

The Land Acquisition Bill: A Critique and a Proposal

MAITREESH GHATAK, PARIKSHIT GHOSH

The 2011 Land Acquisition and Rehabilitation and Resettlement Bill on land acquisition recently tabled in Parliament is well-intentioned but seriously flawed. Its principal defect is that it attaches an arbitrary mark-up to the historical market price to determine compensation amounts. This will guarantee neither social justice nor the efficient use of resources. The Bill also places unnecessary and severe conditions on land acquisition, such as restrictions on the use of multi-cropped land and insistence on public purpose, all of which are going to stifle the pace of development without promoting the interests of farmers. We present an alternative approach that will allow farmers to choose compensation in either land or cash, determine their own price instead of leaving it to the government's discretion, and also reallocate the remaining farmland in the most efficient manner. Our proposed method involves a land auction covering not only the project site but also the surrounding agricultural land.

We thank Abhijit Banerjee, Sanjay Banerji, Pranab Bardhan, Bhaskar Dutta, Archishman Chakraborty, Anirban Kar, Ashok Kotwal and Eswaran Somanathan for helpful comments, and Sreyashi Sen for research assistance. The first author thanks the International Growth Centre for funding under the research grant RA-2009-11-025. All errors are our own.

Maitreesh Ghatak (*M.Ghatak@lse.ac.uk*) is with the London School of Economics and Parikshit Ghosh (*pghosh@econ.dse.org*) is with the Delhi School of Economics.

Introduction

Land acquisition has become a most vexing problem for policymakers in India. Names like Singur, Nandigram, Kalinganagar, Jaitapur and Bhatta Parsaul have entered our lexicon as poignant metaphors of social conflict. The Left Front, which built a remarkable political hegemony in West Bengal largely on the basis of Operation Barga and land reforms, has been brought to its knees after a botched attempt at wresting a thousand acres for a car factory, illustrating how land issues have a seismic potential in our political landscape. The post-liberalisation economic boom continues to create a voracious appetite for space to meet the demands of industrialisation, infrastructure building, urban expansion and resource extraction. Finding a way to balance the needs of economic growth, equitable distribution and human rights, rescuing these complex and sometimes conflicting objectives from the demagoguery of single issue advocates (Bardhan 2011) and political opportunists, is perhaps the greatest challenge facing our democracy.

The importance of the Land Acquisition and Rehabilitation and Resettlement Bill (LARR 2011) recently tabled in Parliament cannot, therefore, be overstated. The Bill closely follows the recommendations of the working group of the National Advisory Council (NAC 2011), though it differs on some key points. The salient features of the proposed legislation are as follows. It significantly increases the minimum compensation payable, but continues to use the market price obtained from recently registered sale deeds from the region as a yardstick. The minimum compensation has been fixed at four times the market price in rural areas and twice the market price in urban areas. LARR (2011), which is a comprehensive Bill on land acquisition as well as rehabilitation and resettlement (R&R), subjects all eminent domain acquisitions as well as private purchases of over 100 acres in rural areas and 50 acres in urban areas to a mandatory R&R package, with a host of benefits both for affected landowners as well as livelihood losers. These benefits include annuities, transportation allowance, land for land, a portion of capital gains from resale, and the construction of alternative housing and communal amenities in the event of loss of homestead. In addition to defining compensation parameters, the proposed law also places several restrictions on the exercise of eminent domain, limiting the use of multi-cropped land and tightening the definition of "public purpose". Procedural safeguards have also been introduced, including social impact assessment, adequate notification and consent of at least 80% of the affected community.

Unfortunately, the proposed Bill's good intentions are not matched by sound economic reasoning. The principal drawback, in our view, is the choice of an arbitrary mark-up over market

price for compensation purposes. Given how land markets operate in India, the market price is not an adequate anchor for compensation, and this ad hoc formula will guarantee neither social justice nor efficient use of a scarce resource, notwithstanding its pro-poor appearance. We outline, instead, a procedure based on a land auction, covering both the project area and surrounding farmland. If properly implemented, this procedure will allow farmers to choose compensation in either land or cash, determine their own price instead of leaving it to the government's discretion, and reallocate the remaining farmland in the most efficient manner. It will not only protect the interests of landowners and reduce political resistance to industrialisation, it should also render some of the stringent restrictions in the Bill (e.g., conditions on the use of multi-cropped land and stringent criteria to meet the standards of "public purpose") unnecessary.

The rest of this article is organised as follows. We first provide an analysis of the nature of the economic problem involved in assuming agricultural land for industrial and urban use. We next outline our proposed solution and explain its main advantages. This is followed by a detailed critique of some of the problematic features of LARR, 2011, apart from its main shortcoming, namely, arbitrary pricing. We also briefly address the issue of compensating stakeholders other than those with formal property rights – groups such as sharecroppers, farm labourers and artisans.

Diagnosing the Problem

The overwhelming question that lies at the centre of the land acquisition issue is the following: how should landowners be compensated when the State seizes private land for development projects? This should be viewed as a general question – we should search for a mechanism or formula that will yield satisfactory results when applied to any particular case, rather than try to find answers on a case by case basis. One too often hears glib criticism that the government's compensation package in Singur or Noida or Kalinganagar was "not enough", without a clear statement of a general principle as to how much is "enough". Surely the answer would depend on local conditions like soil fertility, access to irrigation, cost of living, alternative employment opportunities and so on, and there cannot be a magic number that will work for every region of the country. The useful question to ask is not *what* the displaced farmers should have received here or there but *how* this amount should be determined.

The Land Acquisition Act of 1894 lays down such a principle – compensation should be equal to the local market price for land. More specifically, the law says that it should be the average price of all land transactions completed in the area in the previous three years. This is viewed by many as inadequate compensation, but a compelling reason is rarely articulated. Attempts to remedy the perceived shortfall usually involve slapping an ad hoc mark-up on the market price, and this is the approach adopted in the NAC's recommendations and incorporated in LARR, 2011. Our view is that the use of historical market price even for benchmarking purposes should be abandoned altogether.

Some problems with the market price are easy to see. In many regions, transactions are few and not well documented, leaving considerable room for officials to manipulate the figure by use of

selective sampling or fake deals. Distress sales constitute a bulk of the transactions, and the full value is often concealed to escape stamp duty. Furthermore, any industrial or development project will cause significant appreciation of real estate prices, making it impossible for displaced farmers to buy back land with compensation money if they so wished.

These are, however, secondary concerns. The use of market price for *voluntary* transactions as a proxy for owners' value in *forced* acquisitions is so fundamentally flawed that it is a surprise it has been taken seriously at all. The value of a piece of land to its owner is not some tangible attribute that can be objectively measured by experts but rather a subjective quantity – it is whatever the owner deems it to be. Moreover, there is going to be substantial heterogeneity among owners in the valuation of land. Heterogeneity would arise even if we were to think of land value being derived from the flow of crop output alone, because farmers differ in their endowments of skill, knowledge, capital, farming assets like bullocks or tractors, market access, access to alternative methods of earning a livelihood, etc. There are, in addition, many other potential sources of value for land – collateral for loans, assured source of employment for family labour, insurance against food price fluctuations via self-consumption and even social prestige associated with landownership. Different owners are likely to impute these values very differently. For example, small farmers will have more pressing credit and collateral needs compared to large and affluent landowners, absentee landlords will have lower valuation than resident owners since they do not derive self-employment or self-consumption benefits from the land, and so on.

A market transaction arises when the owner of an asset meets another person who values the asset more than the owner, and together they negotiate a price which is somewhere in between their respective valuations. In a perfect asset market, *all* current owners should value the asset more than the prevailing market price because otherwise, it would be better for them to sell rather than hold on to their land. If their assets are now forcibly seized, it is clear that the market price, far from being a good estimate of their valuation, will actually be a lower bound on it.¹ A lot has been written about the corruption and venality of the process, the subversion of property rights by a nexus of greedy capitalists and their political cronies, or the coercive tendencies of a neo-liberal economic regime. The fact of the matter is that the current legal formula for compensation is seriously flawed and would be reason enough for disaffection even if it were assiduously implemented by honest bureaucrats and politicians.

This critique is, however, vulnerable to one objection. If the government confiscated your car, but paid its market price, it would not matter how badly you needed the vehicle – you can immediately go out and buy another one just like it. If the land market works well enough, the displaced farmer's subjective valuation of land should be irrelevant because a compensation set equal to market price will allow him to repurchase land in the neighbourhood (assuming that expected future prices rather than historical prices are used for compensation purposes). One common criticism of cash compensation is that it replaces a familiar asset (land) with an unfamiliar one (paper assets), destroying the value of the farmer's asset-specific skills and leaving him vulnerable

to bad investments or self-control problems associated with liquid wealth (Banerji and Ghatak 2009). This criticism implicitly assumes that various forms of wealth are not easily convertible, which seems reasonable in the contest of rural India. The market price may be a good compensation benchmark for people who lose homes to make way for infrastructure projects in big cities (e.g., the metro rail) because the urban real estate market is relatively well developed. The asset market for agriculture land in India is extremely thin, fragmented and riddled with frictions of all sorts.² Once someone loses some arable land, it may be very difficult to buy it again even if the dispossessed is endowed with a bundle of cash.

If our diagnosis is correct, any workable solution to the land acquisition problem must have two essential features. First, it must come up with a formula for determining a compensation amount that reflects the dispossessed owners' *own* valuation of their assets. This method should be transparent and non-manipulable, and should leave no room for discretion in the hands of the State, its officials or appointed experts. Furthermore, the method must be such that landowners are incentivised to reveal the true value of their plots in their own estimate. The problem with the market price is that it underestimates the owners' valuation, and the problem with negotiated prices is that owners have every reason to make exaggerated claims. Second, the acquisition process must also make up for the absence of well-functioning land markets in the area. Whenever a large chunk of arable land is diverted to other use, economic efficiency dictates that the ownership pattern on the remaining land must be reshuffled so that those who place the greatest value on land end up remaining owners even if their previously held plots are seized for non-agricultural use. For example, if a land-hungry peasant's plot is eaten up by an industrial plant while an absentee landlord's farm remains untouched by virtue of falling outside the project site, there will probably exist room for a further transaction that should make all parties better off—resettle the displaced peasant on the absentee landlord's land and pay compensation to the latter instead of the former. The role of a land market is to achieve precisely this sort of reallocation, and in its absence, the land acquisition process should aim to fulfil this role. That will go a long way towards promoting efficient land use, minimising the compensation bill, keeping agricultural productivity high and ensuring social justice.

A Proposed Compensation Policy

We will now outline our main proposal regarding a compensation policy for displaced landowners. The highlights of our proposed solution are: (a) the transfer price is determined by a land auction and not left to the State's discretion, (b) displaced farmers get an option to choose compensation in cash or compensation in land, and (c) the area of intervention is extended beyond the project area to surrounding farmland. The basic idea is very simple. The government should hold an auction and buy up the cheapest land on offer at the project site and its surrounding region. Landowners whose plots fall within the project site, but who have not sold in the auction, can then be compensated with equal sized plots of land acquired outside the site through the auction.

Let us take the case of Singur for illustration. The proposed factory was to occupy approximately 1,000 acres. Demarcate an area

which is twice the size (say) of the project site, i.e., 2,000 acres. This should include the project site itself (to be referred to as the core) and a belt of additional farmland surrounding it, amounting to another 1,000 acres (to be referred to as the periphery).³ All owners within this operational zone of 2,000 acres will be asked to submit tender bids for selling their land to the government. The 1,000 acres on which bids are the lowest will be procured against cash compensation, and all of them will be paid a uniform price equal to the bid on the marginal acre that is *not* acquired in the auction (i.e., the bid on the 1,001th acre of land when they are arranged in ascending order of asking price). To discourage collusion among bidders and to reflect the value of land in its intended alternative use, the government may set a reserve price. The acquisition process will be scrapped and other sites sought if the price in the auction exceeds the reserve price. The auction rules will have to be clearly explained to farmers and its implications fully absorbed before proceeding with implementation.

Obviously this process will not solve the problem entirely, since the procured land will have an arbitrary spatial distribution which will usually not coincide exactly with the intended site of the project. Some of it will fall in the core and some of it will fall in the periphery. Note, however, that the area of land within the core that remains unsold in the auction must be exactly equal to the area of land procured in the periphery. The last step of the process is to take land from farmers in the core who have not sold for cash and compensate them with the plots of equal size procured in the periphery. In cases where the State procures land on behalf of industries, it is of utmost importance that there be no subsidies, i.e., the entire burden of compensation and R&R be borne by the industrialist. The State's only role should be to administer the auction and preserve its integrity, in addition to applying the minimal coercion involved in forcing the hands of those who are unwilling to do even land swaps.

As noted by many commentators, a major problem faced in the last several years has been that various state governments have engaged in fierce competition to attract investment to their states, with the attendant promise of industrialisation and employment generation, if not opportunities for kickbacks to politicians and public officials. This has generated a race to the bottom where most of the surplus generated from land conversion has gone into the pockets of capitalists instead of landowners, the local population or taxpayers. West Bengal's disastrous experience in Singur probably owes much to the fact that the CPI(M) government, in its desperation to reverse the deindustrialisation of the state, offered land to the Tatas at throwaway prices (Sarkar 2007), leading it to skimp on its compensation offers since the state exchequer had to pick up the tab. There is an obvious need for a central law that prohibits subsidies and curbs the economically ruinous competition among states for investment and capital. Since land is on the concurrent list, this involves legal and jurisdictional issues that need to be sorted out.

Our auction-based approach has several advantages, which we now discuss in detail:

(1) The single most significant feature of our proposal is that it is considerably less coercive. The existing law of eminent domain leaves the landowner powerless in every dimension. Not only does the State compel him to surrender his land, it reserves the right to

name its own price. Legally stipulated compensation formulae, such as market price or a mark-up over market price plus stipends (as specified in the LARR 2011), ties the hand of the State to some extent but uses no input at all from the affected parties. In contrast, our proposal offers the farmer choice in the *form* of compensation – it can be taken either in cash or land. Moreover, the amount of cash compensation is derived entirely from the asking prices submitted by the landowners themselves, and is designed to exceed, not fall short of, the bid on every plot of land that is acquired against cash. This approach should shut down two of the most common complaints heard about land acquisition in India – that displaced farmers have not received enough compensation, and those who are highly dependent on land have been deprived of an asset that is central to their lives. A farmer who does not want to give up cultivation can quote a high enough bid, and then settle for compensation in land in the surrounding area. The process still contains a small degree of coercion, because farmers who insist on not merely holding land but holding particular plots (perhaps due to the sentimental value of ancestral property) have to be forcibly moved if their preferred plots fall in the core area. However, there can be little doubt that our proposed method reduces the degree of coercion to its bare minimum, compared to the approaches that we have seen so far, including that of LARR, 2011. The only way to make it even less coercive is to eliminate any role for the state and rely entirely on open market purchases, an option feasible only for private projects. We will comment later on why we think exclusive dependence on private transactions will be unwise for big industrial projects involving many interested parties.

(2) Our proposal gives the farmer a strong incentive to bid truthfully, i.e., ask for a compensation amount for which he is truly willing to part with his plot, instead of strategically inflating his asking price. The reason behind this is not very hard to see. The auction is set up in a way such that a uniform price is applied to all plots for which compensation is to be paid in cash, and this price is equal to the lowest *losing bid*. This means that by varying his bid, an owner cannot affect the compensation he will receive, only the probability that he will be paid in cash instead of land. Since it is better for him to receive cash compensation if and only if it exceeds his true valuation for land, it is best for him to bid his true value.⁴ Farmers must be given time and advice to understand the logic of the auction they are participating in, and it is possible that they will miss some of its strategic nuance even after prolonged reflection. However, the fact that one should not significantly overbid or underbid is not difficult to appreciate from a common sense perspective. Someone who has a low value for land (say, an absentee landlord) will be relatively eager to receive cash compensation, but will run the risk of being stuck with another piece of a low yield asset if he bids too high. Someone who values land greatly has no reason to ask for compensation that is insufficient, given his personal valuation of his asset.

(3) One of the most common complaints heard about the current acquisition process is that it prevents owners of acquired plots from reaping the benefits of appreciated real estate prices that come in the wake of industrial and commercial development of the area.⁵ Anyone who is compelled to sell now will lose out in comparison to his neighbour whose land lies outside the project zone by happy

accident, since the latter can wait and sell his property when the real estate boom fully arrives. This is economically crushing for farmers who would like to buy back land and continue cultivation, and is aggravating even for those who are happy with cash and not particularly committed to farming. Our proposal removes this arbitrary source of inequality by treating all local landowners (those owning plots in the project zone as well as outside) at par, allowing farmers to incorporate their own estimates of future land price inflation into their bids.⁶ It also eliminates the problem of hold-up often associated with private acquisitions – an owner who holds out till the end, while neighbouring plots are bought up, gives himself a very strong bargaining position. Many of these problems arise from the sequential and staggered nature of the acquisition process, which we collapse into a single round of bidding and sorting. (4) Finally, our proposal has a provision for the acquisition effort to fail and for land to remain in agricultural use. This will happen when the price in the auction ends up above the reservation price set by the government. It is generally assumed that the value created by industrial use of an acre of land is orders of magnitude higher than what can be generated by crop cultivation. This is probably true in most cases, but we see no reason why the acquisition process should take this for granted instead of putting it to the test. Industrialisation is not an article of faith; it should proceed only where it demonstrably increases the size of the economic pie. The onus should lie on industry to demonstrate this by competitively bidding for the scarce economic resources it wants to divert from agriculture.

Many Challenges

There are myriad details to be worked out and logistical challenges met before a plan like this can be operationalised. We have focused on heterogeneity among farmers in terms of dependence on land and ignored heterogeneity in land quality, implicitly assuming that all plots of the same size are perfect substitutes. In reality, there will be differences arising from soil quality, gradient, access to water sources, sunk investments like pump sets, etc. Farmers must receive supplementary payments to account for these factors, as well as relocation costs, distance-from-home issues, plot fragmentation, etc. These additional awards can be covered by ad hoc payments similar to those in LARR, 2011, or customised based on assessment of individual circumstances, as determined by the district collector.⁷ In some cases, the proposed project may have an environmental impact that reduces yields and lowers the value of surrounding farmland (e.g., through groundwater depletion or pollution). The auction price will not recover these damages, since competitive bidders will shade their bids to reflect the reduced potential of their land. Independent environmental assessments and award of ad hoc compensations on that account may be necessary where relevant.

Our goal here is not to present a complete blueprint of a solution but a broad outline. Auctions have proved very effective in several countries in recent times, albeit for much more hi-tech allocations like spectrum licences. They are also widely employed in procurement of foodgrains by the Food Corporation of India as well as in private wholesale trade. Had the task been one of acquiring a thousand acres from the vast sea of agricultural land stretching across the country, it would have been cheapest, most efficient and least contentious to do it through an auction. The

problem at hand is more restrictive – the acquisition must be a *specific* thousand acres of contiguous territory. We have argued that with only slight modification, essentially the same principles can be applied to this more constrained problem. Our proposed method is designed to kill two birds with one stone. First, it determines a fair price not through the government fiat but through a participatory process of competitive bidding where farmers are free to name their own price and choose their form of compensation (cash or land). Second, it fills in for missing or imperfect land markets in the region by reallocating the remaining farmland to those who place the highest economic value on such an asset.

The Proposed Bill: Additional Critique

Our main criticism of LARR, 2011, is that it relies on arbitrary pricing, which will neither ensure that farmers are adequately compensated for their lost assets, nor guarantee that a scarce resource like land will be put to its most productive use. The Bill has other questionable features to which we now turn our attention. These provisions have little merit when combined with the ad hoc compensation rates, and will be detrimental when the compensation is determined through competitive bidding, as we suggest.

(A) Public Purpose: The public purpose clause features in most eminent domain legislation not just in India but internationally. The Land Acquisition Act, 1894, stipulates a public purpose behind acquisition (part II, Section 6) but also provides for acquisition on behalf of companies for the purpose of residential construction for its employees (part VII, Section 40). The fifth amendment to the US constitution declares: "...nor shall private property be taken for public use, without just compensation". Of course "public" purpose is a vague term, and governments have naturally taken interpretive liberties while operationalising the concept, and courts have generally refused to second-guess executive judgment in this matter. The Supreme Court of India is on record, saying: "The concept of public purpose has to be held to be wider than 'public necessity'", and has permitted the use of eminent domain for such purposes as the construction of a paper mill or a factory manufacturing electric compressors (Desai 2011).⁸ In *Kelo vs City of New London*, 2005, the US supreme court controversially ruled in favour of the city of New London, which had acquired prime waterfront property and handed it over to commercial developers on the grounds that it will serve the public interest by creating jobs, generating tax revenue and rejuvenating an ailing local economy. Interestingly, it is the court's conservative faction, usually perceived as friendly towards the interests of big business, which offered a dissenting opinion, while the liberal wing took an expansive view of the State's right to confiscate private property.⁹

We think the entire focus on public purpose is misplaced, not merely because of the difficulties of enforcement, but due to a conceptual blurring of utilitarian and rights-based perspectives. It is inconsistent to stick to both principles, and the attempt to combine strong protections for private property with a narrow public purpose requirement leads to either a contradiction or a redundancy. The insistence on a public purpose implicitly assumes that those who have to surrender property are being called upon to make sacrifices for the greater common good, i.e., the interests of a

few must give way to the interests of many. The insistence on just compensation upholds the notion that the economic interests, if not formal consent,¹⁰ of property owners cannot be compromised for any reason, however socially desirable. If care is taken so that the economic interests of owners are indeed protected, how does it matter to what alternative use their seized assets are going to be employed? If a golf course or luxury housing project can afford to pay affected farmers enough to improve their standard of living, it is hard to see why anyone should object. If a proposed defence facility claims to serve the national interest, yet the government cannot find enough tax revenue to adequately compensate displaced landowners, one has to ask whether its claimed social benefits are real. If society is to violate property rights for whatever reason, it should put its money where its mouth is.

We need to clarify what we see as the government's role in the exercise of eminent domain. One view is that of a utilitarian social planner. Under such a view, the state can sit in judgment about the merits of alternative uses of land and take compensation obligations lightly. An alternative view is that the State's role is to facilitate complex economic transactions, reduce transaction costs and safeguard the interests of the weak. Under this view, the State's efforts should be concentrated almost exclusively on securing adequate compensation for those who have to give up land. We favour the latter view. If properly implemented, it should promote both economic efficiency and social justice. It is worthwhile to keep in mind that some of the worst human suffering in independent India has been inflicted in the cause of public projects like large dams, Nehru's temples of modern India.¹¹ On the other hand, farmers have reportedly become rich in places like Gurgaon by selling their land to private property developers for housing projects. The time has come to see the farming community not as perennial victims of modernity but as potential stakeholders and beneficiaries of economic development by virtue of the valuable assets they own.¹² These assets should not be zealously locked away for traditional use but should serve as keys to the vault where much of India's newly generated wealth is being stored.

(B) Multi-cropped Land: The draft Bill previously circulated by the Ministry of Rural Development (MRD 2011) simply declared all irrigated multi-cropped land off limits, which was in line with the sentiments expressed by Mamata Banerjee's government as well as some commentators on the issue. The version tabled in Parliament (LARR 2011) relaxes this constraint somewhat by allowing the acquisition of multi-cropped land under "exceptional circumstances" and up to a cumulative ceiling of 5% of such land in the district. It also waives the requirement for "linear projects" like railways, highways and power lines.

The restrictions on use of multi-cropped land are still a significant constraint on industrialisation if not infrastructure building, since a large fraction of total cultivated land in the country is multi-cropped.¹³ This is particularly true in regions surrounding the major metros, where demand for agricultural land is the highest. The thinking behind such a proscription is difficult to understand, and its contradictions are similar to those of the public purpose clause. If the concern is that farmers may be given a raw deal, what matters is not whether the land grows one crop or three, but

whether the compensation paid is enough to cover the value of the crop that will be lost. Since farmers in single-cropped regions are generally poorer and more economically vulnerable, the first egalitarian instinct should have been to erect a protective legal fence around their property instead of rushing to quarantine relatively prosperous multi-cropped land. The restrictions clearly reflect a concern not for the affected farmers' welfare but aggregate food production and prices, i.e., it is utilitarian in outlook.

That industrialisation may lead to food shortages is an alarmist view. The fraction of agricultural land required for industrial production is too small to make more than a dent on overall food production. For this reason, the literature on economic development has paid almost exclusive attention to the transfer of labour from agriculture to industry along the path of development, and has neglected the issue of land altogether. Infrastructure projects and urban expansion are likely to shrink agricultural land to a greater extent, but even there, the demand is going to be quite small relative to total availability. It is worth noting that most industrialised nations are self-sufficient in food production in spite of a tiny fraction of the labour force being engaged in farming, and this has been made possible by a sustained increase in agricultural productivity partly brought about by the fruits of industrialisation such as fertilisers and irrigation technology. At any rate, the price mechanism provides a check on economically injudicious use of agricultural land. As crop output starts falling, prices will start to rise, leading to higher compensation demands from farmers, forcing industry to internalise the opportunity cost of industrial expansion. Much of the thinking on this issue is based on a centralised planning mindset, even though the assets and outputs in question are not supplied in a planned economy but through the market mechanism, whose allocative functions cannot be ignored while formulating policy.

Another point which is important in this context is that the economic value of an industrial plant can also be highly sensitive to its location, depending on factors such as access to water, electricity, road and railway networks, skilled labour, etc. This is why industrialists will typically have a preference for locating factories close to major urban centres and connecting highways. One reason for Singur's attractiveness to the Tatas is obvious – it sits just off the newly built Durgapur Expressway, providing easy access to Kolkata as well as other towns in West Bengal's industrial belt. As long as industry is obliged to pay compensation that fully captures the value of the lost agricultural output and livelihoods, there is no reason why its location preference should not be taken into account. Since acquiring fertile, multi-cropped land will be more costly for industry than single-cropped or fallow land (assuming the compensation system has been set up right), there is no reason why it would want to do so unless it anticipates enough additional benefits. The insistence on protecting multi-cropped land is baffling and counter-productive.

(C) Other Remuneration: The draft Bill previously circulated (MRD 2011) contained an extensive R&R package. Its rigid requirements included various mandatory benefits other than lump sum cash payments, including employment guarantees, annuities, company shares, land-for-land, a share of appreciated land value after resale, and replacement of lost homestead. This was a recipe for increasing administrative costs, jeopardising enforceability

and compensating affected families in highly inefficient ways. Anyone familiar with the amount of black money involved in India's real estate transactions can tell that giving previous owners a stake in the profits from resale is an open invitation to the new owners to conceal the real value of any future transactions. The employment guarantee provision was similarly open to abuse, since it did not specify conditions of termination. Companies can save a lot of money by employing farmers in positions incommensurate with their skills and firing them shortly afterwards for incompetence or insubordination. Annuities are a highly illiquid asset compared even to land and will prove useless in fortifying the family's capacity to face a medical emergency, invest in children's education or durable goods, and take out loans. Payment in company shares instead of cash exposes the recipient to undue risk.

The Bill introduced in Parliament has commendably moved away from the earlier draft in this respect and has introduced a lot more flexibility into the package. Recipients will now have a choice between an annuity (Rs 2,000 per month per family for 20 years), a job and a lump sum payment of Rs 5 lakh. Share of profits from resale has been restricted to cases where the property has remained undeveloped. In the case of urbanisation projects, land-for-land provisions are not compulsory but an option that can be exercised against an appropriate deduction from the cash award.

As Banerjee et al (2007) point out, receipt of a large amount of cash as the main source of livelihood may be problematic for people who lack investment expertise or even access to sophisticated financial instruments. The solution is to provide the farmer more *options*, not a rigid, one-size-fits-all portfolio of assorted non-farm assets. In other words, as a default, farmers should be offered compensation entirely in the most fungible form, together with access to banking services, investment advice and a choice of various financial instruments that poor peasants may be otherwise unaware of or find difficult to access. Our proposed method explicitly adds a critical asset (land) to the menu of choices because of market imperfections – namely, land in rural India is difficult to buy and sell. LARR, 2011, has rightly increased farmer choice in its design of the R&R package, but has left out the most important asset that farmers will possibly care about – land for cultivation. This is a major defect of the Bill.¹⁴

(D) Acquisition for Industry: The previous draft Bill allowed government to acquire land for private use (industries, SEZs, etc) provided at least 70% of the total area needed for the project had already been purchased through the market. The Bill before Parliament, however, has no such provision and allows acquisition on behalf of private companies only if the project serves a public purpose, as specified in Section 2 (companies are still liable for R&R for large-scale projects even when the land is acquired through private negotiations). Interpreted literally, LARR, 2011, has restricted the scope of eminent domain, though it may be argued that the definition of "public purpose" is still kept vague enough to allow government acquisition on behalf of industries. This has been a hotly debated issue, and the view that the government should completely stay away from land transfers between private parties has been forcefully advocated by Mamata Banerjee as well as a majority of the NAC Working Group (NAC 2011).¹⁵ It is true that the State's eminent

domain power has historically aligned itself with corporate and commercial interests instead of safeguarding the interests of poor landowners, but this is precisely what the new legislation is supposed to stop and even reverse. If one really believes that the new laws can make the State work in the interest of the poor, it is only logical to bring all kinds of land transactions within its ambit rather than restrict its scope. The desire to curtail the State's role betrays a lack of faith in the legislation's professed ability to achieve its objectives.

We think the single most important reason the State's participation is essential in large-scale land acquisition for industry has to do with reduction of transaction costs and expedition of the process. The market often works well in arranging bilateral transactions, but its effectiveness drops exponentially as the number of parties to the transaction grows large, especially in a country like India where property rights are poorly defined, land records are fuzzy and courts work at a glacial pace. One must keep in mind that a legal problem may crop up even after a private sale has been completed; for example, if the ownership of a plot of acquired land was under dispute,¹⁶ its sale could be challenged in court by other claimants to the property, taking years to resolve and holding up the project due to a stay order till the ownership issue is settled. The 1,000 acres acquired in Singur came in such small parcels that there were nearly 12,000 owners involved.

To get a quantitative sense of the problem, suppose that any particular private transaction has a 1% chance of facing a court challenge, causing significant delays. A single or a handful of such transactions (the kind of numbers needed for a housing project, say) has a very good chance of proceeding without a glitch. Simple calculations show that the probability of at least one such legal snag developing (and a single dispute is enough to hold up the entire project) rises to 63% for 100 plot sales, and 99.99% for 1,000 plot sales.¹⁷ For the kind of numbers involved in Singur and many other places, without government participation, a legal quagmire is virtually a certainty. The advantage of bringing all the land under eminent domain is that these private disputes can be processed in parallel, without holding up the project itself. While it is important to pay attention to equity and justice, there is substantial common interest in seeing socially useful projects that generate economic surplus come to a quick fruition. In a poor nation where a bulk of the population lives on the brink of subsistence, a strident egalitarianism that is utterly indifferent to increasing the size of the pie is ultimately a disservice to the poor.

(E) Compensating Livelihood Losers: Under LARR (2011), families who "[do] not own any land" but whose "primary source of livelihood stands affected" are entitled to an R&R package (Section 3(c)). The intended beneficiaries appear to be primarily tenants, sharecroppers and agricultural labourers who worked on the seized property. It is commendable that the new law seeks to go beyond formal property rights and protect the interests of all persons affected by economic change. However, its attempts on this front are afflicted by the same problem that characterises its choice of compensation amounts – an unwillingness to take into account the role of prices and market responses.

Elementary economic reasoning suggests that tenants and labourers who get displaced from the acquired land will flood the

local labour and land-lease markets, depressing wages and driving up rents. Relief that is narrowly targeted at those who were attached to the seized properties will suffer from two kinds of errors. First, unlike landowners, tenants and labourers do not lose their primary income generating asset (labour) – they merely have to find alternative employment opportunities (given market frictions, this may be difficult and time-consuming). An R&R package that captures the full income stream being generated by their previous jobs is over compensation. Second, tenants and labourers working in neighbouring fields will be under-compensated under the proposed scheme, since there is no provision to make up for the losses arising from increased competition in the relevant markets and the adverse price movements that will result from it. There can be many other sources of damage to the local population – groundwater depletion, loss of access roads, loss of business for artisans, etc.

Trying to reach all affected parties raises difficult issues of identification and damage assessment. We will not go into the problem in detail, since the focus of this article is on compensating landowners. As a general approach, we see much merit in a strategy of investment in the local economy to raise general living standards and opportunities, instead of trying too hard to provide targeted entitlements to specific groups. These measures might include National Rural Employment Guarantee Act style employment guarantee programmes, infrastructure creation, and job retraining. For the sake of credibility of delivery, these programmes should be in place before the acquisition process gets under way, instead of being dangled as empty promises for the future. Since it is difficult to track whether the diffused externalities from a project have been neutralised through local public goods creation and R&R packages, the idea of a referendum seeking the consent of a majority (or super-majority) is attractive. However, the Bill's requirement of 80% approval seems to be on the higher side.

One important caveat to the discussion above concerns the issue of long-term tenants or tenants who enjoy some protection from eviction under law (e.g., beneficiaries of Operation Barga). Since these tenants are under contractual and/or legal protection and cannot be arbitrarily evicted, they are legally entitled to some compensation if the land is sold. There are other economic reasons for having a compensation policy in such cases (Ghatak and Mookherjee 2011). Due to regulations or other distortions in the rental market, the tenant may be earning rents (e.g., due to a legally stipulated minimum crop share). In this case, vesting sole decision rights with the landlord concerning sale of the asset will generate socially excessive incentives to sell to third parties when the opportunity arises. This is because the landlord will neglect the effect of the sale on the loss of surplus by the tenant. Also, in the absence of a well-defined compensation policy, those who fear displacement due to the process of industrial development will tend to underinvest in the assets (e.g., land) which will affect the productivity of these assets in their existing use, as well as the willingness of the owners to convert them to alternative uses.

Conclusions

Eminent domain is one of the most controversial and politically sensitive instruments of state power anywhere in the world.

Depending on how it is used, it can clear the way for rapid economic transitions, technological progress and inclusive growth, or it can trample on property rights, the economic interests of poor and vulnerable groups, and fundamental principles of justice. The Land Acquisition, Rehabilitation and Resettlement Bill, 2011, is clearly a long overdue attempt to address the inadequacies of the colonial Land Acquisition Act of 1894, which has

been merrily exploited by commercial interests, corrupt politicians and an indifferent state to promote widespread land grab at the expense of the poor. Despite its good intentions, the Bill, in its current form, misses out on an opportunity to promote growth and prosperity while protecting the vulnerable. There exist much better ways of converting agricultural land for industrial use or infrastructure building, as we have tried to outline in this article.

NOTES

- 1 In formal economic terms, one cannot use the market price to impute value for *infra-marginal* agents.
- 2 For example, Deininger et al (2007) look at NCAER data on land transactions over the period 1982-99 based on household data (as opposed to land censuses) and find that 15% and 8% (or 0.88% and 0.47% annually) of the population were involved in purchasing or selling land, respectively. Correspondingly, 9% and 5% of the land that the sample households owned were bought and sold.
- 3 How large the periphery should be relative to the core is a matter of judgment, and we do not have a magic number to propose. Enlarging the coverage area of the auction involves trade-offs. The primary trade-off is an increase in the average distance of relocation for those who swap land for land, against increased competition and allocative efficiency. A helpful factor is that average distance of relocation should increase in proportion to the square root of the coverage area. For example, if the project site is visualised as a circle and the auction covers an area up to twice its radius, then the area under the auction will be four times the area of the project site. It is needless to say that farmers who swap land for land should be paid relocation costs commensurate with the distance of displacement and associated inconveniences.
- 4 Technically speaking, the auction proposed here is a uniform price, sealed bid auction or a multi-unit Vickrey auction, with the added feature of land swaps between non-sellers in the core and sellers in the periphery, once the auction is over. This auction has nice properties if we assume a private values environment (i.e., each bidder knows his own valuation, but not the valuations of other bidders) and different plots being perfect substitutes. Bidding truthfully is a dominant strategy in such environments (provided buyers/sellers are allowed inelastic demand/supply). This property also guarantees allocative efficiency – scarce resources end up in the hands of those who value it most. The single unit Vickrey auction with a reserve price is also a cost minimising way of procuring assets, though the generalisation of this feature to multiple units and asymmetric bidders requires additional assumptions. See Milgrom (2004) for a theoretical discussion of these issues.
- 5 For example, according to newspaper reports, the value of the land that was acquired for the Yamuna Expressway connecting Noida and Agra in Uttar Pradesh has already gone up 50 times in less than a decade. Nine years ago when the state government acquired this land, it paid farmers Rs 50-300 per sq m. Today, in the same location, the Jaypee group building the Yamuna Expressway and a 2,500-acre Sports City (with a cricket stadium and Formula-1 race track) is selling plots at Rs 15,000 per sq m (see <http://jilindia.wordpress.com/2010/09/13/land-prices-up-50-times-in-10-years/>). It is not at all obvious that the proposed Bill's fourfold mark-up would be enough to satisfy sellers in a situation like this.
- 6 A concern we have often heard is that farmers may be too ill-informed to have a good idea about the potential for land price inflation. Consequently, they may bid too low and regret it later. While this may prevent them from capturing a part of the surplus, the auction should at least ensure that they recover their own livelihood losses and are no worse off than before the project arrived. If land is surrendered at a price of the owner's choosing rather than one dictated to him, there is less room for political trouble later, even if farmers realise they

made mistakes. A related observation is that people with political connections and access to inside information may surreptitiously buy up land around the project site before it is announced, and deprive the owners of windfalls. This is an independent problem and requires independent measures to be tackled. Inefficient land transfer policies will not stop insider trading in the real estate market.

- 7 If there is land of variable quality under the auction, some method has to be devised to come up with a conversion scale. This could be constructed by comparing past productivity. For example, if plot A has produced twice as much crop value as plot B, it may be deemed twice the size of plot B even if they have the same physical dimensions. This is unsatisfactory for a lot of reasons, especially because productivity differences may arise not from differences in plot quality but differences in the skill and resources of farmers who cultivated them. Note, however, that the proposed Bill suffers from the same problem, since it specifies uniform compensation rates.
- 8 In two very recent judgments, however, a two-judge bench of the apex court seems to have gone against the grain of previous rulings. These are *Sharan vs State of Uttar Pradesh* and *Banda Development Authority vs Motilal Agarwal*. See Desai (2011) for further discussion.
- 9 Ironically, it is the arch conservative Clarence Thomas' dissenting opinion that echoes the concerns expressed by the egalitarian left in the Indian context: "Allowing the government to take property solely for public purposes is bad enough, but extending the concept of public purpose to encompass any economically beneficial goal guarantees that these losses will fall disproportionately on poor communities. Those communities are not only systematically less likely to put their lands to the highest and best social use, but are also the least politically powerful". In sharp contrast, the majority view offers the State great discretion in determining what constitutes public interest: "For more than a century, our public use jurisprudence has wisely eschewed rigid formulas and intrusive scrutiny in favour of affording legislatures broad latitude in determining what public needs justify the use of the takings power".
- 10 If a mechanism is devised that guarantees farmers either a similar piece of land or a cash compensation that is adequate in their own estimate, the issue of consent will be superfluous in most cases. There will, however, be instances where large non-economic costs are involved, e.g., if the seized property has substantial sentimental value to the owner, so that another piece of similar property does not serve as a close substitute. In *Kelo vs New London*, petitioner Wilhelmina Dery did not complain on the basis of economic losses but the pain of losing a home where she had spent her entire life. We feel that it is only in such cases, where assets have non-replaceable qualities, that the State may be justified in imposing coercion in the social interest. Compensation can only be paid for things which can be replaced.
- 11 See Duflo and Pandey (2007) for a comprehensive study of the social impact of dam construction in India after independence.
- 12 Indeed, the proposed Bill embraces such a philosophy at the very outset when it declares: "...the cumulative outcome of compulsory acquisition should be that affected persons become partners in development leading to an improvement in their post acquisition social and economic status..."
- 13 About a third of net area cultivated is cropped more than once.

- 14 As mentioned earlier, there is a provision in the Bill for some award of land, in the form of 20% of the developed area for urbanisation projects and small plots in the command area for irrigation projects. The contrast with our proposal must be pointed out. This is not an award of *arable land* in most cases, it is not an acre-for-acre swap, and it makes no attempt to sort out the more land hungry from the less. In other words, it is a mechanical formula for a reduced and token award to be distributed among affected farmers on a pro-rata basis.
- 15 N C Saxena of the NAC Working Group, however, favours state acquisition on behalf of industry. Saxena's reasoning is that reliance on open market purchases will leave small farmers at the mercy of the land mafia, prevent industries from locating in tribal areas where sale of land to non-tribals is illegal, and cause significant delays due to incomplete land records in many parts of the country. We find much greater merit in Saxena's position.
- 16 To consider a very plausible scenario, suppose the original owner has died recently, and an inheritance battle has broken out among his children.
- 17 These are obtained by standard calculations using binomial distributions.

REFERENCES

- Banerjee, Abhijit V, Pranab Bardhan, Kaushik Basu, Mrinal Datta-Chaudhuri, Maitreesh Ghatak, Ashok Guha, Mukul Majumdar, Dilip Mookherjee, and Debraj Ray (2007): "Beyond Nandigram: Industrialisation in West Bengal", *Economic & Political Weekly*, 42, 1487-89.
- Banerji, Sanjay and Maitreesh Ghatak (2009): "No Way Out of This Plot", *Financial Express*, 30 September.
- Bardhan, Pranab (2011): "Our Self-righteous Civil Society", *Economic & Political Weekly*, 46(29): 16-18.
- Deininger, Klaus, Songqing Jin and Hari K Nagarajan (2007): "Determinants and Consequences of Land Sales Market Participation: Panel Evidence from India", The World Bank Policy Research Working Paper 4323.
- Desai, Mihir (2011): "Land Acquisition Law and Proposed Changes", *Economic & Political Weekly*, 46(26, 27): 95-100.
- Duflo, Esther and Rohini Pande (2007): "Dams", *Quarterly Journal of Economics*, 122(2), 601-46.
- Ghatak, Maitreesh and Dilip Mookherjee (2011): "Land Acquisition for Industrialisation and Compensation of Displaced Farmers", WIDER Working Paper Vol 201, 1-35.
- Land Acquisition, Rehabilitation and Resettlement Bill, 77-2011 (LARR 2011): Web link: <http://164.100.24.219/BillsTexts/LSBillTexts/asinroduced/land%20acquisition%2077%20of%202011.pdf>.
- Ministry of Rural Development, Government of India (2011): "The Draft National Land Acquisition Bill and Rehabilitation and Resettlement Bill, 2011", Web link: <http://www.rural.nic.in/Final.pdf>.
- Milgrom, Paul (2004): *Putting Auction Theory to Work* (Cambridge, UK: Cambridge University Press).
- National Advisory Council (2011): "Proposals of Working Group for Consideration of NAC-II: Suggestion for Land Acquisition (Amendment) Bill 2009 & Resettlement and Rehabilitation Bill 2009", Web link: http://nac.nic.in/pdf/working_group_proposal_for_larr.pdf.
- Sarkar, Abhirup (2007): "Development and Displacement: Land Acquisition in West Bengal", *Economic & Political Weekly*, 42(16), 1435-42.