The Land Market in Development: A Case Study of Punjab in Pakistan and India

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This paper aims to shed light on the hitherto neglected issue of land in development. It examines the process of land market development in the former Punjab from when private ownership of land was established in mid-19th century, up to the present. It is found that as against the assumption of the classical rent theory, the price of land has been increasing much faster than rent. The differential growth rate between rent and the price of land is attributable, among other things, to the unregulated land market and excess liquidity at the micro level. The rapidly increasing capital gains in land transactions is a land bubble. It has to be realised that the bubble in India and Pakistan is difficult to burst, since it is mostly financed from outside the financial market. If the land bubble is left unattended to, the disparity between receivers and payers of rent will widen and it will retard private as well as the public investment necessary for development in the near future.

Introduction

Along with the diversification of industrial structure, the contribution of land as a factor of production to the gross domestic product (GDP) has been declining. However, with the price hike of petroleum and other underground resources, and the expected water shortage due to the global warming in recent years, the importance of land has been increasing.

Land, unlike capital and labour, is not a man-made resource. In this respect it is like water and other underground resources, including oil and gas, mineral resources and groundwater. The key issue here is the fact that it is land that determines the ownership of other non-man-made resources. For instance, the underground resources are regarded as a free good under the common law that India and Pakistan have inherited from their colonial days. In this sense, underground resources form a resource frontier which is theoretically open to everybody. However, in reality, these resources are accessible only through the ownership of land above those resources. These resources transform themselves from a free good to an economic good through the capital stock installed on the land, and they become a private good if the land and capital stock are privately owned. By the same token, they become a public good if the land and capital stock are publicly owned. In other words, these resources are accessible only to those who own land and financial resources, and those who can lease in the necessary land and raise necessary fund to invest in the capital stock through which a free good can be converted to an economic good. The relationship between land and surface water is also similar to that of land and underground resources.

The purpose of this paper is to focus on the hitherto ignored aspects of land as a factor of production in the framework of the market economy. We believe that the relationship between land and other non-man-made resources we have just highlighted above will be better articulated only after we examine the missing aspects of land in the historical context. We will take up the case of the former Punjab in India and Pakistan for this purpose.

We start our discussion with two basic presuppositions. First, the single most important factor that determines the permanent welfare position of an individual household in a market economy is the asset holding position. Second, there has been a price inelastic demand for the asset in India and Pakistan. Here the asset we examine is the one for which the usual sense of depreciation is not assigned, a notable example is land.
There are basically five aspects or hypotheses of land that have not been articulated both in theory and policy formulation in the past. These are as follows:

(i) The price of land in Pakistan and India historically has not been the discounted value of rent as being assumed by classical rent theory. This is explained by the faster growth of land prices compared with the growth of rents over time.

(2) The rate of return on investment in land measured by the \( R(\text{rent})/P(\text{land price}) \) ratio has been declining over time to the extent that the land market has become inaccessible for those who do not have sufficient initial liquidity.

(3) The differential growth rate between rent (flow terms) and land price (stock terms) can be called a “land bubble”, which has accelerated in recent years with the rapid economic growth under the “free play” of the land market.

(4) The land bubble in Pakistan, at least, is less likely to burst since land purchase basically has not been financed through the financial market.

(5) If the land bubble is left unattended to, the disparity in wealth between rent payers and rent receivers would be aggravated, and it would also eventually retard private investments, as well as the public investment in social and economic/physical infrastructure in the future.

1 Brief History of Land Market in the Former Punjab

Let us begin our discussion by examining the formative phase of the land market, taking undivided former Punjab as a case. Undivided Punjab during the British colonial period included the Pakistan part of Punjab, Peshawar and Hazara of the North West Frontier Province (NWFP) and the Indian part of Punjab and Haryana.

1.1 Establishment of Private Ownership of Land

The preconditions for land market development are basically two. First, private ownership of landed property has to be legally established; free acquisition and free disposition of the land title deed of a private individual should be possible. Second, the commercial value of land ownership has to be established and legally protected.

The former Punjab was annexed by the British on March 29, 1849 after the second Anglo-Sikh War. The British colonial government undertook three important measures to justify its colonial rule over the Punjab. The first measure was to transform it into the most productive farm land in India by constructing extensive canal irrigation networks. In fact, the share of the Punjab in the total investment in irrigation works during the British colonial period was a little less than 40 per cent, and the share in terms of irrigated acreage was as high as 50 per cent of the Indian total by 1919-20 [Hirashima 1978: Table 3, p 30]. The second measure was an attempt at determining an appropriate revenue rate for financing British administration in the Punjab. Punjab in fact became the “revenue creating machine” for the British government, as well as a means to increase “friends among enemies” by absorbing surplus labour from nearby regions in the newly constructed canal colonies.

It is difficult to specify at what date private ownership was actually endowed under the new regime. However, it was a given policy decision to establish private ownership of land in the Punjab, since it was already established elsewhere in India, such as in Madras. It is safe to say that the basis for land market development was given by the Punjab Land Revenue Act of 1887, which followed after the Madras Settlement of 1864. In this Act, the revenue rate was determined at 50 per cent of the “net-produce”. Let us elaborate a little on the significance of this revenue rate (ibid: 18-19).

1.2 Private Rent and Commercial Value of Land

The revenue demand during the Mughal period was one-third of the gross produce or gross value product (gvp) per acre. The rate during the Sikh administration varied from one-eighth to one-half of the gvp (ibid: 16). This revenue demand was justified on the ground that it was a “remuneration of sovereignty” paid in return for the protection and justice which the ruler secured for his subjects. However, it can be interpreted that it was theoretically a rent or the shadow price of land to be claimed to the farmer’s holding of “occupancy right”, by the feudal lords who ruled over land when the private ownership was not yet established.
holders of the state land. By this measure the government could claim the whole rent as land revenue. In other words, the entire amount of rent can only be claimed from the user of land if the government is the sole owner of that land [see Stokes 1959 and Mill 1844].

However, in spite of his assertion, private ownership of land was established in India. Then the question was how to determine the appropriate revenue rate for the state where the state was not the sole owner of land. Here the notion of the “net produce” became important, which was the gvp less cost of production and returns to labour and capital. This is, in fact, the return to land or rent. The Punjab government thought, from the point of view of providing incentive to the private owner of land, that the land revenue to be claimed by the state should be less than the net produce/rent. Consequently, the actual demand was set at “half of the net produce” in the Punjab Land Revenue Act of 1887. It implies that another half of the net produce/rent became the private property of those who own land. It was called a “private rent property”. Moreover, the rate was to be reassessed after 20 years, which was extended to 30 years in 1893. With this decision, the revenue rate in real terms had been declining substantially over time due to economic growth [Hirashima 1978: 18].

It should be clear by now that the commercial value of land was given by the creation of the “private rent property”, which should have been a part of the land revenue to the government, if the state were the sole owner of land as was suggested by James Mill. There is no data recorded on rent during the British period. However, it was documented that the Sikh return at the time of annexation was about one-third of the gvp and the similar rate was charged by the Hindu moneylenders on their mortgage land in those days. However, the private rent property had become increasingly larger during the British period due to the fixation of land revenue rate in nominal terms and the rapidly increasing market price of land. This was precisely the base of incentives for farmers to be private owners of land.

**Role of Hindu Moneylenders**

Even though the pre-condition of land market development was met by the creation of the private rent property, nobody knew the real value of land at the beginning. Quite ironically, it was the Hindu moneylenders who played an important role in formulating the land market. The reason was clear. The Hindu moneylenders had two measuring sticks to judge the profitability of investment in land; namely the interest rate charged for money-lending, which was around 24 per cent per annum, and the rate of return on grain trading. They participated in the land market at the formative phase when the rate of return was much higher than those of their traditional occupations.

As mentioned earlier, it was not possible to specify on what date private proprietorship of land was established in the Punjab. However, the land transaction had started well before the “commercial value of landholding” was firmly established by the Punjab Land Revenue Act of 1887. Moreover, the increasing participation of moneylenders in the land market in Punjab was observed, in particular after the Code of Civil Procedures was established in 1866. In fact, the total number of suits was 1,70,000 in 1869, but it increased to 2,04,000 in 1870, of which 71 per cent was for money due. It had increased to 79 per cent in 1884. Another record shows that out of the total transaction of land made in 1874 equal to 88,000 acres, 36 per cent was sold to moneylenders. In 1896, the total land sold was 371,000 acres, of which 20 per cent was transferred to money lenders [Hirashima 1978: 39].

Although the moneylenders’ participation in the land market started decreasing towards 1900, as we would discuss later, the observed trend of land transaction was questioned by the District Officer of the Punjab, S S Thorburn (1886) in his book entitled Musalmans and Moneylenders in the Punjab, 1886. He could not tolerate the situation where six million Muslim peasants were exploited by some 40,000 Hindu money lenders, which was not only disturbing the tradition of peasant farming in the Punjab, but also the great threat to the political stability of the region. Clearly he was afraid of the similar incidence to occur such as the Deccan Riot of 1875. In response to his warning, the governor general’s council started inquiry into the matter and concluded as follows.

... a careful study of the reports and returns, extending over a period of more than thirty years, had convinced the Government of India that the alienation of land in the Punjab, practically initiated by the British Power after annexation, is progressing with increased and alarming rapidity; that in consequence of this progress land is passing away from the hands of the agricultural classes whom it is our policy to maintain upon it, and into the hands of classes of persons who – are not, in our judgment, either necessary or desirable as landholders; and that consequently a grave political as well as economic danger threatens the province, which it is the bounden duty of Government to avert [cited in Ray 1915].

Based on its conclusion, the Punjab Land Alienation Act of 1900 was enacted by which the Hindu moneylenders were squeezed out practically from the land market. Yet, two puzzling questions remain to be cleared. First, much earlier than the enactment of the Punjab Land Alienation Act, the extent of the moneylender’s participation in the land market had been declining towards 1900 at the rate of approximately 4 per cent per annum. Second, although the land sold after 1900 was reduced from 2.9 lakhs (1896/97-1900/01) to 2.3 lakhs (1901/02-05/06), still on average, around 2 lakhs of land in acre terms had been sold annually up to the end of the British administration in 1947.

**From Moneylenders to Wealthy Farmers and Landlords**

The most decisive factor accountable for the declining participation of the Hindu moneylenders from the land market well before the enactment of the Punjab Land Alienation Act was the declining profitability of investment in land. As we will examine later, we use one-third of gvp as a proxy for rental value of land. The rent-land price ratio (R/P ratio) shows the rate of return of investment in land, since we do not assign the notion of depreciation on land. In order to compute the R/P ratio, we need data on rental

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**Table 1: Rent/Land Price Ratio (R/P Ratio) in Pakistan Punjab: 1971-72**

| Average land price (Rs/acre) | 4,685 |
| Average rent in kind (Rs/acre) | 242 |
| Average rent in cash (Rs/acre) | 152 |
| Estimated rent (shadow price) | 230 |
| Rent/land price ratio (R/P) | 4.91 |

Pooled data from four villages in Pakistan Punjab: three in rice area and one in cotton area. All villages are irrigated: three villages are irrigated by canal and tube well, and one village is irrigated only by tube well. Source: Compiled from data in S Hirashima (1978).
value of land and land price. In this connection, we have data on land price from 1869 up to the end of the British period, but data on GVP is available only from 1891 onward. However, by examining data on GVP, we found that there is not much variation during the period under study; Rs 31.4 (lowest) in 1891 to Rs 51 (highest) in 1942. Therefore, it may not be so much deviation from the reality if we use Rs 30 or less as a proxy for the GVP in the period before 1891.³ By using these proxy data, we come to know that R/P ratio in 1869 was between 100 per cent and 70 per cent (taking GVP per acre ranging between Rs 20 and Rs 30), which came down to 16.8 per cent in 1891 and further to 14.2 per cent in 1900. It implies that the R/P ratio was far higher than the interest rate charged by the Hindu moneylenders (24 per cent) in the initial period, but became lower than that of the cooperative society (15 per cent) in 1900. The declining R/P ratio beyond which the Hindu moneylenders could not see a higher profitability compared with that obtaining in their traditional occupations, confirms the factors behind the gradual withdrawal of the Hindu moneylenders from the land market in Punjab even before 1900.

The R/P ratio stayed around 13 per cent to 17 per cent towards 1905 and then declined to around 10 per cent and further to a single digit. Yet, as we mentioned earlier, around two lakhs of land in the former Punjab had been transacted between 1900 and 1942. Obviously, the players in the land market were not the moneylenders, but those who were engaged in farming and landlords. Then the question is the rationale behind the investment behaviour of farmers/landlords, since the investment became unviable if the purchase of land had to depend exclusively on borrowing from the financial market. It follows, therefore, that the motivation behind the purchase of land after 1900 was not primarily for maximising short-run profitability per unit of capital, and that the major buyers in the market were those who had “excess liquidity”; in the form of larger marketable surplus and/or large amount of rental income. They found justification in this form of investment in the following reasons. First, they could afford to invest their savings without expecting quick return. Second, there were not many alternative opportunities to invest in those days in Punjab. Third, there was always an incentive to acquire extra land for strengthening the socio-economic and political power base in the region.

From the data on land transaction previously referred to, two things become clear. First, the number of transactions immediately after 1900 declined a bit, but started increasing towards 1934/35 from 40,000 cases in 1901/02-05/06 to 73,000 in 1931/32-34/35. Second, the average land in acres per transaction was decreasing from 5.9 acres to 2.7 acres in the corresponding periods. This may indicate that the sellers might have been smaller peasants, while buyers were wealthy farmers and landlords. We could also confirm the trend that the land price had been increasing rapidly after the Act of 1900, while the GVP per unit of land had remained quite stable even at the current price.

### Table 2: Rent/Land Price Ratio (R/P Ratio) in Pakistan Punjab: 1960-89

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</thead>
<tbody>
<tr>
<td>Rainfed area</td>
<td>14,400</td>
<td>24,800</td>
<td>34,400</td>
<td>58,600</td>
</tr>
<tr>
<td>Irrigated (rice/wheat zone)</td>
<td>44,000</td>
<td>76,700</td>
<td>85,500</td>
<td>119,000</td>
</tr>
</tbody>
</table>

### Table 3: Rent/Land Price Ratio (R/P Ratio) in Indian Punjab: 1971-72, 1987-88

<table>
<thead>
<tr>
<th>Region</th>
<th>1971-72</th>
<th>1987-88</th>
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<tbody>
<tr>
<td>Rainfed area</td>
<td>25,444</td>
<td>100,585</td>
</tr>
<tr>
<td>Irrigated area</td>
<td>902</td>
<td>3,142</td>
</tr>
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2. Characteristics of the Land Market

We discuss below the characteristics of the land market.

2.1 Declining Trend of R/P Ratio

So far we have confirmed that the profitability of investment in land had declined gradually over a period of 50 years during the British colonial period in the former Punjab. This trend was attributable to the faster growth of land prices compared to the growth of rent, expressed by the R/P ratio. It implies that the proportionate relationship between rent and land price had not been maintained as against the assumption held by the classical rent theory. The declining rate of return of investment in land lower than the prevalent interest rate of the financial institutions resulted in the concentration of land in the hands of the already wealthy segment of rural Punjab and squeezed out the majority of small and marginal farmers, not to talk of landless non-farm households, from the land market. These findings provide evidence to support our hypotheses earlier made.

Although the R/P ratio is free from the influence of inflation factors, let us confirm the faster growth of land price much more than the growth of rent in different manner. As we have noted we have a land price data from 1869 to 1942. In nominal terms, it increased from Rs 10 per acre in 1869 to Rs 556 in 1942. We do not have a reliable deflator to make them in real terms. Therefore, we use wheat price as a proxy deflator which is available from 1869. Wheat data are available in terms of the quantity of wheat that could be purchased by one rupee. For example, the wheat price recorded for 1869 was 12, which means the wheat that could be purchased by one rupee in 1869 was 12 seers. Wheat price expressed in seer terms did not change much during the period under study from 12 in 1869 to 13.3 in 1940; the lowest price was recorded in 1930 and it was 25.6. By using wheat price, all land values were deflated in the form of wheat in seers that one acre of land could purchase. Then these deflated land prices were indexed taking 1869 as the base year. It was found that the land price in real terms had increased at the rate of 6.43 per cent up
to 1900, and 4.86 per cent during the period of 1901-28 by taking 1901 as a base year. The period of 1928-42 was unstable in that the wheat prices became abnormal reflecting the Great Depression (25.6 in 1930 and 19.4 in 1931) and the outbreak of the second world war (8.1 in 1941 and 4.0 in 1942). In spite of these abnormal years, the general trend of land prices in the British period was consistent with the trend observed in 1869-1900.

After confirming the increasing trend of land prices in real terms during the British period, the next step is to examine the trend of rental value of land in real terms. Since there is no rental value estimated from the production function during the period under study, we use one-third of GVP as a proxy for rental value of land as mentioned already. In the shadow price of land or theoretical rent estimated from the production function based on the field survey conducted in 1971 came out to be roughly one-third of GVP.

Data on the GVP from which we derived the rental value per acre is available only from 1891. The GVP in 1891 was Rs 31.4 and the land price was Rs 62.7, which gives the 

R/P ratio in Indian Punjab (Ludhiana): 1990-95

R/P ratio at 16.7. It means also that the GVP per acre was as high as 50 per cent of the land price in 1891. The ratio had reduced sharply from 43 per cent in 1900 to 10 per cent in 1942. We also deflated the GVP by the wheat price to make it in real terms. It emerges that the land price in real terms increased by 524 per cent in 40 years from 1900 to 1940, while the GVP in real terms increased only by 44 per cent.

Following the argument so far made, we formulate the theoretical relationship between rent and land price as follows.

\[ P = \frac{R}{r} \quad (1), \]
\[ P = \frac{R}{(r + e)} \quad (2), \]
\[ \frac{R}{P} = \frac{1}{r} (1 - e/P) \quad (3), \]

where \( R = \) rent in value terms, \( P = \) land price, \( r = \) rate of return, \( e = \) unexplained residual equal to the land value deviated from the assumed theoretical value of land.

Alternatively, if we assume the land price is expected to increase at rate above the one specified by the discounted value of rent, equation (2) can be rewritten as \( P = \frac{R}{(r - p)} \), where \( p \) stands for the increasing rate of land price at above the theoretical value of land.

The observed declining trend of \( R/P \) ratio implies that \( e \) or \( p \) in our notation had been positive and increasing. We tentatively term it an “asset effect”, most of which is regarded as a capital gain, because it is an unexplained residual, if the land market functions as defined by the classical rent theory, namely land price is the discounted value of rent. In fact, land prices in the former Punjab had increased much faster than rent in real terms, which confirms the unproportionate relationship between the value of stock (land) and the flow (rent), as demonstrated in Figure 1 (p 42).

However, this is considered to be the trend in the long run, since we witness some years when the \( R/P \) ratio was higher than the previous year. This would happen when the rental value increases in response to technological innovation, while land prices remain stable or increase less than proportionately. We hypothesise that land prices started increasing in response to the increase in rent only after it was confirmed that the new technology proved to be of a permanent nature. With the due time lag, the \( R/P \) ratio started following the declining trend along with the long-run \( R/P \) ratio [Hirashima 1996].

### 2.2 R/P Ratio after Independence

Unfortunately, there is no way to make a comparable analysis of the historical trend of the \( R/P \) ratio during the post-independence period in Pakistan, and India as well. This is simply because both governments have not published the land price data. Therefore, the only way left for us to confirm the observed historical trend is to test it with the micro village surveys.

The first attempt at estimating the \( R/P \) ratio was made in 1971-72 in four villages in the Pakistan part of Punjab. As shown in Table 1 (p 43), the theoretical rent or the shadow price of land computed from the production function study was higher than the rent in cash and lower than the rent in kind, but it was approximately one-third of the GVP. We could confirm that the use of one-third of GVP as a proxy of rent was justified. Furthermore, the \( R/P \) ratio based on the theoretical value of rent came out to be a little less than 5 per cent in 1971-72, which cannot be seen as deviating from the historical trend. This is because the \( R/P \) ratio obtained from the survey period could have been higher than the historical trend by reflecting the effect of the Green Revolution technology in the mid-1960s.

Table 2 (p 44) shows other evidence to support our proposition. The \( R/P \) ratios based on Renkow’s data are lower than ours and continued to be lower even during the 1980s. Quite interestingly, the \( R/P \) ratios computed in the Indian Punjab in the period 1971/72-1987/88 were lower than 4 per cent (Table 3, p 44). Moreover, the ratios computed from the villages in the most technically advanced part of Indian Punjab (Ludhiana) proved to be much less; 1.54 in 1990 and further to 0.6 in 1995 (Table 4).

We have another set of data collected from the villages in 34 districts in Pakistan’s Punjab by the Punjab Economic Research Institute (PERI) in 1990-01-2003-04. Although there are some measurement problems yet to be cleared in these data, the \( R/P \) ratio came to be around 2 per cent; the lowest being 1.75 per cent.
in Lahore. Another crude index comes from the four village surveys conducted in 2006 located in the Lower Dir, NWFP by the Japan International Cooperation Agency [JICA 2006]. The computed R/P ratio varies from 1.94 per cent to 4.77 per cent. Furthermore, it was indicated that the land transaction has been activated during the recent decade by the rapidly increased income from off-farm employment, in particular the extent of remittance from overseas.

A more rigorous analysis should be possible, if land price data were released from the governments and financial institutions. However, with the limited micro level survey data, three things seem to have been confirmed, although yet hypothetical. First, the R/P ratio during post-independence Pakistan and India could well be along the declining historical long-term trend. Second, the observed R/P ratio during the post-independence period has remained much lower than the concurrent interest rate of the financial institutions. Third, as far as farm land is concerned, the R/P ratio tends to be lower where technological innovation has taken place, which seems to indicate that the price of farm land has not been determined solely by the productivity of agriculture, but also by other factors. The most important factor is that the land market has not distinguished the transaction of land for farming from non-farming purposes.

3 Concluding Discussion

Let us summarise our discussion on the land market behaviour in the context of development in Pakistan along with the hypotheses we have set forth at the beginning.

3.1 Implication of Differential Growth between Rent and Land Prices

The first two hypotheses we set forth were to examine the validity of the classical rent theory, namely that the land price is the discounted value of rent. This is equally to question the validity of the thesis concerning the relationship between rent (flow) and land price (stock). The empirical data not only from Pakistan, but also from India and Japan (Figure 2, p 42) seem to support our hypotheses. We have confirmed that land prices have historically been increasing much faster than those of rent in real terms, and that the rate of return of investment in land has been much lower than the interest rate charged by the financial institutions.

However, this should not be interpreted as that the classical rent theory has been at fault. What has been wrong was that in most countries, notably the developing countries, the governments have failed to capture the capital gain in land transactions. There are countries which have tried to prevent the capital gains from taking place by regular reassessment of land value. However, this attempt has not proved to be successful as much as the classical theory assumed. As a result, in most capitalist countries, land price has started increasing in response to the price inelastic demand for landholding.

Price inelastic demand for land is based on such factors as positive economic growth, excess liquidity in the form of rental income with limited investment outlets, reflection of higher productivity of the non-agricultural sectors, if land transaction is open to all purposes, impact of externalities of public investment, deterioration of the land-man ratio, enhancing power and prestige in rural society, etc. However, the fact that the R/P ratio has become lower than the concurrent interest rate in the financial market may be better interpreted as that it was not an “investment” for most of the buyers of farm land in the rural area, but an alternative form of “saving”.

Transformation of excess liquidity at hand into the form of land as an alternative form of saving has been justified by the lack of safe or less risky investment outlets, and the increasing demand for maintaining socio-economic and political power as mentioned already. The implication of this market behaviour is that the land market in Pakistan, at least, has been friendly only to those who can afford to buy land with sufficient excess liquidity in the form of rental income. On the other hand, access to the land market has become a “dream” for the majority of small, marginal farm households as well as landless non-farm households in Pakistan [Hirashima 2001].

3.2 Formation of Land Bubble and Its Characteristics

The last three hypotheses we set forth concern the formation of the land bubble in India and Pakistan and its unique characteristics. Based on the declining trend of the R/P ratio during the British period, we hypothesised that Pakistan, at least, had been suffering from a land bubble. In the usual definition, a bubble economy is defined as the extent of deviation between GDP growth and that of asset value, notably real estate and securities. If we take Japan as a country that experienced a bubble economy in the late 1980s and early 1990s, the land value/GDP ratio was only 0.49 in 1981 but it increased to 1.4 in 1988 and came down to 0.88 in 1992 after the burst of bubble in 1991 [Noguchi 1992]. As for the securities, the ratio was 0.31 in 1981 but reached its peak in 1989 (1.31) and down to 0.61 in 1992. Another piece of evidence comparing the growth of GDP, land price and rent during 1980-90 shows that while an index of GDP grew from 100 to 170 in the period, land prices increased to 422 in Tokyo and 435 in Osaka (ibid).

Judging from the experience in Japan, Pakistan had been suffering from a land bubble at least during the British colonial period which was based on the excess liquidity at the micro level as we have discussed already. The extent of land bubble after the independence cannot be quantified accurately because of the lack of published data. Yet, it is hypothesised that it has been continued, and rather reinforced after the tight regulation of money laundering after the incident of September 11, 2001. The excess liquidity in the black market started flowing into the real estate sector, leading to the unprecedented price hike in the land market, particularly in urban areas.

The land bubble in Pakistan is different from that of Japan in that it has less of a chance to burst. This is basically due to the fact that most of the land transaction in the market has been self-financed; regarded as another form of saving rather than investment as suggested earlier. It was definitely so during the British period, but it should be verified more rigorously during the post-independence period by examining the proportion of land transactions financed through the financial market and to what extent they are regarded as a portfolio investment. As of today, no data or study on this point is available.
Based on the discussion so far, the following policy agenda can be spelled out for the government and academic community.

First, land records have to be improved and information on land prices has to be made public as early as possible. Otherwise, it would not be possible to reject our hypotheses, and more importantly it would be difficult to solve the problem of poverty and disparity inherent in the country. Since the land price has been increasing faster than rent, it is insufficient to talk about poverty and disparity in terms of income inequality alone. Inequality in asset holdings, notably assets without depreciation, is much more important to be recognised.

Second, in order to restore the proportionate relationship between “flow” and “stock” in the land market, a drastic reform in the field of property tax, notably land tax and the introduction of regular reassessment of land value seem to be essential. Otherwise it is difficult to visualise and thereby check the growing capital gain to be privatised.

Third, the land bubble in Pakistan, at least, has a unique characteristic in that it has less of a chance to burst. If this characteristic holds true, the conventional monetary policies such as raising the interest rate and controlling real estate financing would not be effective to check the land bubble. If the land bubble of this nature is left unattended, the disparity in wealth between rent receivers and rent payers would be aggravated further, and most importantly, it would eventually retard private as well as public investment for development; a larger portion of allocated fund for investment projects will be eaten up by the acquisition of land, this in turn aggravates the income and asset position of individuals and regions.

Fourth, if land is to be transacted in the market, it is crucial from the point of view of economics to distinguish farm land from non-farm land, and also to identify the portion of land value that accrues to public investment. If land transaction is made open to all purposes, then land prices tend to reflect the highest productivity sector in the region as pointed earlier. Considering the inherent productivity difference between agriculture and industry, for instance, land prices determined in the free market would become too expensive to buy for agricultural purposes, thus the traditional base of peasant farming in India and Pakistan would be lost eventually. As for the second point, the argument is straightforward. If the incremental value of land is due to public investment, irrigation facilities for instance, then if farmers do not pay the “land revenue due to irrigation” as the Punjab farmers used to pay during the British period, the incremental value should not be captured by private farmers at the time of the land transaction.

Fifth, through the analysis of the land market in India and Pakistan, it may be possible to conclude that whatever distortion occurred in the land tenure system during the British colonial period, the situation has not been improved through market transactions during the post-independence period. It implies that the free market does not have a built-in capability to modify the distorted land tenure system. The proposition of a market-friendly land reform seems to be irrelevant in this context. In order to avoid the situation where an important asset such as land is purchased by those who wait merely for capital gain, a blind belief in the market with respect to resource allocation needs careful scrutiny.

Lastly, we would like to conclude this paper by referring back to the point raised in our introductory remarks, namely the issue of the relationship between land and water, in particular under-ground water. In arid and semi-arid areas, the importance of underground water resource for irrigation has been increasing for farming. In the Punjab, for example, the conjunctive use of surface water and underground water for irrigation has already been well instituted, where land and water are two sides of a coin, determining land productivity and the wealth position of rural farm households. Here, we have to raise the additional aspect of this relationship, namely that the access to underground water resource is possible only through the ownership of land.

If the land bubble continues it implies two things. First, the access to clean water would become more desperate for the landless population. Second, it would be difficult for the government to develop, utilise and conserve underground resources systematically for development and for future generations. This is the additional missing aspect of land in development [Qureshi and Hirashima 2007].

NOTES

1  Darling pointed out clearly that the basic cause of debt was due to prosperity in terms of asset holding and not due to low income. See Malcolm Darling (1925).
2  Hirashima (1978), Table 9, p 49. Calculated from Board of Economic Inquiry, Punjab (1937).
3  Data on gross produce: George Blyn (1966).
4  Data on wheat price: Brj Narain Brj (1926).
5  Data on rent and land price are based on the village survey conducted during 1995/91-2003/04 in 34 districts in Punjab conducted by the Punjab Economic Research Institute, Lahore.

REFERENCES