

Managing Land—A Holistic View

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List 2 of the Seventh Schedule of the Constitution, which gives the exclusive jurisdiction of the States, in Entry 18 reads, “ Land, that is to say, rights in or over land, land tenures including the relation of landlord and tenant and the collection of rent; transfer and alienation of agricultural land; land improvement and agricultural loans; colonization”. However, Entry 42 of List 3, the Concurrent List, gives concurrent jurisdiction to Parliament and the State Legislatures in the matter of acquisition and requisitioning of property. At the same time under Entry 20 of List 3 puts economic and social planning in the realm of both the Centre and the States. To the extent that the use of land affects the economy the Centre does have a say in the planning of land use.

Land is the resource on which cities are built, industries are established, roads and railway tracks constructed, agriculture is done, forests are conserved and expanded and mining and extraction operations effected. This is the common resource for practically every human activity. The National Commission on Urbanisation devoted a whole chapter to land as a resource. This is what the Commission has to say about land.

I quote in extenso because this is about the best coverage of the subject. Purely as an aside, as Vice Chairman of the Commission I wrote the chapter on “Land As A Resource” and, therefore, at worst I am only quoting myself.

“Land is the medium on which the entire superstructure of a human settlement is created. On land man builds his houses, constructs his factories, shops, schools and hospitals. From land he extracts metals and minerals and on it he grows his grain, fruit and flowers. The relationship between man and land, therefore, is organic and symbiotic. Where land is managed with foresight, sympathy and understanding, an environment is built up in which the whole ecological system tends towards equilibrium. Where, however, land is mismanaged and exploited rather than used, the result is blight. By and large, the way man has managed land, especially in India, there has been environmental degradation, and nowhere more so than in our cities”.

The Commission further states:-

“The management of this critical resource is qualitatively different in the urban and the rural context. Rural land is a factor of production, the major input for the main rural economic activity, agriculture. Urban land, on the other hand, by and large, is the base on which things are built. Rural land is predominantly under a repetitive cycle of sowing, tending and harvesting, whereas urban land is converted or diverted to a built environment on a one-time permanent basis. Because it is constantly reused, rural land is generally better managed than urban land which is often utilised for an expedient profit, without thought of long-term consequences. This is perhaps why our exercises in land planning tend to be restricted to urban areas in the form of master plans, there being an underlying assumption that rural land will be properly managed in any case.

In large measure, it is our attempt to plan land use, divorced of a wider understanding of human behaviour under the stress of city dynamics, which has contributed to the present urban chaos. While land use planning alone cannot sort out the urban mess, the management of land can certainly be

improved so that land is viewed in its correct perspective, as a resource, and its use planned with optimisation under changing circumstances as the objective. To illustrate the point: a farmer decides whether to plough his land or leave it fallow, whether to use it for rabi or kharif cultivation and the crops to be sown on it, depending on weather and market conditions and the availability of seed. His system of land use is thus flexible. The urban planner, however, tends to assign one particular use to land, into which the bureaucrat locks it, regardless of changing conditions.

Paradoxically, the use, ownership and transfer of land are well documented in village India, where land is fairly well managed, because the man-land symbiosis is still largely undisturbed. The land records system ensures an annual review and revision of the land-use situation and the data base is thus kept up-to-date, and just where planning is a matter of vital importance, there are virtually no land records. There are city surveys, but they are outdated, inadequately informed and quite worthless as a planning tool. For example, this Commission tried to ascertain how much land under actual cultivation has been acquired for or privately converted to urban, non-agricultural use in the last 20 years. No records are available. Neither the Ministry of Urban Development, nor the National Remote Sensing Agency could give this information. City by city, it is possible to longitudinally compare the physical spread, but it is not possible to obtain data about how much of this has occurred by conversion of agricultural land, or the quality of the land thus converted. In other words, a broad analysis of the cost of city spread in terms of diverting land from cyclical use to a built environment is not possible because there is no record of the potential of the land thus converted and its productivity and value under agricultural use. Even in the context of intra-city planning, the lack of such data effectively blocks any attempt to assign uses so that land best suited to growing things is retained under vegetation, whilst marginal land is built upon. In city after city, with Delhi as a good example, barren land is converted into gardens at immense cost, whilst fertile land is smothered under concrete and asphalt”.

Having examined the issue of land in great detail the Commission recommended that in addition to the Survey of India, which may be taken as the mother institution, there should also be a Settlements Survey of India, which would scientifically survey land and classify and suggest the most appropriate uses for different types of land. A separate Directorate of Urban Land Records within the overall umbrella of the office of the Commissioner for Land Records, Survey and Settlement should be set up in every State. On the basis of the data generated an overall land use policy should be framed whereby land is allotted that use for which it is most appropriate. That is simply not done in India so far. In fact land use allocation follows such economic policies as the one for development of backward areas through industry. One has just to fly over Hyderabad to see what this has done to a city which at one time was known for the beauty of its rocky landscape and the water bodies like Hussein Sagar and Himayat Sagar. Whether one flies from the north or from the south one witnesses a huge urban sprawl which has destroyed such beautiful rocky locations as Banjara Hills, Jubilee Hills, Somajiguda, etc. All the agricultural land around Hyderabad has been eaten up. This is because Medak District which adjoins Hyderabad was declared to be backward. Cyberabad, Ramachandrapuram and Pattancheru are the results, with Hyderabad city itself expanding into the so-called backward areas. Had an intervening space of about 100 kilometres been left between Hyderabad and the backward areas Hyderabad would not have expanded so much and independent, thriving townships would have come up in the designated backward areas for the benefit of the residents of the district. Similar is the case with Dharampuri in Tamil Nadu, with the result that the border town of Hosur has now grown into Bangalore and the outreach of Bangalore has expanded because of the concessions made available on the outskirts of the city. Indore, with Dewas to the north and Pithampur in Dhar District to the south is a similar example of urban sprawl promoted by faulty industrialisation policies and, therefore, land use policies.

The problem of land management has to be disaggregated at different levels. The first is the national level. India is one of the very fortunately placed countries in the world in which sixty percent of the land is arable, thirty percent is under forests, grazing or other public use and only ten percent is uncultivable waste land. In China, by contrast, only ten percent of the land is arable, sixty percent is uncultivable waste land and the balance thirty percent is divided between grazing, forests and human settlements. In China expansion can take place into land which does not have an alternate use. In India it has to be planned so that it is forced to divert to land which cannot be cultivated or put to other useful purposes. For this reason at macro level we need a strong, scientifically formulated land use policy which divides land along lines of permissible activity and then assigns land use accordingly.

There is also a meso level dimension which would roughly approximate to the State. Every State provides for restriction on diversion of land from agricultural to nonagricultural use. At the same time it is well known that around cities such diversion takes place, sometimes legally after seeking permission and very often illegally by surreptitious land use change and subsequent regularisation through political pressure, bribery or both. Unauthorised colonies in Delhi are a direct result of such unauthorised, unplanned diversion of land from agricultural to nonagricultural use. If the State fine-tunes the general national level policy of allocating land for appropriate use then illegal diversion could also be checked. How does the State fine-tune land use policy? In Gujarat the two areas most unsuited to agriculture are the Greater and Lesser Rann of Kutch, both of which are desert whose sands are encrusted with salt as sea water which inundates them during the wet season recedes and leaves the land barren. The other large area which, in a way, is a continuation of the Rann, is the Khar Patti of the Bhal between Bagodara and Limbdi. This area is totally unfit for cultivation or growth of trees. It is a well known fact that the most fertile, well watered part of Gujarat is south Gujarat, that is, the districts of Baruch, Valsad, Navsari and Surat. Central Gujarat, Ahmedabad, Kheda, Mehsana and Baroda districts, is also fertile. It is these districts where the maximum industrialisation and urbanisation is taking place, thus eating into thousands of acres of good, cultivable soil. A sensible industrial policy for Gujarat would be to locate industry in the Khar Patti or in Kutch. One is greatly encouraged to find that the present government of Gujarat is following a deliberate policy of encouraging industry in Kutch, this being one of the few examples of a state government adopting a sensible location policy. We need to create a climate in which within the framework of the National Land Use Policy state governments do detailed planning so that at meso-level we have an appropriate location and land use policy.

Land use planning is equally important at the micro level, which could be the region, city or village. Very often sound land use planning at ground level becomes a victim to the greed of property owners and developers and the cupidity of our politicians and officials. This is particularly true of land on the periphery of our large towns. Whereas Delhi has now expanded exponentially, just thirty-five years ago the 1650 unauthorised colonies, with a population of over twenty lakhs, were a direct result of our not being able to plan land use and land management as an integral part of the Master Plan of Delhi. A recent example from Bhopal would further illustrate this point. About twenty-five kilometers from the centre of Bhopal is located village Bhauri, approachable both from the Sehore road which goes west of Bhopal and the Narsingarh road, which goes north. With no thought to consequences government decided to locate the Indian Institute of Science Education and Research (IISER), the School of Planning and Architecture (SPA) and the National Institute of Fashion Technology (NIFT) in Bhauri. In addition, a major police training establishment with all India coverage is also being located in this village. Naturally land values have appreciated in Bhauri and surrounding villages and real estate developers have stepped in. It is estimated that within the next few years a new township with a population of over two lakh will be established, with no thought to any centralised planning. Individual layouts have been cleared but area-wise infrastructure is not even envisaged. This new development lies outside the

command of the water supply, sewage and drainage systems of Bhopal. Two lakh people will be left dependent on ground water, already in short supply. The sewage, after perfunctory primary treatment in septic tanks, will be discharged into a nala which drains into the upper reaches of Bhopal's Upper Lake. All the efforts to protect the Lake from pollution will be set at naught.

I have given these two examples to emphasise the need for a proper land use policy which covers the region, the settlements within the region and the direction in which the region should grow. In other words, within the broad framework of the national land use policy and the state level policy, we need to do detailed planning of regional infrastructure which would allow the settlements located within that region to develop in tandem and without creating the imbalances which can create isolated planned pockets within a blighted region. It is this sort of planning which can then lead to the detailed development plan of a town and fine-tuned zonal planning within the development plan.

India is paying a very heavy price for neither having a proper record of how its land space is being used, nor a broad national policy of how land should be used. Some of the consequences need to be mentioned for a proper understanding of the problem. It is self-evident that in rain fed areas where the health of rivers is directly dependent upon the health of the forests within the catchment because there is no snow to feed the rivers, any national level policy must give very high priority to the conservation and enlargement of the forests in the catchment of all our peninsular rivers. The forests of the upper and middle reaches of the Narmada River are under stress but are still in a reasonably healthy state of conservation. The Narmada is an entirely rain fed river. The gauging stations at Mandla, Hoshangabad and Mortakka show that the dry season flow of the Narmada is between twelve to fourteen percent of the wet season flow. Contrast this with the Bhagirathi (Ganga) at Uttar Kashi and Tehri. Here the dry season flow is six percent of peak season flow, despite the fact that the Ganga emerges from a glacier and is snow fed. There is such mass deforestation in the hills of Tehri and Uttar Kashi that the behaviour of even a snow fed river is less satisfactory than that of a pure rain fed river whose forests are still reasonably healthy. Ultimately it is the forests which are the source of water and it is they which regulate the health of ground water in the plains and also prevent upland erosion. Forests, therefore, must get the highest priority in any national land use planning.

India wants to retain a sustained growth rate of between eight and eight and a half percent per annum. Our mindset is such that the secondary and tertiary sectors are the ones which we have planned to engineer growth. In the process the primary sector, agriculture, is neglected, or else it is presumed that the growth potential of this sector is very little. Agriculture is not only a function of sowing seed and then harvesting the mature crop. Linked with agriculture is irrigation and, consequently, availability of power. Irrigation itself demands storage for flow irrigation and exploitation of ground water for lift irrigation. We have no national policy in this behalf. So far as ground water is concerned we have not been able to have a policy which correlates discharge through lift and recharge of the source of ground water. This has caused a disastrous drop in the water table in areas such as the Punjab and Haryana, where natural aquifers exist and the Malwa region of Madhya Pradesh, where there are very few aquifers and it is only pockets of fossil water which are tapped. As a part of the national land policy we must, therefore, also have a policy relating to water withdrawal and recharge. The State of California in the United States of America does have such a policy. A series of percolation tanks in the hills cause ground water recharge in the central part of the State. Government carefully monitors recharge and regulates drawing of water by volumetric metering and fixing of the water rate, plus a ceiling on the quantum that a user can draw.

Closely connected with land use policy is the correlation of development activity and conversion of land to that particular use. For example, if a road is to be built land will have to be acquired. If industry is to be established it can be done only by locating it on land. If a new Indian Institute of Technology is to be founded it will need five hundred acres of land. If thermal power is to be generated coal will have to be mined and assigned to the power station and this converts the present land use, largely under forests, to mining which, through excavation, changes the landscape. The national land use policy must take this factor into account so that it accommodates both the thermal power station and the mines that feed it. Here what is needed is a sound policy for restoration of mined areas to a state of nature, a policy followed with great success in the German State of Rhenish—Westphalia, but is not even conceived even as a principle in India. If land is the medium on which human activity takes place, then the national land use policy will have to take into account all such activities. How to optimise land use, how to come up with a rational policy of diversion of land use, how to acquire land for purposes which are critical to the development process would all emanate from a national land use policy. Today for want of such a policy ministries such as Rural Development and Forests and Environment pull in one direction, ministries such as Agriculture and Industry pull in another and activists who are trying to establish their own credibility pull in every direction imaginable, leading to complete chaos. Economic planning is not a function of individual ministries taking decisions, almost always contradictory of each other, but is rather a holistic exercise in which the national land use policy plays a vital role in determining land use and then assigning to land the function which will promote overall economic development without compromising on issues of environmental protection.

Is there any hope that we shall get a national land use policy? In fact the answer is a string of question marks because at present there is no evidence that a holistic land use policy is even thought of by our politicians, officials and planners. As is our wont it is ad hocism which governs and will continue to govern every issue relating to land use.
