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Infrastructure Development, Flexible Land Policy and Ecological Security: An Indian Perspective

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Abstract

Infrastructure development such as roads and highways, power, telecommunications, airports, seaports, water supply and sanitation, hospitals, schools, etc, generate public services, which are very essential for providing livelihood security and higher standards of living. This is however possible when large outlays are available for construction and maintenance of infrastructure. Infrastructure development often needs large acreage of land also but to be utilized in a manner that it does not adversely affect various ecosystems it supports. Infrastructure development is to be also carried in sustainable manner. Planners should leave some part of natural resources for future by adopting flexible land policies. Leaving behind a destroyed ecology as the economy grows is not a sustainable solution. Infrastructure development is also not sustainable if the facility created meets needs of select few only. Government of India plans to introduce a new land acquisition law with built-in flexible provisions which is currently awaiting approval in parliament. A reformed Land Acquisition Act in the current context has to lay emphasis on sustainable development and inclusive growth, as well as ecological security and livelihood security of those who are affected with acquisition. The paper highlights role of sustainable and flexible land policies for infrastructure development that protects ecological security and livelihood security that achieves all round inclusive growth and sustainability of natural resources.

Keywords: *Ecological Security, Flexible Land Policy, Infrastructural Development, Inclusive Growth, Livelihood Security, Sustainability.*

Introduction

Infrastructure which in several countries is more popularly referred as *utilities* (power, telecom, water utility, etc.) covers facilities that have high sunk costs in developing them but with no tradable output as from a production shop. Infrastructure includes a network of facilities such as rail network, roads and highways, bridges, airports, seaports, oil & gas pipelines, telecom network, postal network, public distribution network, etc; urban infrastructure such as water supply and sanitation, power supply and distribution, public transport systems, fire services, etc; rural infrastructure such as rural energy supply network, irrigation canals network, rural roads and culverts, rural transport, etc; farm infrastructure such as warehouses for post-harvest grain storage, cold storage and cold chain for farm produce, farm retail network, cold chain network for transportation of fruits and vegetables, etc; social infrastructure such as schools, colleges, hospitals, clinics, homes for the aged and destitute, etc. Expansion of infrastructure often needs more land resources but which are fixed and finite resource for a nation as no more of it is added.

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Land is basis of human society that supports ecosystems and ecology and provides food, water, minerals, fossil fuels, clothing and shelter. Other than agriculture, land in its natural forms also provides invaluable economic services to the people and the planet. Land resources are however finite as no more of it is being produced any further except through some minor reclamation in coastal regions. Managing land resources is thus very important for national development. Land management throws several challenges posed by inappropriate land uses, population growth, over exploitation of natural resources, environmental degradation, ecological destruction, etc (Kirk, Loffler & Peterman, 1998).

India has 2.4 per cent of the world's land which supports 16.7 per cent of the world's population. Country has less than 0.5 per cent of the grazing land but supports 18 per cent of the world's cattle. Agriculture and horticulture, while using more than 50 per cent of the country's land mass, contributes to less than 30 per cent of the GDP. Apart from agricultural land, India has around 50 million hectares classified as wasteland – barren and uncultivable land, etc, which is about 15 per cent of the country's total land mass. This apart, there are other land formations such as mountains, deserts, permanent pasture lands, etc, constituting about 5-7 per cent of total land (Mahindra & Pathak, 2011, p.110).

The Rakesh Mohan Committee on Infrastructure listed electricity, gas, water supply, telecom, roads, industrial parks, railways, ports, airports, urban infrastructure, and storage as infrastructure sectors. The Central Statistical Organization also considers all these as infrastructure but excludes industrial parks and urban infrastructure from its list. National Statistical Commission has identified certain segments of Railways (tracks, signaling system and stations), roads, bridges, runways and other airport facilities, transmission and distribution of electricity, telecommunications, pipelines for varied usage, canal networks, and water supply and sanitation systems as infrastructure (Sikarwar, 2011).

Infrastructure development is often accompanied with adverse impact on environment, ecology and ecosystems besides throwing away large population out of employment whose precious land is taken away. For infrastructure development both environmental sustainability and social protection aspects are important. As per recent forest cover accounting, the State of Forest Report 2009 shows that 21.02 per cent of India is now under green cover, a marginal increase over the previous ten years. As per international benchmarks, India should have 33 per cent of its total land area covered by forests. As per official records only some 25 per cent land is under forest cover though in reality it may be even less.

Infrastructure in a city typically includes water supply and sanitation, under-ground drainage, roads, storm water drains, street lights, etc. Periodic techno-economic surveys in different localities in partnership with resident welfare associations enable identify infrastructural development needs, which can be later converted into stage-wise operational plans. These can be divided into areas such as those already having water supply and drainage network but no roads, those not having water supply and drainage network, and those requiring only recreational facilities, such as parks and playgrounds. Various facilities are then developed according to the priorities accorded by the planners. Best results come when the residents (people participation) are involved in the development process at every stage (Sharma, 2012).

Public private partnership (PPP) is an efficient mode to finance infrastructure projects. While pursuing infrastructure projects care is taken that individuals dispossessed of their land are provided due social protection and social security especially when they were largely dependent on land for livelihood. The new airport at Hyderabad built by the GMR Group is a very successful example of PPP mode of financing infrastructure projects in which individuals affected were adequately compensated. Scope for unethical practices is much less in PPP projects than

through normal routes. PPP route enables private players to utilize their resources more efficiently. Environment, ecology and social protection policies help achieving both livelihood security and ecological security by protecting the poor from economic and ecological vulnerabilities.

Government of India is keen to enhance share of private investment in infrastructure development (*The Times of India*, June 7, 2012). GOI has drawn very ambitious agenda of infrastructure development during 2012-13. Dr. Manmohan Singh, Prime Minister of India, while addressing a meeting of infrastructure ministers representing airports and aviation, ports and shipping, highways and road transport, railways, coal and power asked ministers “to go extra mile for implementing infrastructure projects and expeditiously resolve any inter-ministerial differences that may arise...In order to take the economy back to the 9 per cent growth rates, the share of private investment in infrastructure needs to be stepped up.”

This paper highlights need for infrastructure development for country's inclusive growth for livelihood security covering all segments of society, but pursuing in a manner that it does not affect ecological security of various ecosystems, nor hampers livelihood security of those who are dispossessed of their land; and discusses how it can be achieved through sustainable and flexible land policies. The paper presents review of the Land Acquisition (Rehabilitation and Resettlement) Bill, 2011, reviews flexible land policies and sustainable infrastructure development aspects, infrastructure development and ecological security issues, infrastructure development and livelihood security aspects, a case on land acquisition in Noida and Greater Noida in UP, and finally a case on land acquisition at Singur in West Bengal.

Land Acquisition (Rehabilitation and Resettlement) Bill, 2011

Land acquisition for real estate can be done by following one of the three main routes. Land can be obtained from three sources, namely, a private party, a government agency either through allotment or auctions. Land in urban areas comes under purview of local authorities. Real estate industry typically involves taking numerous approvals from several agencies leaving scope for malpractice at each stage. Ethical violations in real estate start with land, over pricing of which begins at its very purchase. Stamp duty is 3-14 per cent depending on state. In property transactions Capital Gains Tax is 20 per cent if transaction money is held for more than 3 years, and tax rate is marginal if held for less than three years.

Registration charges are 1 per cent of property value or Rs. 30,000, whichever is lower. License is obtained from Town & Country Planning, permission for land use from the local planning authority, clearance under the Urban Land Ceiling Act; clearances from the Airport Authority of India, Ministry of Environment & Forests, State Pollution Control Board, etc; permission to bore wells from the Ministry of Water Resources, No Objection Certificate from Ministry of Water Resources, etc., all of which leave sufficient scope for malpractice at each stage (Raja & Datta, 2011).

The Land Acquisition (Rehabilitation and Resettlement) Bill 2011, which is yet to become an Act, aims to restrict the government involvement for industrial projects. It aims to protect interests of landowners and landless who depend on agricultural income from it while acquiring their land by paying them adequate compensation. As per the ongoing thinking in certain quarters, the term ‘public purpose’ is being narrowed down to relate only to infrastructure and defense purposes, leaving other sectors including industrial development largely beyond its jurisdiction. The Land Acquisition Bill restricts government's role in acquisition while mandating private companies to buy at least 70 per cent of land for projects themselves at market prices, while the government can be involved for securing the remaining land needs.

The issue of land acquisition had gained prominence after farmers' agitation in Greater Noida demanding greater compensation for their land acquired earlier. The objective of the bill apparently is to protect the interests of landowners so that they receive higher compensation for their land from open markets. While on one hand it protects their interests but at the same time country's efforts towards industrial development and job creation may suffer if the GOI keeps itself completely out in procuring land at concessional rates. A suggestion made from several quarters is that 'public purpose' should be widened to include industrial activity as well by introducing some built-in flexibility in the bill, as the private industry creates wealth and employment opportunities in society and its interests also need to be duly protected (Banerjee, 2012).

Section 96 of the Bill provides necessary powers to the government to transfer acquired land to private companies and individuals, but on such conditions that 20 per cent of the profit accrued in selling to the private firms is to be shared with the owners. These transfers by the government to the companies can take place on the condition that the buying organization shall use it for some 'related purpose' only. As an example, in accordance with Section 93 that governs post-acquisition changes in land use, it will be perfectly legitimate to transfer the land acquired for urban development, to be later transferred to private companies, say, for developing a Special Economic Zone (SEZ). The idea is that land owners in many cases are willing to part with their property provided a consensual approach is adopted, and there is fair compensation on equal terms. Streamlining land acquisition is critical in sustaining India's growth story and making it more inclusive (*The Times of India*, June 6, 2011).

Similarly, land acquired for urban development can be transferred to builders for housing projects, without violating the proposed law. The initial purpose can be appropriately defined to justify several other uses as 'related purposes'. When the acquired land remains unutilized for a well-defined period, it is required to be returned to the owners (Singh, 2011). Land is acquired for official purposes, but after needful usage it can be transferred back to farmers/ original owners. Land is acquired for oil-well drilling but after drilling when no oil is found, it needs to be restored to the farmers after giving due compensation for the damage caused to the land during oil-well drilling. As for direct acquisition by companies or large scale purchases by them, the bill mandates rehabilitation and resettlement for affected families. The compensation is determined on the basis of circle rates or the average price of sale-deeds of similar land, whichever is higher. The Bill in its current form allows compensation payable which is detailed in sections 97, 98 and 99.

Land acquisition collectors (LACs) award compensation based on circle rates, which are perpetually well below the market rate as well as the sale-deed rates. While the LACs use circle rates, courts base their decisions on high value sale-deed rates. As the court awards are generally higher, parties concerned are attracted to go to the courts in search of more attractive compensation. State intervention is often needed to protect interests of small and ill-informed owners, and to clear unnecessary hold-ups by owners when land is being acquired for some very legitimate public service. Compulsory acquisition becomes mandatory for projects that are location specific such as road, railways, or site for oil-well drilling. Acquisition of particular land for works such as real estate, hotel, theaters, etc cannot be considered as mandatory as such facilities can always be built at alternative site if owners do not wish their land to be acquired (Singh, 2011).

In the case land is to be acquired for industry, consent of 80 per cent of those affected, not just landowners but even landless people of concerned village, need to be obtained. Mandating necessity of 80 per cent consensus of the project-affected people for land acquisition by both private and government agencies, buyers will have to shell out up to twice the registration of stamp duty value of the land in urban areas and up to six times in case of rural areas. The bill

provides a subsistence allowance of Rs.3000 per family per month for a year, and an annuity of Rs. 2,000 for 20 years. Besides, landowners will get 20 per cent of the appreciation in value of their land every time their land changes hand for 10 years. The bill also offers employment provisions for affected persons (*The Economic Times*, September 2, 2011).

Flexible Land Policy and Sustainable Infrastructure Development

Land, be it, agriculture or forest land is constantly under diversion for infrastructure, industrial and mining projects for which GOI classifies countries eco-rich lands as 'go' or 'no go' type depending on their ecological values. Land in villages and on the periphery of urban areas often comes under the jurisdiction of village *panchayats*, in which local politicians may also have some vested interests. Fast growing India's economy needs more land to be diverted from agriculture to industry, urbanization and development of public infrastructure such as roads, bridges, ever growing rail network, schools and hospital, etc. There is a need to spell out clear cut policy to serve larger national interest concerning whether power over land use is best vested at the village *panchayat* or urban local body level, or needs a nested system of controls, all the way from local to national.

Land policies determine who has legal rights and access and /or ownership to certain resources and under what conditions, and therefore how these productive assets are distributed among diverse stakeholders. A National Land Policy (NLP) is an official government document that defines the land tenure system(s) and prescribes proper allocation and management of land in a country (European Union, 2004). In Mumbai, most of the urban poor do not have secure tenure and live in large slums such as Dharavi. Securing formal rights to land use and having low-cost multi-flats apartments constructed thereon may facilitate access to basic services on them. Flexible land policies by way of effective laws and institutions in place may also help slum dwellers access legal and financial services to raise capital to invest.

Solution to the need for continuous infrastructure development and to prevent its adverse impact on ecology lies in sustainable infrastructure development. Any infrastructure development is to be at such pace which can be sustained over longer time span than for society's immediate needs. Sustainable solutions are inevitable in a world starved of natural resources. Sustainable solutions may add to extra cost affecting business interests but at the same time reduce hidden cost of ecological security (Paranjpe, 2011). For instance, Punjab provides free power to farmers which costs the state Rs. 4500 crore a year and accounts for 90 per cent of Punjab's Rs. 78,000 crore debt. An estimated 83 per cent Punjab farmers have only small or marginal landholdings, and no tube-well at all. Free power 'technically' benefits only 17 per richest farmers, some of whom have even 150 tube wells (Aiyar, 2012).

Sustainability need comes into picture, when one looks at a falling water table which may shut up drinking water wells (which serve the poor). As the water table keeps falling, centrifugal pumps (costing Rs. 30,000 and working up to 30 feet depth) cease functioning, hitting small farmers who cannot afford deep submersible pumps costing Rs. 1.5 lakh. Free power supply helps these 17 per cent rich farmers who alone are in a position to pump out water from greater depths and use the water for growing paddy which need huge water, and in the process depriving the poor farmers in deriving benefit of rice cultivation as they cannot pump out at lower depths following damage caused to the aquifer by rich farmers. Free power due to lack of financial inclusion among farmers makes it unsustainable (Aiyar, 2012).

Government of Delhi way back in 2006 came out that all clinics, diagnostic centers, nursing homes and hospitals, registered with the state government should be allowed to function from residential areas even though it may not be ideal from the viewpoint of residential colonies.

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This is because as clinics and nursing homes within residential colonies though it may optimize land usage but it may give rise to problems of vehicle parking and hospital wastes. Solution lies in maintaining balance which is more sustainable (Mehdudia, 2006). Accordingly, in view of land shortages everywhere and need for sustainability, nursing homes should be allowed on plots of 100 m² or more in regular and regularized unauthorized colonies, while in villages and rehabilitated colonies these can be permitted to function on plots of 50 m² or more. (The suggestion was made by Mrs. Shiela Dixit, Chief Minister, Delhi Government, in a note submitted to the Union Urban Development Ministry in 2006 in evolving a 'master plan' for Delhi).

The major reason for Delhi's deteriorating air pollution levels are more than 1000 vehicles being added every day. MCD proposes to levy congestion tax to achieve environmental sustainability by restricting people from bringing out their cars on any pretext. Government is planning to introduce a single card for the travelling by different modes – metro, BRT and normal buses by providing an 'automated fare collection system (AFCS)'. The idea is that people are attracted to travel by metro wherever they can and in the process save environment as well. The new design of corridors will provide sustainable solutions that while dedicated lanes are available for buses, private vehicles shall enjoy flexibility and will not be bound by the rigid demarcation of lanes. Sustainable solutions aim to reduce inherent conflict between public and private transport which promotes public transport but at the same time does not favour complete elimination of private transport. In order to encourage public transport it is trying to improve bus transport services. For example, bus queue shelters will have passenger information system (PIS). The PIS will not only give basic information about the bus number and route, but will also display the arrival time for the next bus (*The Times of India*, January 2, 2012).

According to the Hotel and Restaurant Association of Odisha (HRAO), the state should make land allotment policy flexible and identify at least 500 acres of land as 'Specialist Tourist Zones' in each district for prospective hotel chains and entrepreneurs. Entrepreneurs should be provided land at 50 per cent less than the market value of land and the land price should not be charged at one go. In order to develop tourism, infrastructure should be strengthened by building international airports in major cities, expanding fleet size of luxury coaches and house boats; and expanding infrastructure for heritage tourism, spiritual tourism, religious tourism, health tourism, rural tourism, sports tourism, adventure tourism, wild-life tourism, etc. As per HRAO estimates, state needed at least 4000 rooms of three star category with an investment of Rs. 30 lakh per room amounting to Rs. 1200 crore in order to handle tourists inflow. This apart 1000 rooms of five star category of Rs. 1 crore each amounting to Rs. 1000 crore were required to cater to the needs of foreign tourists (*The Hindu*, 2012).

Infrastructure Development and Ecological Security

The present system of obtaining forest clearances in the country is tardy – projects that need over 40 hectares take over three years. Part of this delay could be attributed to the current system of case-by-case decisions for diverting forests into non-forest uses. The process varies depending on the area of land to be diverted rather than on the basis of nature or quality of the forest. Government of India proposes to classify forest land based on their ecological value, which would also include marking some tracts as 'inviolable' or 'no go'. India needs to balance the value of the forests themselves with the value of the minerals that it seeks to extract from these forests. 'No go' list typically includes parks and sanctuaries protected under the Wildlife Protection Act, 1976 namely: 100 national parks, 514 wildlife sanctuaries, 43 conservation reserves, and 4 community reserves that add up to roughly 5 per cent of the country's geographical area (*The Times of India*, April 13, 2012).

Infrastructure development in wake of continuous urbanization often threatens ecological security. When ecological security is in peril, it may harm tourism potential in the area. New Delhi being nation's capital city is epicenter of migration from all quarters. The city is expanding into all directions. As a result the city is experiencing continuous air and water pollution, and biodiversity loss including loss of native herbs and shrubs. Climatic changes might be responsible for harm to various ecosystems – pollution in city, change in micro-climate, urban heat island phenomena, and contaminated water bodies.

As a case-in-point disappearance of very popular small bird in the National Capital Region, sparrow could be attributed to the damages in the ecosystems. Sparrows generally nest around old buildings, houses with kitchen gardens, shrubs, trees, etc. Real estate infrastructure development in the city could be one of the contributing factors for their significant decline – change in the architecture like tall glass buildings with no cracks or crevices like old electricity meters for sparrows to nest.

Bombay National History Society (BNHS) and the Ministry of Environment and Forests in 2012 carried out a 'Citizen Sparrow' survey in Delhi, in which out of 410 responses received, 86 reported that they have not come across sparrows in recent periods. Respondents have pointed out that sparrows have been spotted in areas like Ghaziabad, in parts Lutyens' Delhi, Mayur Vihar, parts of Delhi and parts of Noida, but rarely in South Delhi such as Greater Kailash. Sparrow population is moderate in places where there are old government buildings, water bodies or green spaces (Nandi, 2012).

Land in Vasant Vihar which is part of the Aravali ecosystem in recent years has been wrecked by stone mining which has damaged tourism potential of the area. Damage of Aravallis mountains due to sandstone mining activity following continuous urbanization is another example of loss of ecological security. Centre for Environmental Management of Degraded Ecosystems (CEMDE) of Delhi University is implementing a project of the Delhi Development Authority (DDA). The project is a model for converting a mining ravaged area into a biodiversity park and converting it into a tourist attraction. Birds, insects and animals typically found in the Aravallis have started inhabiting the abandoned mines.

Araveli Biodiversity Park (located near the residential colony at Poorvi Marg in Vasant Vihar) is an experimental forest that is home to blue bulls, porcupines, jackals, palm civets and variety of rare birds, butterflies, insects and plants. The Park is spread across 692 acres on land that once had stone queries owned by the Scindias. Earlier mining activity caused severe ecological damage harming plant and animal species due to rapid urbanization. CEMDE is imparting the expertise needed to bring those species back to the city. Work on the first plantation started in 2006, and gradually 15 to 16 forest (biotic communities) were created. Biotic communities are a group of interdependent organisms inhabiting the same region (Nandi, 2012a).

CEMDE researchers first mapped the entire Aravalli range to decide which species may be grown in the 629 acres of space available to them in the abandoned sites. Species from the Aravallis were re-grown after surveying the soil type, temperature and gradient. The species have been re-grown at the park over a period of five years (2006-11), which have restored to some extent the Aravali landscape. Biotic communities of plants are attracting birds, insects and animals typically found in the Aravallis. When the work began there were only 25 butterfly species, but after planting of 400 odd host plants following mapping exercise, as many as 96 butterfly species were found to live in the area. CEMDE has replanted species from different forest reserves in the Aravallis like Alwar, Jaipur, Ajmer, Pavagadh, Jhansi, Udaipur and Mount Abu (Nandi, 2012a).

Government of Delhi is also setting up waste-to-energy plant which will help achieve in some way the objective of ecological security. Waste-to-energy plant at Okhla combines a unit for anaerobic treatment of biodegradable wastes and an incineration plant for burning other solid wastes. The plant set up by the Jindal Encopolis is claimed as zero-smoke, zero-odour and zero-pollution unit though residents in the area very much contest the claim, who have been agitating for shifting its location (Lalchandani, 2012). Government is also creating interceptor sewage system which will come along three major drains in Delhi – Najafgarh, Shahadra and Supplementary – intercept the waste flowing into these from hundreds of smaller drains across the city and carry them to treatment plants before it finally reaches the Yamuna. The work is likely to be completed in 2012. Pouring of treated wastes into Yamuna will certainly be less harmful for the ecosystems of the system.

Infrastructure Development and Livelihood Security

All countries have to take on their fair share of responsibility to ensure sustainable development but it cannot be at the cost of economic growth, which any way is required for economic prosperity and job creation. Government should provide economic and other incentives to steer the economy towards sustainable consumption, which would lead to sustainable prosperity. The global effort must address the issue of sharing ecological space on equitable basis. The challenge lies to find economic drivers that would address aspirations of higher standard of living, while promoting sustainability (Ramesh, 2012).

Growth cannot be inclusive if some groups are not allowed to reap the benefit. Leaving behind a destroyed ecology as one grows is also not sustainable. As the world consume global resources particularly the global commons, rising food and fuel prices are estimated to lower purchasing power of the bottom 20 per cent of the population by a quarter (Alvi, 2012). Thus, financial inclusion and sustainable development are interlinked. Instead of compensating the poor through subsidy, inclusive growth aims to extend social and economic benefits to all through socio-economic welfare measures or schemes (Chhibber, 2011).

Growth in recent years in India has been jobless and in some sectors employment growth has even declined economic growth due to greater automation. Growth has also been uneven across sectors and locations, and some regions have advanced faster than others. Inclusiveness and sustainability are interconnected. Given that the center of economic gravity is moving towards non-farm sectors, and urban areas provide greater employment opportunities for all, expansion in infrastructure facilities would provide a real push to creation of jobs and livelihood security. Financial inclusion and social protection policies are necessary to pursue the goals of livelihood security and ecological security by protecting the poor from economic and ecological vulnerabilities (Chibber, 2011).

GOI is continuously engaged to provide urban amenities in rural areas (PURA) so that people do not have need to shift from rural to urban areas for livelihood security. GOI initially introduced this scheme as PURA 1.0 but more recently a more revised version PURA 2.0 is being promoted. The revised PURA aims to provide urban amenities and livelihood opportunities in rural areas which are now rapidly urbanizing to bridge the rural-urban divide. It is to be implemented through Public Private Partnership (PPP) between Gram Panchayats and the private sector. Ministry of Rural Development in closed association with concerned state governments has already initiated the first batch of 9 pilot projects, across 5 states and 1 union territory. It is now proposed to undertake a second batch of 10-15 pilot projects based on the experience from first batch.

The PURA 2.0 aims to develop livelihood opportunities, urban amenities and infrastructure facilities to prescribed service levels and be responsible for maintenance of the same for a period of ten

years. The selected private partner would be required to provide amenities like water supply and sanitation, drainage, drainage, solid waste management, street lighting, development of economic activity and skill development in a panchayat or a cluster of panchayats. The clusters should preferably be around census towns, non-municipal block headquarters or potential growth centres. The private partner may also provide 'add-on' revenue-earning facilities such as village linked tourism, integrated rural hub, agri-common services or any other rural-economy based project in addition to the above-mentioned activities (HT, May 29, 2012).

Land Acquisition Act needs to be suitably modified for meeting the growing land needs for infrastructure and industrial development. At the same time the proposed Act should safeguard livelihood security needs of landowners whose lands are acquired in national interest. A recent Supreme Court judgment about the Yamuna Expressway (linking Greater Noida with Agra), is critical in matters dealing with land. It upholds the principle of eminent domain. It also states that even if the development of the acquired land is being done by a private party, it should still be construed as 'public purpose' as greater good to the community overrides the good of a few farmers. India's emergence as an industrial power will require flexible land acquisition policies, for which the displaced people also need to be adequately compensated (*The Indian Express*, October 5, 2008).

A Case on Land Acquisition at Noida and Greater Noida

More people on this planet earth live in cities but in India more than 70 per cent people still live in villages but pressure of continuous urbanization is reducing this number. Growing urbanization provides thrust for infrastructural development. Urbanization is however no guarantee that it will lead to higher quality-of-life for people. As a case in point, in Mumbai more than 60 per cent people live in slums where the quality-of-life is no better than village life. India is also gradually heading for a scenario in which more people will live in urban areas than in villages. Urban renewal and development is the need of the hour but it is difficult to implement it as the availability of land in the midst of town is shrinking.

As an alternative to growing urbanization in existing cities, country also needs to develop new cities where none exist. Governments of India and Japan are jointly working to develop cluster of cities, highways, railroads and airports on the north to southwest stretch of the country from Delhi and Mumbai, and later from Mumbai to northeast stretch up to Kolkata. This will cater to the needs of people migrating from villages and slums to cities in search of higher quality-of-life and employment opportunities. Development of cities like Noida and Greater Noida are the latest examples of such cities which have all facilities which a modern town should have (*The Times of India*, November 24, 2011).

Farmers in UP have been agitating over better compensation against land acquired by the state government. Their contention is that the government acquired land from them at prices as low as Rs.450-850 per m² but sold these later to private developers at Rs.4,500-5,500 per m². These developers are now selling the same land at Rs.15,000-17,000 per sq. yard. Lands were acquired by paying a compensation of Rs.120 crore in Bhatta and Rs.180 crore in Parasaul. Following a number of agitation by farmers, the UP government announced a rehabilitation policy with the provision of annuity for farmers against acquisition of their land in September, 2010 (Sharma & Rai, 2011).

Protests against land acquisition in Bhatta and Parasaul villages in Greater Noida areas were addressed and solved by relying on tenets of the Land Acquisition (Rehabilitation and Resettlement) Bill 2011 though it is yet to be passed in Parliament. The key to Ms. Mayavati's the then BSP Government in UP was the understanding that farmers are not averse to part

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with their land provided a consensual approach was adopted, and a fair compensation paid on equal terms. Land acquisition in Haryana, based on similar presumptions, has also been successfully done. Industrial growth is lagging in India. Streamlining land acquisition is critical to sustaining India's growth story and making it more inclusive (*The Times of India*, June 6, 2012).

While acquiring land a prime issue to be kept in view is livelihood, current and future of the landowners and others dependent on land. The compensation payable should be minimum at par with market rates. Policy adopted by the Government of Haryana for land acquisition has been adopted in many states as a very viable and reasonable approach. The government divided Haryana into different zones, and fixed minimum floor rates for each zone separately as well as annuity for 33 years. This takes care of future livelihood. It also provides for an innovative no-litigation premium of 20 per cent if owners promise not to go to court later. The policy provides social security for rehabilitation of non-owners affected persons by offering skill development, preference in employment in upcoming projects, and earmarked funds for rural infrastructure (Banerjee, 2011).

A Case on Land Acquisition at Singur

Singur is 34 km away from the Howrah railway station in West Bengal. Nano, the world's cheapest car which astonished the world as to how a car can be made and sold in mere \$2000. Government of West Bengal acquired a land of 997 acres for this project for which the Tata Group speedily built the plant, but which was never destined to be in operation. A people's movement led by Trinamool Congress demanded adequate compensation to be paid to farmers who were dispossessed of their land but somehow the settlement could not take place and Tatas decided to move to a new site at Sanand in Gujarat on October 3, 2008 (Sharma & Albuquerque, 2012, p.110). Government of West Bengal is now keen to return 400 acres of land back to the agitating farmers in exchange for the compensation they had received earlier. The matter is not yet over as the land plots still remain to be restored to the farmers who are now complaining that the land is not anymore cultivable and significant sum will have to be spent to make them cultivable.

In matters involving land acquisition and subsequent restoration when the land is no more needed such as when the Tata Group's withdrew from Singur, matters should be resolved through flexible approach either through arbitration or based on a flexible framework of the 'The Singur Land Rehabilitation and Development Rules, 2011'. The West Bengal Government showed flexibility by offering Tatas to retain 597 acres of land which they may utilize later for an industrial activity of their choice, but only after returning 400 acres of land to farmers who have been agitating for restoration of their land.

Return of the land is however not free from hassels as during the intervening period the cost of the land has gone up. Due to elapse of three years time period between 2008 to 2011 till the Calcutta High Court gave its verdict, someone else has to pay the price for cost escalations during the period. Fairness demands that the farmers cannot simply be given back the land in return for the money they were paid following acquisition. Quite apart from the fact that many or all of them might have spent the money by now, it remains a question who will compensate them for the loss of livelihood for the last seven years between 2005 and 2012. Under the circumstances several farmers were unwilling to receive their land back either for want of money to buy back or not having any money to make it cultivable.

It becomes the responsibility of West Bengal Government to make good that loss to them by making waiver of the price paid by the farmers either in full or in part on case-to-case basis.

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This however would mean that taxpayer foots the bill. Tata Motors should also compensate the farmers losses under their social obligations as it was their decision to withdraw from Singur that led to the farmers woes. The bottom-line is that the fertile land of extremely high value for agriculture has been spoiled following plant construction. However, if some poor farmers are unwilling to accept land restoration, the state government should offer the special rehabilitation package to farmers and utilize unreturned land at some later stage for some industrial or infrastructure activity. Solution lies in exercising flexibility by three stakeholders, state government, Tata Motors and the farmers.

Government of West Bengal has passed the Land Reforms (Amendment) Bill 2012, to promote setting up of business establishments like factory, port, airport, etc, which clearly indicates underlying goal of expanding employment opportunities. Amendment of Section 14 Y of West Bengal Reforms Act, 1955 will allow entrepreneurs to hold more than 24 acres (*The Economic Times*, April 3, 2012) so as to enhance livelihood security of those who are engaged in the entrepreneurial activities. Land holdings for industrial projects would also be able to lease out their land after obtaining permission of the state government. The amended section reads, “if the state government... is satisfied that such person requires land for the purpose of establishing a mill, factory or workshop, livestock breeding farm, poultry farm, dairy, industrial park or industrial hub or industrial estate, financial hub, warehousing, tea garden, agro-industry, power plant or power transmission or distribution sub-station, film city, tourism project, educational and medical institutions, bio-tech park, food park, port, airport, shipyard including ship building and ship breaking, oil and gas products, piped transportation, ICT (Information and Communication) and ICT-allied industries, or mining and allied activities, and for the purpose of future expansion of any such suits, such person may, with the previous permission, in writing, of the state government and on such terms and conditions and in such matters as the state government may, by rules prescribe, acquire and hold land in excess of the ceiling area applicable to him under Section 14M.”

While speaking at the inaugural session of The Entrepreneurial Summit (2009) held in Mumbai on December 22, 2009, Mr. Ratan Tata, Chairman, Tata Group of Industries, emphasized the need for flexible land policies and livelihood security of those affected with land acquisition. Speaking within the backdrop of unhappy experience of land acquisition at Singur in West Bengal, Mr. Tata observed:

“A lot of infrastructure projects are impacted due to the conflict of personal interests. The industry faces several issues on land, and these come from individual needs who are politically inclined and they exploit the situation. More often than not, conflicts related land are promoted by individuals who do not belong to that area, but who have other political motives. Leaders need to define and reconcile between cultivated land and industrial land, because agriculture also needs to be efficient. There should be no long term detriment to the land owner...Land reforms would also bring about job opportunities in India and take it to the next level of growth. Given that India wants to create job opportunities for not-so-educated people, it is going to be in non-high technology sectors like manufacturing, where we need lot of land.”

Conclusions

Land is very fixed and finite resource in a nation, as no more of it is being further added. When land is diverted for infrastructure development, concerns are made for protection of ecosystems and ecology of the area. Ecological security refers to safeguarding ecosystems and ecology of the land, which may be endangered when the land is diverted for infrastructure development. Ministry of Environment and Forests always tries to ensure ecological security while giving environmental clearance to various infrastructure projects. One of the objectives of Environment

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Impact Assessment which the MoEF organizes is to ensure that ecological security is never threatened with such diversions.

Land uses in a very populous and vast nation like India have to be very judicious and optimal and all flexibilities need be exercised for maximizing land utilization for activities whose economic and social needs could be enormous. Development and ecological security aspects are often opposed to one another. In some cases after its use the land is to be restored to its owners. An appropriate example of land restoration is return of land to the owners when following oil-well drilling the land is not found hydrocarbons bearing and it can be safely returned back to owners with due compensation.

Ethical and ecological violations while developing the acquired land for real estate can be looked into by the proposed 'real estate regulatory authority'. The proposed bill pending in parliament for approval makes registration of realty projects and agents mandatory, compulsory deposit of 70 per cent of funds in a separate bank account, and makes mandatory public disclosure of all project details. As part of disclosures, developers shall disclose, among others, details of promoters, project layout and development plans, land status, and names and addresses of real estate agents, contractors and architects. The proposed bill will empower the authority to penalize builders which indulge in ethical and ecological violations (Kumar, 2012).

Land acquisition for oil-well drilling is essential in national interest for energy security but when no oil is found the land can always be restored to the farmers for carrying out their usual farm business. Environment and ecology may sometimes be affected during 'exploratory drilling' when sites for drilling are identified based on geophysical factors which cannot be altered but following oil discoveries when 'development drilling' is to be done for demarcating oilfield boundaries, flexibility can always be exercised in choosing such locations where environmental and ecological damages are minimal.

Similarly, flexibility can be exercised in site selection for production installations where there is minimal or no damage to the environment and where maximum ecological security can be maintained. However, there cannot be any fixed rules in such matters as development and ecological security are both national priorities and choice can be made on case-to-case basis as priorities differ from area to area and project to project. A flexible land policy has to be a guiding philosophy in all such cases. Flexibility should be hallmark of a land policy which the government evolves in larger interest of industrialization and infrastructural development, and may change from time to time as the scenario changes.

Government involvement in land acquisition process for private companies is desirable given the land ownership patterns, state of land records, and access to muscle power by some interested buyers prejudicial to the interests of land owners (Ramesh, 2012). GOI cannot and should not absolve itself of the responsibility of acquiring land for sale to private companies, especially when it desires that private sector should come forward in setting up units in manufacturing and infrastructure sectors. As the industry brings jobs and development, it is the government's responsibility to facilitate land acquisition (Banerjee, 2012).

The country, vide its Land Acquisition (Rehabilitation and Resettlement) Bill, 2011 looks forward to create a flexible land policy by introducing built-in flexibility mechanisms for land acquisition, ecological security, livelihood security, sustainable development, inclusive growth, and all other related issues. Amount of compensation payable is to be decided on case-to-case basis, as there can be no set rules in such matters as every case is unique. It becomes the moral social responsibility of the land acquiring company following acquisition for assigned activity, to ensure livelihood security for dispossessed land owners by creating employment opportunities and offering socio-economic benefits.

References

- Aiyar S.S.A (2012) Supreme Court says Auction Natural Resources. Water too? *The Times of India*, April 8.
- Alvi Naziya (2012) Government Mulls Denotification of Land in North West Delhi Villages, *The Times of India*, May 17.
- Banerjee Chandrajit (2011) Help Industry Acquire Land, *The Economic Times*, June 18.
- Chhibber Ajay (2011) Inclusive and Sustainable Growth, *The Economic Times*, November 19.
- Dasgupta Reshmi R. (2011) The Speaking Trees, *The Economic Times*, January 6.
- Deveshwar Y.C. and Sunita Narain (2011) Business and Environmental Sustainability (Chapter 8, p.201-228), In: Nielkani, Rohini, *Uncommon Ground: Dialogues between Business and Social Leaders*. New Delhi: Penguin/Viking.
- European Union (2004) *EU Land Policy Guidelines: Guidelines for Support to Land Policy Design and Land Policy Reform Processes in Developing Countries*, Brussels.
- Gold J. (2006) Flexible Land Tenure System in Namibia: Enabling Sustainable Options to Urban poor, paper presented at the Africa Region CASLE Conference, March 14-17, 2006.
- *Hindustan Times* (2012) PURA 2.0: Notice Inviting Expression of Interest for Providing Urban Amenities in Rural Area, May 29.
- Himatsingka, Anuradha and Sengupta, Tamal (2011) Singur a Mute Symbol of Uncertainty and Despair, *The Economic Times*, October 24.
- Kirk, Michel, Ulrich Loffler and Thomas Peterman (eds.) (1998) *Proc. International Seminar on Land Tenure and Policy Issues in Land Use Planning, Food and Agriculture Development Center (ZEL)*, Zochortan, Germany.
- Kumar, Arun (2012) Proposed Realty Regulator to get Due Powers, *The Economic Times*, April 2.
- Lalchandani, Neha (2012) Okhla Plant Chokes Colonies, *The Times of India*, January 8.
- Nandi, Jayashree (2012) Life Blossoms Again in Ravaged Arravallis, *The Times of India*, April 2.
- Nandi, Jayashree (2012) Where have all the Sparrows Gone? *The Times of India*, May 10.
- Mahindra, Anand and Medha Patkar (2011) Land (Chapter 5, p.109-147), In: Nielkani, Rohini, *Uncommon Ground: Dialogues between Business and Social Leaders*. New Delhi: Penguin/Viking.
- Mehudia, S. (2006) Government of Delhi for Flexible Land Policy in the Master Plan, *The Hindu*, September 6.
- Orissa Diary (2008) ASSOCHAM asks Orissa for Flexible Land Acquisition Policy, *Business News*, April 21.
- Paranjpe, Nitin (2011) Sustainable Solutions Inevitable in a World Starved of Natural Resources, *The Economic Times*, November 18.
- Raja D, John Samuel and Kaushik Datta (2011) Laws of the Land, *The Economic Times*, June 9.
- Ramesh, Jairam (2012) Sustainable Development not at the Cost of Economic Growth, *The Economic Growth*, April 12.
- Ramesh, Jairam (2012) Why Do We Need to Subsidize the Rich? *The Economic Growth*, May 29.
- Sharma, R.T. and Rai, Manmohan (2011) Developing Land of a Million Mutinies, *The Economic Times*, May 10.
- Sharma, Sameer (2012) Financing Our Cities, *The Economic Times*, April 12.
- Sharma, Subhash (2012) *Consciousness in Corporate Corridors: Management, Leadership and Spirituality*, IBA Publications, Bangalore 560062.
- Sikarwar, Deepshikha (2011) Infrastructure to Get New Meaning Soon, *The Economic Times*, March 11.
- Silayo, Eugene H. (2009) Urban Land Policy for the Poor in East and Southern Africa, paper presented at the World Bank Conference on Land Governance in Support of the Millennium Development Goals – Responding to the New Challenges, Washington DC, March 9-10, 2009.

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- Singh, Ram (2011) A Misguided Land Law, *The Economic Times*, September 23.
- *The Economic Times* (2011) Cabinet Likely to Clear Land Acquisition Bill Soon, New Delhi, September 2.
- *The Economic Times* (2012) Bengal Raises Landholding Cap for Industry, New Delhi, April 3.
- *The Hindu* (2012) Flexible Land Policy for Promoting Tourism Demanded, Bhubaneswar, March 11.
- *The Indian Express* (2012) We need Flexible Land Use Policy: Ratan Tata, April 1.
- *The Times of India* (2011) Walk the Talk: UP's Land Acquisition Policy Shows the Way, June 6.
- *The Times of India* (2011) Country Needs Planned Cities where None Exist (Editorial), November 24.
- *The Times of India* (2012) Country Needs Planned Cities where None Exist (Editorial), April 13.
- *The Times of India* (2012) Global Economy has Affected India: Dr. Manmohan Singh, June 7.