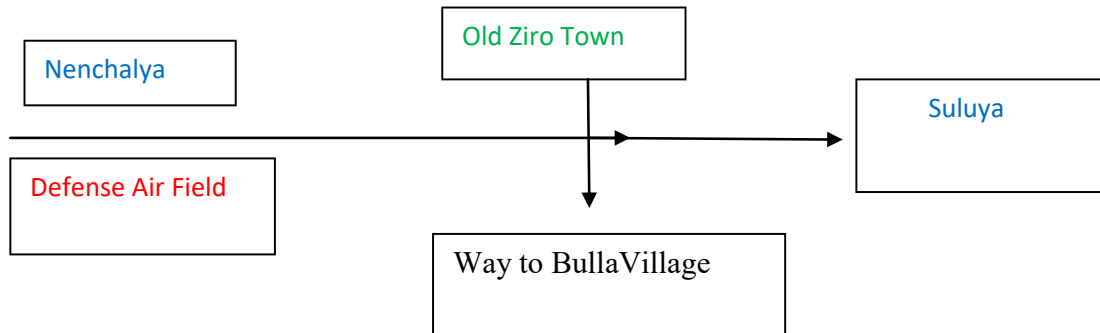


Figure -3.4: Sketch diagram of Old Ziro Town and its colonies/ sectors



CHAPTER -IV SOCIO-ECONOMIC AND DEMOGRAPHIC PROFILE OF THE RESPONDENTS

4.1. Description of respondents:

In this chapter, the identification of the respondents is mentioned by describing their various socio-economic profiles. It is an important part of the research activity to acquire the basic information about respondents. The present study has taken 520 respondents from Ziro I Block of the Lower Subansiri District inclusive of Hapoli town, Old Ziro and its seven main villages (Bulla, Hari, Hong, Bamin-Michi, Mudang-Tage, Dutta, and Hija).

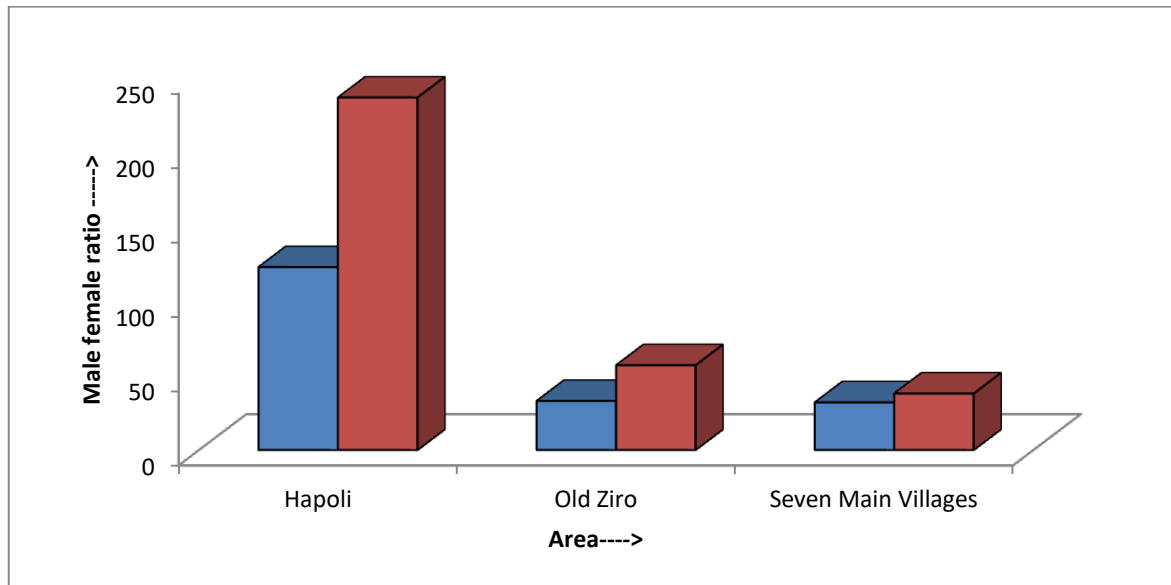
4.2. Sex composition:

The sex composition of the respondents is given in table 5.1. There are 520 respondents, 332 are males and 133 are females, which accounts for 64% and 36% respectively.

Table - 4.1: Area wise and Sex composition of sample respondents

Area	Female	Male	Total	Percentage
Hapoli	123	237	360	69.23%
Old Ziro	33	57	90	17.31%
Seven Main Villages	32	38	70	13.46%
Total	133 (36.15%)	332 (63.85%)	520	100%

Figure - 4.1: Area wise and Sex composition of sample respondents



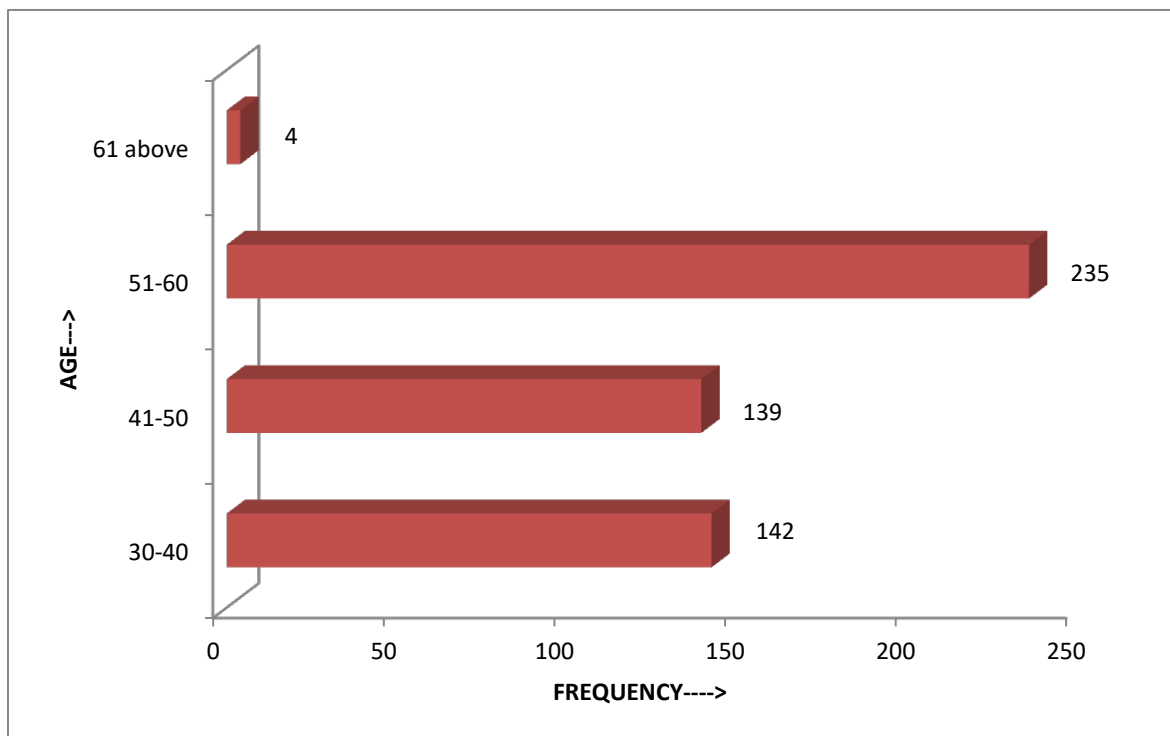
4.3. Age composition:

The table -5.2 shows the different age group of the respondents. The table represents 27.3% of the respondents comes under the age group between 30 -40, 26.7% of respondents come under 41-50 age group. The largest representation of the age group belongs to 51-60 years which is 45.19%; the researcher has purposively taken this age group in a large sample study because this age group witnessed the changing patterns and transitions of the Apatani society from rural to urban and tradition to modernity. And 0.7% is represented by age above 60 years. In this study, the researcher has taken the respondents who have attained 30 years and above.

Table - 4.2: Age group distribution of the respondents

Age	Frequency	Percentage
30-40	142	27.30%
41-50	139	26.73%
51-60	235	45.19%
61 above	4	0.76%
Total	520	100

Figure 4.2: Age group distribution of the respondents.

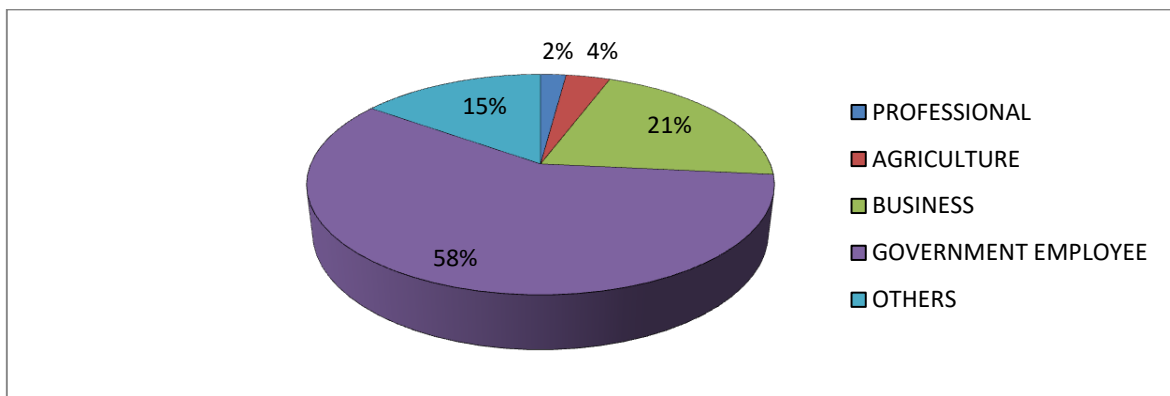


4.4. Occupation:

Table 4.3:Types of occupation of the respondents

Type of occupation	Frequency	Percent
Professional	11	2.1
Agriculture	19	3.7
Business	108	20.8
Govt. employee	303	58.3
Others	79	15.2
Total	520	100.0

Figure - 4.3: Types of occupation of the respondents



From the above table it is found that 19 (3.7%) of the respondents are engaged in agriculture occupation and this is represented by the respondents from the seven major villages, and 11 (2.1%) of the respondents are engaged in professions like lawyer, doctor, professor etc. 108 (20.8%) of the respondents engaged in business as an occupation. The government employees are the highest i.e. 303 which represents (58.3%) and Others category is 79 (15.2%), which includes those person working under private organizations, house works, non

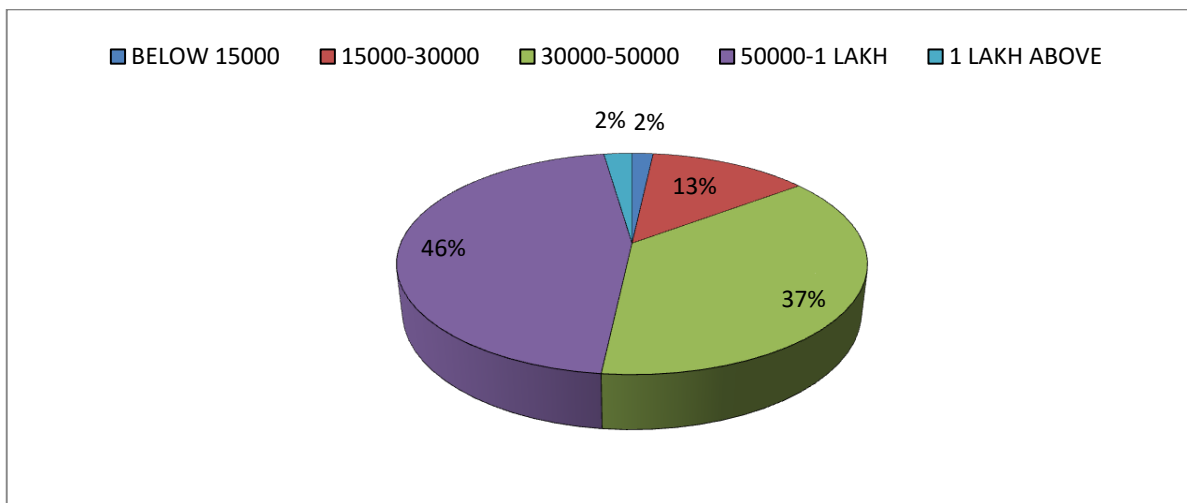
workers, and contract workers within the private firms, and engaged in the political organization in urban areas, etc.

4.5.The income of the respondents:

Table - 4.4: Income distribution

Income	Frequency	Percent
Below 15000	9	1.7
15000-30000	68	13.1
30000-50000	192	36.9
50000-1 Lakh	239	46.0
1 Lakh above	12	2.3
Total	520	100.0

Figure- 4.4: Income distribution



This table gives us the monthly income of the population of the study. 46.0% of the respondents are earning between 50000 to 1 lakh, these respondents are basically government employees and businessman. 2.3% of them is earning above 1 lakh, this group of respondents represents from government employees, politician, businessman, and contractors. 13.1% and 36.9% category respondents fall under again the government employees constituting regular, contingency and contractual staffs working under various flagship programmes and time-bound projects of the departments. 1.7% of the respondents representing from rural agriculture workers, and contractual staffs working in both private and government sectors.

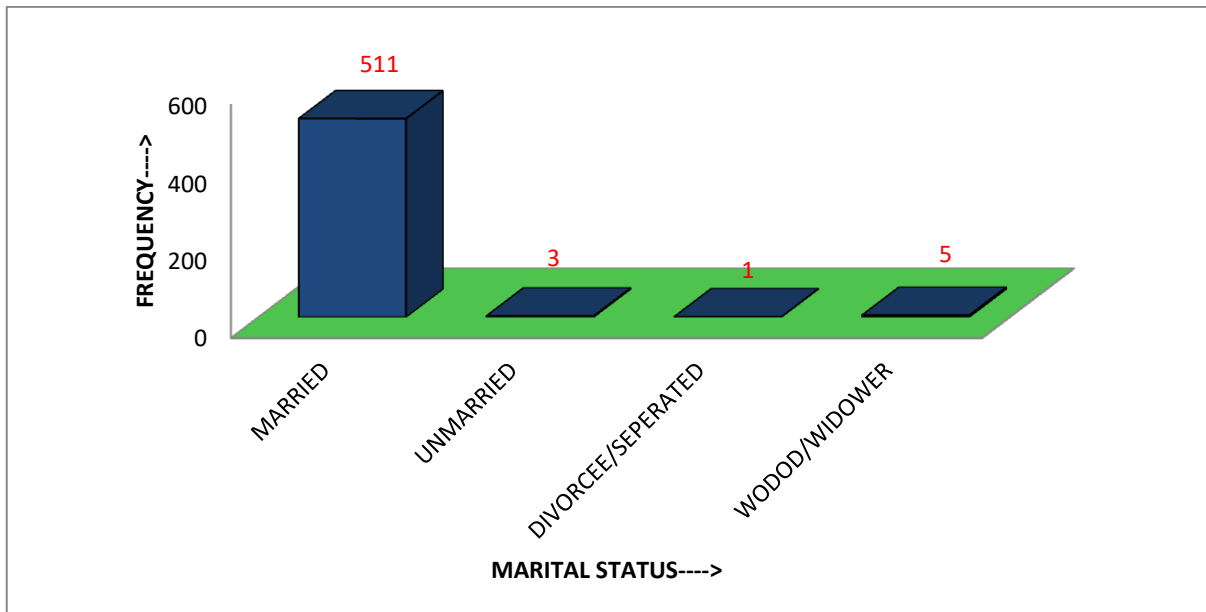
4.6. Marital status:

Table - 4.5 shows the marital status of the respondents, 511 (98.3 %) of them are married, 3 (0.6%) of unmarried, 1(0.2%) of Divorcee/Separated and 5 (1.0%) of widow/widower. Since the respondent's age were taken 30 years and above therefore there is a higher percentage of married respondents than unmarried.

Table - 4.5: Marital status of the respondents

Marital Status	Frequency	Percent
Married	511	98.3
Unmarried	3	0.6
Divorcee/Separated	1	0.2
Widow/Widower	5	1.0
Total	520	100.0

Figure - 4.5: Marital status of the respondents

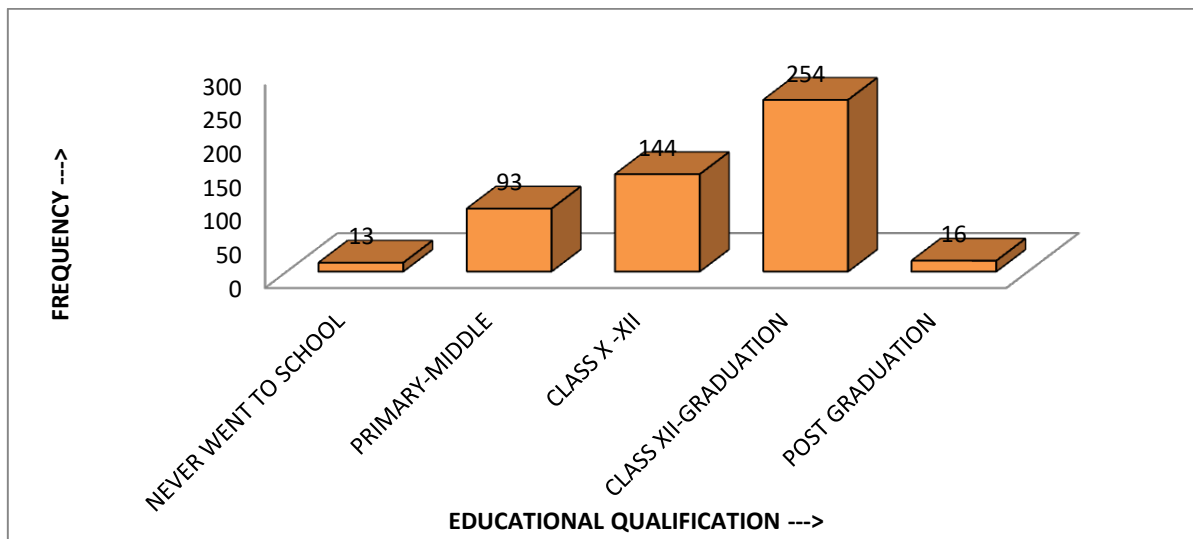


4.7.Education:

Table - 4.6: Education status of the respondents

Education	Frequency	Percent
Never went to school	13	2.5
Primary - Middle	93	17.88
Class X - XII	144	27.69
Class XII - Graduation	254	48.84
Post graduation	16	3.07%
Total	520	100.0

Figure 4.6: Educational qualification of the respondents



The table - 4.6 shows the status and variation in the education level of the respondents. 254 (48.8%) of the respondents were graduated or class XII pass from various disciplines, 144 (27.69%) were class X passed or were below 12th standard, 93 (17.88%) had gone to Primary level of education or Middle level education, 16 (3.07%) of the respondents had their post-graduation degree and 13 (2.5%) of the respondents never went to school.

4.8. Religion:

Apatani tribe practices a primitive form of religious life in the way of both animistic and spiritual inclination. The religious practices is one of the main regulatory principle that keep the community in an organized pattern and harmonious relation between society, nature and spiritual entity. The table - 4.7 below represents the division of religion into the traditional and non-traditional religious group in the Apatani community in the present context. It shows that 425 (81.7%) of the respondents are practicing the indigenous and traditional religion, i.e. *Doni-poloism*. 95 (18.3%) of the respondents have converted to non-traditional religious groups. The incidence of conversion to other faith and belief is emerging and increasing among the apatani

people in recent period. The conversion process is an external forces and it is taking its course of action with the help of different agencies and factors. It is happening due to social contacts with the initiation of urbanization in the valley.

Table - 4.7: Religion of the respondents

Religion	Frequency	Percent
Indigenous faith	425	81.7
Non-indigenous	95	18.3
Total	520	100.0

Figure 4.7: Religion of the respondents.

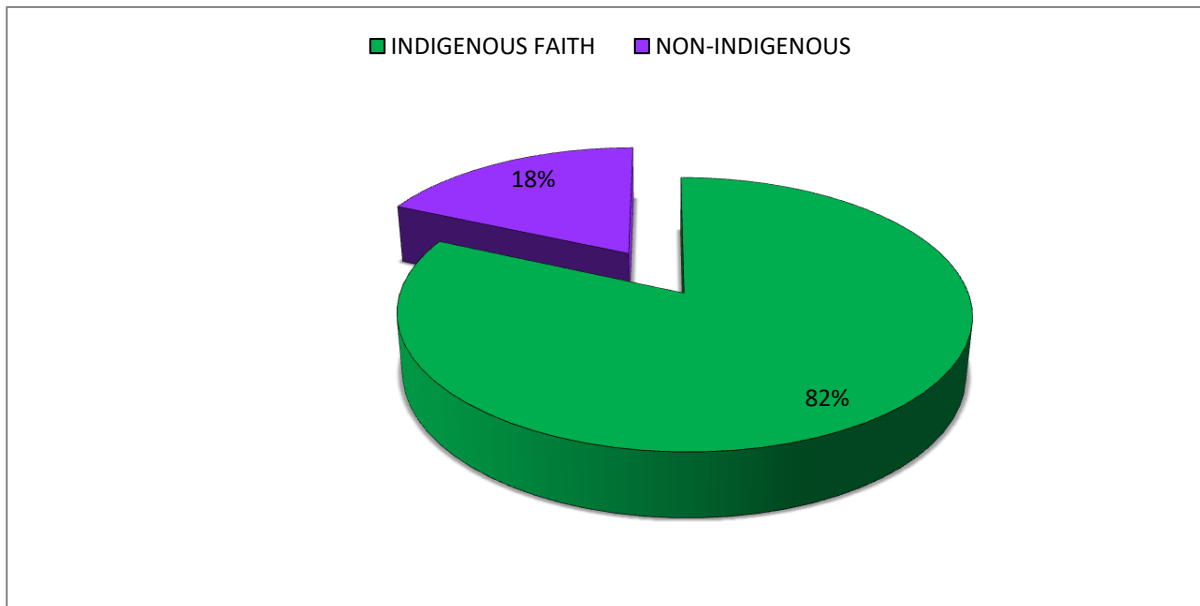


Table -4.8: Distribution of worshipping place in Ziro valley

Worship place	Location
MederNello (Donyi Polo)	1. SuluyaMederNello, Old Ziro 2. NaniChabo, MederNello, Old Ziro 3. Tajang, MederNello, Old Ziro 4. Takhubo, MederNello, Old Ziro 5. Kalung, MederNello, Old Ziro 6. Hari, MederNello, Old Ziro 7. Papii, MederNello, Old Ziro
1. Temple	Air Force line, Old Ziro
2. Temple	Molyang, Old Ziro
3. Mosque	Suluya,OldZiro
4. Church	Baptist church, Nenchalyang Church of Jesus Christ Church of Jesus Christ, Kiilya Baptist church, Hari The Catholic church, Rakhe Revival church Suluya, Revival church, Airfield

Sources: field data survey from Ziro

Table - 4.9: Worshipping Place at Hapoli

Hapoli	
Worship place	Location
1. Temple	Hill Top Assam Rifle, segment Gurudwara Colony Kardo
2. Mosque	Pari Ami
3. Church	Baptist, Pai Gate Catholic, Pai Gate Pentacost, SSB Gate Siiro, Revival Gano, revival KiilyaDiiya, Revival Siibe, Revival
4. MederNello (Donyi Polo)	1. Hangu, MederNello 2. Siiro, MederNello, Hangu 3. SupungMederNello, Hapoli

Sources: field data survey from Ziro.

4.9. Migration:

As per Haimendorf in 1944-45 estimation the total population of the Apatani tribe was approximately ten thousand populations. The total population of the Apatani in 1961 was 10793 with households 2529 and there was no urban census some of the villages like Hari, and Bulla did not include in the count. The census 1971 present the emergence of the urban area and addition of several adjoining villages due to the growth of population. The total population in 1971 was 15253 and 1981 census 17765. From the 1971-81 statistical data and records, it was found that the number of population from the villages were decreased due to mass migration towards Hapoli and Old Ziro town (Kani, 1993).

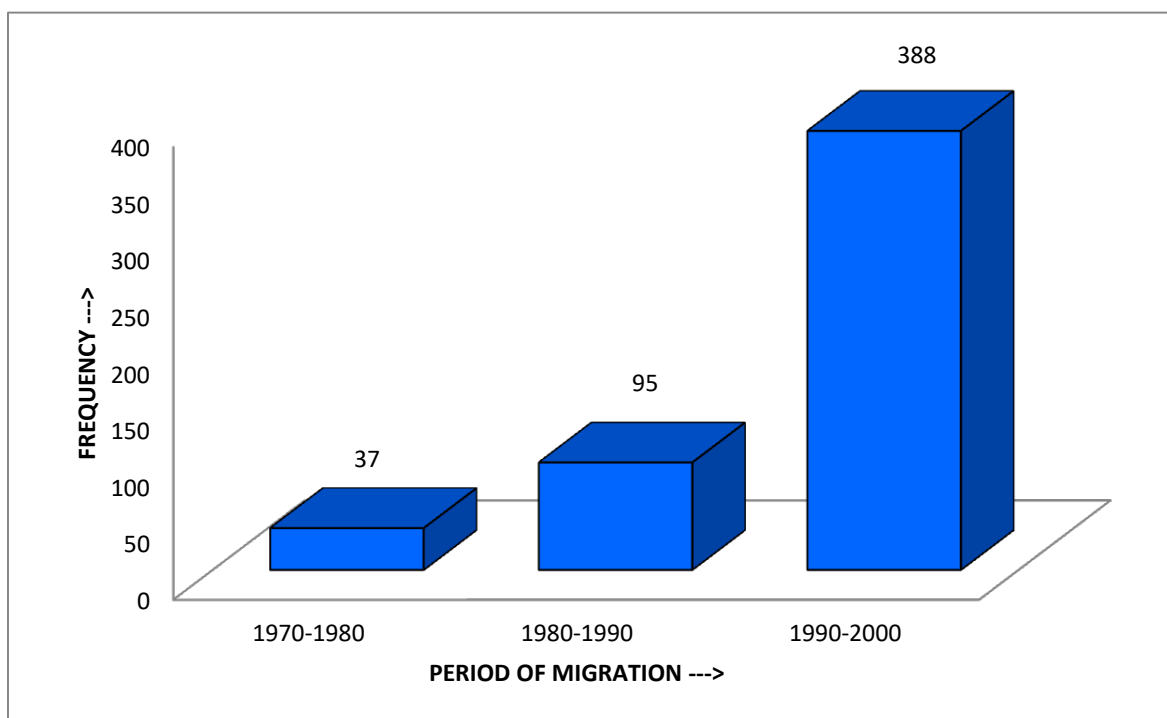
Migration to town is the main factor for rapid urbanization and social change in the Apatani society. There are various reasons families' moves from one place to another. The movement or shifting has been a temporary and permanent one. The migration population of Apatani is not permanent; they always have property or culture property which makes them come back in a native village in a year.

Table 5.8 shows the year of migration of the respondents from their village to Ziro town and Old Ziro. The decade of 1990-2000 shows the highest percentage of respondents with 388 (74.6%), While it was only 95 (18.3%) in the year of 1980-1990 in which people migrated to Ziro and Old Ziro town. The preferences for migration are economic i.e., – employment in the government department and private organization, the sources and scope of income is better, urban has got better and more civic facility, the number of education institution with qualified faculties, the health facilities including office, hospital, private clinic with laboratory, the quality of urban life with influx of other community people and mass media information.

Table - 4.10: Migration Period

Year	Frequency	Percent
1970-1980	37	7.1
1980-1990	95	18.3
1990-2000	388	74.6
Total	520	100.0

Figure 4.8: Period of migration of the respondents to urban areas.



CHAPTER- V ANALYSIS AND MAJOR FINDINGS

5.1. Urbanization and Economic Changes:

The impact of urbanization on economic activity can hardly be ignored in contemporary time. Impact of urbanization on the economic structure and function of the Apatani community at Ziro is very significant. In the wake of urbanization, a number of significant changes have been observed in Ziro valleys in terms of infrastructure, migration, market activity, consumption pattern, production process and so on and so forth.

5.1.1. Priority of occupation:

Table - 5.1: Choices for tertiary sector occupation

Response	Frequency	Percent
Yes	507	97.5
No	13	2.5
Total	520	100.0

Figure- 5.1: Choices for tertiary sector occupation

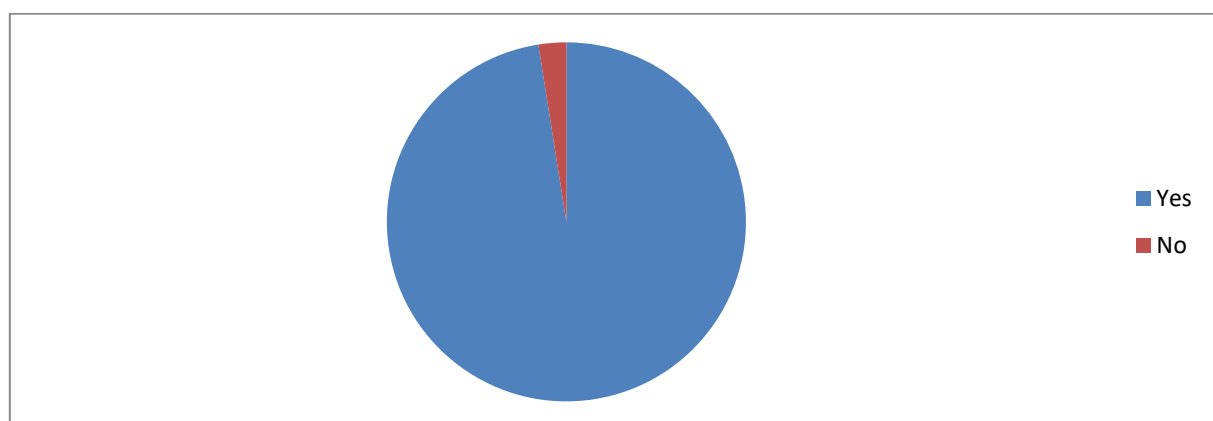


Table - 5.1, shows that majority of the respondents have agreed (97.5%) that the parents and youths are choosing and preferring their occupation for tertiary sector occupation like be in government services, business, and professions. Significantly education based occupation is replacing traditional skill based occupation among the educated youths. The introduction of modern education institutions have retained and refrained youths and parents from sending to the fields and forests. The growth of schools and government education policies helped the community people to avail the facilities. The modern politico-administration center or bureaucratic organization, directly and indirectly, gave the message to the community people that education based occupation are the new forms of employment and income generation.

5.1.2. Relation between administrative center and growth of urban infrastructure:

Table - 5.2:Relation between administrative center and growth of urban infrastructure

Responses	Frequency	Percent
Disagree	22	4.23
Agree	498	95.77
Total	520	100.0

Figure - 5.2: Relationbetween administrative center and growth of urban infrastructure.



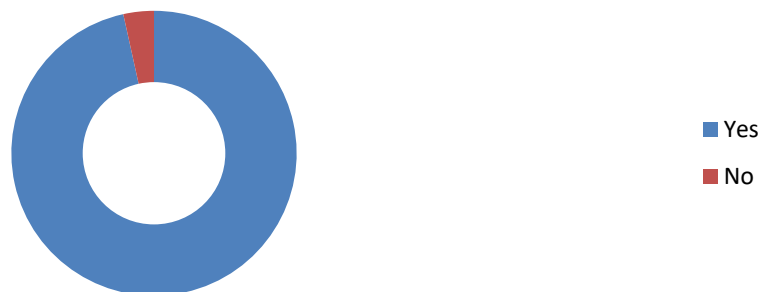
Tables -5.2 shows the 95.77% of the respondents agreed that the growth and development of urban infrastructures in the Ziro valley are taking place because of the location of administration center and ever-growing population of both indigenous and outsiders. The change of physical structure in and around the Ziro valley began with the announcement of district headquarters. The immediate infrastructures built during and after the coming of administrative offices was Motorable roads, electrification of the valley, water supply, public bus station, health centers, library and museum, club and stadium, public toilets, post office, banks, defense area, police station and fire brigade, market and cooperative shops, staff colony, circuit house and Inspection Bungalow, schools, and airfield.

5.1.3. Consumption pattern:

Table - 5.3: Changing consumption pattern

Opinion	Frequency	Percent
Yes	502	96.54
No	18	3.46
Total	520	100.0

Figure - 5.3: Changing consumption pattern



The table -5.3/fig indicates that 100% of the respondents agreed that the pattern and mode of consumption are changing in the Apatani society. The pattern of change came with the coming of non-tribal, market and transportation. The consumption patterns are visibly found in the diet, food habit, dress/fashion, luxury items. The consumption change is found both in urban and rural. Due to the accessibility of transportation, markets, and money the community people have altered their lifestyle. The changing itself symbolized the urban characteristic.

The monetary system, government job, and policies helped for social mobility and enjoy the modern culture. The community which was suffering from the economic and communication bottleneck was opened with the opening of the bureaucratic center. People have modified their way of life by adopting some of the life style of Indian mainland people. The possession of materials became the luxury for the community people.

Drinking of tea became an ideal beverage for the community; it is often drunk in or without occasion which had replaced local rice beer (*Apong*). Chewing of betel nut is commonly found among the old and young adults. Factory made cigarette and *bidi* replaced pipe tobacco. Whiskey and rum (modern liquor) have replaced local *apong*.

Houses were built on modern style in the Ziro town, interior decoration was decorated with sofas, center tables, television, kitchen, toilet with shower room, several windows with ventilation, separate bedrooms for family members, garage, iron gate, heater, gas, tape recorder, and radio transistor.

The respondents agreed that besides tremendous changes, people still prefer to have a traditional diet. The numbers of the meal taken in a day have increased in the households as breakfast, lunch, and dinner. There is frequent use of mustard oil and spices in the food menu of

the modern Apatani family and it is one of the lucrative dishes items on the table. Consumption of tea and milk is a normal part of the intake and gradually it is replacing the locally brewed rice beer to treat the guest.

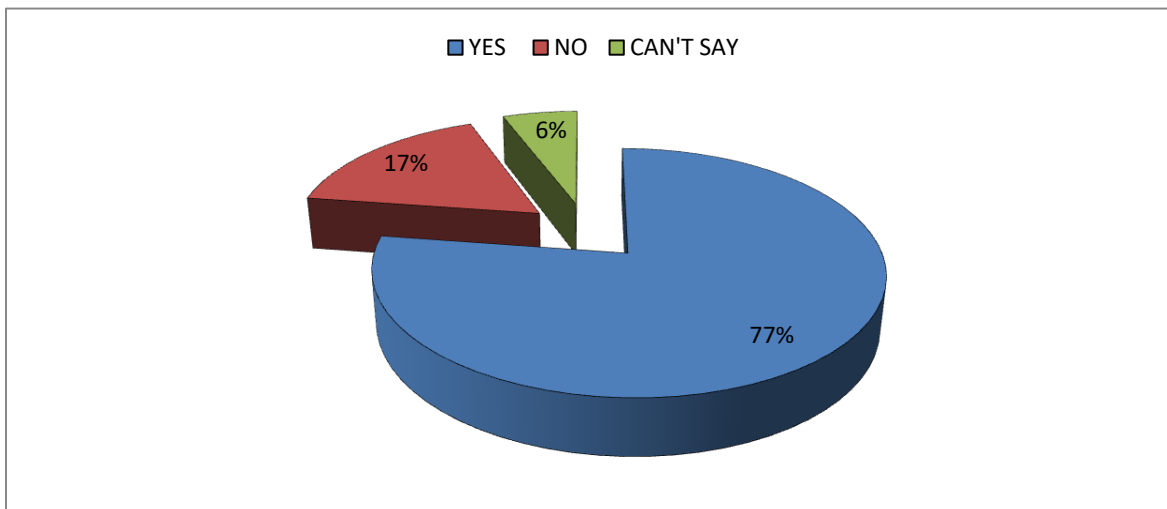
Apatani has fond of modifying their lifestyle and surroundings with modern technology and skills. In today's scenario, there is no such household in the valleys who haven't experience or affected by the urbanization process. There are several traditional culture materials which are replaced by modern materials or techniques. Cane rope is substituted by plastic rope, beacon used during the *Myoko* for ceremonial friends is replaced with money, *Lapang* slate is now being cut in the sawmills, traditional *tapyois* replace by commercial salt, toilet system is changed, pine oil is replaced by kerosene and LPG cylinder, storage container is replaced by plastic and iron drum for storage of rice beer and wines, wooden and bamboo spoons are substituted by steel, aluminum, and plastic spoons, and fish traps are replace by nets. Use of electrical appliances is common for every Apatani households. The utensils have changed from clay pots to steel and aluminum.

5.1.4 Modern financial institution:

Table No - 5.4: The role of modern financial institution

Opinion	Frequency	Percent
Yes	402	77.3
No	88	16.9
Can't say	30	5.8%
Total	520	100

Figure 5.4: Role of a modern financial institution



Before the advent of modern financial institution there was no knowledge of the economic value of currency, the idea of saving account, current account, joint account and keeping account for the future was not formalized and understood by the Apatani people. the community people did not have any storage system to keep their valuable belonging and cash to keep safe. Due to introduction of banking system the people are realizing the safety of their property and easy way of doing business. The bank acted as safety keeper and besides help those person to start their business by providing financial assistance. The table - 5.4, shows that 77.3% of the respondent's family is helped by the modern financial institution. The bank assistance is in the form of personal loan, house loan, vehicle loan, government subsidies, agriculture loan, enterprise loan, etc. 16.0% of the respondents said that the bank is not helping the family and its role is limited to a few selected person or families. The financial institution is not taking the proper action for financial support. It provides grant to those who are having security, regular income and property. The banks are not creating awareness to the public about the available government schemes and facilities as found in the other states. While 5.8% of respondents said

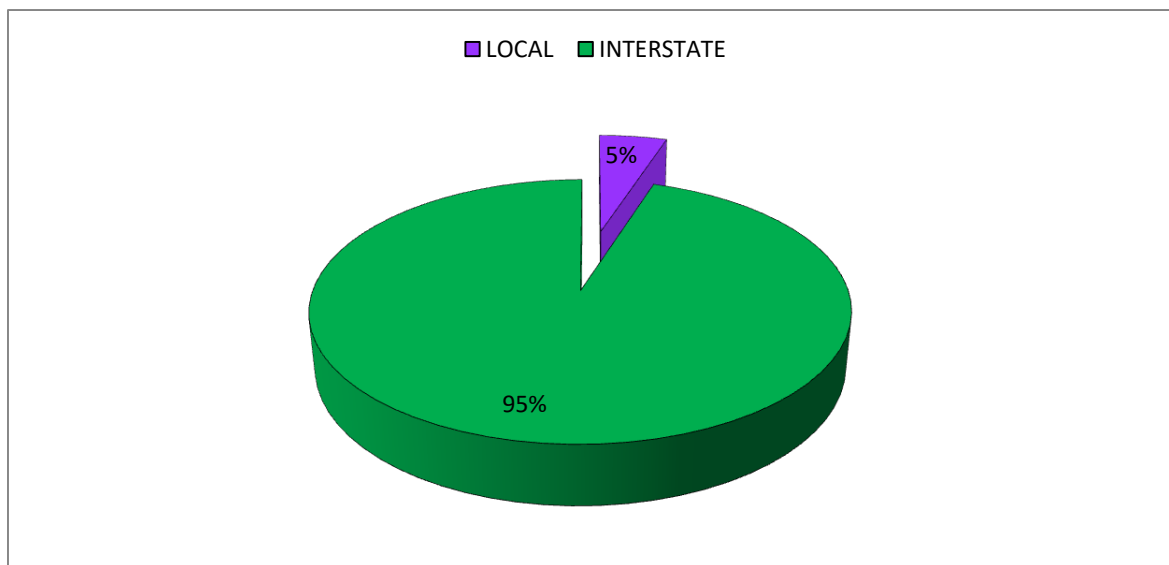
they are not having the idea of whether financial institutions are helping the local inhabitants or not.

5.1.5. Labour supply:

Table No - 5.5: Labour supply

Sources	Frequency	Percent
Local	26	5.0
Inter state	494	95.0
Total	520	100.0

Figure 5.5:Labour Supply



The table shows that Ziro valley is receiving the maximum number of skill and un-skill workers from the other states as 95.5% of the respondents told that there is a huge inflow of human workforce from the neighboring and other states of India. While 5% of respondents agreed that local human power is gradually growing in numbers and they belong to both skills

and unskilled level. Local workers have got their training from Industrial Training Institute (ITI), short term course provided by District Industrial Units (DIU), and by learning on their own. Several of the new occupations which came into the valley is generally occupied by the non-tribal group especially in cobbler, barber, mansion, sweeper, carpenter, blacksmith, telawala, mechanic, tailor, washer man etc.

There are several other professionals and technical occupation that is largely engaged by non-tribal population in Teaching both private and public sector, pharmacist, traders, electrician, government staffs, shop keeper, cable man, fruit seller, driver, service boy. In this way the economic relationships and structure is influence and effected in the distribution and circulation of income in the valley.

5.1.6.Land value:

Table - 5.6: Land value

Response	Frequency	Percent
Yes	500	96.15
No	20	3.85

The table - 5.6, shows the importance of the land value. The respondents (96.15) have agreed that the land value have increased and increasing with the growth of urbanization. Since the establishment of headquarter and expansion of the township the value of the land nearbythe Ziro town have increased. Competition for the land possession at the centre of the town have increased.

While few percentage of 3.85% have regarded that there are few isolated places like bamboo gorves, forest, public or clan based land are exceptional areas which are still not being

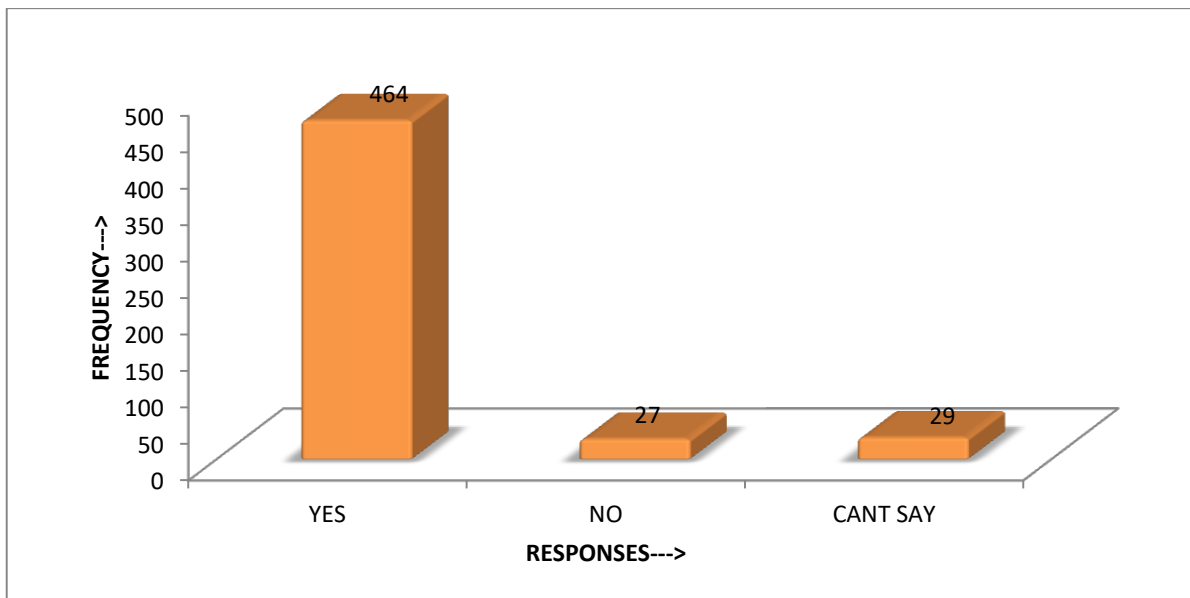
commercialized therefore the land value of that area is not effected by the process of urbanization.

5.1.7. Effect of a growing population on economic structure:

Table - 5.7:Effect of a growing population on the economic structure

Scale	Frequency	Percent
Yes	464	89.2
No	27	5.2
Can't Say	29	5.6
Total	520	100.0

Figure 5.7: Effect of population growth on the economic structure



The growth of population in urban is phenomenal in Ziro area because of urbanization. According to the table – 5.7, 464 respondents (89.2%) said population growth hastremendous

effect on economic structure in the valley, 27 (5%) said ‘No’ there is no significant economic change occurred due to growing population in the valley, and 29 (5.6%) said they can’t say.

The impact of the economic structure in Apatani society is quite visible and prominent. A significant change has been observed from primary occupation to modern type of secondary and tertiary sector occupation. A huge scale migration occurs in Apatani society because of its proximity to town and education status of the population. Growth of urban market, commoditization, commercialization of the local products, increase in production and consumption level, the building of vast infrastructure, communication and transportation system, etc. are a few significant economic changes that occurred in Ziro valley.

The economic relationship which was based on mutual understanding, give and take relationship in the past is gradually changing to diversified and more complex forms of relationship. With this the value of the material culture is increasing day by day. The society which was less materialistic now is substituted by the force of the market economy.

5.1.8. Growth and sell of indigenous products:

Table - 5.8: Growth and sell of indigenous products

Degree	Frequency	Percent
Low	34	6.5
Medium	417	80.2
High	69	13.3
Total	520	100.0

Figure - 5.8:Growth and sell of indigenous products

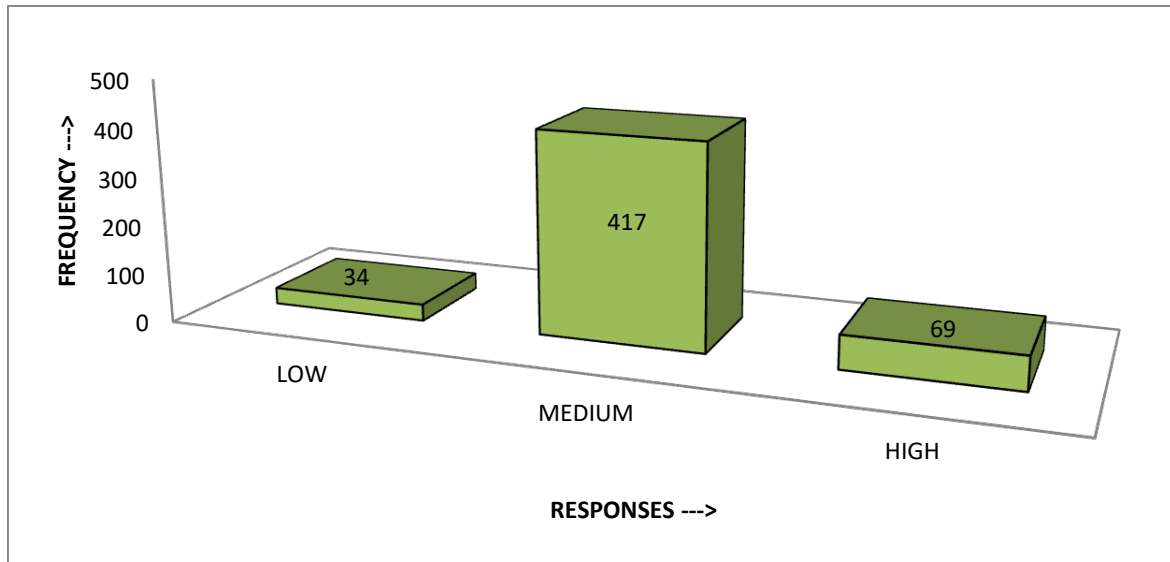


Table - 5.8 shows that 80.2% of the households agreed that local products selling has moderately increased over the period of time and 13.3% of them said there is high increase while 6.5% said to be at low range. With the growth of urbanization and population, the demands for local items/goods have increased. Some prominent local goods are agriculture products, horticulture product, and embroidery& handlooms. The Ziro market and the capital provide a place for marketing their agriculture and horticulture products for the agriculturist. Market sheds are provided by the government in Ziro town to encourage the local farmers to sell their products. Besides, there are several other beneficiary schemes and incentives launched by both state and central government for growth and development.

In the recent development process, many people have started following horticulture activities with the help of incentives and subsidies provided by the government department. The Ziro valley is considered to be a good place for doing horticulture. Many of the farmers have got their good returns from the sale of their horticulture products. Fruits like Kiwi, Pears,

Cardamom, Ginger, and apple are commonly grown in the horticulture fields. Vegetables, fruits from garden and forest are sold in the market and the number of vegetable grower have increased for supplying to urban areas. The increasing rate is due to the growth of shops and government stalls and emporium in and outside the market. The customers are both indigenous people and outsiders. The local products are encouraged by the government by giving subsidies, loan, and opening of outlets for the farmers and unemployed youths.

Apatani tribe is popular with their artistic work in handicraft, woodcraft, embroidery, and handlooms. The notion of commercialization of the products is undergoing rapidly. The embroidery and handloom items are bought and consumed by both local and non-local people. The embroidery and handloom items include those Gale (woven by female), shawl, sofa cover, machete handle, cane bag, *maplar*, coat, tie, etc.

Handicraft and woodcraft are available in the form of baskets, mat, machete handle, machete cover, cap, toys. Shops and outlets store is opened in the market and websites are made for purchasing the goods. The numbers of emporium shops have increased which has significantly affected the growth of employment and skill workers. The administrative center is becoming the center providing scope for employment and income generation.

5.2. Impact of urbanization in Political institution and practices:

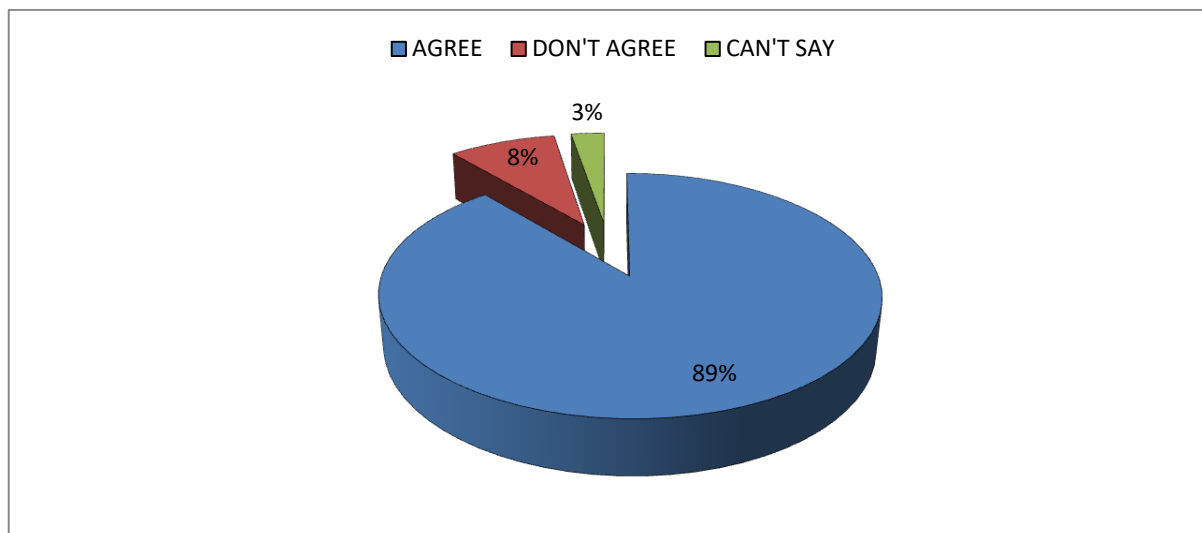
In many ways, the political changes are visible in political aspects of Apatani life due to urbanization. The modern urban life has challenged the role of *Buliyang*. Participation in modern political institutions has significantly increased. Increasing participation of women in the modern political system is a new dimension in political aspects of Apatani society.

5.2.1. Status of traditional Builyang institution:

Table -5.9:Builyang and its role

Respondents	Frequency	Percent
Agree	461	88.7
Don't Agree	45	8.7
Can't Say	14	2.7
Total	520	100.0

Figure-5.9:Builyang and its role



The table shows that 88.7% of the respondents said that the role and functions of Builyang have diminished, 8.7% said the Builyangis still functioning their role and function even after Panchayat Raj system, and 2.7% said they can't say about its power and function. From the above table and data gathered from the respondents it is found that Builyang as village council is not having the same power and jurisdiction as before. The power of it has decreased significantly and now it remained with a customary institution only. In recent days the power of officials in jurisdiction, execution, and decision making for any disputes and conflict has reduced. However,

they are given priority and respect during the celebration of festivals like *Murung*, *Myoko*, etc., and invited with great reverence. The judiciary and executive power of Builyang are transferred to magistrate and police.

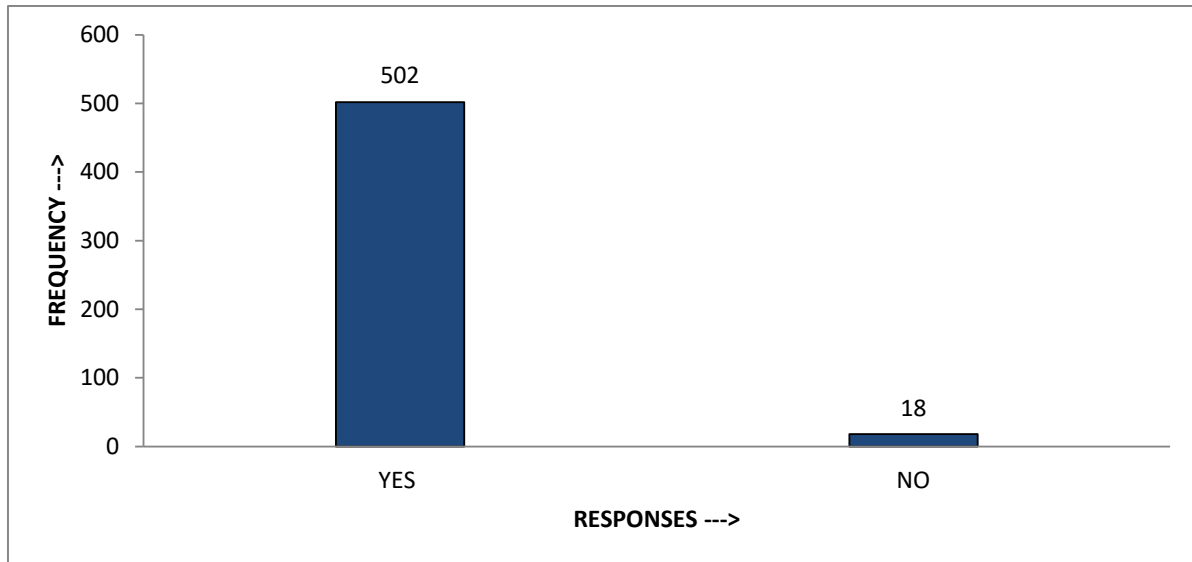
The Builyang as an institution is replaced by the modern political system in recent time. The need for this institution by the community people is greatly reduced to few families only. Builyang as an institution is not organized now at the level of taking a decision in the village. Due to the seizure of power by modern political system and governance, Builyang is not active in any platform, therefore, their widely accepted as an institution is reduced.

5.2.2. Participation in the modern political system:

Table -5.10: Participation in the modern political system

Responses	Frequency	Percent
Yes	502	96.5
No	18	3.5
Total	520	100.0

Figure - 5.10: Participation in the modern political system



The table shows that 96.5% of the respondents agreed that they are actively participating in the modern political system. Only 3.5% of respondents say that they are not interested in the modern political system.

The modern political system includes those activities like voting in elections, listening to national political news, participation in political party system, directly and indirectly, election meeting and campaign. The above table gives us the fact that the community has transformed their attitude and practices from traditional to the modern political system. People have understood the meaning of democracy and their political rights to elect and to be elected. The modern political system has taken over the traditional Builyang system by the state government by introducing *GaonBura* then Panchayat Raj system. People opined that Builyang system was to some extent biased political institution which has got its own limitation and demerits. The modern political institution is broader and justifiable to each and every one. It has given equal

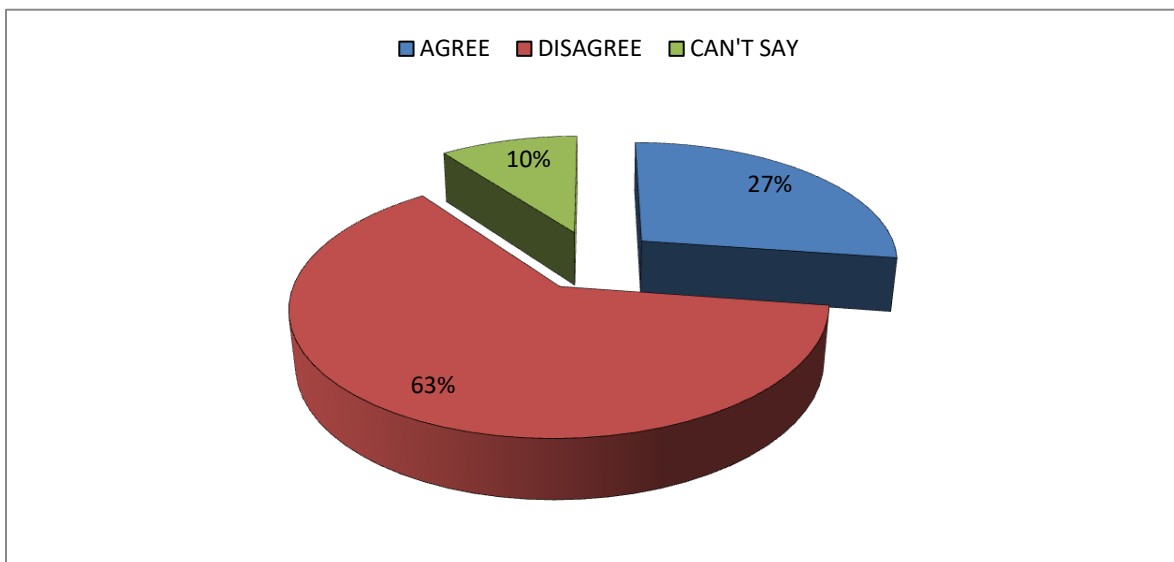
opportunity to everyone to be a part of the system and run the system. Therefore they have faith in the modern political system for the development of the community people.

5.2.3. Social differentiation:

Table - 5.11:Social differentiation

Opinion	Frequency	Percent
Agree	142	27.3
Don't agree	325	62.5
Can't Say	53	10.2
Total	520	100.0

Figure 5.11: Social differentiation



This table shows the 62.5% of the respondents agreed that there is no socio-political differentiation among the kin groups even after the modern political system is established in the

valley, 27.3% of respondents observed instances of socio-political differentiation among the localities and among even family members. While 10.2% says they have no comments on this idea.

The modern electoral system has given democratic power to the individual to elect the leader. The processes of politics have paved a way for the placement of political based relationship. It is becoming a serious issue that now everything and anything is taken into political discourse. The degree of differentiation takes place during the election time and last even after the election is over. Due to differentiation in political party, several families often hesitate to participate and share in a social gathering or ceremonial observation in the village. The party based political activities have brought changes in the social structure of the community. The mechanical solidarity is gradually transforming into organic solidarity.

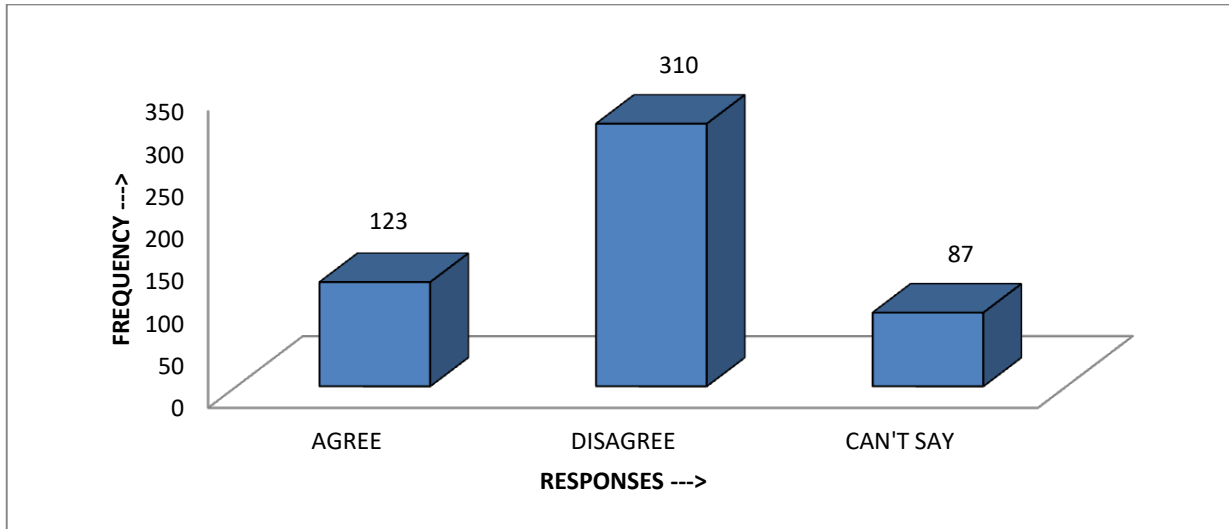
In Apatani society, kinship relation plays an important role during the election time. Kinship and religious obligation are well felt in voting behavior. With the passage of time, the notion of kinship politics based alliance is increasing in recent days.

5.2.4. National Party modifying the tribal attitude:

Table -5.12: National Party modifying the tribal attitude

Responses	Frequency	Percent
Agree	123	23.7
Don't Agree	310	59.6
Can't say	87	16.7
Total	520	100.0

Figure- 5.12: National party modifying the tribal attitude



This table shows the 59.6% of the respondents say that the coming of National political party in the state, has not greatly affected the Apatani society, 23.7% of them said there is change in the political behavior and socialization after the intervention of National level political party and 16.7% of the respondents say that they don't have a proper answer to it.

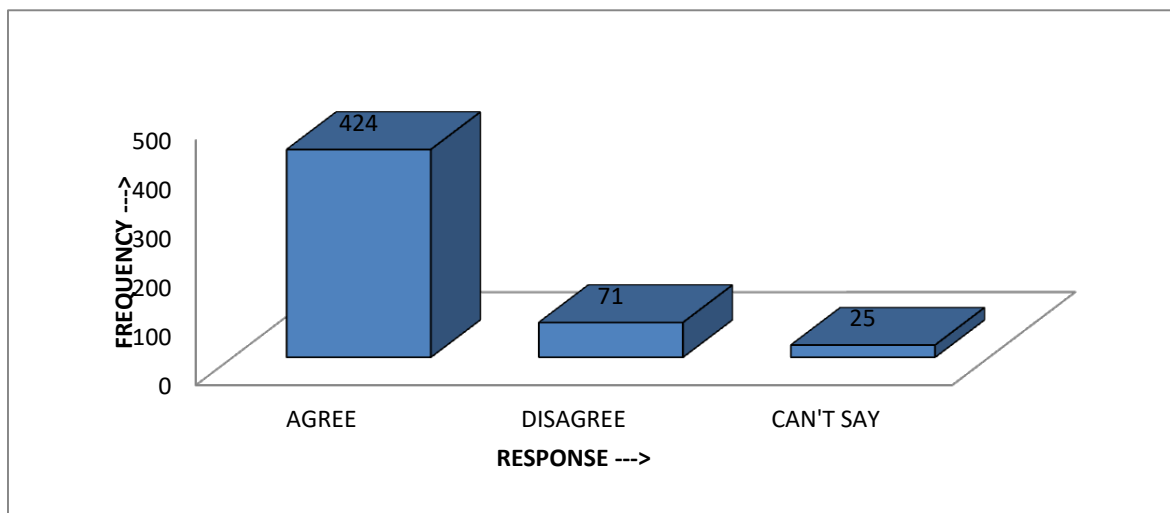
As per the table represented above National Political Party is not one of the major factors but directly or indirectly they have made inroads into the minds of native people. The Youths have joined in different party organization and they are made to work and deliver according to party principle and law. People from a different village, age, and class are coming together and forming a political group. This group becomes the part of the larger structure of the state.

5.2.5. Women empowerment and privileges:

Table -5.13: Women empowerment and privileges

Opinion	Frequency	Percent
Agree	424	81.5
Don't Agree	71	13.7
Can't Say	25	4.8
Total	520	100.0

Figure 5.13: Women empowerment and privileges



From this table it is observed that 81.5% of the sample respondents say that Apatani women had received their political power and participation hence, after the establishment of a modern democratic political system introduced by the state, 13.7% did not agree that women have been fully emancipated by modern political system, they claimed devolution and transfer of power to women is not fully given to womenfolk and 4.8% said they can't say about it.

Other than political factor education plays a vital role in opening the gates of right for women. The Apatani women had certain privileges and liberty unlike other women belonging to

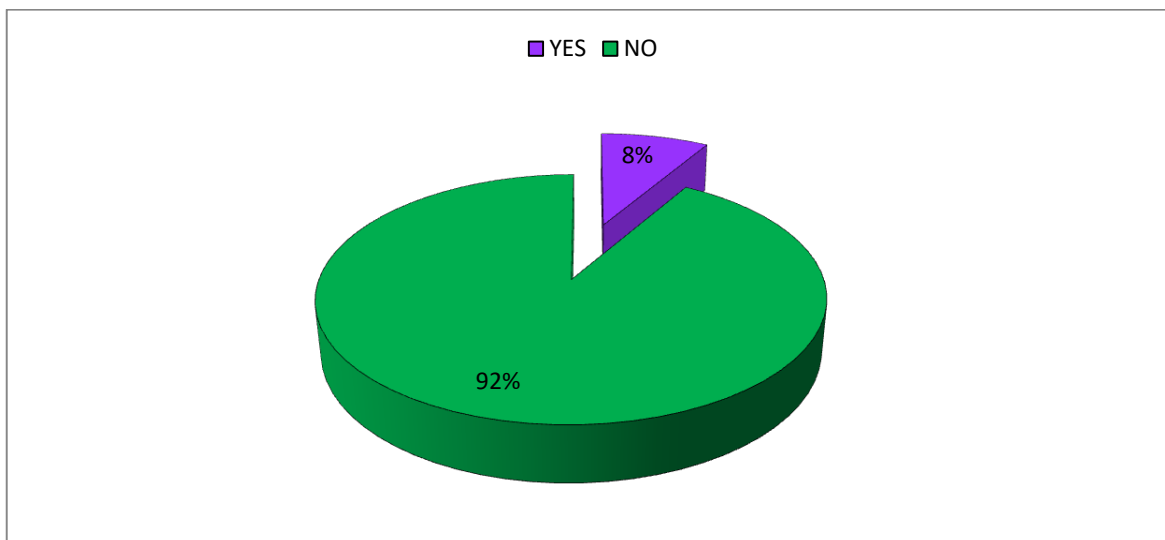
caste and neighboring tribe. Women were not allowed to sit and discuss in the male meeting and social meeting but today women participate in Panchayat meeting, organized meeting and sponsored the meeting. *GaonBura* which was immediate post created by the government to take over the political relation between tribe and state was once filled with a male but today there are few women took up the job of *GaonBuri* and contributing a lot to counterpart.

5.2.6.Tribal Identity:

Table – 5.14:Tribal Identity

Opinion	Frequency	Percent
Yes	44	8.5
No	476	91.5
Total	520	100.0

Figure - 5.14:Tribal identity



This table shows that 91.5% of the respondents agreed that the identity of Apatani is still intact. 8.5% of them are strongly agreed that there is loss of tribal identity by merging into urbanism as a way of life. With the growth of urbanization and social contacts with outsiders, several cultural practices have changed and discarded.

So far, the integrity and cultural identity are not vanishing away with the urbanization and modernity. There are continuity and change found in traditional cultural practices. It has been said that the modification of the cultural practices is to adopt contemporary society and get acquainted with modern life.

On the other hand, the Apatani tribe is losing its culture gradually by adopting the mainland culture and ignoring the transmission of knowledge by the elders. One of the core areas that are being affected largely is found in the use of local language, religion, diet, education, and agriculture and food habit. The uses of Apatani language is rapidly decreasing among the youths. There are many factors that contribute to declining numbers and all these factors have been due to urbanization and urban growth. The urbanization has converted the isolated and free spaces into compact living space with all those urban amenities and utilities like schools, cinema hall and market complex. The Hindi language is popularly used as a medium of communication, the Hindi language used by the local people is a mixture of the local language, Assamese, Bengali and Nepali. It is found that the Hindi language is used frequently among the respondents to communicate with their children but it is rarely used for same age group and with elders.

Education on traditional knowledge is largely diminishing and the older generation is not able to transmit the traditional and indigenous knowledge to the new generation. Farmers are declining rapidly. Only older generations are now looking after the age old farming system.

Youth's involvement in agriculture is an almost negligible percentage. Farming is a laborious and physical job that's why youth engagement is minimal. They are not keen to learn and internalized the art of doing traditional farming from the elders. Youths have been diverted towards education and searching for employment in the secondary and tertiary sector. Elders also encourage their young ones for other occupations other than farming. Gradually there is an increase in another caste group like Nepali, Miri, and non-tribal workers who are working in the field on hire by landowner.

5.3. Urbanization and social implication:

There are many social implications of urbanization which are visible in recent days.

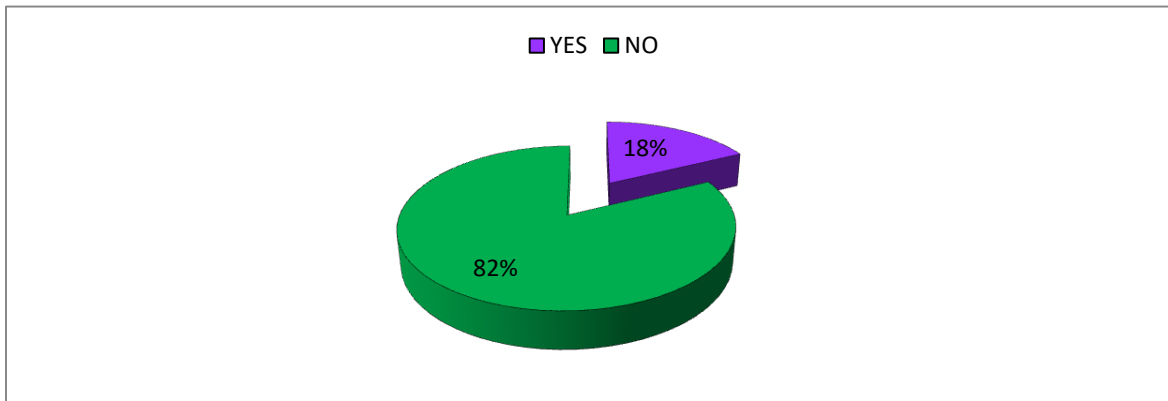
These are comprehensively discussed below:

5.3.1. Nature of family orientation:

Table – 5.15: Nature of family complexity.

Response	Frequency	Percent
yes	92	17.7
No	428	82.3
Total	520	100.0

Figure 5.15: Urban family complexity



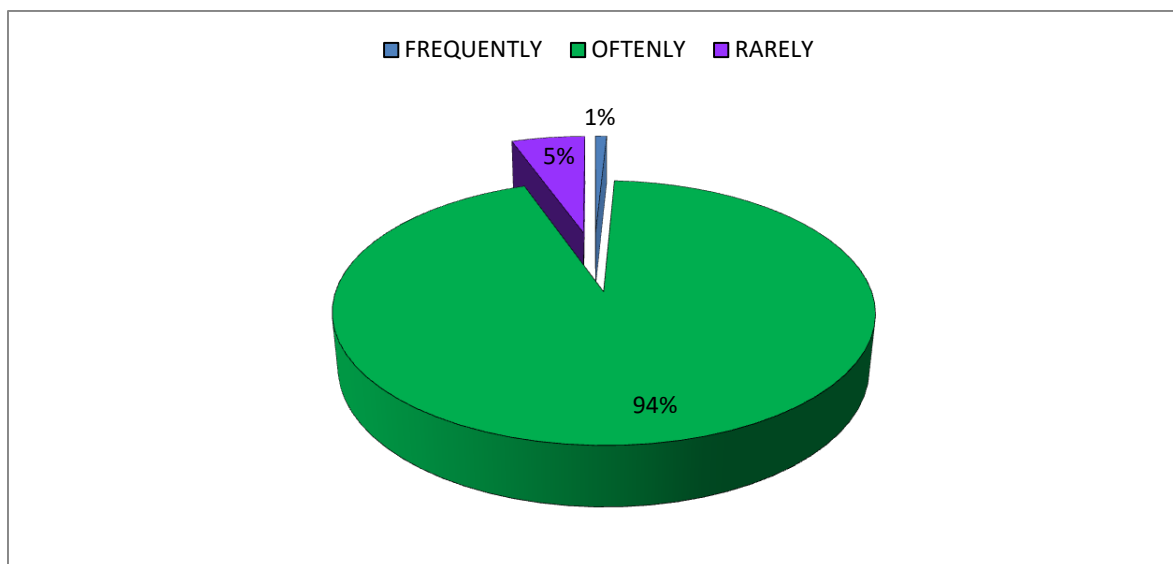
The table shows that 82.3% of the respondents agreed that the urban family is not becoming complex, 17.7% agreed that family in urban is becoming complex unitand self-centered. The complexity, Individualistic and self-centric is a unique feature of any urban society. Due to the complex normative pattern, costly life, increasing consumption and limited income, family living in urban areas have more economicconstraints. Due to busy life, the relationship in an urban area is also becoming secondary kind.The small percentage of the respondents said that traditional bond and cohesion among the Apatani community is changing and people are becoming self-centered. But, most of the respondents said still there is primary relationprevailamong the community people.The solidarity and common belongingness is still maintained in urban areas.

5.3.2. Degree of social contact:

Table – 5.16: Degree of social contact

Degree of Contact	Frequency	Percent
Frequently	4	0.8
Oftenly	490	94.2
Rarely	26	5.0
Total	520	100.0

Figure-5.16: Degree of social contact:



This table depicts the frequency of social contacts among the relatives and friends of the respondents. It shows that 94.2% of the respondents have proper contacts with their near and dear ones, 5% said they rarely meet or communicate with their relatives and 0.8% of them meet and communicate them regularly.

The frequency of communication and interaction is frequently made even though people have migrated to town and leading urban life. The arrival of a relative in their place is not restricted. The social traditions of the Apatani community are very strong and based on a reciprocal relationship. Every individual is bound with strings of kinship relationship. The social ties are sacred among the Apatani community. It has a religious and ceremonial character as well. This is the reason for which there is often interaction and communication among the kin groups.

5.3.3. Community based organization

Table – 5.17: Growth of Pan Apatani Organization.

Sl. No.	Name	Establishment year
1.	Tanw Supun Dukun (TSD)	2014
2.	Apatani Women Association Ziro (AWAZ)	2015
3.	Apatani Career Guidance Forum (ACGF)	1997
4.	Popi Sarmin Society	1990
5.	Apatani Cultural and Literary Society (ACLS)	1988
6.	Apatani Socio-Cultural Welfare Society	1988
7.	Apatani Student Union (ASU)	1982
8.	Aptani Youth Association (AYA)	1974

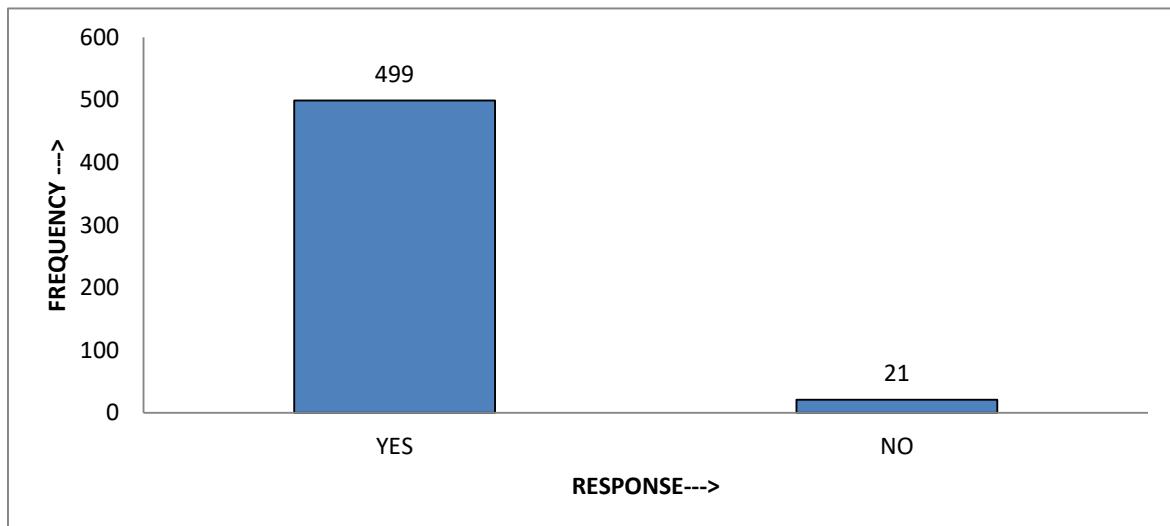
Sources: field data survey at Ziro.

5.3.4. Changing Pattern of Culture:

Table - 5.18: Changing pattern of Culture practices

Opinion	Frequency	Percent
Yes	499	96.0
No	21	4.0
Total	520	100.0

Figure -5.17: Changing pattern of Culture practices



This table represents the changing pattern of culture due to urbanization and urban growth. 96.0% of respondents say significant changes have been taken place in certain cultural practices. While 4% remarks that culture is strongly maintained and there are no significant changes taken place in the traditional culture.

Changes are found in the way of celebrating the major festivals of the communitylike *Dree, Myoko, Mida and Subu-Murung*. The urbanization processes have brought both

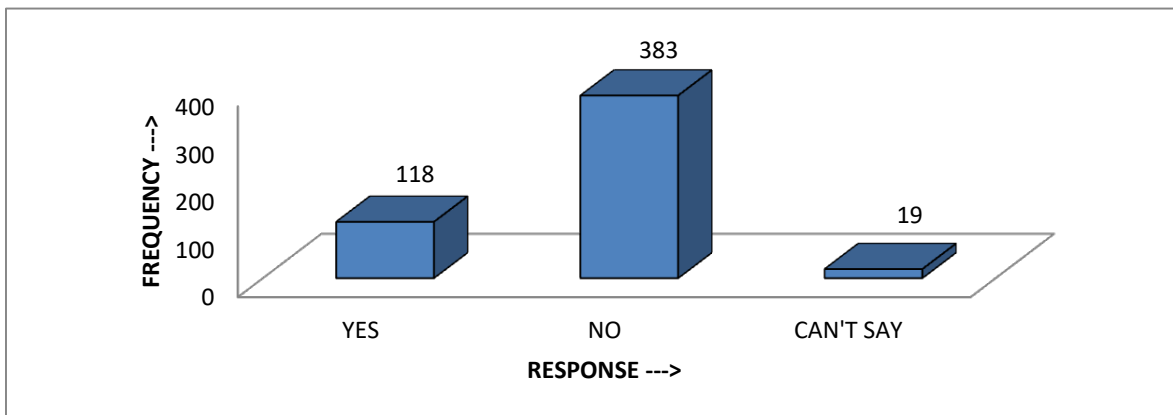
replacement and addition of new cultural practices. Non-indigenous cultural traits have easily diffused into and adopted by the people. The use of modern technology – loud speaker, audio tape, projector video display, inviting VVIP, VIP and distinguish guest, in-fusion of modern music and lyrics, are largely found in Dree celebration. During Myoko and Mida celebration many bollywood and western songs are sang among the members as a part of the entertainment. Currency notes is becoming one of the most valued mode of exchange in place of the ritualized articles in certain instances. The major festivals of the community have undergone modification are agriculture oriented festivals, socio-religious and family ceremonials. With the interaction with modernity and outside cultural contacts, the Apatani are gradually urbanized and adopted the material culture of contemporary time.

5.3.5. Problem of old age:

Table - 5.19: Problem old age

Opinion	Frequency	Percent
Yes	118	22.7
No	383	73.7
Can't say	19	3.7
Total	520	100.0

Figure- 5.18:Problem of old age



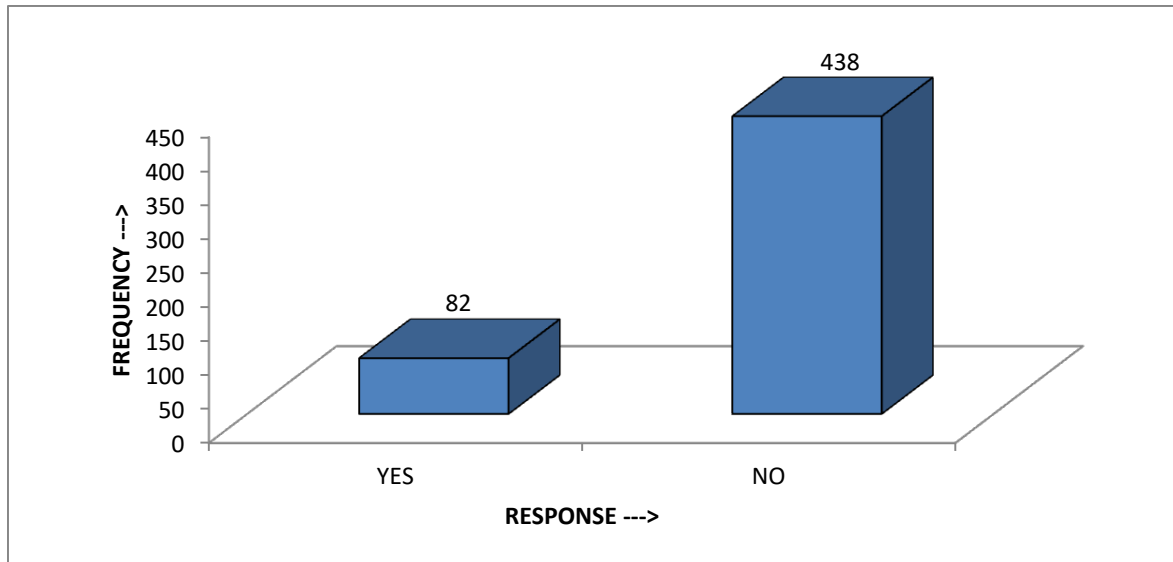
This table shows the problem of old age in the urban family. 22.7% said there are emerging issues of old age problem in urban families and 73.7% said there is no problem regarding old age for parents residing in urban areas while 3.7% said they can't say on the issue. Old age problem is an emerging social issue, especially in urban areas. The busy schedule and nature of work in the urban area have created many problems for elder people. Many old parents are left behind the house by their working children. The quality of life and health status of those parents is diminishing. But in Apatani society age, old people are always treated with great respect and honor. The overall care of elder people has not strongly diminished.

5.3.6. Socialization:

Table – 5.20: Socialization Diminishing:

Opinion	Frequency	Percent
Yes	82	15.8
No	438	84.2
Total	520	100.0

Figure - 5.19: Socialization Diminishing



This table represents the role of the urban family in the socialization process. 84.2% agreed that families in urban still performing their role in socializing and educating their children, while 15.8% said that families are gradually diminishing their role as a socializing agent due to nature of works and environment.

The majority of the respondents accepted the idea that urban family is still a strong agency of socialization process. Here socialization takes place by educating the children about morality and responsibility to become a good citizen. Development of new institutions has brought many new features and facilities that have reduced the function of the family. These new institutions have taken away the role of the family as an agent of socialization. The children are sent to school in early age and so overloaded with academic activities that they hardly have the space for learning more about traditional values by the family members while they learn more about outside culture. The learning of the native language is diminishing at a fast rate. There are various factors which have affected the learning of native language, contacts with other groups,

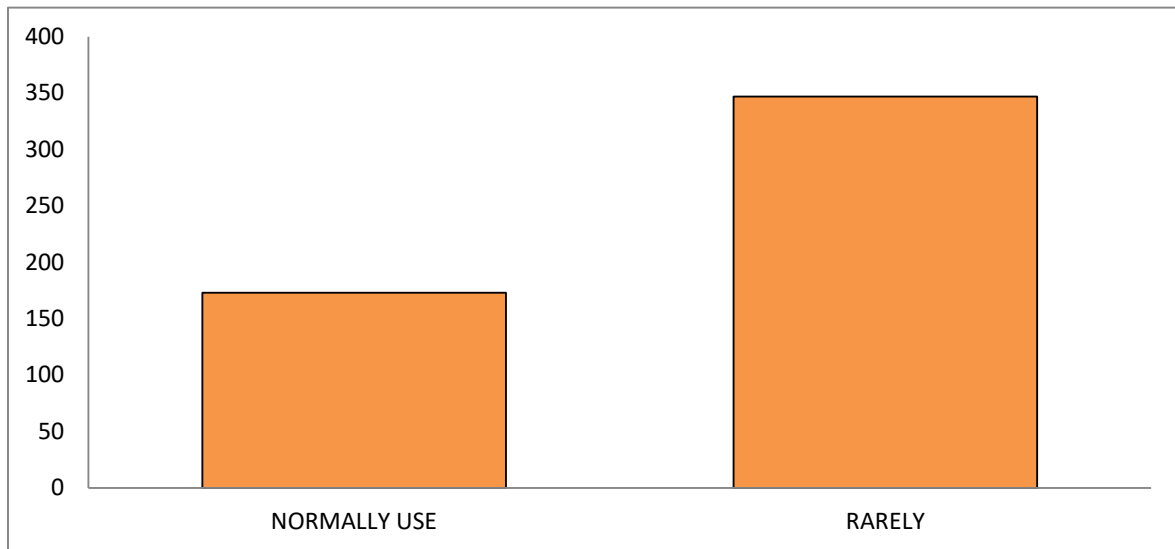
the medium of teaching at schools, encouragement of parent to learn English and other languages.

5.3.7. Use of Mother Tongue:

Table - 5.21: Use of Mother Tongue

Scale	Frequency	Percent
Normally use	173	33.3
Rarely Use	347	66.7
Total	520	100.0

Figure - 5.20: Use of mother tongue



33.3% of respondents say that they frequently use their mother tongue, while majority 66.7% say that they are using the mother tongue rarely when occasions come only. They prefer

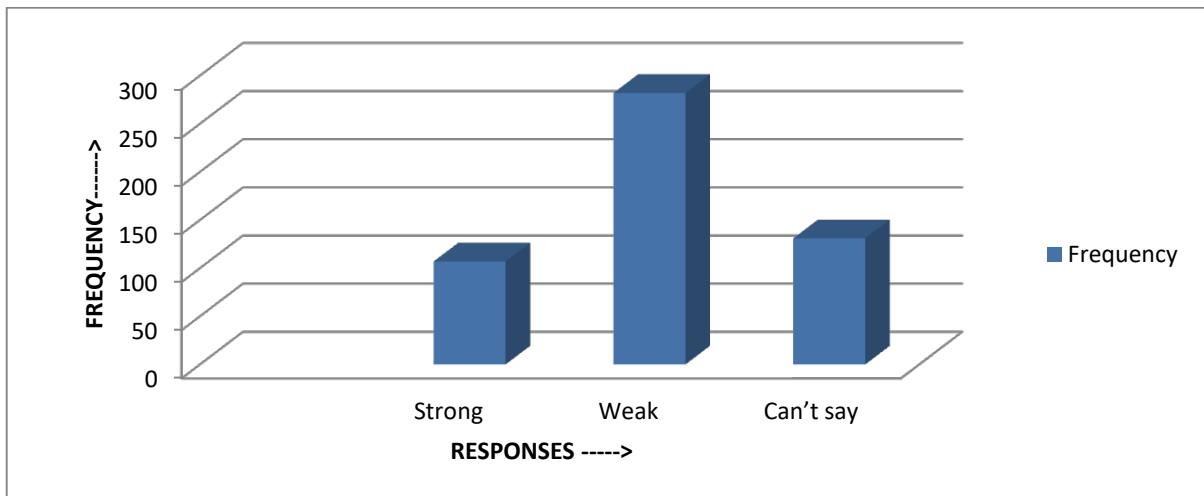
to use Hindi/English in their day to day dealings/interaction process. This is one of the negative impacts visible in these days.

5.3.8. Neighborhood relation:

Table -5.22: Neighborhood relationship

Degree	Frequency	Percentage
Strong	107	20.6
Weak	282	54.2
Can't say	131	25.2
Total	520	100.0

Figure 5.21: Neighborhood relationship



This table shows the degree of interrelations and interactions of respondents with their neighbors, 54.2% of them agreed there are lesser social contacts which shows the weak social relationship with the neighborhood in urban areas. 20.6% of them said they have good and regular interactions so their relationship with their neighbors is stable and 25.2% agreed that they are unable to judge it properly. Nevertheless, these people say that comparatively, the primary

relationship among the neighborhood of earlier time is not clearly visible. The less visible primary relations among the neighborhood shows that the urban working system and the nature of professional jobs have created a situation in which everybody is busy with their own life and does not find time for others.

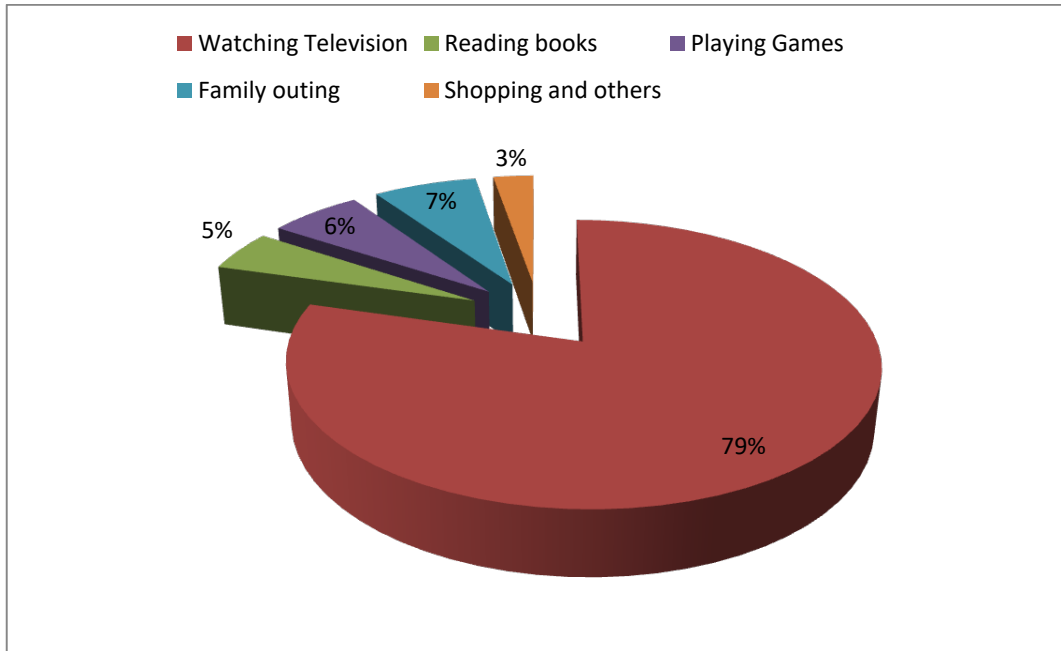
Differences in culture, food habits, and lifestyle create a distance among the neighborhoods. It is also found that due to class (income) differences the people have built high walls and gate with dogs and it creates difficulty to meet them by their neighbors. The respondents have agreed that cohesion and integration among the kin group are gradually diminishing in urban areas through the overall solidarity among the Apatani society is still maintained.

5.3.9. Urban leisure facility:

Table – 5.23: Urban Leisure.

Variables	Frequency	Percent
Watching Television	413	79.4
Reading books	25	4.8
Playing Games	32	6.2
Family outing	36	6.9
Shopping and others	14	2.7
Total	520	100.0

Figure -5.22: Urban leisure



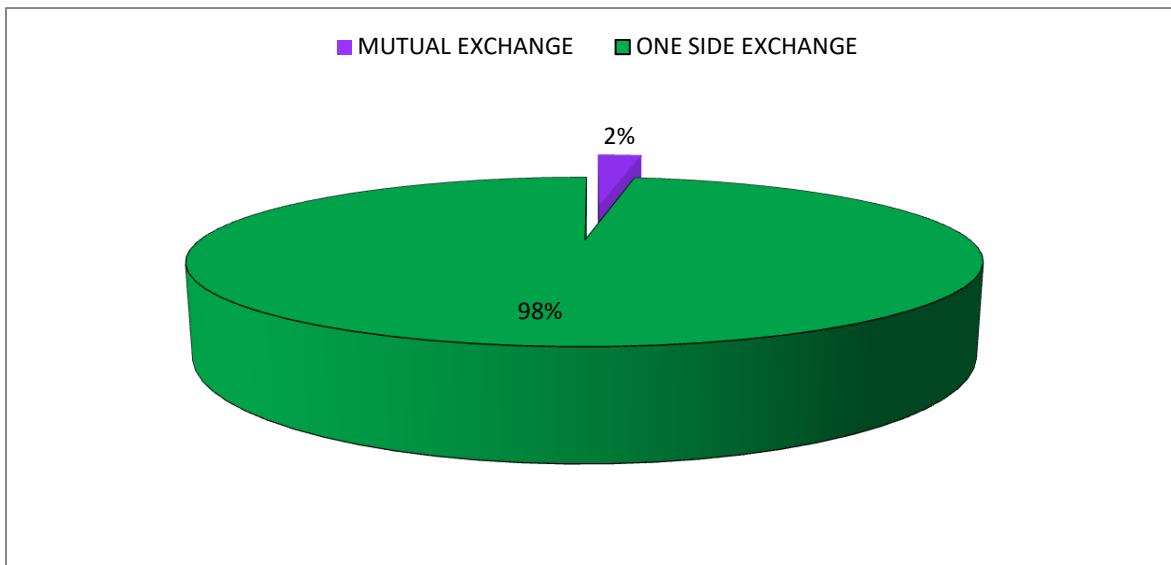
79.4% of the respondents agreed that watching television is one of their entertainment process it also bring all the family members in some point of time and interaction takes place. 7% of them agreed that family outing for picnic, site visit, and relative visits is taking place. It is happening due to opening of many tourist location in the valley which is attracting both foreing and domestic tourists. 6% of the respondents engaged with sports activites, many audotrium and playground has open avenues for urban dwellers.

5.3.10. Kind of Exchange:

Table - 5.24: Kind of Exchange

Kind of Exchange	Frequency	Percentage
Mutual exchange	13	2.5
One side exchange	507	97.5
Total	520	100.0

Figure – 5.23:Kind of Exchange



This table represents the intensity and degree of social interaction and exchange taking place between Apatani community and outsiders in the valley, 97.5% agreed that there is one sided exchange between native and non-native while 2.5% of the respondents said there is a mutual exchange of cultures and ideas.

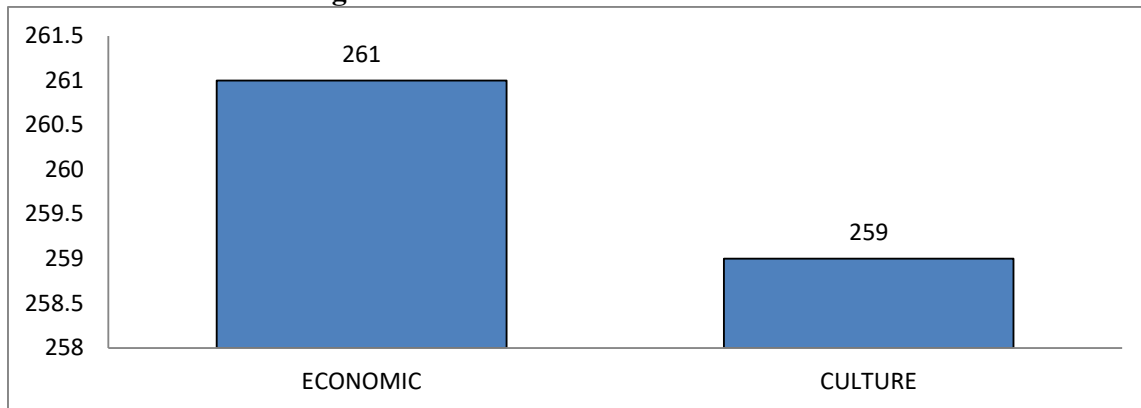
The kind of exchange is represented by both material and non-material culture. The table above shows that due to the urbanization process, it is evident that Apatani society has acculturated many of the cultural elements from the mainland populations of India. But it is found that another group is not very interested to receive many things from the local group, while Apatani tribe is acting as recipient group. Anything that has come with the administrative set up is a modern component which is very influential and that has engulfed the local traditional values easily. The outside culture seems more popular therefore it has more influence and the significant outside elements are immediately adapted, local people.

5.3.11. Prominent influence of outsiders:

Table - 5.25: Prominent influence of outsiders

Variables	Frequency	Percent
Economic	261	50.2
Culture	259	49.8
Total	520	100.0

Figure - 5.24: Prominent influence of outsiders

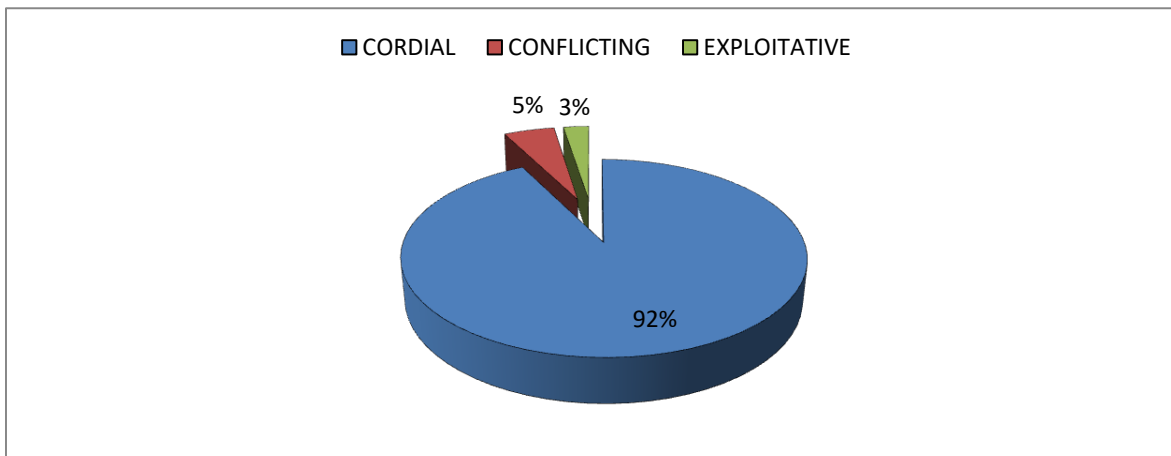


5.3.12. Relationship between classes:

Table -5.26: Relationship between classes

Variables	Frequency	Percent
Cordial	481	92.5
Conflicting	26	5.0
Exploitative	13	2.5
Total	520	100.0

Figure - 5.25: Relationship between different class groups



This table shows that the kind of relationship between different class groups that have emerged in recent decades. 92.5% of the respondents agreed that there are cordial and mutual relations between various economic class groups, 5% said there is conflicting relations between various economic class groups and 2.5% say that the nature of the relationship between two groups is exploitative.

The purpose of the finding is to understand the nature and kind of relationship exist between two economic groups. In recent times, many individuals have become wealthy and rich in Apatani community. The class structure relations of those olden periods were simple and based on affection. The wealthier families were easily identified with their possessions of land, wives, *mithun*, and forest and they were few in numbers but today the number of the rich class has increased.

It is found that cordial relations maintained strongly during the celebration of community festivals like *Dree* and *Murung*. It also takes place when there is an issue regarding village and community issues. In recent times, Apatani people have created *TaniiSupunDukun* (TSD) as the

apex body to deal with anything that is related to community issues. Since then every Apatani people cooperate with the forum for development and integrity. From the above table, it shows that a person is not subservient to a person when he becomes rich. The rich class also do not directly control over the poor people. Even though their economic conditions are different, they do not have any conflicting relations. The exploitation takes place where both the worker and owner coexist together under one firm/compartments. It is been reported that the exploitation takes place between local contractor and its local workers. It is been told that they grab the profit amount without regular payment.

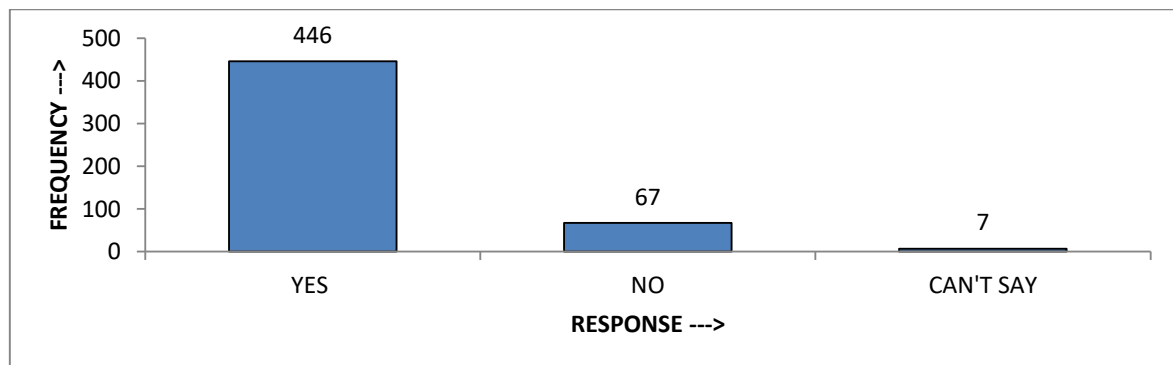
5.4. Impact of urbanization on environment & health:

5.4.1. Degree of pollution:

Table - 5.27: Degree of pollution

Variables	Frequency	Percent
Yes	446	85.8
No	67	12.9
Can't say	7	1.3
Total	520	100.0

Figure - 5.26: Degree of pollution



This table shows that the 85.8% of the respondents have agreed that Ziro town is one of the polluted towns of Arunachal Pradesh, 12.9% has said Ziro town is not polluted and 1.3% said they have no idea. Urbanization and increasing trend of consumerism in the Ziro valley are the factors leading to generation and increasing of more waste.

The pollution in Ziro is increasing day to day. Due to the absence of urban local bodies(ULB), urban planning and strategy are not very effective. There is no proper drainage system, sewerage, dustbin and urban vehicles to carry off the dirt from the town. There is only one urban dustbin truck to manage removing the dirt from the town area to dumping ground.

With the increasing number of automobiles and earth cutting and felling of trees in and around the valley has affected the air, water level, and soil quality. The rate of airborne disease is increasing among the people as reported from health physician. Due to the felling of forest trees, the sources of water has gone down drastically for drinking and agriculture purposes. Town residents are suffering from the irregular supply of water. The climate condition is also changing; the temperature has increased in recent times. It is evident from the uses of the ceiling fan, Air condition in the houses. Time to time it has also affected the cropping pattern and their production quality. In 2016 several of the rice crops were damaged due to *AjiYala*(decay of farm crops), which is caused by climate change.

5.4.2. Vehicle Pollution:

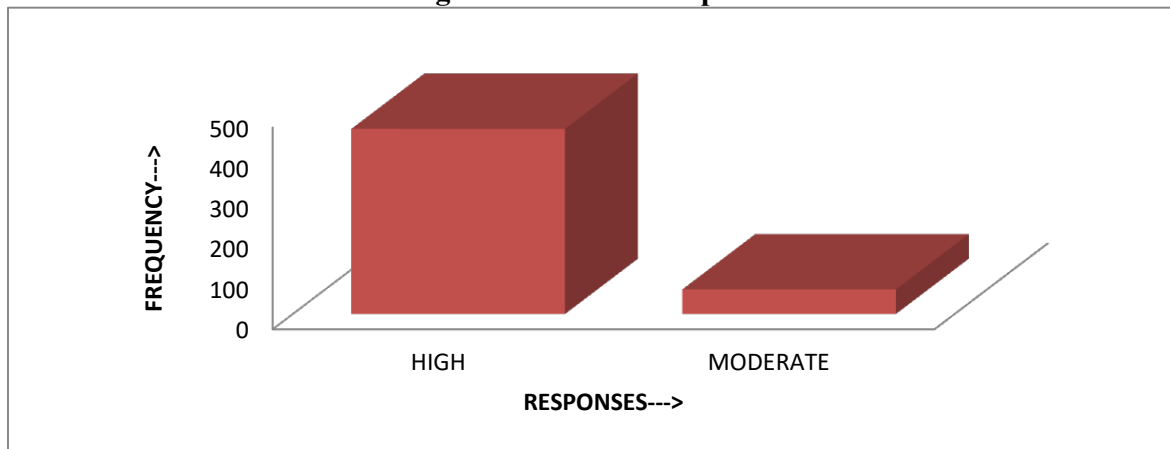
The increasing number of vehicles have added another factor for pollution source in the valley. Automobiles emitting pollution have led to dilution of breathable air, increase noise pollution and risk to accidents it is an area of growing concern. It is also taken into consideration from the field observation that degraded and poor management of road condition is responsible for creating a another level of air pollution.

This table shows about the high rate of pollution that has created by the increasing numbers of vehicles in the valley. 459(88.3%) replied that there are correlations between the increase of vehicles and pollution in the valley, while 61 (11.7%) of the respondents disagreed the relationship between pollution and growing vehicles in the valley.

Table - 5.28: Vehicle Pollution

Scale	Frequency	Percent
High	459	88.3
Moderate	61	11.7
Total	520	100.0

Figure - 5.27: Vehicle pollution



5.4.3. The problem of water and drainage system:

Ziro valley population depend upon the natural supply of water coming directly from the rainforest and streams. Since the inception of Public Health and Engineer (PHE) department every household gets pipe water supply. With the installment of water treatment plant at SSB gate colony the residential of Ziro (Hapoli) is getting potable form of water. Due to growing

population and rapid urbanization along with developmental activities in and around the valley by earth cutting of the nearby hills for house construction and horti farming, felling of the trees have led to loss and deterioration of water sources and problems in the valley. The urban growth and town expansion is taking place instantly but there is inadequate numbers of the drainage system. It has become an un- focus area. Due to ignorance and lackadaisical attitude by the urban management system there was a man made flood situation occurred in the Ziro town in the year 2013.

It is reported from the villagers that the quantity and quality of water in recent years has solely decreased, the far away paady fields from the main sources of canal is losing its production and problematic to do fish culture. They have cited it as due to human activity with the nature and growing population.

Table - 5.29: The problem of water and drainage system

Response	Frequency	Percent
Yes	439	84.4%
No	81	15.5%
Total	520	100.0

5.4.4. Soil Change:

Table - 5.30: Soil Change

Responses	Frequency	Percent
Soil changed	104	20
Soil not changing	416	80
Total	520	100.0

104 respondents (20%) said that the quality of soil is changing while 416 (80%) of the respondents stated that the quality and fertility of the soil is still the same and there is no change. Apatani community is an agrarian community and they have been solely dependent on agriculture products. It is important to understand the quality of the soil and its changing texture with the changing environment. The study helps to find the production values and the decline of its practices. The fertility and quality of the soils tell the pattern of land use in the valley. The more soil retains its quality constantly the continuity of the agriculture can take place in a better way.

5.4.5. Climate Change:

Table -5.31: Climatic change

Response	Frequency	Percent
Yes	379	72.8
No	141	27.12
Total	520	100.0

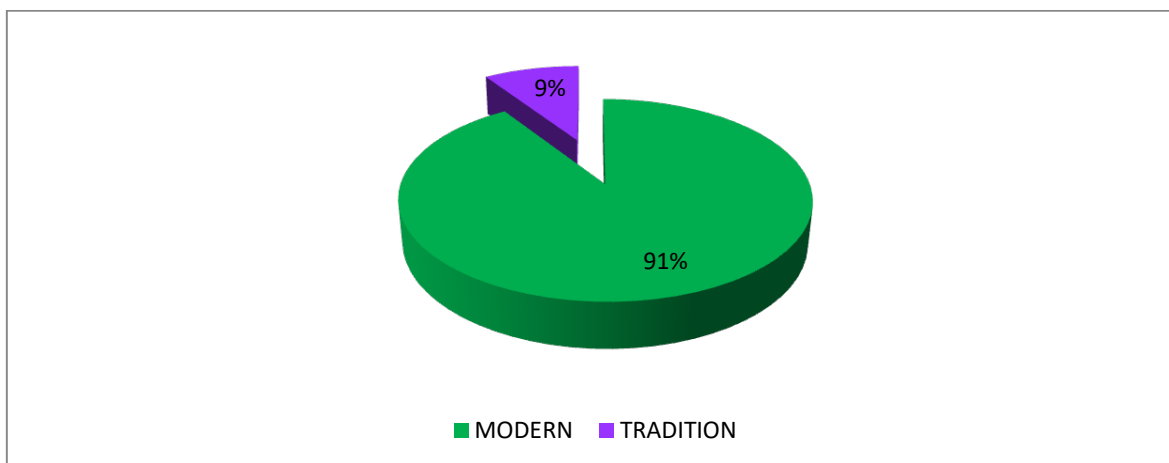
This table shows the opinion of the respondents about the climatic change in Ziro valley over the period of time. 520 respondents have agreed that the Ziro valley is experiencing the climatic change in recent decades. The people have said that the temperature has increased and therefore they have started buying fan and air condition for cooling during the summer season. The duration of the rainfall is shortening in a year or two. The causes for the change in the climate is basically a man made in the recent period due to a growing population, burning of fossil fuels, felling of trees for infrastructure development, rising number of vehicles. Directly and indirectly, the climatic change has affected the grain productions by reducing the quality of the soil.

5.4.6. Health treatment:

Table – 5.32: Mode of health treatment

Types of Health Treatment	Frequency	Percent
Modern	472	90.8
Traditional	48	9.2
Total	520	100.0

Figure – 5.31: Mode of health treatment



This table presents the mode of health treatment, 472 (90.8%) of the respondents have agreed that they prefer to modern medicine rather than the traditional method of curing the diseases. While 48 (9.2%) would still prefer to take the indigenous way of curing their diseases.

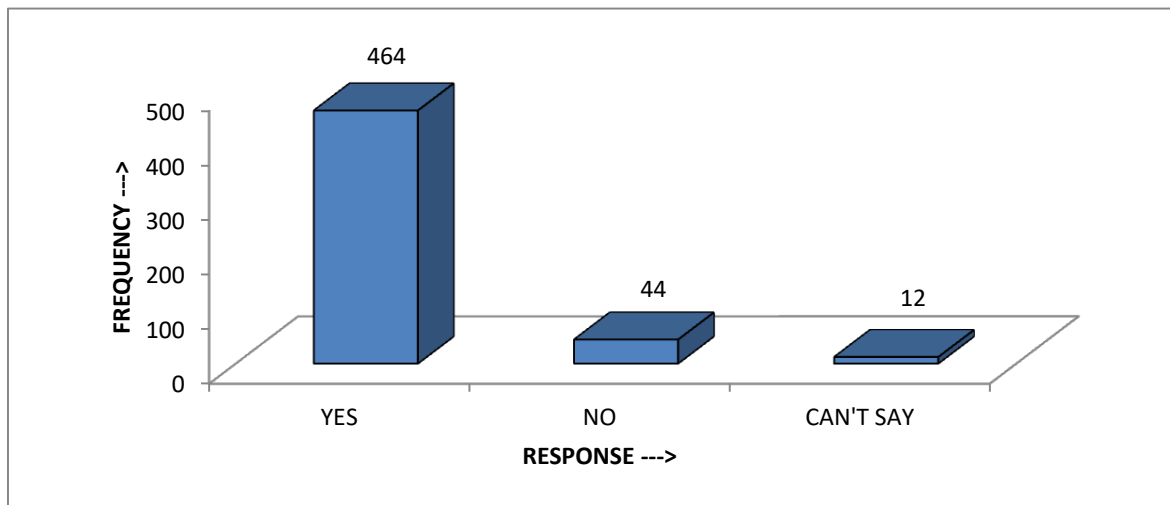
The indigenous method is greatly losing its significance as a way of healing one's sickness. In traditional practices of health, generally herbs and shrub are used as medicines and it is grown in the kitchen garden or collected from the forest. If it is not cured then ritual ceremony takes places with the help of *shaman* or *Nyibus* who perform various rites and ritual as per the demand of the deities and observation of the taboos is prescribed for the concern individuals and family. The number of *Nyibus* is decreasing in every village, some of the clans have already lost their *Nyibus* and they call him from other villages. It is also one of the reasons people are opting for modern medicine.

5.4.7. Stress:

Table – 5.33: Stress in urban

Response	Frequency	Percent
Yes	464	89.2
No	44	8.5
Can't say	12	2.3
Total	520	100.0

Figure – 5.32: Stress in urban



This table gives us the finding that 89.2% of the respondents are having more stress in urban areas, while 8.5% said they are not having stress or tension by living in urban areas and 2.3% said they can't say or don't have any idea.

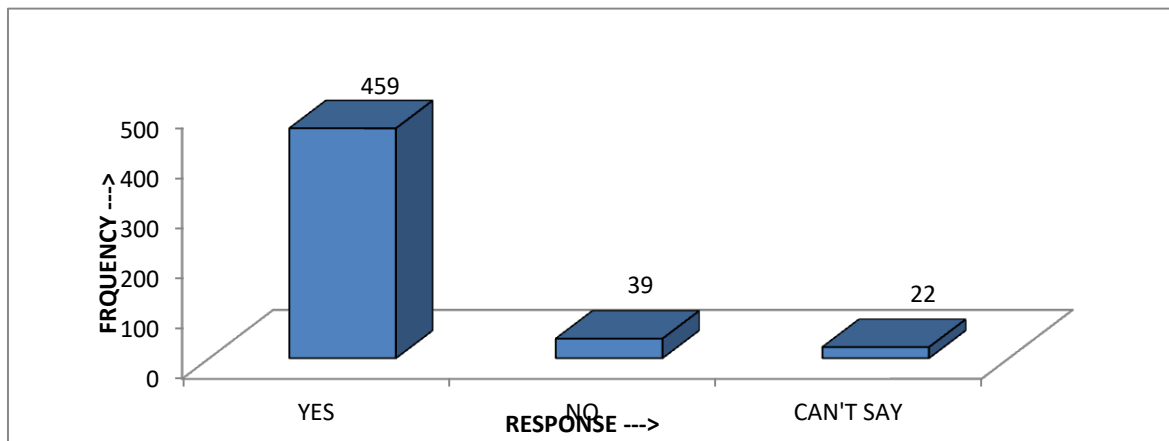
During the discussion of stress topic with the respondents, they have briefed that why urban life is more stressful than rural life? It was told that the urban people are having the stress because of the unhygienic surrounding, bad neighborhood, payment of bills, rush of vehicles, irregular supply of water, fuel, electricity, lack of close and trust worthy relationship and loneliness are the main factors. Urban life is giving economically stressful without a proper job and good source of income to meet the daily needs. One has to maintain a minimum standard of living in urban area. Urban life is depended totally on possession of cash money, one has to understand and learn the proper use of money and making out of it. The social relations intensity is strengthened with good economic factors.

5.4.8. Diseases and urbanization:

Table – 5.34: Diseases due to urbanization

Variables	Frequency	Percent
Yes	459	88.3
No	39	7.5
Can't say	22	4.2
Total	520	100.0

Figure – 5.33: Diseases due to urbanization



This table shows the opinion of the respondents about the diseases occurring due to urbanization. Ziro valley is one of the rapid urbanization district headquarters among the districts of the state. The growing population in the valley have gradually increased the rate of diseases which can be term into as exogenous factors that is foreign diseases brought by those migrant population especially coming from other states. The diseases could have been transmitted either direct or indirect contact. its unhealthy environment and brought by outsiders to the Ziro valley. 88.3% of the respondents agreed that many new types of diseases have come after the arrival of other outside communities and increased due to urbanization, 7.5% said there

is no relation between urbanization and diseases, while 4.2% opined that they are ignorant about it.

Different new types of diseases are diagnosed and experienced by the people after coming of outsiders to the valley. The causes for the increase of diseases have many factors, it is also possible that the same diseases had persisted before but due to the absence of science and technology people were unable to find it. But it is a fact that there are many issues relating to health raised after the urbanization has taken places. The pattern of lifestyle, eating habit, the rise of pollution, contamination of water, haphazard and unplanned housing, lack of proper drainage, physical contacts with different people, and changing of the environment has a detrimental role for increasing the rate of diseases and sickness in the Apatani society.

5.5. Urbanization and Crime:

The incidence and practices of crime have changed in the society. There are emerging new patterns of crime taking place due to influence and contacts with the outsiders and availability of medium of communication and abuse of the facility led to growing incidence of crime scene in the Ziro valley. The numbers of crime recorded in the year of 2013-14 in the lower Subansiri district is given in the table below.

Table – 5.35: incidence of crime in Lower Subansiri district

Sl. No	Type of offence	Case reported
1.	Murder	4
2.	Dacoity	1
3.	Robbery	10
4.	Burglary	22
5.	Property theft	18

6.	Rape	1
7.	Attempt to murder	3
8.	Causing greivous injury	22
9.	Neglignce drive	1
10.	Others	71
Total		160

Sources: District Statistical Handbook of Lower Subansiri District, 2013-2014

The rate of crime is rapidly increasing with the growth of urbanization and technological development in the valley. Before the modern political system was introduced, the Apatani society condemn criminal activities and there was prevalent of repressive law and crimes were controlled to a great extent with severe physical punishment and isolation from community, but with the introduction of judiciary law and prison system, the law becomes restitutive in the urban society which has become more flexible and liberal to any person. The crime are generally committed by male than female.

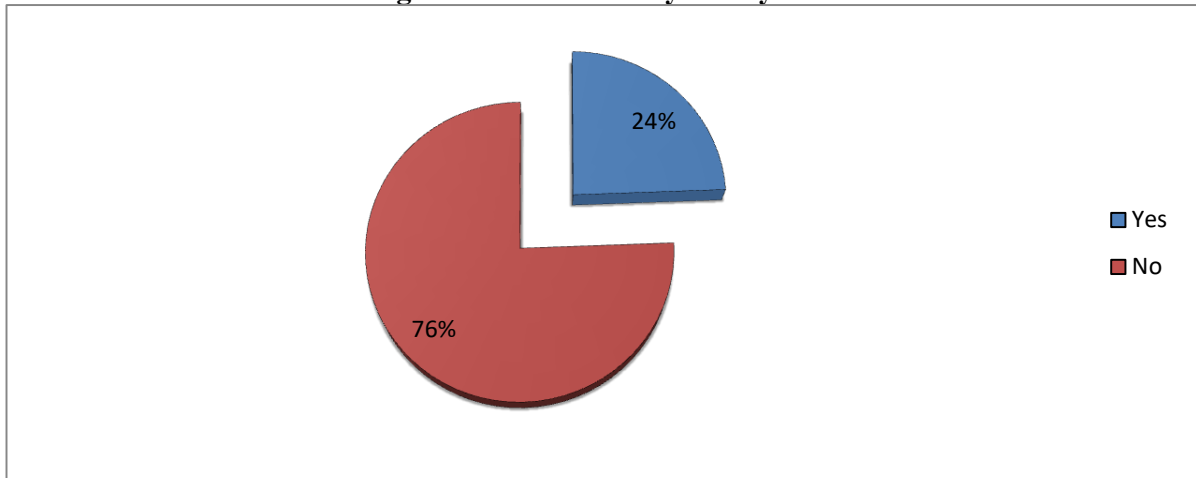
The following tables shows the respondent's opinion on crime and its various aspects.

5.5.1.Crime and local youth:

Table - 5.36: Crime local youth

Variables	Frequency	Percentage
Yes	127	24.4%
No	393	75.6%
Total	520	100.0

Figure - 5.34: Crime by local youth



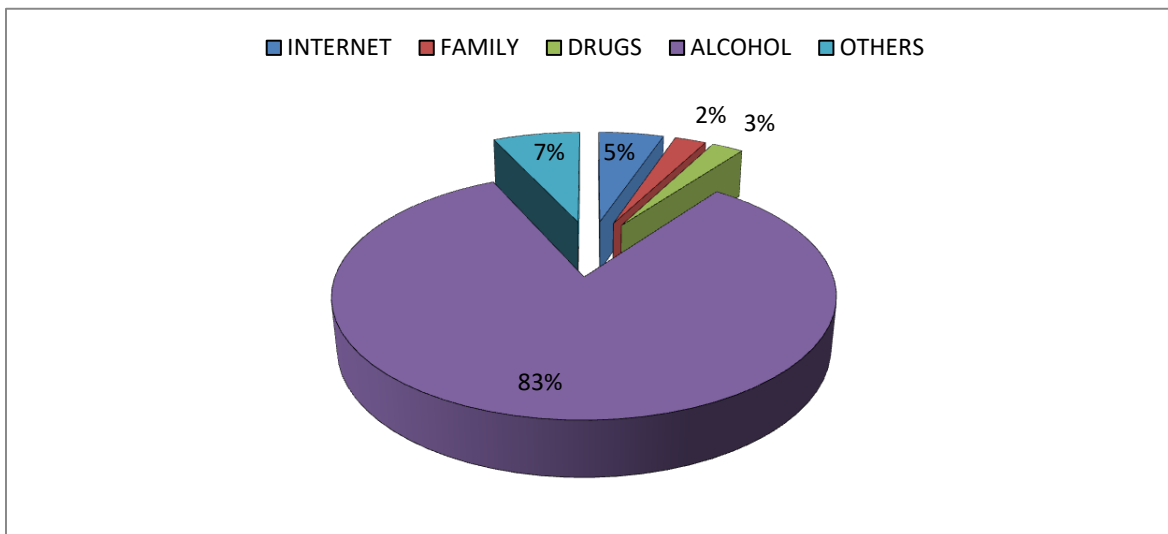
The table - 5.34 shows the opinion of respondents regarding the crime of local youths. 24.4% of the respondents agreed that local youth are involving in criminal activities, while 75.6% said the local youths are not committing crime rather it is by non-local individuals. The non local are non Apatani people/group. it is evident that migrants population are committing the crime and most of the cases are related with urban areas rather than rural areas. Crime rate is highest among those in the low income family, divorced parents, drop out from schools, there are also few children belonging from rich families indulges in deviance activity.

5.5.2.Sources of crime:

Table - 5.37: Sources of crime

Variables	Frequency	Percentage
Internet	27	5.2
Family	13	2.5
Drugs	13	2.5
Alcohol	431	82.9
Others	36	6.9
Total	520	100.0

Figure -5.35: Sources of crime



This table shows that 82.9% of the respondents have agreed that the main cause of the crime is due to alcoholism, 6.9% went for others factor as a cause of crime. Here another option is given for those reasons which are not mentioned in the options list of schedule. 5.2% of them

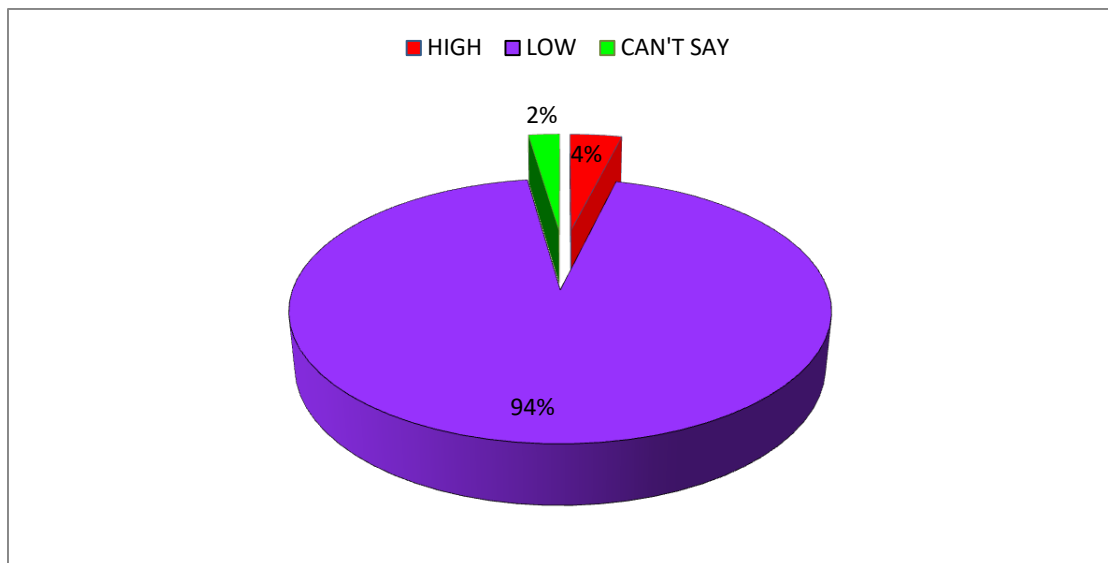
said the internet and mass media act as a motivating factor for indulging in anti-social activities, and 2.5% accept the crime is happening due to drugs and family problems. It is observed that the degree of crime is high in Ziro town and it is mostly committed by youths and teenager especially by outsiders who are gradually affecting and influencing the local youths.

5.5.3.Domestic violence and women:

Table - 5.38: Domestic violence against women

Domestic Violence	Frequency	Percent
High	20	3.8
Low	488	93.8
Can't say	12	2.3
Total	520	100.0

Figure - 5.36: Domestic violence against women



The table -5.36 represents the degree of domestic violence taking place against women in urban areas, 93.8% agreed that the case of crime against women is low, 3.8% said there are occurrences of domestic violence against women in an urban area and 2.3% replied they are not

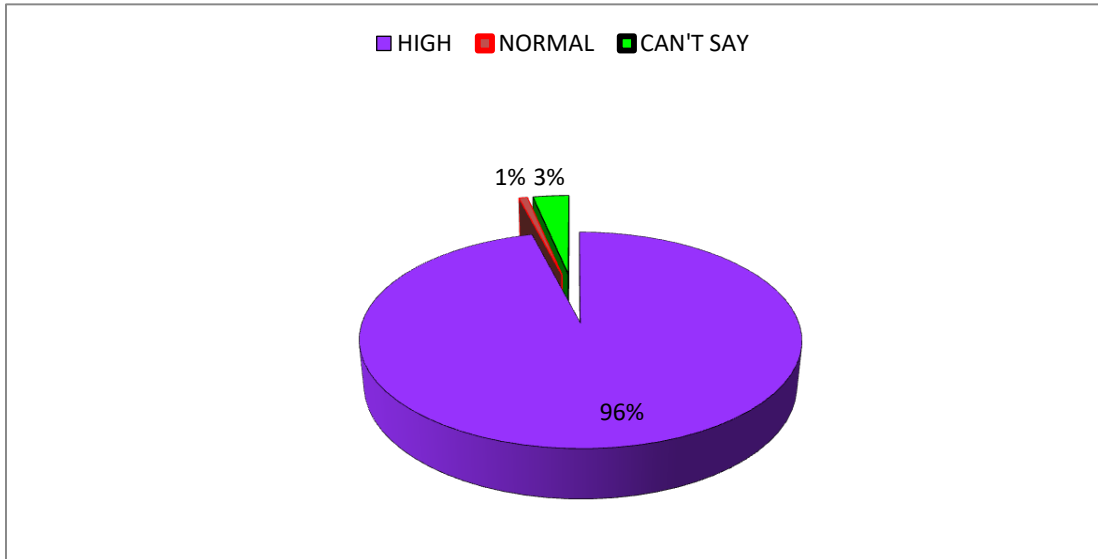
sure or can't say. However, the majority of people said in comparison to other society domestic violence in Apatani society is less.

5.5.4. Juvenile Delinquency:

Table- 5.39: Rate of juvenile delinquency

Rate	Frequency	Percent
High	499	96.0
Normal	4	0.8
Can't say	17	3.3
Total	520	100.0

Figure - 5.37: Rate of juvenile delinquency



The table - 5.37 represents the rate of juvenile delinquency in an urban area. 96.0% say there are high instances of juvenile delinquency in urban areas, 0.8% says it is normal, and 3.3% say that they are not sure of the incidence. When questions were raised why it is happening,

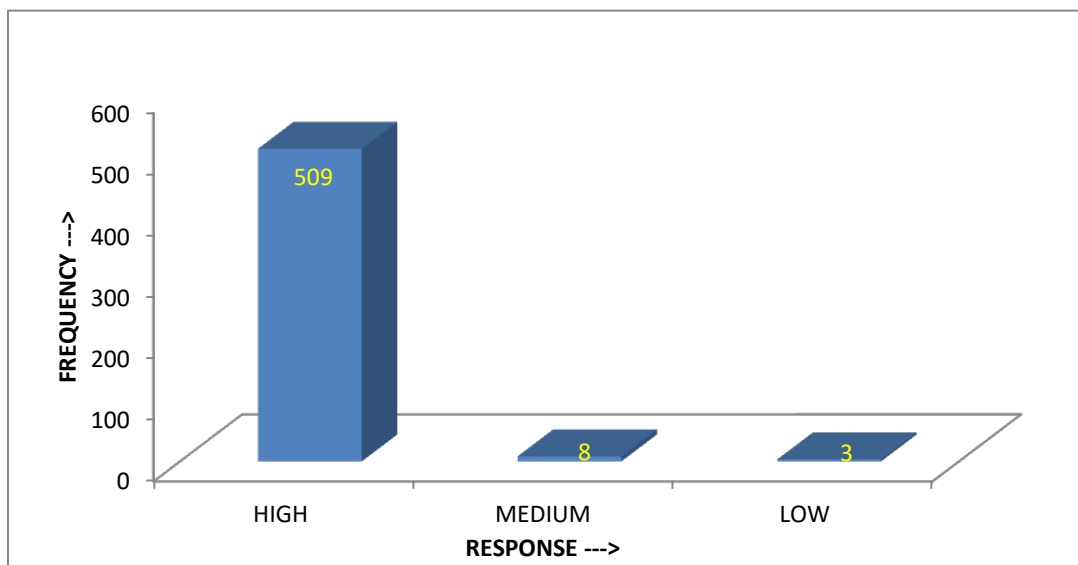
many of the respondents gave a different opinion like coming of the internet in mobile phones, less strict attitudes of parents, bad peer influences, intake of toxic items, available of wine shops and absence of moral education subject at school level are responsible for this.

5.6.Education and social change:

Table - 5.40: Modern education as a social change and mobility

Variables	Frequency	Percentage
High	509	97.9
Medium	8	1.5
low	3	0.6
Total	520	100.0

Figure -5.38: Modern education as an agent of social change and mobility



The table – 5.38 shows the 97.9% of the respondents agreed that education is the major factor for bringing social change and social mobility in the Apatani society, 1.5% represents that

there is a moderate level of social change brought by education and 0.6% said education has a low significant role to bring social change.

Modern education system gave an opportunity for social mobility and change in attitude, behavior and thought process. People prefer secondary and tertiary sector job by engaging themselves in government sectors, private company by attaining degrees. Today we find a large population of Apatani is engaged in different level of occupations. Education has brought social mobility in Apatani society.

The higher education and several private educational institutions are located at Ziro town, therefore, youths from other districts also come for their education. Nevertheless, the issues of educated unemployment youths are also on the rise and most of the youths are staying in urban areas in search of job and income. It is one of the urban issues the society is facing now. Since the establishment of headquarters, the valley is expanding its administrative units but there is no industrial establishment by government or private enterprise to absorb the educated unemployed youths.

Respondents gave their argument that modern education has brought a change in occupation system by turning youths towards formal education based employment but there is a crisis of employment. Due to lack of capital and resources the entrepreneurial development is not possible. During the interview, the respondents discussed that the youths and those families who have migrated to urban are not participating or keen on learning the art of doing the traditional method of agriculture. It is because the agriculture land is too small for the commercialization of crops. So the prospect for generating surplus products and income is not possible. In the wake of

urbanization, recent youths are therefore not paying their attention to engaging themselves in agriculture.

CHAPTER – VI SUMMARY AND CONCLUSION

6.1. Relevance and Significance of the Study:

The study is very significant to understand the dynamics of social change in tribal regions of Northeast India especially on the Apatani tribe of Arunachal Pradesh through the impact of urbanization process which is occurring rapidly. Since no work has been done in this field the study has tried to make a pathway for understanding and interpreting the phenomena of urbanization in tribal society. There is a lack of theoretical explanations of urbanization and urban growth in the state especially about social, cultural and institutional and environment level. The study has tried to provide a conceptual understanding of the urbanization process.

6.2. The Primary Objective of the Research:

- To study the nature of urbanization and its properties.
- To understand urban planning and development in the valley.
- To examine the impact of urbanization on bringing change in the socio-cultural, economic, political and religious aspects of Apatani life.
- To study the relationship between urban growth and the physical environment.
- To find out the limitation and challenges of the urbanization process.
- To provide certain suggestive remarks to eradicate the problem of urbanization.

6.3. The Approach to the Study:

The researcher used an exploratory research design to explore the process of urbanization and its impact on the Apatani society. This particular research design was adopted to understand the core issues of societal changes which are happening by the phenomena of the urbanization process. The subject of the field also offers new ventures to investigate the problem. The present study is impact assessment on an institutional level. It is a descriptive as well as analytical study. The exploratory research design supplied the resources for description and analysis of the impact of urbanization in Apatani tribal society. To evaluate the socio-cultural transformation and the growth of economic development it has been envisaged through a comparative approach. The comparative approach facilitates to delineate the attitudes and behavior patterns towards the emergent process of social change between the old and new generations.

The area of the study is Ziro valley, the district headquarters of Lower Subansiri. As per the proposed study, the researcher has divided the Hapoli town into several clusters for the convenient of the study, Old Ziro town and seven main villages are also brought into the part of the area of study. In total 520 households have been taken as sample for the study.

Considering the sampling size and spatial distribution of the population a variety of method and techniques have been used to collect the data. In order to test the validity of the techniques, the researcher has conducted the pilot survey in Hapoli Town, Old Ziro and seven major villages. The pilot survey helped the researcher to design the interview schedule for the main research.

In the present study, the researcher has used different primary methods for collecting the data like i) Interview schedules ii) observation iii) focused group interview iv) mailed questionnaires. Apart from primary data, the varieties of data had also been collected from secondary sources. Secondary sources comprise both published and unpublished materials.

The researcher has attempted to present the findings and make generalization of the study precisely through this analysis and understanding facts observed from the research. The discussions are elaborately discussed according to the findings, which are presented in the form of various tables and figures through statistical analysis.

6.4. Major Findings of the Study:

6.4. 1. Impact of Urbanization on Social Aspects:

- 82.3% of the respondents agreed that the urban family is not becoming individualistic, 17.7% agreed that family in urban is becoming an individualistic unit and self-centered. Individualistic and self-centric is a feature of urban society. Due to the complex normative pattern, costly life, increasing consumption and fewer sources of income of family living in urban areas have more economic constraints. Due to busy life, the relationship in an urban area is also secondary. The small percentage of the respondents said the traditional bonds and cohesion among the Apatani community is changing and people are becoming self-centered. But maximum respondents say still the primary relations between Apatanis, their solidarity, and common belongingness is still maintained in urban areas also.

- 94.2% of the respondents say they have proper contacts with their near and dear ones, 5% said they rarely meet or communicate with their relatives and 0.8% of them meet and communicate them regularly.
- 96.0% of respondents say significant changes have been taken place in certain cultural practices. While 4% remarks that culture is strongly maintained and there are no significant changes taken place in the traditional culture. Many changes are found in the way of celebrating the main festivals of the community. The urbanization processes have brought both replacement and addition of culture. Non-indigenous cultural traits have easily diffused into and adopted by the people. The major festivals that have undergone little modification are agriculture oriented festivals, socio-religious and family ceremonials. With the interaction with modernity and outside cultural contacts, the Apatani are gradually urbanized and adopted the material culture of contemporary time.
- 22.7% of respondents say that there are emerging issues of old age problem in urban families and 73.7% said there is no problem regarding old age for parents residing in urban areas while 3.7% said they can't say on the issue. The busy schedule and nature of work in the urban area have created problems for elderly people especially in related to their diet and health care. Several old parents are left behind their house by their working children. The quality of life and health status of those old parents is diminishing. But in Apatani society age, old people are always treated with great respect and honor. The overall care of elder people has not strongly diminished.
- 84.2% agreed that families in urban still performing their role in socializing and educating their children, while 15.8% said that families are gradually diminishing their role as a socializing agent due to nature of works and environment.

- 33.3% of respondents say that they frequently use their mother tongue in conversation and interaction, while majority 66.7% say that they are using the mother tongue rarely when occasions come only. They prefer to use Hindi/English in their day to day dealings/interaction process. This is one of the negative impacts visible in these days.
- 54.2% of them agreed there are lesser social contacts among their nearby families which show the weak social relationship with the neighborhood in urban areas. 20.6% of them said they have good and regular interactions so their relationship with their neighbors is stable while 25.2% agreed that they are unable to judge it properly or can't say. Nevertheless, these people says that comparatively, the primary kind of relationship among the neighborhood is not existing as generally found in rural areas. The less visible primary relations among the neighborhood shows that the urban working system and the nature of professional jobs have created a situation in which everybody is busy with their own life and does not find time for others.
- 92.5% of the respondents agreed that there are cordial and mutual relations between various economic class groups, 5% said there is conflicting relations between various economic class groups and 2.5% say that the nature of the relationship between two groups is exploitative.

6.4. 2. Impact of Urbanization and Education:

- The education status of the respondents is substantially good; we can relate its high rate to the growth of urbanization and the concomitant opening of private, missionary and government educational institution in the valley.

- 97.9% of the respondents agreed that education is the major factor for bringing social change and social mobility in the Apatani society, 1.5% represents that there is a moderate level of social change brought by education and 0.6% said education has a low significant role to bring social change.

6.4. 3. Impact of Urbanization on Religion:

- Earlier all community members were practicing indigenous religion. But now there is a change taken place in the previous practices. It is evident from the study that though indigenous religious practices are largely found among the respondents (81.7%) the non-indigenous religious practices are on the rise with the percentage of 18.3%. The non-indigenous religion is basically including the practice of Christianity in the region. The impact of urbanization and outsider has hugely influenced this phenomenon.

6.4. 4. Impact of Urbanization on Economy:

- The urbanization process was found to be taking place rapidly since 1980 onwards but the finding shows the majority of the respondents have migrated towards urban area during 1990 - 2000 period. It is evident from the finding that the urbanization is rapid and prominent during this period.
- There is a direct relation between administrative center and growth of infrastructures in the valley. Growing infrastructures have changed the physical looks of the valley and it has provided all civic amenities and provisions to the people. This has attracted a huge population to migrate to Ziro town.

- 97.5% of respondents say that the parents and youths are choosing and preferring their occupation for tertiary sector occupation like be in government services, business, and professions. Significantly education based occupation is replacing traditional skill-based occupation among the educated youths. The introduction of modern education institutions have retained and refrained youths and parents from sending to the fields and forests. The growth of schools and government education policies helped the community people to avail the facilities. The modern politico-administration center or bureaucratic organization, directly and indirectly, gave the message to the community people that education based occupation are the new forms of employment and income generation.
- Consumption Pattern of the population has changed over the period of times and the incidence of change is highly found in those urban families. The people have adopted the new material culture, it is prominently found in their way of dress, eating habits, intake of more non-local dishes, use of more luxurious gadgets and modern technology, cosmetics for beautifications and other materialistic elements of urbanized culture. The modification of in their consumption pattern is visible due to the modern market center, mode of transport and communication by which the goods are easily bought and sold.
- Tribal society was based upon communal ownership of land and forest. There is an absence of the idea of private ownership. Land distribution for agriculture was previously done by the tribal chief. It was almost an egalitarian society in a Marxian perspective of primitive communism mode of production. But now things have been changed. There is a growing interest to accumulate more and more private land and property. Apatani community in contemporary time is a class-based society because of the existence of private property and individual land ownership.

- The banking system is another feature of urban infrastructure that has changed the financial status of the community. The financial institution has provided ample scope for saving. The bank helps to get the loan to the established enterprise. Bank has introduced the currency system in the tribal economy and gradually it has replaced the exchange and barter system in the Apatani society. People value more to money than goods and objects.
- Since the establishments of Ziro as the district headquarter, lots of construction has been taking place and many private shops have opened to give services to the people. During the process of building the headquarters at ziro, workers have been brought from the plains in large numbers. The study reveals that 95.5% of the laborers and workers both skill and unskilled have migrated from the other states in the beginning. Today local youths have the opportunity to enter into the business and work under private enterprises.
- Still, the menial occupations like washer-man, barber, cobbler, etc are largely performed by non-tribal population. The respondents mentioned that the Apatani tribe is very conscious about their prestige and status, therefore they do not like to reduce their status by performing the menial job.
- The skill training is imparted by a government department is facilitating through various schemes and programmes for both educated and uneducated youths in several technical institutions like Industrial Training Institute (ITI) and short term course provided by District Industrial Units (DIU). Several new types of the occupation have come up due to the growth of town and urbanization.
- The horticulture activity is gaining importance and provides a good scope for high earnings. In recent decades, many of the Apatani people started focusing in this field. The commercial crops like kiwi, Cardamom, ginger, pears, etc. are vastly grown in the field.

The development of horticulture activities is taking place with the help of incentives and subsidies provided by government departments. It has improved the earning and income source for the local women and their economic empowerment.

- Apatani tribe is popular with their artistic work in handicraft, woodcraft, embroidery, and handlooms. The notion of commercialization of the products like *Gale* (woven by female), shawl, sofa cover, machete handle, cane bag, *maplar*, coat, tie, etc. have increased rapidly. The embroidery and handloom items are bought and consumed by both local and non-local people.
- It is observed that the importance of the land value. All respondents have agreed that the land value is increased or increasing with the growth of urbanization. The establishment of headquarter and expansion of the township have increased the value of land nearby Ziro and led to an increase in land price.

6.4. 5. Impact of Urbanization on Political Institution:

- In many ways, the political changes are visible in political aspects of Apatani life due to urbanization. The modern urban life has challenged the role of *Buliyang*. Participation in modern political institutions has significantly increased. Increasing participation of women in the modern political system is a new dimension in political aspects of Apatani society.
- 88.7% of the respondents said that the role and functions of *Buliyang* have diminished, 8.7% said the *Buliyangis* still functioning their role and function even after Panchayat Raj system, and 2.7% said they can't say about its power and function. It is found that *Buliyang* as village council is not having the same power and jurisdiction as before. The

power of it has decreased significantly and now it remained with a customary institution only. In recent days the power of officials in jurisdiction, execution, and decision making for any disputes and conflict has reduced. However, they are given priority and respect during the celebration of festivals like *Murung*, *Myoko*, etc., and invited with great reverence. The judiciary and executive power of Builyang are transferred to magistrate and police.

- 96.5% of the respondents agreed that they are actively participating in the modern political system. Only 3.5% of respondents say that they are not interested in the modern political system. The modern political institution is broader and justifiable to each and every one. It has given equal opportunity to everyone to be a part of the system and run the system. Therefore they have faith in the modern political system for the development of the community people.
- 62.5% of the respondents agreed that there is no socio-political differentiation among the kin groups even after the modern political system is established in the valley, 27.3% of respondents observed instances of socio-political differentiation among the localities and among even family members. While 10.2% says they have no comments on this idea. In Apatani society, kinship relation plays an important role during the election time. Kinship and religious obligation are well felt in voting behavior. With the passage of time, the notion of kinship politics based alliance is increasing in recent days.
- 91.5% of the respondents agreed that the identity of Apatani is still intact. 8.5% of them is strongly agreed that there is a loss of tribal identity by merging into urbanism as a way of life. With the growth of urbanization and social contacts with outsiders, several cultural practices have changed and discarded.

- 59.6% of the respondents say that the coming of the National political party in the state, has not greatly affected the Apatani society, 23.7% of them said there is change in the political behavior and socialization after the intervention of National level political party and 16.7% of the respondents say that they don't have a proper answer to it.

6.4. 6. Impact of Urbanization on Environment & Health:

- 85.8% of the respondents have agreed that Ziro town is one of the polluted towns of Arunachal Pradesh, 12.9% has said Ziro town is not polluted and 1.3% said they have no idea.
- The pollution in Ziro is increasing day to day. Due to the absence of urban local bodies (ULB), urban planning and strategy are not very effective. There is no proper drainage system, sewerage, dustbin to carry off the dirt from the town. There is only one urban dustbin truck to manage the dirt from the town to dumping ground. With the increasing number of automobiles and earth cutting and felling of trees in and around the valley has affected the air, water level, and soil quality.
- 459 respondents (88.3%) replied that there are correlations between the increase of vehicles and pollution in the valley, while 61 (11.7%) of the respondents disagreed the relationship between pollution and growing vehicles in the valley.
- The rate of airborne disease is increasing among the people as reported from health physician. Due to the felling of forest trees, the sources of water has gone down drastically for drinking and agriculture purposes. Town residents are suffering from the irregular supply of water. The climate condition is also changing; the temperature has increased in recent times. It is evident from the uses of the ceiling fan, Air condition in

the houses. Time to time it has also affected the cropping pattern and their production quality. In 2016 several of the rice crops were damaged due to *Aji Yala* (decay of farm crops), which is caused by climate change.

- 472 (90.8%) of the respondents have agreed that they prefer to modern medicine rather than the traditional method of curing the diseases. While 48 (9.2%) would still prefer to take the indigenous way of curing their diseases.
- It is observed that 89.2% of the respondents are having more stress in urban areas, while 8.5% said they are not having any stress or tension by living in urban areas and 2.3% said they can't say or don't have any idea.
- 88.3% of the respondents agreed that many new types of diseases have come after the arrival of other outside communities and increased due to urbanization, 7.5% said there is no relation between urbanization and diseases, while 4.2% opined that they are ignorant about it.
- 24.4% of the respondents agreed that local youth are involving in criminal activities, while 75.6% said the local youths are not committing crime rather it is by non-local individuals.
- 82.9% of the respondents have agreed that the main cause of the crime is due to alcoholism, 6.9% went for others factor as a cause of crime. 5.2% of them said the internet and mass media act as a motivating factor for indulging in anti-social activities, and 2.5% accept the crime is happening due to drugs and family problems. It is observed that the degree of crime is high in Ziro town and it is mostly committed by youths and teenager especially by outsiders who are gradually affecting and influencing the local youths.

6.5. Limitation and scope of the study:

Though the researcher has taken utmost care to observe even the minute activities still few limitations remain in this study. The following are a few limitations observed after the study is conducted on this topic:

- i) The very first limitation of the study is that there is no terminology and meaning for urban or town in the language of Apatani.
- ii) Theoretical approaches were not very substantially appropriate for this urban process.
- iii) The area of the study is very vast comprises of seven villages and two urban areas, and clustering them into areas/zone wise was approximately done for the purpose of the study.
- iv) Some of the selected respondents were not cooperative during the interview time. Many a time the respondents were absent and out of station this also led to delay of collecting the data.
- v) There was also a difficulty in the translation of the technical terms into the local language in a precise way.
- vi) The completion of the interview in one go was not possible with all the respondents due to the constraint of the respondent's time. The repetitive interview was conducted for completion.
- vii) There is very scanty of work have been done and literature availability on the aspects of urbanization of the Ziro valley and the societal level was very less, therefore, it became very difficult in bridging the gap of knowledge and refurbishing of new knowledge for the direction of doing research.

viii) The time constraint and financial involvement was another limitation taken into consideration for the study.

Nevertheless, taking into consideration the difficulties and limitation of the area of the study the researcher has tried to give his best effort for a comprehensive and empirical work and unbiased work. Yet this study has done exploratory research on urbanization process at Ziro, Arunachal Pradesh which will definitely provide ample scope for further studies on the said topic in the state in future.

6.6. Suggestion:

Apatani population in earlier time has been living in a compact, isolated from the other tribes, self-sufficient, self-administered system of governance that makes the community different from the rest of the tribes of the state. The urbanization process has brought a different level of change in the society and valley. The change is identified in socio-culture, physical, environmental, economic and other aspects as well has modernized the valley. Urbanization as a process of change has brought both the positive and negative changes for the society as a whole. Considering both the effects, the researcher would like to recommend a few suggestions for the healthy implementation of different urban policies and the overall development of the area. The following are a few suggestions in this regard:

There should be a self-regulatory local urban body or municipality immediately to properly administer and manage the urban growth and urbanization.

1. The coordination between the bazaar committee and administrator should be strengthened to implement the management of the town area.

2. The local participation in urban management should be encouraged and frequent monitoring activities should be performed.
3. There should be a proper and specific town planning format for short and long term.
4. Illegal construction and encroachment on public property should be stopped.
5. There should be a guideline and regulation for house construction to avoid compactness and congested type of settlement that could prevent disaster.
6. Construction of the drainage system and garbage disposal in every colony is the need of the hour. Sewage treatment plant should be constructed for urban areas.
7. A proper action plan for collection, treatment, and disposal of solid waste should be prepared with the identification of the location.
8. The urban department can use with the help of Satellite Remote Sensing Images to identify and locate the wasteland site and for other urban expansion policies.
9. The government should provide proper facilities and incentive schemes related to agriculture activities and also other alternative livelihoods to the villagers so that it can improve their economic positions and checks unwanted migration.
10. The basic urban facilities like water supply, electrification, health centers, education center, and road connectivity should be properly established and maintained from time to time to accomplish its quality.
11. The law and order should be well maintained to prevent any unlawful and anti-social elements in the urban areas.
12. There should be a proper burial ground site for those outside communities.
13. The government should build a parking lot to avoid traffic congestion in urban areas and traffic management to prevent air pollution.

14. There should be a proper mechanism to prevent illegal migrants from other parts of the states.

6.7. Conclusion:

Urbanization is a universal process in the global village. It has brought many transformations in the society, both at the level of economic, cultural and physical aspects. The traditional structure is altered and modified in the process of urbanization. Urbanization has also brought change in lifestyle status and identity in large.

Urbanization as a process is very recent phenomena and took place in the year 1971 in the state and 1991 in Ziro valley of lower Subansiri district. The urbanization process is induced changed brought by political and administrative policies. Today Ziro is experiencing the rapid urbanization process. Multiple numbers of infrastructures and urban amenities are built in and around the Ziro town. Modernization is a major part of the urbanization process. We cannot isolate the elements of modernization from the urbanization incase of the Apatani society. Modernization is other side of the coin with urbanization.

The urbanization has brought transformative changes in social institutions of the Apatani community. The impact is largely found in economic structure, income, occupation, division of labour, political institutions, *Builyang* system, breaking the heredity system of power and functions, empowerment of women, modern education, occupation so on and so forth. Urbanization brought social change in social contacts and social relationships; the degree of change is not very prominent as found in metros and cities. In Ziro, still, there is a strong sense of we-feeling among the kin group even in the urban areas. The role of the family is continuing as normal, it has not deviated from its function as a socializing agent. But the uses of the mother tongue is declining very rapidly especially among the urban dwellers and young generation

parents. The native language is taking over by Hindi and English languages. The urbanization has contributed a new type of social institutions which has taken over the role of the family in certain functions.

The consumption pattern of the community has altered and modified to a large extent. People are emphasizing more on modern culture than traditional. The traditional religion is also being converted to other religions (Christianity) in a large number. The crime is on the rise, most of the crime is committed by youths especially by migrant population. Consumption of alcohol and multimedia is prominent sources of committing a crime. The participation of native youths in traditional activities is decreasing day by day. The health issue is one of the problems found with urbanization and urban growth. Different new types of diseases have come to the valley. Urbanization has increased the rate of pollution and environmental hazards after many construction activities and environmental damages.

In contemporary time urbanization is a universal process. No society can escape from this. Though it has a few negative impacts still it is well considered as one of the most important processes of socio-economic transformation for the overall development of any society. The only thing which is the need of the hour is to see that proper urban planning must be implemented to avoid the environmental risk in an urban area.

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