The Dragon and the Elephant: Learning from Agricultural and Rural Reforms in China and India

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What can we learn from the process of economic reform in China and India? Does the sequencing of reform and an agriculture-led package matter? What could other developing countries and countries in economic transition learn from the experiences of India and China? What could these two countries learn from their own as well as each other's experiences? How can the two largest developing countries cooperate in their agricultural and economic development and work together at multilateral negotiations, such as those conducted through the World Trade Organisation, to address the concerns of developing countries? This paper summarises the key findings of a number of studies that were prepared for two international conferences devoted to comparing the rural development and agricultural reform experiences of China (the dragon) and India (the elephant) over the last several decades.

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1 Introduction

The reforms in both India and China have led to rapid economic growth, with growth rates touching 9-10 per cent per annum in China and 8-9 per cent per annum in India in recent years. Despite similar trends in the growth rates, the two countries have taken different reform paths; China started off with reforms in the agriculture sector and in rural areas, while India started by liberalising and reforming the manufacturing sector. These differences have led to different growth rates and, more importantly, different rates of poverty reduction. They also have fundamentally different implications for growth and poverty reduction in the future.

What can we learn from the process of economic reform in these two countries? Does the sequencing of reform and an agriculture-led package matter? What could other developing countries and countries in economic transition learn from the experiences of India and China? What could these two countries learn from their own as well as each other's experiences? How can the two largest developing countries cooperate in their agricultural and economic development and work together at multilateral negotiations, such as those conducted through the World Trade Organisation (wTO), to address the concerns of developing countries?

This paper summarises the key findings of a number of studies that were prepared for two international conferences devoted to comparing the rural development and agricultural reform experiences of China (the dragon) and India (the elephant) over the last several decades.¹ These are as follows:

2 Agricultural Reforms for Poverty Reduction

From the trend growth rates of agriculture and the incidence of poverty in the pre- and post-reform periods in China, it is clear that the acceleration in agricultural growth during 1978-2002 (4.6 per cent a year as opposed to 2.5 per cent a year over 1966-77) was the primary factor influencing the sharp drop in poverty, from 33 per cent of the population in 1978 to 3 per cent in 2001 [NBS 2002]. The better part of this decline occurred in the first reform phase of 1978-84 when agricultural gross domestic product (GDP) jumped to 7.1 per cent a year and rural poverty dropped from 33 per cent to 15 per cent. In India, the most rapid poverty reduction occurred

from late 1960s and the late 1980s. This is the period of the socalled green revolution and agricultural growth was high due to the use of modern technologies and the strong policy support to agriculture. In contrast, agriculture was not a major factor behind poverty reduction during the era of reforms. In fact, farm growth fluctuated and remained around the same levels of the 1980s, if not marginally lower. During 1991-2003 agricultural GDP grew at 2.7 per cent a year compared to 2.9 per cent a year between 1980 and 1990 [GOI, Economic Survey]. Agricultural growth did rise immediately after reforms began in 1991, at 4.1 per cent a year till 1997 before dipping again to 2 per cent. However, this higher growth of six years did not have a noticeable impact on rural poverty, which reduced only slightly from 37.4 per cent in 1990-91 to 35.7 per cent in 1997. That is partly because, rather than through reforms that directly affect the farm sector, agriculture growth was induced in India primarily by interventions outside agriculture, including currency depreciation and reduction of protection in industry, leading to an improvement of the terms of trade for agriculture.

Figure 1: GDP Growth in China and India

Index (1951-52=100, India; 1952=100, China)



1952 1955 1958 1961 1964 1967 1970 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 Sources: Calculations for China are based on data from National Bureau of Statistics (NBS) 2003: Calculations for India are based on India, CSO 2004 and India, RBI 2003

Figure 2: Growth in Agricultural Output and Productivity in China and India



Sources: (a) Authors' calculations based on NBS (2002) and Indiastat data 2003; (b) China: Fan, Zhang and Zhang 2002. India: Fan, Hazell and Thorat 1999.

By making agriculture the starting point of market-oriented reforms, a sector which gave majority of the people their livelihood, China could ensure a widespread distribution of gains and build consensus and political support for the continuation of reforms. Reform of incentives resulted in greater returns to the farmers and in more efficient resource allocation, which in turn strengthened the domestic production base and made it more competitive. Besides, prosperity in agriculture favoured the development of a dynamic rural non-farm (RNF) sector, regarded as one of the main causes for rapid poverty reduction in China as it provided additional sources of income outside farming [Fan, Zhang and Zhang 2002]. The rapid development of the RNF sector also encouraged the government to expand the scope of policy changes and put pressure on the urban economy to reform as well, since non-farm enterprises in rural areas had become more competitive than the state-owned enterprises (soes). Reforms of the soes in turn triggered macroeconomic reforms, opening up the economy further.

A comfortable domestic food supply situation achieved through the various incentive reforms ensured a critical level of grain production before liberalisation could begin and allowed Chinese policymakers to abandon the old agricultural policy framework geared towards self-sufficiency in foodgrains. The procurement system was dismantled everywhere except for the main grain-producing regions and the food rationing system was abolished in the early 1990s. As a result, private agricultural trade is now flourishing.

In India, reforms were actually prompted by macro imbalances and thus started with macroeconomic and non-agricultural reforms. These led to impressive rates of economic growth in the 1990s but, being limited to the non-agricultural sectors, did not have as significant an impact on poverty as in the case of China. Policy changes related to agriculture were carried out much later, and even then were only partial. India still continues with state food procurement and distribution, mainly because it is seen as affirmative action for over two-thirds of the population, including the poorest, who are dependent on agriculture and the rural economy, for livelihood.

3 Gradual and Careful Reforms

China

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India

The Chinese policymakers first created the incentives and institutions required by the market economy and then, in the mid-1980s, they began to slowly open up markets, by withdrawing central planning and reducing the scope of procurement while expanding the role of private trade and markets. Studies show that the impact on growth from incentive reforms of land use rights, agricultural production management through the household responsibility sys-

> tem (HRS), and rising procurement prices during 1978-84 was larger than from market liberalisation reforms after 1984 [Fan 1991; Lin 1991]. This was because incentive reforms in China aided the gradual emergence of markets which kept at bay the negative effects of the sudden collapse of the old central planning system in the absence of market-based al-

locative mechanisms, as experienced in other transitional countries.

It is not that the Chinese policymakers had planned this sequence meticulously; rather, it evolved out of a "trial and error" approach in implementing reforms. The adoption of new measures through experimentation rather than a predetermined blueprint increased the likelihood of the success of reforms since it implied a "learning by doing" approach or, in the words of Deng Xiaoping, one of "crossing the river while feeling the rocks" [Chow 2002]. This was peculiar to the Chinese reform process in which the government made sure that each new policy was field-tested at length and determined to be successful in selected experimental districts before it could be applied nationwide and the next measure introduced [Chen, Wang and Davis 1999].

In the case of India, agricultural trade reforms were a point of departure in agricultural policy. It can be argued that this sequence was a natural choice for India since the incentive structure of Indian agriculture was highly distorted at the outset of reforms; the sector was, and still is, burdened with excessive regulations on private trading and most market activities. There is significant potential for growth only if these constraints are removed.

In the case of India, liberalisation of agricultural trade policies happened to create a series of imbalances by preceding incentive and market reforms in the domestic arena. Lowered protection against a backdrop of low international prices increased imports, although in the case of wheat there was already excess supply from domestic production induced by a high minimum support price (MSP). While broad-based economic and trade reforms resulted in the new export orientation of the sector and improved the incentive framework of agriculture, they also left the sector more exposed to international competition because of persisting constraints to productivity improvement in the domestic front.² As a result, India is now attempting marketing reforms and removal of regulatory constraints at least in some of the states by amending Agriculture Produce Marketing Committee Act, although Essential Commodities Act still remains in place.

4 Importance of Initial Conditions

In 1970 the likelihood of an Indian child dying before the fifth birthday was twice that of her Chinese counterpart. Life expectancy was 49 years in India against China's 62 years, and 70 per cent of the Indian rural population was illiterate as opposed to 49 per cent of rural Chinese [WDI 2006]. One important reason for China's edge over India in health and education is the collective system where the government provided these basic amenities free. Rural electrification had made headway in the pre-reform years as rural electricity consumption grew at a rate of 27 per cent a year over 1953-80 as opposed to 10 per cent a year over 1980-90 and government investment in power grew at 27 per cent a year during 1953-78 [Fan, Zhang and Zhang 2002]. The egalitarian access to land was ensured by the land distribution and tenure system which also performed a crucial welfare function by limiting the number of the landless, providing the bulk of the rural population with subsistence and helping to distribute widely the benefits from agricultural price and market reform. The resultant improvement in efficiency and productivity were major triggers in poverty reduction.

In India on the other hand, land reforms to make the agrarian structure more equitable were not as successful and left a relatively larger number of landless agricultural labourers exposed to the harsh impact of unemployment and underemployment. In the power sector too, although public investments were substantial, annual growth of 12 per cent during 1981-90 [Fan, Gulati and Thorat 2007] was not as high as in China and thus rural electrification and even establishment of telecommunication connection proceeded more slowly in the Indian villages. This slow pace severely affected the growth of agro-processing and cold storage in the rural non-farm sector. The levels of processing remain abysmal even now, with over 20 per cent of fruit and vegetables produced going waste, and the government is currently designing policies to encourage this sector.

Thus, the relatively more favourable initial conditions in China help to explain why, despite the private and economic restrictions imposed on the Chinese rural population, the country could achieve a sustained growth even before the reforms [NBS 2003].³ However, China could not fully realise the benefits from the available physical and social infrastructure in the pre-reform period because of lack of incentives under the commune system. Once economic reforms were introduced, they released the latent energy in the system, resulting in a very high growth rate and rapid reduction in poverty after the 1970s [Rao 2003].

Both countries recorded a slowdown in meeting their health and education goals after reforms began. In India, this was primarily due to the fiscal discipline imposed by the macroeconomic crisis, while market-oriented reforms in China introduced the concept of profit in the management of social services. In China, this implied progressive privatisation of supply agencies, decline in government subsidies, and increase in education and health costs, which caused school dropouts and rising health vulnerability. In devising mechanisms to address the risks involved in increased privatisation of social services, China could perhaps learn from India's long experience of a vast system of government safety nets and welfare programmes for the rural population.

With regard to land, both countries have high populationland ratios but distribution is less skewed in China than in India and landlessness is virtually absent. As in education and health, equal access to land was a product of the egalitarianism inherent in the collective era that played a vital role in minimising risks and ensuring the availability of minimum subsistence. In India, replication of the Chinese agrarian system is not politically feasible, so marginal and landless farmers will require a strong social protection system through well-targeted social security and employment policies. Effective social protection measures will also be required in China where land distribution is likely to become skewed and more concentrated following the adoption of the new agricultural lease law that enables farmers to transfer lease rights.

Both China and India are characterised by the predominance of small farms (below two hectares) - more so in China - which has implications for rural employment. China's experience shows that small farms support more intensive use of family labour resources, while in India, owners of holdings above two hectares, who account for less than 20 per cent of total landholdings but over 60 per cent of cultivated area, often lack the incentive to practise labour-intensive cultivation. Therefore, reforms are required to optimise land use and eliminate distortions such as concealed tenancy in Indian land markets. Land leasing is restricted affecting private investment as well as the scope for consolidation into larger and more efficient operational holdings [Landes and Gulati 2003]. However, given the high population-land ratio, approach to deregulation is naturally cautious, allowing for a minimum set of safeguards (for example, liberalising leasing within ceilings) to prevent absentee landlordism and increase in landlessness.

5 Public Investments

In China, the correlation between the initial conditions and postreform achievements in poverty reduction and growth makes a convincing case for stepping up government investments in rural infrastructure and social services. In India, on the other hand, the decline in rural public investment as a result of fiscal profligacy

and rising subsidies on fertilisers, power, water and price support is regarded as a primary cause of slower growth after 1997. Since both these countries have budget pressures and are unlikely to be able to raise public investments significantly, they would just have to invest available resources more efficiently. Returns to public investments vary drastically across different types of investment and regions even within the same country. This implies a great potential for achieving more growth and less poverty even with the same amount of investment, assuming public resources can be allocated optimally on the basis of reliable information on the marginal returns of different government spending. Studies have found that spending on agricultural research, education, and rural roads is the most effective for promoting agricultural growth and poverty reduction [Fan, Gulati and Thorat 2007].

Then again, both countries will find it tough to expand cultivable land and water resources, so yield-based farm growth will become important and will call for increased agricultural research and technology development. Agricultural research and development (R&D) takes place in both public and private sectors, but managing public versus private R&D can be tricky. China promoted the development of the public business sector through commercialisation of technologies by public research institutes but this often led to duplication of research and overlap of efforts with soEs. The Chinese experience can provide valuable lessons in this sector for other countries in transition.

The improved intellectual property right (IPR) regime under wTO stimulated private research and patenting activity in both countries [Pal 2004]. However, weak implementation of IPR in the two countries and high costs of maintaining patents in China are obstacles to the entry of private players. The Chinese experience also shows that protection of plant varieties can help improve resource generation by the poorer public research institutes as the number of IPR applications filed was effectively higher for resource-poor institutions than for better-funded national institutes. In terms of increasing the scope for private research, India's case indicate that the IPR regime is more effective if complemented by favourable policies in the area of tax, investment and input imports (ibid).

Private agricultural R&D provides both opportunities and challenges. Significant opportunities can arise for public-private partnerships in the areas of funding, research and extension. However policymakers need to be aware that the private sector tends to privilege higher-value crops and concentrate in areas where agriculture is already advanced. Given agriculture R&D's potential to reduce poverty in marginal regions, public research spending should target poorer farmers in less favoured environments like India's semi-arid tropics and rainfed areas and China's poor western regions.

Water Management and Conservation

In the water sector, government spending in irrigation effectively promoted growth and poverty reduction, but the marginal returns of such spending has come down over time. Indeed, studies have shown that investments in rainfed areas have had high marginal returns for agricultural growth and poverty reduction. Major investments in harvesting rainwater through watersheds, through public-private partnerships, may help usher in a "multicoloured revolution" (not just a "green" one) in agriculture.

In both countries, water use efficiency can be vastly improved through institutional and management reforms of existing water systems. India's experience with water users' associations (WUA) in some states, participatory watershed schemes and communitybased rain harvesting can provide good learning experience. Transfer of management to user groups was more successful in India, although the coverage of irrigated areas by these user associations remains low in India compared to other south-east Asian countries [Rao 2002]. Insufficient administrative and political will to devolve management powers to the local wUAS and inadequate infrastructure for building capacity inhibited the involvement of farmers in India [Rao 2000]. On the other hand, the Chinese experience shows that reforms aimed at giving incentives to irrigation systems managers to improve useefficiency had a positive effect on crop yields, groundwater table and cereal production [Wang et al 2003]. The question is whether the strategy of transforming water bureaucrats into managers is possible in India.

Providing right incentives to farmers is crucial to promoting water saving. Low water prices and profligate power subsidies for operating tubewells have encouraged wasteful use of water and depletion of groundwater resources. Ambiguous water use rights following de-collectivisation in China, and laws linking water rights to land ownership in India also led to inefficiencies. These included the emergence of unfair water markets over time, where rich landholders with modern water extraction technology profited from selling water to poorer cultivators.

Increase in water use charges may not be feasible in the short to medium term without changes in the institutional set-up. In India, irrigation is affected by realpolitik as free electricity for pumping water is offered for political rent-seeking. In both countries, given the booming numbers of private tubewell owners and weak institutions and infrastructure that make monitoring of water withdrawals and revenue collection difficult,4 the impact of reforms like withdrawal permit systems and volumetric charging can only be limited [Shah, Scott and Buechler 2004; Wang, Huang and Rozelle 2003]. Improved crop yields can also lead to a more efficient use of scarce water resources in agriculture. For that, inputs other than water, such as credit and agricultural research on water saving and yield-improving technologies, need to be deployed. This is particularly true for India where both irrigated and rainfed crop yields are lower than those in China. In both countries, this may also call for trade and price policies favourable to high-value, less water-intensive crops. In India, technological innovations to improve yields seem more feasible in the short and medium term than management reforms for improving water use efficiency, given the political and institutional constraints [Rao 2002].

6 Reform Incentives

China's experience with marketing reforms holds valuable lessons for other transition economies. Farm support policies lose their rationale when there is oversupply of food and agricultural trade is free and open. Indian MSPS and input subsidies were intended to encourage the adoption of new technologies and fuel growth, turned into inefficient and costly income-support interventions, encouraging the build-up of vested interests because they were not abolished after their aim was realised. China could learn from this experience and seek to encourage agricultural growth in the future, yet avoid the large inefficient Indian subsidies. This issue is important because India has recently introduced a costly direct transfer programme for rural areas and also because of late, increasing government support to agriculture and rural areas is finding many takers among scholars and government officials alike.

Despite limited reforms in agricultural marketing in India, the impact of policy changes has slowed down since state governments are reluctant to implement them [Landes and Gulati 2003]. In addition, a host of outdated domestic regulations, such as the agricultural price marketing committee (APMC) acts, regulation of agricultural produce market sale, restrictive land laws and licence requirements on food processing units, continue to weaken the environment for agribusiness and private sector involvement in agricultural marketing that could boost employment and efficiency. In the backdrop of increasing, diversified food demand and opening up of agricultural trade, legal and regulatory reform remains critical given its capacity to directly impact the sector adjusting to the changing environment. Given that smallholder agriculture is predominant in both countries, farmers could be excessively penalised because they do not possess sufficient capital and information to manage the risks inherent in agricultural activities. While China and India are reconsidering the current forms of agricultural and input subsidies, they should also put in place well-targeted and innovative cost-effective crop insurance policies to protect farmers vulnerable to drastic supply and price shocks. Such shocks can only intensify as trade policies are further liberalised. In India, the abolition of restrictions to trading on the futures markets in major agricultural commodities is a step in this direction, which needs to be further strengthened.

One other important area is the strengthening of the network of support services to small farmers related to information, credit and extension. The Indian experience shows that smallholder agriculture needs strong institutional support in these areas to grow and prosper.

Trade Liberalisation

With regard to broad trade liberalisation, both countries made progress in reducing protection levels. Still, India's weighted average tariff at 29 per cent was double that of China's 16 per cent [Ahluwalia 2002]. India was able to sustain its current growth rate with lower foreign direct investment (FDI) inflows and a relatively less export orientation than China. But if it has to attain the target of 9 per cent GDP growth it needs to further reform the FDI climate in view of its potential to transfer knowhow, managerial skills and new technologies. China can offer valuable lessons in this area.

The inevitable restructuring and adjustments involved in opening up agricultural trade flows will produce both winners and losers. Domestic producers of crops in which the country lacks comparative advantage (for example, edible oils in the case

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of India and wheat and maize for China) are likely to suffer increasingly from falling prices resulting from higher imports. They will also be negatively affected when there is pressure on the governments to reduce support to inefficient national producers. Broad-based structural adjustments in the economy may depress rural income, increase opportunities in manufacturing as well as services primarily located in urban areas, and widen rural-urban inequality. These inter-sectoral adjustments will progressively shrink the size of the primary sector, which will release additional unskilled labour into the labour markets.

The rural population will gain if it is able to shift to more profitable off-farm occupations. Here, investment in rural education can help farmers move out of traditional occupations. It will also be important to increase investments in rural R&D and infrastructure to enhance productivity. These investments fall under the wто "green box" and are therefore exempted from reduction commitments, although their positive impact will be realised over the longer run. On the positive side, wto membership can provide the much-needed external pressure to improve efficiency and implement reforms in tradable inputs such as seeds, fertilisers, farm machinery and pesticides, where markets are inefficient either due to government intervention or lack of infrastructure. It can also highlight the facilitating role of the government in the provision of services like information, marketing facilities, technical assistance, and standards and quality control regulations. Lastly, wto also offers an opportunity to join hands and create a third force of countries besides the giants European Union (EU) and the us in negotiations during the Doha round.

7 Promoting Rural Diversification

A major shift in farm production towards non-foodgrain products like livestock, fishery and horticulture has been well under way in India and China since the 1980s. In China, achievement of food self-sufficiency and the extraordinary growth in basic grain production by the late 1970s immensely helped diversification. This is because food surpluses provided government with enough leeway to feed the increasing population and relax controls over the foodgrain sector. China gradually abandoned the policies biased in favour of rice and wheat, such as the food rationing system for urban areas or the mandatory levy quotas, which encouraged farmers to diversify production. Developing countries affected by chronic food shortages can learn from this experience. In contrast, steadily growing MSPS in India artificially raised production of major cereals discouraging diversification toward non-grain commodities.

A comparison of the shares of government expenditure to the pace of growth in output in different agricultural sub-sectors indicate that despite high growth, some high value products (like livestock and horticulture) are under-funded relative to traditional food crops [Pal 2004]. Policymakers must encourage higher investment in research to boost yields and expand cultivation given the export potential of these crops, positive impact on smallholders, and growing domestic demand.

Post-reforms, rising per capita income influencing food consumption patterns has been a major driver for diversification into non-food crops. Without vertical integration between production,

processing and marketing – that is, between "plate and plough" – the potential for growth inherent in the diversification process may remain under-exploited. Vertical integration reduces risks by providing assured markets, cuts transactions costs, and helps improve quality standards and food safety. In both countries, new and innovative institutional arrangements have emerged, promoting the development of new products, and these need to be strengthened. India's successful experiments with contract farming, which helped cut risk, promote production and export of high-value foods, and raise income and employment of smallholders, can be valuable for China. On the other hand, the experience of growth in the retail food chains and supermarkets in China in recent years could benefit India where restrictions on FDI and infrastructure bottlenecks are limiting progress.

Inadequacies

In smallholder dominated farming, diversification has important implications for poverty reduction. The labour-intensive nature of the production of high-value products is not only well suited to the small farm economy but there is also great potential for employment creation in agro-processing and retail chains. Strengthening vertical integration through innovative institutional arrangements without tackling the other major obstacles faced by the small farmers would not be effective in reducing poverty. In fact, India's case shows how institutional deficiencies like weak enforcement of contracts and high transaction costs faced by small cultivators often prompt agro-firms to deal directly with large farmers.

Acceleration of diversification in favour of small farmers is also hindered by lack of access to markets, technology and information, poor rural infrastructure and inadequate marketing facilities. Future reforms need to address these issues through increased investments in basic rural infrastructure and marketing facilities like cold storage chains. Lastly, small cultivators often lack sufficient marketable surplus. Nor can they raise production at will due to their lack of access to technology and financial services. Welltargeted government support services are needed in credit markets and extension services designed specifically for smallholders.

Rural Non-Farm Sector

Looking away from crops, as the Chinese experience has amply demonstrated, the evolution of a dynamic rural non-farm sector offers great potential for rural diversification. Rapid growth of rural enterprises in China is one of the most striking differentiators between the reform processes of the two countries, especially as township and village enterprises (TVES) provided increasing jobs outside agriculture, by diversifying and expanding the sources of household income. Agricultural growth and favourable demand conditions were critical to development of the RNF sector in China because post-1978, reforms triggered a surge in demand from prospering rural areas for TVE products. TVEs also benefited from the close connection with dynamic urban markets established since the early stages of their development. The connection with urban markets brought TVES in competition with soes and stimulated the latter to increase productivity and unit scale [ILO 1998]. In India, however, farm output growth rates decelerated, dampening demand as well as farm and non-farm employment.

India's non-farm economy produces low-profit services of the informal sector primarily for the rural markets and is dominated by tiny own-account family-operated units. These are characterised by low productivity brought about by poor technological base and by policies aimed at protecting rural employment by reserving certain activities for small units. Limited growth of RNF job opportunities is also related to the poorly educated rural labour force. This is a challenge that will increasingly confront both countries as they adjust to greater market and trade liberalisation leading to economic restructuring and the replacement of traditional and low-productivity jobs by new and more productive occupations requiring more educated labourers. Thus spending on rural education will be crucial.

The role of non-farm employment is expected to become increasingly significant as the average size of farms get smaller. Small farms may be efficient in terms of land productivity but not in labour productivity, which is more closely linked to farmers' income. Greater off-farm opportunities and migration to urban areas is required to increase average farm size, labour productivity and farmers' income.

8 Anti-Poverty Programmes

The role of anti-poverty programmes (APPS) and safety nets in poverty alleviation came into sharp focus in the 1990s to address the negative impact of liberal policies on income distribution. The need for fiscal stabilisation in India meant the reduction in transfers to the states and in capital expenditures on rural infrastructure [Jha 2000], to counterbalance which the government stepped up funding for several existing anti-poverty programmes and created new ones. In China, the government was strongly committed to addressing the poverty problem, and government initiatives, as announced in official plans and government conferences starting in the mid-1990s, were revived.

Poverty funds and programmes have documented shortfalls and inefficiencies in terms of targeting and cost-effectiveness, but their significant contribution to limiting the severity and the extent of poverty is inescapable. There are still more than 400 million rural poor in India and China, based on the international standard of one dollar a day (more than 100 million in China and more than 300 million in India). In China, the bulk of the rural poor are primarily in the remote, mountainous or naturalresource poor western provinces. In India, they are concentrated in the eastern (Bihar, Orissa and West Bengal), central (Madhya Pradesh) and northern (Uttar Pradesh) states where rural poverty is higher than the all-India average of 27 per cent as of 2004-05.

Radical redistributive measures like land reforms are relatively impractical in India due to their potential for social conflict, while public investments take a long time to translate into employment and economic growth. Compared to these, APPs are a more agile instrument in the short run, provided their shortcomings are removed.⁵ Poor design, targeting, implementation and fund misuse are key causes of ineffective poverty programmes. To improve targeting, one lesson that China may draw from the experience of India is in the use of a greater variety of targeted programmes directed to specific sections of the poor as opposed to its own traditional, broader income or area-based approaches. Selfselection schemes like rural public works and plans targeting women, children and the elderly are more pro-poor since identification of the beneficiaries are easier, faster and less costly.

To strengthen the impact of APPS, decentralised and participatory approaches are more effective than top-down strategies as they involve a greater variety of agents (non-governmental organisations (NGOS), civil society, and international aid organisations) in the fight against poverty besides the government. India is a good point of reference in this respect since extensive participation of panchayats and civil society at various stages of the formulation and implementation of the programmes ensures the tailoring of programmes to local needs, thereby improving their impact and effectiveness.

9 Institutions and Regulatory Environment

In both countries there was political will to carry out reforms, but in practice outcomes were shaped by the different patterns of governance. India is a "debating society" where political differences are expressed freely. Policymaking is exposed to the pressure of various interest groups and there are long debates before decisions are taken. The lengthy bureaucratic procedures, intended to ensure checks and balances in the system, often delays decision-making and implementation. This exercise is compatible with the needs of a free and dynamic polity but in practice is a key reason for India's slow pace of economic reforms.

China, on the other hand, is a "mobilising society" where decisions are taken faster and state power is backed by mass mobilisation. As a result, implementation of decisions is more effective although the lack of more elaborate debate in China on major reforms can sometimes lead to disastrous actions, as with the Great Leap Forward in 1958, and the Cultural Revolution of 1966-76. Interestingly, as the economic system opens up further and prosperity increases, it will become harder and harder to reconcile the centralised political set-up with the more liberal economic system. Indeed, this is one of the most important challenges before China today.

However, in China, the ideology-induced commitment to build an equitable society in the pre-reform years created a strong political will to provide the population with near-universal access to basic health and education services, while the administrative set-up of the communes proved an effective mechanism of resource mobilisation and service delivery. Although similar administrative machinery is not replicable in the Indian context, the country can still try and strengthen the initial conditions in terms of rural electrification, roads, access to education and health services etc.

A critical factor in explaining dissimilar reform outcomes between India and China is the difference at the level of reform implementation that is shaped by the institutional, regulatory and political settings. Investments in rural infrastructure and other key public services are crucial, but it is equally critical to develop suitable institutional arrangements for their delivery. Major failures in public provision notwithstanding, the government continues to be the major supplier of infrastructure services in both countries. Input suppliers like the state electricity boards (sEBS) in India and soes (including grain bureaus) in China do not function

against the requirement of a 3 per cent return on investment
(ROI), SEBS have recorded negative ROIS since 1981. By 2000-01, their returns were a negative 27 per cent after subsidies [Gulati
and Narayanan 2003]. In the case of power and water, underpricing of user fees do not allow recovery of costs even to meet
costs of operation and maintenance and this leads to deteriorating quality of water and power services to farmers. Strengthening public institutions that provide public goods and services and
making them cost-efficient can lead to both fiscal sustainability
and long-term growth. These goals can be achieved in different
ways such as privatisation, unbundling, decentralisation and
contracting. Effective public institutions also require an adequate
supply of trained and motivated personnel and investments in
training to increase the supply.

efficiently due to the lack of transparency and accountability. As

relates to the regulatory environment and the enforcement bureaucracy. Although streamlining the regulatory apparatus through de-licensing has begun, much inefficiency remains in place. Several private investment decisions still require government approval entailing long procedures encouraging corruption.

During the reform years China relaxed regulations on mobility between rural and urban areas, which promoted the development of the non-farm sector and abetted economic migration. Recently, it has also started to relax the complex system controlling broad-based personal mobility, removing state interference in private life and creating a more mobile and open social environment in tune with the freer economic setting.⁶ One of the fallouts of these changes is the faster issue of passports and visas.

Finally, a key factor in the effective implementation of reforms in China was the ability of the leadership to set both clear objectives and time frame for transition to the reformed regime [Ahluwalia 2002], no doubt helped by the centralisation of decision-making which minimises dissent. In the context of a highly pluralist society like India, consent is more difficult to achieve, and so neither clear objectives nor time frames for transition can be set. This has been the case with, for instance, phasing out of subsidies, tariff reduction, price increases for economic services, etc. There is also a tendency towards populist policymaking in India, which is clear in the case of subsidies which although acknowledged as inefficient and iniquitous, have been tough to remove or minimise. This situation slows the pace of change in the short and medium term. Although democracy and participation have intrinsic value and are not mere instruments of development, the role of democracy in enhancing or hampering economic change and poverty reduction remains a complex subject for development research. Comparisons of China and India on these broad political matters may produce a fascinating set of insights in the coming years.

10 Conclusions

A number of factors help to explain the differences in growth between the two countries during the reform era: initial conditions, the sequencing and pace of reforms, and the political system, institutions, and regulatory environment. Yet special mention must be made of the fact that China and India achieved remarkable development and growth even as aid as a percentage of GDP in

the two countries remained low. This is in direct contrast to most other developing countries and regions, where aid is much higher while development and poverty reduction lag far behind. This is an important lesson for developing and developed countries, multilateral agencies, and local NGOS and groups. It questions the very basis of current policy prescriptions that accompany aid packages, not only raising issues related to the efficiency and effectiveness of external aid but also, conversely, revealing the extraordinary and often underestimated capacity of national initiatives and policy actions to turn – and in fact halt – the tide of poverty.

Both countries still face tremendous challenges on the path to further prosperity. Continued growth is a must, owing to pressure from a growing population and the need for jobs for them. It is also a condition for a more stable society. Given the high expectation of their citizens, the lack of growth or even slower growth could lead to unrest in both countries. The limited natural resource base can be a critical constraint to growth. The future economic growth of both countries increasingly depends on imports

NOTES

- 1 These events, held in New Delhi and Beijing, brought together many prominent Chinese and Indian scholars and policymakers and were organised by the International Food Policy Research Institute in collaboration with the Jawaharlal Nehru University, New Delhi, and the Chinese Academy of Agricultural Sciences, Beijing.
- 2 See Elbehri, Hertel and Martin (2003) who provide a case study on the impacts of trade liberalisation in the cotton sector.
- 3 Between 1952 and 1977, Chinese agricultural GDP increased at about 2.3 per cent a year.
- 4 There were near 20 million private tubewell owners in India as on 2003 and 3.5 million in China as on 1997.
- 5 Jha (2001) provides a comprehensive analysis of the financial, regulatory and political ways to improve the effectiveness of poverty reduction programmes.
- 6 In recent years some cities including Beijing were allowed to relax the 'danwei' system of permits, a government controlled work-unit to which urban citizens had to apply for permission to get housing, wedding licence, passport, etc. The decline of the danwei system is a consequence of the restructuring of the SOEs during the reform years.

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of energy, for which future prospects are uncertain. Both countries are also among those most severely affected by water shortages.

Consequently, future growth must be based on higher efficiency and will require China and India to invest in science and new technologies to harness energy and water, optimise their economic structures for allocative efficiency, and reform their fiscal, financial, banking, and insurance systems. Both countries must also pursue more pro-poor growth, which is not only a development objective in itself, but also a precondition for future growth in the long-term.

China and India can both gain tremendously by learning from each other, as there is a long way to go for both. The dragon is breathing competitive fire over a large part of the world and the elephant is ambling briskly, but both need to address their weaknesses and build on their strengths in order to achieve their national goals and fulfil the aspirations of their people. The lessons learned from the experiences of China and India will also help other developing countries and in the global fight against hunger and poverty.

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