Chapter–V

ACTORS OF LAND TRANSFORMATION
5.1 Introduction:
Land use/land cover changes are the result of broad economic, socio-cultural forces bringing in use and changes in land. The present research try to identify the causative factors responsible for their decision making process.

In most cases, number of factors are used to represent the underlying causes; for example, population density and accessibility. These are further differentiated into ‘driving’ forces and the ‘conditioning’ factors. Driving forces are expected to change over time, such as population density and land value whereas ‘conditioning’ factors are relatively stable over time. Conditioning factors are spatially varied, such as physical setting and cultural values. This helps in the land analysis of spatial and temporal prospectus of change (Verburg et al. 2003). Broadly the causes which lead to the land use/land cover change are classified under two broad categories i.e., the direct and the indirect causes.

5.2 Direct Versus Indirect Causes of Land Transformation:
Direct causes involve physical changes in land use/cover. These are usually limited to responses such as increase in built-up, infrastructure building and wood extraction etc. Direct causes generally operate at the local level, for example, at individual households or communities (Lambin and Geist, 2003; Mather 2006).

Indirect or underlying causes are fundamental forces that underpin the direct circumstances for land transformation. They operate more diffusively (i.e., from a distance) and often have bearing over stable direct forces. Indirect causes are formed by a complex of social, political, economic, demographic, technological, cultural and biophysical variables (Brookfield and Stocking 1999). In contrast to direct cause the indirect/underlying driving forces operate at districts, provinces, natural or even global levels.

The indirect drivers which are in general responsible for land transformations are; technological, economic, political, institutional, demographic and socio-cultural forces. The change in any of these indirect drivers usually results in changes in one or more of direct forces triggering land transformation. Bryant and Bailey have used the term ‘actors’ for the individual components of driving and conditioning forces (Bryant and Bailey, 1997). ‘Actors’ are the different institutions and people who regulate different forces leading to land transformation. The trends and pattern of
land transformation at any location are the outcome of certain ‘alliances’ and ‘conflicts’ among these individual actors.

5.3 Roles of Actors and Political Ecology in Land Use Issues:
The actor approach was originally used in the field of the political ecology (Bryant and Bailey 1997, Blaikie and Brookfield 1987, Blaikie 1996). The land transformations are because of the different forces influencing and interacting with each other at local level.

Land transformation is the outcome of the interaction of complementary and conflicting interests of different human and institutional actors. As the urbanization process is complex, the actors and their role is also complex in urban land transformation. The interests can be balancing or at variance in nature resulting in harmony or differences. Their strength of the actor approach lies in the integration of place and non place based analysis.

5.4 Socio-Political Perspectives of Land Use:
The city is expanding and there are wide spread changes in land use. The study tries to investigate the role of different sections of the population as actors like residents, migrants/new settlers, farmers, boatmen, entrepreneurs, property dealers, developers and at the same time the government and private agencies who play an active and important role in the process of land transformation in Srinagar city.

Generally forces found to be crucial for decisions about land in Srinagar city are: demand for land, capital and the land value.

5.5 Actors of Land Transformation Operating in Srinagar City:
In the present study, distinction has been made between the Institutional and private actors including both human and institutional factors bringing about transformation in land use. Institutional actors include different government agencies. Private actors include residents, farmers, boatmen (locally called as Hanjis), entrepreneurs, property dealers and developers who are individually transforming the land. The role of individual actor acting in the process of land transformation in Srinagar city during the period of 37 years (1971 to 2008) has been evaluated. The hierarchical
order of these actors from the most influential actor to the least influential is given below:

5.5.1 Institutional Actors:
Urban development in India is under the control of state government. J & K state is further protected through the special status of Article 370 of Indian Constitution. So, state government has the supreme authority in the development in Srinagar city. Under the provision of J&K Development Act 1970, Local Area of Srinagar was delineated and Srinagar Development Authority was constituted in early 1971. The objective of the authority was to carry out the development of the Local Area of Srinagar according to Master Plans.

(a) Government Agencies and Their Activities in Srinagar City:
Government agencies play direct role in the land transformation in Srinagar city to build infrastructural services for the growing demand of the city residents. The important agencies operating in Srinagar city are Srinagar Development Authority (SDA), Srinagar Municipal Corporation (SMC), Urban Environment and Engineering Department (UEED), J&K Housing Board, Lakes and Waterways Development Authority (LAWDA), Town Planning etc.

The infrastructural development has resulted in conversion of land from vacant, agriculture and plantation/orchards to built-up land. These conversions have raised the land rent of the transformed locations instigating land transformations of nearby locations. The laying of roads to connect different parts of the city have instigated widespread land transformation e.g., the road connecting Rainawari with Naupora in the central part of the city was widened at the cost of significant residential space. The commercial establishments at Batamaloo in the west of Lal Chowk and residential colonies at Bemina wetland i.e., Rakh-i-Gandakshah and Rakh-i-Arat in the west of the city have all been planned and executed by SDA.

Srinagar city is garlanded with numerous water bodies which are governed by the Lakes and Waterways Development Authority (LAWDA). Several projects for beautification and development of Dal lake is carried out by the LAWDA.
(b) Government Policies and Their Impact on Land Transformation in Srinagar City:

Government actors sometimes play indirect role in the process of land transformation in Srinagar city through different land use policies. They motivate the government and private actors to bring the changes in landscape. In the Kashmir valley, land use policy was formulated by the Maharaja under which, conversion of agricultural land to non-agricultural land was restricted. But lately the division of authority into several agencies has led to poor implementation of policies. This resulted in large scale conversion of residential colonies to accommodate the growing population. Presently there are many colonies in Srinagar city which are developed on orchards. For example, Aalochi Bagh, Rambagh, Rajbagh, Gogji Bagh etc., all are the important residential places in the core area of the city.

(c) Article 370 and Its Impact on the Land Transformation in Srinagar City:

The Article 370 plays an important role in land transformations. The Article 370 restricts the ownership of land only for Kashmiri residents. Outsiders cannot own land in Kashmir. This in many ways influence the land market of Srinagar city. This act in some way also helped the landlord to hold on their lands. The increasing demand for land has raised the land value substantially. This trend has clearly divided the Kashmiri residents between rich land owners and the poor land less residents.

There is also state land revenue act of 1939 which prevents the conversion of farmland and Municipal Act of 1951 which restricts extensions and encroachments on public lands. But these acts are unable to restrict the conversion because of exorbitant demand for land and pressure of other actors.

Presently the SDA is the nodal agency responsible for urban planning. The present Master Plan (2001-2021) prepared by SDA has divided Srinagar Metropolitan area into various land use zones such as Residential, Commercial, Industrial, Public and semi-public, Recreational, Transport and Communication, Agriculture etc. The city has been assigned areas depending on prevalent land use classes which is essentially mixed land use. These zones are meant to protect land use and the physical form of the growing city as proposed in this plan. The plan is focused to have increased efficiency in activity and utilization of space. Besides it,
the administrative bodies have compulsory conditions and financial weaknesses that make the implementation of Master Plan proposals a difficult issue.

Lack of coordination among the government departments/agencies is also responsible for the irregular and uncontrolled transformation of land. For example, Srinagar Municipal Committee permitted the boatmen (Hanjis) people, living in and around the Dal Lake, to construct houses. Later these houses were demolished by the department of Lakes and waterways (LAWDA) in a Dal Rehabilitation Drive. This type of conflicts has led to the increase in encroachments resulting into the unplanned and illegal land transformations.

5.5.2 Private Actors:
Private actors include Residents, Farmers, Boatmen (Hanjis), Entrepreneurs, Property dealers and Developers; are instigated by their social and economic needs to transform the land in the city. The role played by these actors is explained below:

(a) Residents:
The role played by residents as individuals of the society in Srinagar city can be divided into three groups: the local land owning community, the local landless group, and outside migrants. Since, Srinagar city is in the developmental phase and there is increasing demand for land. This make residents attracted to invest in purchasing land. This trend is prevalent due to three reasons, firstly; families are growing and thereby splitting into nuclear households, which requires additional residential space. Also the growing preference for nuclear family system in Srinagar city has also aroused the demand for more residential land. State housing agency have been able to solve only 7% urban housing demand and the rest 93% has been contributed by the non organized sector (Srinagar Development Authority, 2000). Secondly; residents of the core part (Lal Chowk, Dal Gate, Rajbagh, Wazirbagh, Karan Nagar etc) have spared their residential space for commercial use and many residents have moved out of this part to outer locations. Srinagar city being the tourist destination, therefore the residents have also converted their houses into tourist inns and hotels for income generation. Thirdly, the developments in the outskirts of the city have created demand for goods and services and to fill this
demand significant commercial development is taking place instigating land transformations.

**Migrants** in Srinagar city are not necessarily from the rural areas only; they belong to the other parts of the city also. For example, people from the congested core areas of the Srinagar city like Lal Chowk, Kawdara, Rajouri Kadal, Aali Kadal etc., are moving towards the outer parts of the city on open spaces. However there is rapid inflow of people belonging to rural areas. During the last decade, people from South Kashmir especially Anantnag, Bijbehara, Pampore, Tral districts purchased land on the southern limits of Srinagar city at Nowgam, Chanapora, Rawalpora, Hyderpora etc. These migrant people were having educational and economic connections with the city. Similarly, people of the western neighbouring districts e.g., Bandipora, Kupwara and Baramulla colonized areas in the west of the city. This gave rise to HMT layout, Zainakot, Bemina and Qamarwari etc. People from the north i.e., Ganderbal, Kangan have colonized areas in the north of the city like Ghulab Bagh, Alestang and Soura etc.

Education and employment are important pull factor for migrants settling in Srinagar city. A large section of the younger migrants have come to the city and settled in Rajbagh, Jawahar Nagar, Wazirbagh, and Shivpora etc. The older people are attached to their rural lands and agricultural activities. So there is split in family structure but with time many rural residents dispose off their rural properties and shift to city leading to land transformations at both rural and urban locations.

*(b) Farmers:*
The perception and objectives among individual farmers in Srinagar city vary with respect to use of land. It was observed that the farmers in the changed economic transformation have long term considerations to maximize and utilize their land resources (Figure 5.1) These considerations are depended on three elements, firstly, the available land resource and its prospective utilization; second, the role of other actors (government agencies, developers, entrepreneurs, property dealers etc); thirdly, the physical setting and location (risk of floods in the low lying areas, single cropping season and single cropping pattern etc) of their land influencing its utilization.
Farmers in Srinagar control the first kind of elements, i.e., their own resources and knowledge. Personal driver are the farmer’s long term considerations i.e., the economic aims and objectives wherein farmer sells his fertile agricultural land. Mega drivers influence the opportunities available to the farmers.

This consideration role i.e., the growing demand for more income of the farmers determines the fate of the agricultural land in the Srinagar. However, ‘Mega drivers’ i.e., the factors controlled by the external organizations e.g. government agencies also decide the agricultural land use in Srinagar. These drivers motivate a farmer to sell their land to the external agencies like government agencies, private developers and entrepreneurs. For example, in the west of the city at Rakh-i-Arat and Rakh-i-Gandakshah fertile agricultural land and the marshy area was taken by the government for the establishment of residential colonies and government offices. Similarly, personal drivers motivate the farmers in the outskirts of the city to sell off
their land to the local city people and the outside migrants. Therefore these farmers act indirectly in the process of land transformation. These farmers in turn receive compensation according to the size of their landholding, which adds good sums to their income.

Farmers also played direct role while transforming their fertile agricultural land into plantation/orchard in the north and northeast of the city. Since the horticulture activities are more remunerative than the crop growing activities due to low agricultural productivity. Therefore number of farmers shifted to growing of fruits in order to increase their income. Moreover, the growing number of family size motivates a farmer to increase the dwelling units on the available agricultural land. Also in the low lying areas, prominently in the south and western parts of the city farmers faced the annual threat of the floods. So, to avoid the loss of crops due to floods, they shifted to horticulture and plantation activities.

(c) Boatman (Hanjis)

The boatman of Kashmir is known as Ha’enz in local language and Hanji is used in Hindi script. Hanjis are among the aboriginal inhabitants and are an important and prominent tribe of Kashmir Valley. They could be traced from Pandit Kalhana’s ‘Rajatarangani’, of 826 CE which is the first historical record written on Kashmir valley.

Boatman (Hanjis) is one of the important actor who control the fate of ecologically important land use/land cover in and around the water bodies and marshy areas of Srinagar city. Currently Dal Lake is sheltering about 50 Hanji hamlets with a population of over 50,000 people, who have property rights over 300 hectares (6,000 kanals) of agricultural land and 670 hectares (13,400 kanals) of water area. The important localities are Kohn Khan, Mir Mohalla, Abi Kakpora, Dar Mohalla, Nishat, Shalimar lying in the periphery of the lake and the localities namely Bujal Mohalla, Gogal Mohalla, Bakir Mohalla are lying further in the interior of the lake. Some localities are as big as more than hundred of households and some are as small as five to ten household only. The Dal Gate and Gagribal area of the lake is having high concentration of Hanjis.

About 90 percent of the Dal dwellers have a poor socio-economic base and they churn out their modest income from agricultural activities i.e., cultivating
vegetable gardens (locally called as \textit{Radh}), mat weaving, tourist related activities like paddling Shikaras and deweeding of weeds. On the other hand, they play an important role in quantitative and qualitative transformation of the water bodies and the marshy areas in the city. Dal Lake is the prime victim of this indifferent role played by them during the urbanization process. Out of total decrease of 1449 hectares of water bodies and the marshy area in the city, 882.5 hectares of decrease has been witnessed alone in Dal Lake and the rest is shared by others i.e., Nigeen Lake, Brari Nambal, Khushalsar, Rakh-i-Gandakshah marsh etc. Important land transformations carried out by Hanjis during the study period in and around the Dal Lake are; water body to marshy and marshy to agriculture etc.

\textbf{(d) Entrepreneurs:}
Entrepreneurs in Srinagar city are not only the businessmen but other economically sound residents from tertiary sector as well as large land lords turned businessmen. This section of the society has invested heavily to construct shopping malls and complexes in the core area of the city. These actors operate in group which includes land owners, policy makers, capitalists etc.

Large number of commercial and residential buildings have been brought up by the entrepreneurs on vacant land at Lal Chowk, Brari nambal, Karan Nagar areas in the core area and also on agricultural land in west at Bemina. Moreover, the increased flow of tourists in and around the water bodies result into increase in the number hotels, guest houses, restaurants and house boats. This activity has been observed to be prominent in and around the Dal Lake.

\textbf{(e) Property Dealers:}
Property dealers in Srinagar city are active and are engaged in selling and purchasing properties at very high prices. In Srinagar city, the size of built-up and non built-up land holding is small particularly in the congested core area where the properties have multiple owners. In this situation the individual buyer finds difficult to settle transaction deal. So the property dealers play a significant role to satisfy the demands of all the stakeholders of land but increases the land rent substantially. This bid of arrangements only benefits property dealers because they operate on conversion share. The higher is land rent the higher would be the commission of
property dealers, cutting the share of land owner and purchaser of land. However, in the recent past, it has been observed that residential areas in the core area i.e., Gonikhan, Amira Kadal, Maisuma, Habba Kadal, Zaina Kadal, Khanyar are being converted into commercial zones. This has become possible by the joint efforts of entrepreneurs and property dealers who engage the multiple owners into a deal and then succeed in acquiring land for raising shopping malls. Such deadlocks still exist in many areas of the old city because of which it is not undergoing any renovation. Efforts on the part of Government to develop the core area in the past also met failure because of multiple-ownership of properties. Acquiring land for road widening projects in the core area is a great problem faced by the urban developmental agencies.

Property dealers in the state in the early 1980s played an important role in the selling and purchasing of the properties. Due to political turmoil in the state during this time Kashmiri Hindu people (locally called as Pandits) evacuated the Valley and permanently migrated to the other parts of India abandoning their property. Most of them were the residents of the core area of Srinagar city e.g., Wazir Bagh, Aalochi Bagh, Raj Bagh, Lal Chowk, Karan Nagar, Habba Kadal and Barbarshah. Few belonged to the city outskirts also. Property dealers took the advantage of this political turmoil and offered them lower prices for their property and sold it at the higher prices to the local residents and entrepreneurs, who converted those residential houses mostly into commercial buildings.

(f) Developers:
They are the real colonizers in Srinagar city who try to maximize their profit through residential development of the city. While evaluating their activities on research basis they are mostly illegal. In 1971-1991 Master Plan of Srinagar city, government included developers/colonizers who were holding sizeable areas of land in the land market. This inclusion was done for the speedy development of large urban land areas because of various difficulties of finances and technical personals in the government agencies.

They helped the government by establishing various residential colonies e.g., the residential colonies at Buchpora and Bemina in the north and the west of the city respectively. But this led to the capture of land market by speculative developers,
which caused the differential in the demand and supply of urban land. Since, legally a private developer can only purchase government land but due to their greed for more money, they also purchased fertile agricultural land from local people. Land values have gone up and problems of the poor people, living in highly dense areas of the city have grown beyond the capacity of government agencies. They are politically and economically strong people. Many political leaders in Srinagar city have also stepped into these activities, who make optimal use of their power. Therefore the rate of land capture is further accelerating.

5.6 Evaluation of Actors of Land Transformation in Srinagar City:
All the above discussed actors play different roles within complex framework. The land transformation is the outcome of the act of conflicts and alliances among them which may change depending upon the role they play.

5.6.1 CONFLICTS:
(a) Government Agencies and Residents: Government’s role in the process of land transformation in Srinagar city many a times acts against the interests of the local residents. The implementation many times raises conflicts of policies of urban development with residents like the construction of new roads, buildings, widening of the existing roads or the relocation of the boatmen population etc, residents confronts government policies and try to block these policies. An example of this conflict is the road widening in the residential areas at the cost of residential space of the residents. However the residents are offered monetary compensation. Similarly, Srinagar Municipal Corporation’s (SMC) solid waste dumping site at Saidpora Achchan in the north of Srinagar city is another prominent example. This site has become the serious threat to the health of the residents living in its vicinity. This issue led to the clashes between the residents and the authorities from time to time.
(b) Government Agencies and Farmers: There are conflicts between the farmers the government agencies in terms of the exchange of land. Government requires land for urban development and they acquire land from farmers but there is conflict the compensation rates. The farmers do not wish to hand over their land due to low compensation and their emotional attachment. Moreover the farmers consider
farming as their only livelihood option and this also leads to conflict with government agencies.

(c) **Government Agencies and Boatmen:** There are conflicts between the boatmen (Hanjis) and government authorities because of their relocation to the other parts of the city in order to rehabilitate the deteriorated water bodies. This led to the clashes between boatmen and the government authorities because providing of improper substitutes of livelihood after relocation.

### 5.6.2 ALLIANCES:

(a) **Government and Property Dealers:** The government policies encourage the property dealers to participate in the land/property market in the city. They help the government agencies in breaking the deadlock of multiple ownership of land/property for the infrastructure development in the congested core areas of the city. Since they are aware of the legal traits, therefore, they minimize the public dealing with the government agencies by resolving the issues related with the selling and purchasing of properties.

(b) **Government and Developers:** Developers help the J&K Housing board in removing the residential housing backlog in the city by establishing various residential colonies and satellite towns in the outskirts of the city. Although they charge high price but they provide the better services to the residents.

(c) **Government and Entrepreneurs:** The activities of entrepreneurs and their strong economic background in the city have created a favourable atmosphere between them and the government authorities. They invest their money in business establishments like shopping malls and complexes which helped government to accelerate economic growth in the city.

(d) **Property Dealers and Entrepreneurs:** Entrepreneurs in Srinagar city are dependent upon the property dealers for purchasing the property/land for their business activities because it is the easiest way to purchase the property. They pay good sums of money as commission to the property dealers for getting land at the appropriate site and price. Therefore, they maintain the harmonious relationship with each other.

(e) **Property Dealers and Developers:** Like the entrepreneurs, developers in Srinagar city have also good relationship with the property dealers. Since developers
are dependent on property dealers for the selling and purchasing of the property. The property dealers act as mediators in the deal and earn good commission out of the transaction.

5.6.3 STRONG ACTORS:
The actors operating in land market of Srinagar city are in certain alliances and conflicts. Their operation projects certain actor’s role as strong and some other appear weak.

(a) Government Agencies: Among the actors operating in Srinagar land market, government agencies appear as strongest actor. These agencies formulate and implement the policies regarding urban development. All other actors operate according to these policies formulated by government agencies (Srinagar Development Authority (SDA), Srinagar Municipal Corporation (SMC), Town Planning Department and Lakes & Waterways Development Authority (LAWDA) carry out various developmental proposals which have to be followed by the people by one way or the other. Here article 370 of the Indian constitution is also an important policy issues. This has significant influence in all the policies and their implementation.

(b) Property Dealers: Property dealers also emerge as strong actor in Srinagar land market. They act as link between land owners and developers, entrepreneurs etc. The land deals have multiple stake holders and the role of property dealer is to satisfy the demand of all. But on several occasions they operate to favour certain stake holders resulting in disputes.

(c) Entrepreneurs and Developers: The entrepreneurs also are strong actor as they have good financial background and operate in alliance with government agencies. This means actually they invest capital in accordance to governmental policies. The investments are very high so is the profits also. Here there alliances with other actors are crucial for the success of their investments.

5.6.4 WEAK ACTORS:
The conflicts and alliances among the actors resulted into weakening the residents, boatmen (Hanjis) and the farmers who are socio-economically weak people of the city. The weaknesses of these actors are discussed below:
(a) **Residents:** Residents appear as relatively weak actors as they come into the land market with limited resources. They have small land holding and that too have multiple owners. This makes their role curtailed in land market. They depend heavily on property dealers for good deals making them weak and vulnerable.

(b) **Farmers and Hanjis:** The farmers and Hanjis are also weak actors in general. But they have the advantage of owning land. But due to their poor economic and social background their stakes are manipulated by other actors. The government agencies in some way protect the interests of farmers and Hanjis but when the stakes are high, other actors override their stakes forming suitable alliances.

5.6.5 **BENEFICIARIES:**
It was observed that strong actors came out as the beneficiaries from the process of land transformation because of the following reasons:

(a) **Entrepreneurs:** The strong economic and political base of the entrepreneurs in Srinagar city makes them the successful businessmen. With the help of money they maintain harmony in the society and achieve their goals by establishing shopping malls and complexes.

(b) **Property Dealers:** Since, the property dealers command the price of a particular property. Also are responsible for the soaring land value in the city. They command both the demand and the supply ends of land and make huge money without investing their own money. Property dealer is and outstanding beneficiary actor in the process of land transformation in Srinagar city. They made huge sums of money even during the political disturbance in the state when there were no signs of development.

(c) **Developers:** Developers made outstanding income from the establishment of residential colonies because of the growing demand for the residential space in the city. They give attractive services to the society and thereby make the sound economic base for themselves.

5.6.6 **VICTIMS:**
The weaknesses among the actors made them the victims of the land transformation process in the Srinagar city. The reasons are discussed below:
(a) **Residents:** A resident in Srinagar city is a weak actor, who suffers from the adverse circumstances. Residents are the prime victims of land transformation process who are dictated by the law, government authorities and policies etc. They sometimes turn the victims of the property dealers, developers etc., at the time of selling and purchasing of the property. However, every resident is not a victim; the authoritative residents in the city who have an upper hand in the society are the prominent beneficiaries.

(b) **Farmers:** They are the main sufferers of the process of land transformation. Farmers in Srinagar are the weaker section of the society, even though they are the part of the city. Firstly, the farmers are weak actors because of their low agricultural output. Secondly, many a times they sell their fertile agricultural asset at the cheaper rates for getting instant income because of their lack of knowledge of the proper utilization of land resource. Moreover, farmers are exploited by government agencies, property dealers, entrepreneurs and developers who dupe them with attractive monetary exchange and grab the asset from them for various urban developmental activities. They not only lost their fertile agricultural land but also their livelihood in the process land transformation in Srinagar city.

(c) **Boatmen (Hanjis):** Boatmen are the exploited because of their poor socio-economic base in the city. They are being relocated to the other places of the city in order to rehabilitate the loss incurred by them in water bodies, without assuring them with the proper livelihood substitutes. In addition to it, their houses in their localities in and around the Dal Lake were number of times demolished by the Lakes and Waterways Authority (LAWDA), so as to save the lake from further deterioration. Their interests have always been sidelining.