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Locking in Private Investment in Indian Agriculture

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Private and Public Investment are Complements

Experience has conclusively established that investments in agriculture made by developing countries are pro-growth and pro-poor.¹ Agriculture continues to provide a labour-intensive source of employment, cheap food, raw materials, labour, savings, and the demand for non-agricultural goods. Yet, over the last three decades, there has been a significant systemic bias against the rural economy in the allocation of public resources. This scenario is inefficient because no developed economy of significant size became so without the agricultural sector recording substantial productivity gains. There is some historical evidence that a Green Revolution preceded the Industrial Revolution in Europe, its offshoots, and Japan. Recent scholarship has excavated the importance of pre-war agricultural growth to the post-war industrialisation of Taiwan and South Korea. Cross-country studies which seek to track the sectoral sources of growth in developing countries unambiguously report that a dynamic agriculture has the strongest linkage to growth in other sectors and aggregate growth. India has a long way to go in this transition.² In the 1970s, India had a larger proportion of the workforce engaged in the organised sector in comparison with Thailand and Indonesia. By the early 1990s, the ratio was three times more, and in Indonesia, 2.3 times more. While the stagnation of output in agriculture can increase with improvements in infrastructure and technology, it is not clear that such changes lead to large increases in rural employment. The problem can only be addressed by generating demand for unskilled employment outside the agricultural sector. Here is where the labour absorptive capacity of organised manufacturing comes in. The evidence for India of the past few years, as given in the *Handbook of Statistics on the Indian Economy 2007* by the Reserve Bank of India, is unimpressive. Table 17 of the Handbook shows a flat trend of agricultural production of foodgrains. The pattern of land use and select inputs for agricultural production, including net and gross sown area, net and gross irrigated area on Table 24 of the Handbook, display anything but a dynamic agriculture. The following table, which is Table 18 of the Handbook on index numbers of area, production, and yield of foodgrains, non-foodgrains and all crops, is clear.

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¹ Bezemer, D. & D. Headey, 2008, Agriculture, Development, and Urban Bias, *World Development*, 36, 8, 1342-1364.

² Bose, A., 2007, Employment in *The Oxford Companion to Economics in India* (ed) K. Basu, New Delhi: Oxford University Press, 124-126.

	2003-04	2004-05	2005-06	2006-07(advanced estimates)
Production	155.1	144.2	152.5	158.6
Yield	121.0	115.6	120.8	123.2

A ringing message from past and recent history is that public support programmes are a necessary precondition for growth in agricultural productivity. The large multiplier effects of agriculture mentioned above are externalities to the sector itself. Private investors will not be induced to invest. Besides, market failure is endemic. Consequently, a purposive “industrial policy” towards agriculture is called for. In South Korea and Taiwan, for instance, the governments absorbed risks and invested in new agricultural technologies. Effete governments, in contrast, struggled with land reforms and kept prices low without the backing of sufficient public expenditure, particularly in research and development, and extension activities. The government, in the form of the public sector and public institutions, would be the natural ground for the creation of jobs, given the objective of creating employment “for the sake of employment”.³ While more employment leads to more demand, more employment requires a startup of exogenous demand in the first place. Once some initial demand is created, say by an employment guarantee scheme, the production response creates income. Further demand is stimulated in a well-known multiplier process. Massive state intervention with budget deficits is not called for. All that is required is an initial push. With a savings rate of 25 percent, the ultimate back-of-the-envelope increase in demand would be 400 percent of the initial impulse. What is the record of India in this regard? In Table 111 on Public Sector Plan Outlay (at current prices) in the *Handbook of Statistics on the Indian Economy 2007* by the Reserve Bank of India, we ignore the figures from 2004-05 onwards as they are taken from the Economic Survey, 2006-2007. The following figures (in rupees crores) for the earlier years speak for themselves.

Year:	2000-01	2001-02	2002-03	2003-04
Agriculture & Allied Services	7577	8248	7655	8776
Total	185736	186315	210203	224827

The Objective

Small scale enterprises (SSIs) are an adjunct to agriculture and require long-term and short-term capital. Long-term capital is provided by institutions such as the Small Industries Development Bank of India (SIDBI), State Financial Corporations (SFCs), State Industry Development Corporations (SIDCs), and so on while short-term capital is provided by the banking sector. SSI lending falls under priority sector lending. The overall picture which is an extension of earlier trends is not comforting. Under Non-food Gross Bank Credit, the figure for agriculture and allied activities has stagnated at 12.4 percent (18 March 2005), the same for 31 March 2006 and 12.8 percent outstanding on 30 March 2007. Industry (small, medium and large) has steadily declined from 42.1 percent to 38.2 percent to 38.5 percent recorded at

³ Bose, A., 2007, Employment in *The Oxford Companion to Economics in India* (ed) K. Basu, New Delhi: Oxford University Press, 124-126.

the same time points. Priority sector advances have declined from 37.3 percent to 36.4 percent to 35.2 percent. Outstanding credit to services, on the other hand, has shown an increase from 20 percent to 22.8 percent to 23.3 percent, once again reported at the end of the financial years (RBI, *Report on Trend and Progress of Banking in India 2006-2007*, 2007, Appendix Table III.3).

Since the growth of small and medium enterprises (SMEs) cannot be regarded as inferior to the growth of other sectors in a transforming economy such as India, a subgroup on the flow of private investment to the SME sector was constituted. The definitions that were applied were provided by the Micro, Small and Medium Enterprises Development (MSMED) Act of 2006. Traditionally defined small scale enterprises (TDSSIs) are units with investment in plant and machinery up to Rs.1 crore. The scope was broadened to include newly-defined SSIs (NDSSIs) as units having investment in plant and machinery between Rs.1 crores and Rs.5 crores. The Act also introduced the concept of medium scale enterprises (MSEs) as enterprises having investment in plant and machinery between Rs.5 crores and Rs.10 crores. The methodology used was as follows. An average growth rate of gross domestic product of 8.5 percent during the 11th Plan was assumed. Production data for TDSSIs in current prices was extrapolated assuming an average growth rate of 12 percent and an inflation rate of 4.5 percent. Data on NDSSIs is not easily available so the subgroup, after experimenting with alternative econometric techniques, generated a series based on the proportionate share of the subsector in relation to the total. An average growth rate of 12 percent was arrived at. The MSE sector partook more of the dynamics of the industrial sector. Hence the projected growth rate was 10 percent.

Working Capital Requirements

A regression equation established a strong linkage between SSI production and bank credit. Outstanding bank advances to the TDSSI sector was estimated to be of the order of Rs.1 lakh crores at the end of the 10th Plan to increase to the order of Rs.2 lakh crores in 2011-12, the terminal year of the 11th plan. A similar regression equation for NDSSIs was run and the total working capital requirements were of the same order as above, the addition of the latter being slight. Another regression line for the MSE yielded an estimate of the order of Rs.18,000 crores at the end of the 10th Plan to increase to the order of Rs.38,000 crores in 2011-12. The numbers were found to be consistent with the Government of India/Reserve Bank of India directives to public sector banks to double their credit to the SME sector between 2005-06 and 2009-10 with not less than a growth rate of 20 percent.

Fixed Capital Projections

Here, along with regression analysis, the so-called institutional capacity was estimated. The numbers were of the order of Rs.72,000 crores for TDSSIs, Rs.20,000 crores for NDSSIs and Rs.9,000 crores for the MSE sector. It is worth noting that the requirements for the sector, as a whole, implied a growth of almost 40 percent over the 10th Plan estimate. Small and medium scale entrepreneurs approached SIDBI, the SFCs and the SIDCs with their business plans. Projections were made on the basis of this data, assuming a smartly growing industrial sector. It was found that the carrying capacity of these institutions was a disbursement of the order of Rs.1 lakh crores loans during the 11th Plan as against a disbursement of the order of Rs.45,000 crores during the 10th Plan period, an increase of 130 percent.

Towards New Private Initiatives

The share of priority sector advances in total non-food credit of scheduled commercial banks has been more or less constant at 37 percent since 1999. According to Table 33 in the *Annual Survey of Industries-Principal Characteristics*, the number of factories have steadily declined over the last 10 years. The number of workers was less in 2004-05 than it was in 1997-98. Hardly any change can be noticed between fixed capital and working capital comparing 1997-98 and 2004-05. Wages have increased only slightly. Gross fixed capital formation is only slightly higher in the period, net fixed capital formation lower.

Along traditional lines, there is a need to reinvigorate public investment.⁴ There is a large public sector in India, huge portions of which are efficient as evidenced by their rising profitability. Many of them are in the infrastructure business, producing and generating power, in roads, railways, ports, and telecommunications. In addition, while funds are likely to continue being released through reductions in the cash reserve ratio, the Reserve Bank of India should return to the system of sector-specific refinance facilities that induce banks to lend to agriculture and SMEs.⁵

We have recommended the encouragement of venture capital in order to finance entrepreneurial schemes in agriculture.⁶ The motivation comes from the financial systems paradigm in micro-finance. According to this view, micro-finance providers should be resolved to covering their costs since anything less would undermine their ability to achieve the scale necessary to make any inroad into the unfulfilled demands of their clients. Their outreach is to be based on the offering of tailor-made products rather than eligibility rules or other measures denying access. Time should be spent on unearthing services that groups are willing and able to pay for rather than measuring the impact of their services on clients. Proponents of this perspective regard the reduction of poverty as a by-product of the numerous ways in which access to financial services helps poor households. The belief is that by reaching massive scale, micro-finance providers are likely to reach more of the very poor than many smaller agencies devoting their resources to directly reaching them. A key problem with micro-finance is sustainability, that is, the ability to withstand massive stochastic shocks. There might be a tradeoff between lending to the very poor and sustainability. The ability to attract deposits is often taken to be an index of financial viability. However, while depositor funding may leverage donor funding to attain a large scale of operations, sustainability might be a casualty. Deposits can be withdrawn without notice in times of crisis. The central issue remains sustainability without the continuous infusion of external subsidies. The conclusion is that sustainable financial institutions by this criterion tend to have a low dependence on deposits.

Venture capitalists (VCs) who finance and advise start-up enterprises can be regarded as an important adjunct to this perspective on micro-finance. The case here is that a sophisticated venture capital industry makes young firms grow faster, increases value and creates more jobs. VCs screen projects, structure contracts and monitor firms. The joint inputs of both entrepreneurs and VCs interact to determine the long-term fortune of start-up enterprises.

⁴ Sengupta, A., 2008, A Monetised Deficit for Sustaining Growth amidst the Meltdown, *Economic & Political Weekly*, XLIII, 42, 10-11.

⁵ EPW Research Foundation, 2008, Paradigm Shift in Financial Policies: Need of the Hour, *Economic & Political Weekly*, XLIII, 42, 22-28.

⁶ Correa, A., & Correa, R., 2008, Microfinance: Debt and Equity Contracts, *Applied Financial Economics Letters*

Entrepreneurs provide the novel technological inputs but tend to be inadequate financially. VCs support the firm with their financial expertise. They embody the best of principal-agent monitoring, thereby reducing risk. A special trait of VCs is that they are oriented towards exit. Thus, the infinite dependence on infusion of inputs like cash is obviated from the outset.

Yet another source of private investment in agriculture might be the routing of international long-run financial investors (LRFIs) to India.⁷ Mainly pension funds and insurance companies, LRFIs collect contractual savings and support long-run commitments on them but their contracts are founded on trust. Due to the sheer size of their portfolios, their strategy of divergence makes them universal owners. They are concerned with macro risks and returns over time. Importantly, they have an incentive to internalise external risks generated by venturing into strange pastures. With dynamic and not static portfolios, the base of diversification is the long-term bond, a riskless asset, not a short-term security.

In conclusion, the dramatic contrast between investment in India and China can be cited.⁸ The growth of the capital stock in China is more than double that of India. During the period 1980-2003, investment in China grew at an annual average rate of 11.7 percent in comparison with 6.8 percent in India. The comparison is not odious as China's trajectory in this regards mirrors the experience of countries like Singapore and Korea.

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⁷ Agietta, M., 2008, Corporate governance and the long-run investor, *International Review of Applied Economics*, 22, 4, 407-427.

⁸ Felipe, J., Laviña, E., & Fan, E.X., 2008, The Diverging Patterns of Profitability, Investment and Growth of China and India during 1980-2003, *World Development*, 36, 5, 741-774.