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**Competition Policy Reform in
Agriculture: A Comparison of the
BRICs Countries**

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Abstract

This paper forms part of a project titled '*Facilitating Efficient Agricultural Markets in India: An Assessment of Competition and Regulatory Reform Requirements*' funded by the Australian Centre for International Agricultural Research (ACIAR). The project follows from previous research which found that India's border reforms need to be complemented by 'behind-the-border' domestic reforms if government policy objectives of improved productivity, higher rural employment and incomes and enhanced food security are to be met.

The project is being undertaken by Indian and Australian collaborators with expertise in agricultural policy development. Stage 1 of the project is designed to develop a common understanding among those collaborators of contemporary market based policy development principles and the extent to which they have been adopted in other developing countries. The BRICs economies of Brazil, Russia, India and China, as well as South Africa, were chosen for this purpose.

A comparative overview of agricultural policy developments in these economies is underway drawing observations about policy reform impacts on agricultural production and the extent to which policy reforms have been consistent with competition policy and microeconomic reform principles applied in developed economies, such as Australia. The extent to which trade practices law has emerged in developing economies as an alternative to direct regulation is also considered. Preliminary findings are reported to facilitate broader discussion and encourage input from interested parties.

Stage 2 of the project, commencing later in 2009, will involve the application of competition policy principles to the marketing regulations of a selection of agricultural industries in India. Consideration will be given to clarifying regulatory objectives, assessing their consistency with accepted forms of 'market failure' and assessing whether regulatory measures address those policy objectives in a manner least restrictive on competition.

As well as facilitating efficient policy reform within India's agricultural sector, the project aims to enhance the development of market based agricultural policy frameworks and the policy development skills of Indian and Australian policy makers.

Key words: ACIAR, developing countries; agricultural policy reform; market failure; competition policy, competition law.

¹ The views expressed in this paper are those of the authors rather than those of the NSW Department of Primary Industries or the NSW Government.

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I. Introduction

This paper reports on the progress of an ACIAR funded project (ADP/2007/062) titled 'Facilitating Efficient Agricultural Markets in India: An Assessment of Competition and Regulatory Reform Requirements'. The project is being undertaken collaboratively by the New South Wales Department of Primary Industries, India's National Council of Applied Economic Research, the Australia and New Zealand School of Government, Melbourne University, LaTrobe University and Exeter University.

India's agriculture sector faces ongoing adjustment pressures as it becomes increasingly exposed to international market forces. Its rapid growth since the beginning of the green revolution in the mid sixties occurred in a protected environment facilitated by policy support, new production technologies and public investment in irrigation infrastructure. The sector has also been heavily shaped by India's national goals of long term food security and price stabilization.

A key challenge over the medium term is therefore the development of agricultural policy settings which enable farmers to efficiently adjust to a less regulated marketing environment. A particular concern is to introduce marketing reforms in conjunction with an appropriate competition policy regime in order to avoid anti-competitive outcomes eroding the gains from market reform.

The paper follows from a previous ACIAR project ADP/2002/089, 'Agricultural Trade Liberalisation and Domestic Market Reforms in Indian Agriculture', which involved the assessment of impacts of international and domestic market reforms on agricultural prices, production and incomes. Results from this project were reported in several *fora*, including two major workshops in Delhi, an interim workshop in Melbourne in early 2007 and at a special session at the Australian Agricultural and Resource Economics Society Conference in February 2007.

A key finding was that trade policy reforms at the border need to be complemented by 'behind-the-border' domestic reforms if government policy objectives of improved productivity, higher rural employment and incomes and enhanced food security are to be met. For example, econometric analysis of domestic and international market integration of rice markets in India demonstrated that while the post 1990s policy reforms in India improved market integration and efficiency, there remain significant constraints to further progress due to the pervasive influence of efficiency-hindering domestic regulatory structures (Jayasuriya, Kim and Kumar, 2008).

Furthermore, at an April 2006 workshop in Delhi the Project Advisory Committee comprising senior Indian officials, private sector representatives and academic analysts suggested that the project team should look at the possibility of extending the research into these domestic reform issues. They pointed out that Australia has an international reputation in the area of implementing competition policy and deregulation measures in many areas including agriculture.

These findings and policy issues are further complimented by the GE analysis of Chadha, Pratap and Tandon (2008) where they concluded that 'there is need to have a watchful competition and regulation system in place to oversee the efficient working of newly developed private agricultural markets.

The current project which is the subject of this paper was therefore formulated in response to the findings of project ADP/2002/089 and in response in particular to requests from Indian officials and analysts in the Project Advisory Committee. The new project is designed to

complement the previous project by first 'sharing' among project collaborators and the Project Advisory Committee in Stage 1 the approaches being taken to agricultural policy reform in a number of other developing countries which are trade competitors with India. The BRICs economies of Brazil, Russia, India and China, as well as South Africa, were chosen for this purpose and a comparative overview of policy developments in these economies is currently underway.

This comparative work will focus on the last ten years, drawing observations about production related policy change impacts and the extent to which agricultural policy reforms in those developing economies have been consistent with competition policy and microeconomic principles applied in developed economies such as Australia. A further issue of significant interest to Indian policy makers is the extent to which competition (trade practices) law has emerged as a feasible alternative to direct regulation. The preliminary findings from this Stage 1 work are the subject of this paper.

In Section 2 of this paper some recent competition policy developments and views are outlined. In Sections 3 and 4, agricultural policy reform outcomes in the BRICs economies are considered, while in Section 5 preliminary conclusions are offered in relation to the further adoption of agricultural competition reforms in developing countries.

2. Competition Policy & Competition Law

2.1 A Definition of Competition Policy

The term competition policy can be used to describe the range of market interventions by government which influence resource allocation. Competition or trade practices law, where it exists, can be viewed as a component part of a country's 'competition policy' settings.

Australia's recent *National Competition Policy* initiative reflected this perspective, requiring that all legislation that influenced resources allocation (ie. 'competition' in the broadest sense) be regularly reviewed. Reviews required that "legislation not restrict competition unless it can be demonstrated that the benefits to the community as a whole outweigh the costs, and that the objectives of legislation can only be achieved by restriction competition". Institutional arrangements were also established to monitor the rigour with which legislation reviews were conducted with penalties imposed on state and territory governments that were considered in breach of their review obligations (see Davenport 2007).

A further useful perspective on competition policy is that provided by White (2008) where 'industrial policy' is portrayed as often standing in juxtaposition with competition (or trade practices) law. The author highlights that most countries traditionally have industrial or sectoral policies (such as regulated commodity prices and input subsidies) designed to influence resource allocation with generally stated objectives relating to growth and productivity outcomes.

In relation to agriculture, the tension between industrial policy, which is considered to often be about 'rent seeking' and income redistribution, and competition law is highlighted by agriculture often being formally exempt from antitrust laws. This tension extends to the adverse effects that poorly developed industrial policy has on providing competitive advantage to certain agricultural businesses and statutory bodies and the often unforeseen effects that regulatory incentives may have in causing producers to become locked in to certain production patterns and in turn becoming exposed to anti-competitive market behaviour.

The useful perspective is then provided that while traditional industrial policy is often poorly designed around rent seeking behaviour, it does have an important role where it legitimately

targets instances of market failure that would not otherwise be expected to be addressed by competition law (eg. environment externalities and information asymmetry problems).

2.2 OECD's *Positive Reform Agenda*

Consistent with the previous discussion, the OECD recently developed its '*Positive Reform Agenda*' (OECD 2002) which seeks to promote best-practice regulatory settings through the endorsement of a set of policy goals agreed to by the OECD Committee for Agriculture in 1998. These goals require that the agri-food sector:

- is responsive to market signals;
- is efficient, sustainable, viable and innovative, so as to provide opportunities to improve standards of living for producers;
- is further integrated into the multilateral trading system;
- provides consumers with access to adequate and reliable supplies of food, which meets their concerns, in particular with regard to safety and quality;
- contributes to the sustainable management of natural resources and the quality of the environment;
- contributes to the socio-economic development of rural areas including the generation of employment opportunities through its multifunctional characteristics, the policies for which must be transparent; and
- contributes to food security at the national and global levels.

The OECD's *Positive Reform Agenda* is a response to Producer Support Estimates in OECD countries continuing to be dominated by output-based support and input subsidies, which in turn 'necessitate the use of trade protection policies which further amplify the net costs of inefficient domestic policies'. The OECD states that 'by reducing the need for border measures, domestic reforms make it easier for reforming countries to reach agreement in a multi-lateral context'.

The *Positive Reform Agenda* therefore calls for governments to be clear about what their policy objectives are and to define them in a measurable way that lends itself to the assessment of alternative policy instruments. This in turn increases transparency and reduces the influence of politics in decision making.

There is growing concern, however, in relation to the ability of countries to apply these principles and the approach. Typically, domestic agricultural policy objectives are stated in broad terms, such as supporting farm incomes, promoting rural development, or progressing 'food security'. Such terminology, however, provides little clarity in relation to the specific outcomes intended to be achieved, or the respective role of government *vis-à-vis* other stakeholders in achieving those objectives.

In considering the objectives of agricultural policy, it appears therefore that there needs to be much closer consideration of, and alignment between, stated policy objectives and accepted forms of market failure (ie. information asymmetry, externalities, imperfect competition and public goods). Where strong market failure rationales can be established, the preferred policy instrument should then be that which least restricts competition (that which imposes minimal social costs).

While the aforementioned merits of market based policy approaches are generally well accepted, the persistence of poor agricultural policy settings opens for further debate the issue of dealing with strong 'rent-seeking' behaviour by sectoral interests. These situations necessarily have their solution in understanding the underpinning values and incentive systems at play. Ultimately, in addition to espousing best-practice policy principles, there may

be a need to consider how institutional reforms within government might enable the full range of social values involved in policy settings to be considered.

2.3 Agricultural Policies in Non-OECD Countries

A number of recent studies have profiled agricultural policy developments in developing countries. For example, the OECD report 'Agricultural Policies in Non-OECD Countries' (OECD 2007) provides a valuable insight into policy trends in eight non-OECD countries including Brazil, Russia, India, China and South Africa. Key findings were that:

- (a) agricultural support remains dominated by market price support measures and input subsidies, the least efficient and most distorting ways of providing agricultural assistance;
- (b) that more targeted forms of support not linked to production are increasingly being sought to pursue specific goals, such as raising the incomes of poor farm households, promoting rural development and protecting the environment; and
- (c) the *ad hoc* nature of many recent policy developments has failed to provide the predictable policy environment that is essential for growth and development.

The OECD succinctly summarises policy challenges facing these economies as agriculture typically being viewed as the vehicle to solving broader social welfare and food security concerns.

The focus of long term policy reform was found to be a shift from closed economies, self sufficiency and import substitution, to open economies with recent economic growth (often with its origins in the services sectors), providing the basis for increased budgetary support to agriculture to alleviate poverty and address food security. It was nevertheless found that for many countries, there is an increasing problem of environmental sustainability that threatens productivity growth. The contribution of subsidised inputs to this problem therefore appears as an important current focus of policy reform.

Agricultural policy was found to remain dominated by direct market price support in the form of domestic price interventions and border measures apparently because such measures do not require the use of scarce budgetary funds. Contrary to the expectations, this form of support was found to be increasing with the next most significant form of support being input subsidies including subsidised credit. Despite direct supplementary income payments more effectively addressing the objective of assisting poor farm families, only some countries were found to be adopting this approach.

A further, perhaps disappointing, finding was that despite research, development, extension, inspection, marketing and infrastructure assistance often being more beneficial to farmers than market price support, this form of assistance was in most cases declining.

In summary, the report finds that policy reform has facilitated major growth in the eight economies examined and that macroeconomic stability has been essential to that transformation process. The agricultural policy environment in these countries is, however, found to be characterised by uncertainty with respect to how governments intervene which is likely to have impeded efficient private agricultural investment decisions. An overriding concern is that market price supports, as a form of intervention, are not only the most significant form of sectoral support, but are increasing. While politically popular these measures are found to undermine future agricultural productivity and the sector's ability to make a sustainable contribution to growth, poverty alleviation and food security.

3. The BRICs Economies

Goldman Sachs (2001) claims to have coined the term 'BRIC' for the four developing countries of Brazil, Russia, India, and China in its 2001 Global Economics Paper, *The World Needs Better Economic BRICs*. The original BRIC thesis, that the BRIC group were emerging as large economies with real GDP growth that would soon exceed that of the G6, was revised in a subsequent 2003 paper *Dreaming with BRICs: the Path to 2050*, in which it was argued that BRIC countries could become four of the seven largest economies in the world by 2050 (Goldman Sachs, 2003).² A 2005 paper, *How Solid are the BRICs?* makes the case that BRIC economies can realise the 'dream' more quickly than initially thought (Goldman Sachs, 2005).

Policy reforms that have taken place are outlined in Figures 1.1 to 1.5. From the first of these it can be seen that the BRICS economies differ significantly in their stage of development as measured by GDP per capita and the significance of agriculture as an employment provider. India and China stand out among this group for their heavy social reliance on the agricultural sector and relatively low rates of GDP per capita. Russia and Brazil similarly have low rates of GDP per capita but much less reliance on agriculture. The implications of these characteristics for agricultural policy are potentially significant with agricultural policy continuing to play a surrogate social policy role in some cases.

The importance of the agricultural sector in terms of GDP also varies (see Figure 1.2). India again presents a special case with agriculture's contribution being greater than in any of the other BRICs economies. China has the next most significant agricultural sector, but significantly less than India, at around 8 percent. Both countries therefore face a significant challenge in having such a large proportion of their population reliant on a sector that provides a relatively small contribution to GDP.

The decline in agriculture's contribution to GDP has been significant in the economies under review with the exception of Brazil where agriculture's contribution has been maintained (see Figure 1.3). This situation is similar to that in many developed economies where the contribution of other sectors has outstripped that of agriculture despite increasing agricultural production.

Trends in the Producer Support Estimate (the value of producer support/gross value of agricultural production) for the BRICS economies are detailed in Figures 1.4 and 1.5. Assistance was negative at particular points in time for Brazil, Russia and China followed by subsequent increases in price support to more modest current levels (Brazil 5.9 percent; Russia 15.5 percent; India 16.1 percent; China 8.4 percent; and South Africa 9 percent. The comparative figure for Australia is 4.8 percent.³

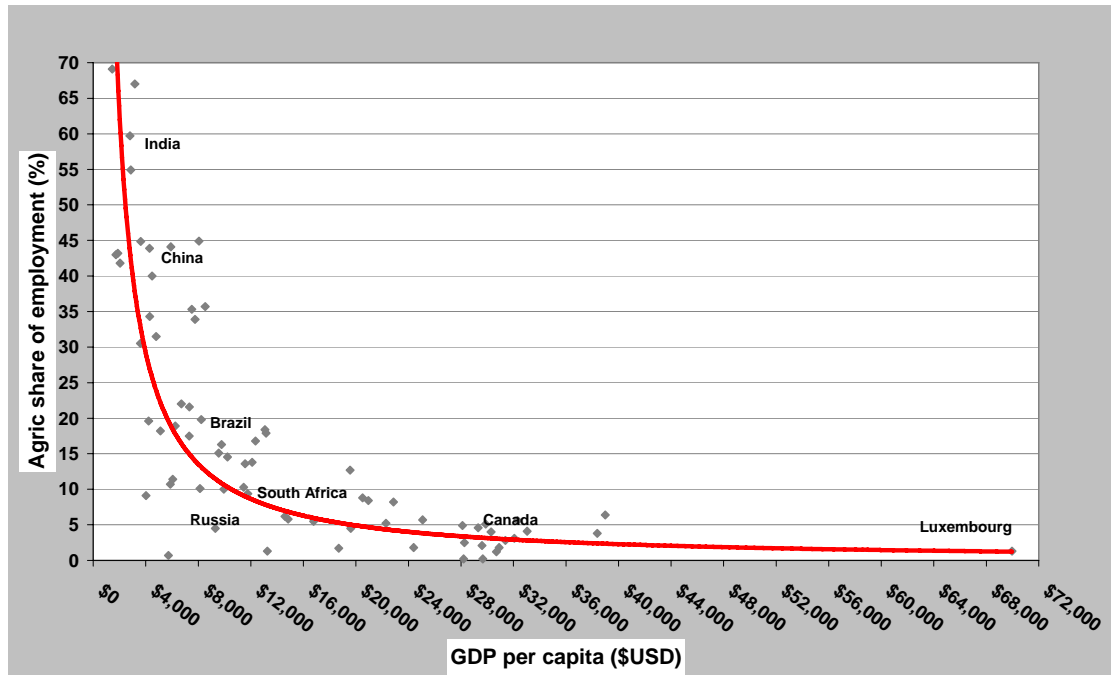
Interestingly, partly in response to agricultural policy reform, Gross Agricultural Output (GAO) of the BRICs economies has increased since 2000 (see Figure 1.6), but not at the same rate of growth relative to the overall economy (OECD, 2007), although Brazil and China stand out as having achieved steady annual gains in agricultural output. Some notable production and trade developments within the BRICs economies are that:

² The G7 block refers to the group of the seven most industrialized nations in the world (the United States, Japan, Germany, United Kingdom, France, Italy and Canada) whose finance ministers meet on an annual basis to discuss and consider shared global economic policies. The G8 is a meeting of G7 heads of government plus Russia. For the purpose of analysis, Goldman Sachs drops Canada from its assessment, hence, the G6 reference. There is no 'G6' block of finance ministers or government leaders.

³ The reported PSEs are for the year 2005; 2002 for India; and 2004 for China.

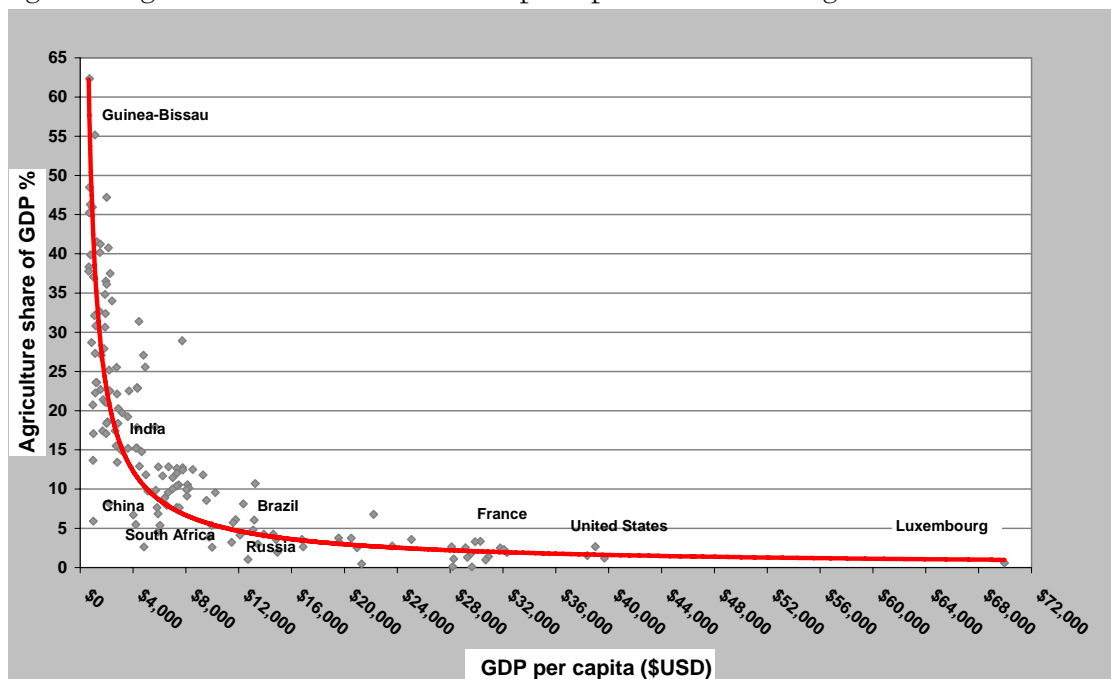
- Brazil is the world's fourth largest exporter of agricultural commodities and its exports of sugar, poultry and oilseeds dominate world markets. Brazil is also a major exporter of sugar-based ethanol;
- Russia is the world's fifth largest exporter of grains, but the world's largest overall importer of agricultural commodities—importing much of its meat and vegetables;
- India is the world's second largest exporter of cotton; and
- China is a major importer of cotton for its textile industry.

Figure 1.1 Agriculture's Share of Total Employment/GDP per capita, 2003-05 Average.



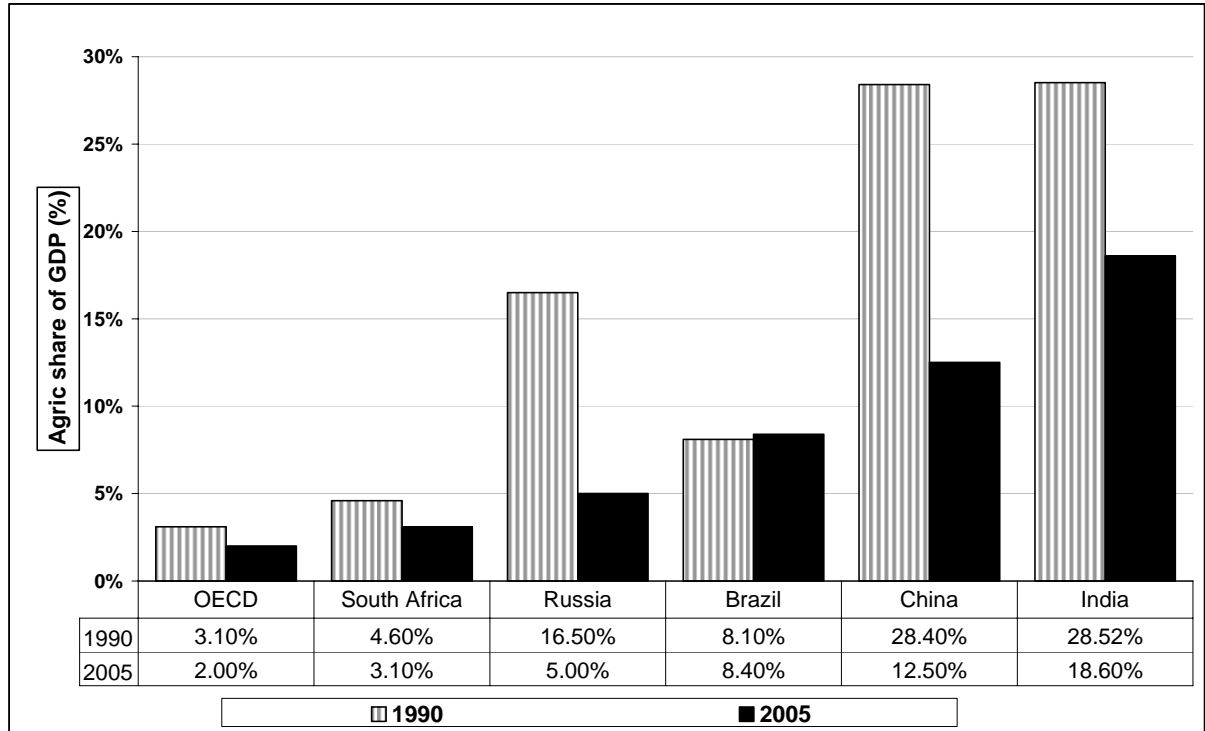
Source: OECD, 2007: 17 based on World Bank, World Bank Development Indicators, 2006
<http://ocde.p4.siteinternet.com/publications/doifiles/512007031PIG1.xls>

Figure 1.2 Agriculture's Share of GDP/GDO per capita, 2003-05 Average.



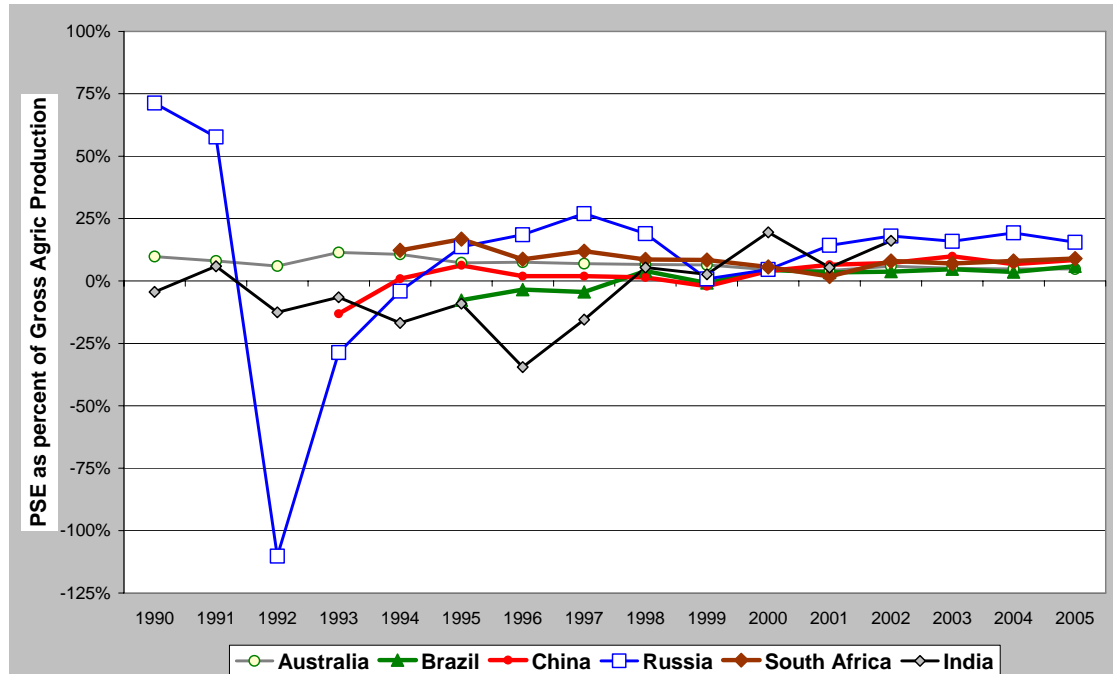
Source: OECD, 2007: 17 is based on World Bank, World Bank Development Indicators, 2006

Figure 1.3: Share of Agriculture in GDP



Source: OECD, 2007: 18, adapted from World Bank, World Bank Development Indicators, 2006.
<http://ocde.p4.siteinternet.com/publications/doifiles/512007031PIG8.xls>

Figure 1.4: Percent Value of Producer Support (1990-2005)



Sources: OECD data at Swivel: http://www.swivel.com/data_sets/spreadsheet/1005177 and Orden D, et al (2007) "Agricultural Producer Support Estimates for Developing Countries - Measurement Issues and Evidence from India, Indonesia, China, and Vietnam".

Figure 1.5: Percent Value of Producer Support (1999-2005)

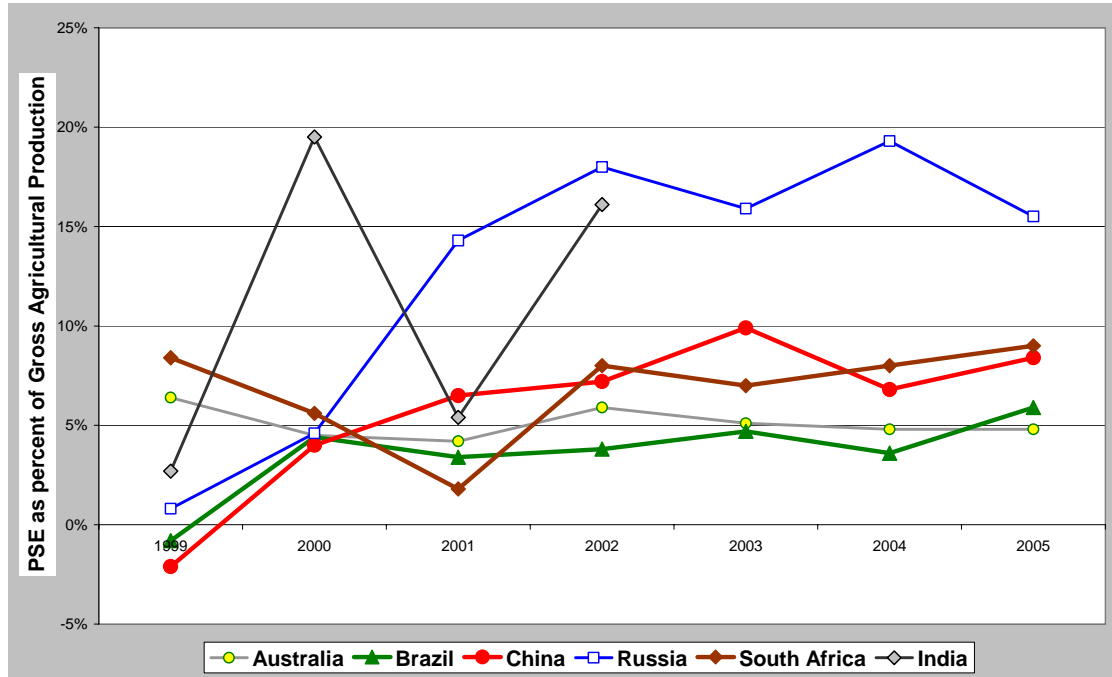
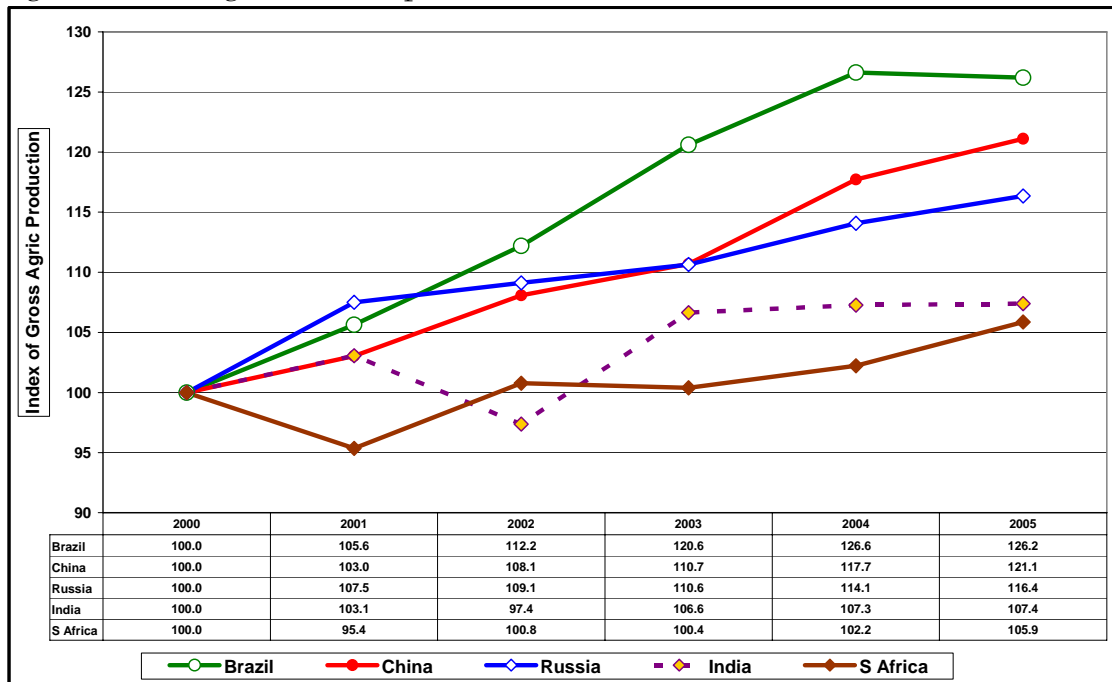


Figure 1.6: Gross Agricultural Output, Index 2000 = 100



Source: OECD, 2007: 19 adapted from OECD Secretariat, 2006; FOA, FOASTAT database, 2006
<http://ocde.p4.siteinternet.com/publications/doifiles/512007031PIG9.xls>

4. Policy Reform Outcomes in the BRICs Economies

Agricultural policy reform in BRICS countries has origins in the 1978 'open door' policy in China, the creation of the Russian Federation in 1991, the emergence of black majority rule in South Africa in 1994, and the 1994 currency plan to address hyperinflation in Brazil.

Brazil

In the early 1990s, Brazilian agricultural policy focussed on import substitution for consumer goods and food products requiring high tariffs on imported goods, often exceeding 100 percent. Those policy settings encouraged various manufacturing industries at the expense of reduced competitiveness of other firms including agriculture. It also led to severe inflation and low rates of investment (Barros, 2008).

The nature of agriculture was therefore heavily influenced by self sufficiency policy, supported by regulated commodity prices. Only orange juice, sugar and coffee prices were unregulated (OECD, 2005a). A hyperinflation crisis in the early 1990s was brought under control by a new 'currency plan' and the elimination of high tariff and import substitution policies.

The pre 1990 trade policy of Brazil embodied a range of trade control measures in support of the self-sufficiency which created significant resource use distortions in agriculture and isolated the sector from international markets. These measures, including import tariffs, import quotas, export licensing and quotas, were removed between 1987 and 1995 and trade policy re-oriented toward a liberal regime. Important also was the removal of restrictions on foreign investment in the food processing sector. Brazil then became a significant exporter in world markets and a proponent of free trade.

Producer support subsequently collapsed with price support increasing to 6.5 percent in 1998 before declining. Brazil now has the second lowest overall level of publicly funded producer support in the world at 3 percent, behind only New Zealand at 2 percent.

In recent years, the most significant feature of Brazilian trade policy has been its leading role in WTO negotiations to achieve free trade where it has argued against the subsidy regimes of the European Union and North America (OECD, 2005c).

Devaluation of the Real had a profound impact in conjunction with trade liberalisation with agricultural production increasing from 7 percent of GDP in 1997 to 10 percent by 2004. Agricultural sector employment declined slightly from around 25 percent of total employment in 1997 to just above 20 percent in 2005 reflecting major improvements in agricultural productivity.

Soybean production increased from about 26 million tonnes in 1995 to about 51 million tonnes in 2005, while sugar cane production increased from 30 million tonnes to 42 million tonnes over the same period.

Government policy makers no doubt understood the link between closed economies, inflation and investment and hence the need to embark on fundamental policy reform towards an open economy. The focus on reducing tariffs and subsidies and on trade liberalisation through the Mercosur common market provided clear objectives for policy reform.

The extent to which reform was forced upon the economy and the extent to which policy processes were established to maintain the impetus of microeconomic reform, particularly in relation to agricultural policy, seems to be an issue, and one common to many developing economies.

Given that programs of concessional farm finance are maintained potentially indicates an absence of close scrutiny of program objectives and a lack of transparency in assessing the efficiency of policy mechanisms. Concessional finance can, for example, be difficult from a market failure perspective to justify where there is well functioning credit markets, and the mechanism can be associated with various unforeseen societal costs such as impeded farm sector and economy-wide adjustment, as well various environmental impacts associated with overuse of natural resources.

Competition Policy Developments

The evolution of Brazilian competition law⁴ over several decades has been instrumental in transforming Brazil from mostly state owned enterprises with substantial government intervention into a fully functioning market economy that generates economic growth and sustainability for the developing South American region (Silvia, 2007, p1).

The changes made in the 1990s with new legislation occurred alongside significant trade liberalisation in which import tariffs declined from over 50 percent to around 13 percent. During this period, a number of important sectors of the economy were privatised and the stabilisation plan was introduced to address high inflation which had hampered development since the late 1970s. The Brazilian privatisation programme started in the 1980s and gained momentum after 1991 when major state companies were transferred to the private sector (OECD, 2005c).

A competition law appears to have been first enacted in 1962 creating the Administrative Council for Economic Defence (Conselho Administrativo de Defesa Economica of CADE), but initially the Council had little impact due to its authority extending to only a few private firms. In 1988 a new constitution established competition as a key feature of the 'economic order'. A privatisation program was launched, barriers to international trade were reduced and CADE became more active.

The modern era of competition policy in Brazil commenced in 1994 when CADE was reconfigured as an independent agency, and certain aspects of enforcement were vested in two other agencies: the Secretariat of Economic Law in the Ministry of Justice and the Secretariat for Economic Monitoring in the Ministry of Finance.

Brazil's competition law 'On the Prevention and Repression of Violations against the Economic Order' of June 11, 1994 identified the following four offences:

- to limit, restrain or in any way injure open competition or free enterprise;
- to control a relevant market of a certain product or service;
- to increase profits on a discretionary basis; and
- to abuse one's market control.

Brazil's competition law is now more generally referred to as having established the Brazilian Competition Policy System (BCPS) which brings together various government agencies for the purpose of overseeing legislation compliance. The BCPS regulates merger control, competitive behaviour among Brazilian firms, antitrust issues and economic stability within regulation.

The OECD has reviewed the activities of the BCPS since the introduction of Competition Law in 1994, both in 2000 and again in 2005 (OECD, 2005b). It noted that despite serious handicaps the BCPS has made significant gain in fostering sound competition policy in Brazil.

⁴ 'On the Prevention and Repression of Violations against the Economic Order', Law No 8.884.

Russia

Prior to the break up of the Soviet Union in 1991, large scale production of grains, meat, sugar and cotton were carried out on collective farms using highly subsidised heavy machinery and other inputs. Agricultural policy aimed to deliver high levels of self-sufficiency in food and raw materials for industry (e.g. cotton) and to produce exportable surpluses in exchange for manufactured products from the satellite states of Eastern Europe (World Bank, 2002). Generally, commodity prices were regulated and direct payments and input subsidies were provided in an effort to maintain farm profitability.

Policy reform has been characterised by a series of market based initiatives including privatisation, reductions in producer support and currency devaluation. Subsidies equivalent to 80 percent of the gross value of agricultural production were removed which previously focussed on increasing livestock numbers and meat production and encouraging imported feed grains to address shortfalls in local production. Once these subsidies were removed, cattle numbers declined from over 20.1 million in 1992 to 10.3 million in 2006, with Russia becoming a major meat importer increasing from 89,640 tonnes in 1992 to 669,817 tonnes in 2006.

Agriculture's share of GDP subsequently declined from 16.4 percent in 1990 to 6 percent in 2000 and 6 percent again in 2005. Agricultural employment changed from 14.7 percent of the labour force in 1995 to 10.8 percent in 2007. This decline in farm labour coincides with a period when Russia became a net importer of agricultural products, thereby improving economy-wide productivity.

Despite these changes, inputs such as fertiliser, credit and fuel remain subsidised with continuing rationales such as compensation to producers for disparities between input and output prices. In 1995, pressure from the farm lobby resulted in subsidised loans being replaced with a barter based 'commodity credit' system where input suppliers provide inputs like fertilizer and fuel directly to farmers at no cost, government assumes the debt, and farmers are then required to provide certain harvested products, particularly grains, to the Federal Food Corporation.

Frequent changes to tariff structures during the reform period suggest agricultural policy objectives may not have always been clear. For example, tariffs continue to represent the greater part of the value of subsidies to agriculture affording high levels of protection to the cattle and sugar beet industries. The tariff on in-quota beef is currently 15 percent (with a quota of 450,000 tonnes having applied since 2005) and 40 percent on over-quota beef. Nevertheless, beef imports have continued to increase rapidly with 50,000 tonnes of over-quota beef imported in 2005 and 200,000 tonnes imported in 2006 suggesting that the tariff is may be nothing more than a tax on consumers.

The privatization of land brought about significant change in the structure of land holdings, however, legal issues remain regarding land ownership, including the right to buy and sell land. Banks do not consider agricultural land as collateral and there is little or no mortgage market which represents an important impediment to private investment and sectoral adjustment.

A significant anomaly is corporate farms continuing to enjoy protection from bankruptcy through a government system of 'loan forgiveness' which must reduce incentives for efficient farming. Farms obtaining most benefits from the program appear to be strategically important ones in relation to current food production. The practice of loan forgiveness is being replaced with subsidised interest rates on loans for agricultural purposes. The World Bank thus notes that at the regional level there are significant price and trade policy distortions and 'a patchwork of inconsistent policies that have fragmented the Russian national market' (World Bank, 2002).

Competition Policy Developments

The first Russian competition authority was created in 1990, that being the 'State Committee for Antimonopoly Policy and the Support of New Economic Structures' and the law 'On Competition and the Restriction of Monopolistic Activity on Goods Markets' was passed in 1991.

In 1998 Federal Government program provided for de-monopolisation initiatives through the 'promotion of new enterprise creation, particularly in highly concentrated markets, reduction and elimination of market entry barriers, reorganization of enterprises, creation of the appropriate financial and organizational infrastructure and promotion of competition advocacy' (Yacheistova, 2000). This program was developed under an initiative titled *Demonopolization of the Economy and Promotion of Competition* and was complemented by programs of market de-monopolization at regional level, as well as by ministries of different branches of industry.

The main purpose of the latter programs was the decentralization of production and the creation of favourable conditions for the development of competition. As part of this plan, legislation was introduced prohibiting interference in competition by government and administrative bodies.

More recently a new 'monopolist' sentiment on export trade appears to have emerged. For example, the Agency for the Regulation of Food Prices (ARFP), a portfolio of the Minister for Agriculture, which until recently served as the state agent in grain purchases, is being reorganised as a 'para-state' grain trading corporation that will operate in competition with existing private companies.

The Federation will transfer its grain stocks held in private trading companies into the new agency. While it has been reported that the ARFP will operate in competition with other operators, there is a view that the Agency may well assume monopoly powers over exports with 40 to 50 percent of all grain exports going through the ARFP by 2011.

In addition to initiatives to restrict monopolies, the Russian Federation initiated a privatisation program in mid-1992 as part of its transition to a market economy. The program combined the two independent, but closely interrelated, processes: the issuance of shares in medium and large state enterprises for sale to citizens and private legal entities; and the privatisation of small enterprises, mainly in the service sector, by the issue of privatisation vouchers to citizens as a share in state property.

In regard to Russian participation in the World Trade Organisation (WTO), a Federal Law 'On Technical Regulating' came into force 1 July 2003.⁵ It provides guidance on how Russian legislation should be reviewed and amended in order to comply with the WTO Agreement on Technical Barriers, and to bring Russia's food and agriculture policy into WTO compliance.

On November 16 2004, the Russian Federation published a list of 74 laws and regulations that would be amended within two years according to provisions in the law 'On Technical Regulating'. This initiative was designed to speed up the process of bringing Russian legislation into compliance with WTO requirements and to promote Russia's accession to that trade body.

In 2006, the Russian Government set up the 'National Priority Project' for the 'Development of the Agro-Industrial Complex'.⁶ There are three sub-projects under this law (OECD, 2007):

⁵ Law #184-FZ.

⁶ The project was set up under a new Federal Law on Development of Agriculture.

- the Accelerated Development of the Livestock Sector;
- Support of Smallholder Farms; and
- Provision of Accessible Housing for Young Specialists in Rural Areas.

The objective of the accelerated development of livestock industries project is to increase meat and milk production by 7 percent and 4.5 percent, respectively. This involves preferential investment loans (e.g. interest rate subsidy) for construction and modernisation of livestock facilities, subsidised leasing costs for pedigree animals and equipment, and the elimination of import duties on livestock equipment for which no similar product is produced domestically.

Second, the support to smallholder farms will be provided to raise production by 6 percent. This involves subsidised bank loans for individual (peasant) farms and household producers aimed at improving the development of marketing, supply and credit cooperatives, and a pilot project for developing a land mortgage system.

The housing assistance project will be provided to young specialists in rural areas to attract qualified labour and their families.

While the removal of subsidies was the most significant factor in the decline in agricultural production, uneconomic agricultural operators remain. Osborne and Trueblood (2002) make the case that incomplete reform is responsible for a decline in agricultural 'productivity'. They note that 'agriculture-specific and economy-wide institutional reforms have been only partially implemented' because four specific reforms have yet to occur: (1) allowing insolvent farms to go bankrupt; (2) liberalising land transactions; (3) creating commercial law that protects property rights; and (4) providing more legislative stability.

They argue that there is no incentive for farmers to produce efficiently if they can roll over their debt to avoid bankruptcy; that prohibitions on using land as collateral limits farm's liquidity and agricultural credit market development; that long term investment and the care of durable assets is undermined by the threat of the expropriation of profits; and that commercial law is inefficient because legislation is constantly changing.

An OECD study on regulatory reform (OECD, 2005d) also recommended further initiatives to improve the business environment. Importantly from a regulatory best-practice perspective they highlighted the need for Russian officials to pursue regular monitoring of the impact of regulatory measures on the business environment and to increase transparency and timely dissemination of information on the regulatory framework that currently applies.

India

In the 1970's, India's agricultural policy was based on policies of food security and price stability. Policy settings included controls on market pricing, storage, transport, and quantitative restrictions on trade. Public investment in the agriculture sector, spurred by 'The Green Revolution' of the 1960s, grew by over 4 percent per annum in the 1980s.

This rate, however, was not sustainable. A slowdown in public investment, low yield growth, and environmental problems including declining water tables led to poorer agricultural performance in the 1990s. During this period, domestic economic reforms and the WTO Agreement on Agriculture constituted two important policy changes. The impacts of the economic reforms were indirect in so far as they raised per capita incomes which in turn led to changes in food consumption patterns. The WTO Agreement brought about some tariff reforms (i.e. liberalising agricultural trade), including the removal of quantitative restrictions on imports in 2001.

India's focus on liberalising agricultural trade is partially set out in the Tenth Five Year Plan (2002-07) in which the following four strategies to raise agricultural output are noted:

- increasing crop intensity through multi-cropping in the same season;
- adopting modern technologies;
- increasing productivity; and
- diversifying production from low value crops to high-value crops and livestock.

The policy intent of these strategies is nevertheless undermined by a range of government interventions. The government, for example, provides 'Minimum Support Prices' (MSP) which can be further supplemented by State governments. The MSP policy is mainly used to cover rice, wheat and sugar cane, and though originally intended to raise agricultural productivity and output by promoting the use of modern inputs, intervention is now seen as an unproductive support measure for farmers (OECD, 2007). Other interventions include a crop insurance subsidy for small farmers on their premium payments, and direction to commercial and co-operative banks to increase small farmer credit by 30 percent and the number of borrowers to 5 million in 2005-6, even though an increasing number of indebted farmers have faced crop failures. In practice this means providing credit at interest rates below the market rate.

A range of input subsidies are also provided and include subsidising fertilisers, irrigation water, and electricity used for irrigation and other agricultural purposes. Subsidies may also apply to seeds, herbicides and pesticides. They have been considered necessary to increase the use of a given input, but overtime have increased and become a major burden on central and state budgets. Subsidies may also lead to indiscriminate application of herbicides and pesticides and cause water quality problems.

On balance, India's production of fruit, vegetables, rice, wheat and other grains has increased over the 1975 to 2007 period, with rice production significantly higher than other crops. Agricultural exports are higher than agricultural imports through this entire period.

With 60 percent of the workforce engaged in agricultural work, the relatively lower rate of productivity compared to other developing countries is generally understood. However, price stability and food security policies hamper reform initiatives. Excessive regulations thus dampen economic development by suppressing market competition.

Competition Policy Developments

Reform initiatives were largely piecemeal in the 1990s. For example, in 1994, agriculture export policies were liberalised (i.e. the removal of export quotas and minimum export prices). It is only since 2000, however, that a number of reforms have been initiated to facilitate greater integration of the agricultural sector with the global market. Reforms include removing quantitative restrictions on imports of agricultural commodities, reducing the average import tariffs, the emergence of private markets, improved commodity supply chains and super markets, and futures trading.

Central and state government agencies still have the flexibility to impose restrictions on competition, so difficulties enforcing competition policy measures should not be underestimated. Market concentration and collusion among producers can also lead to asymmetric bargaining power and price fixing arrangements, respectively. Indian agricultural markets have performed inefficiently due to state intervention in prices, lack of entry of private business firms, particularly at the level of purchasing farm produce, movement restrictions, collusions and cartels formed by private transporters, and lack of effective regulation of retail sales.

Reforms in Indian agricultural markets need to be introduced with caution. A proper regulation and competition regimen needs to be put in place before liberalising agricultural markets in favour of major privatisation. Due diligence needs to be adopted lest undesirable anti-competitive behaviour may offset the likely gains. The reasons to account for slow growth in the agricultural sector include lack of quality inputs, poor public infrastructure and marketing facilities, and population pressure on agricultural land.

In terms of competition policy, India has an Agricultural Produce Market Regulation Act (APMRA) in which every regulated market has a market committee where farmers, traders, commission agents, local bodies and the state government are represented. Prices are fixed through an open auction in a transparent manner in front of an official of the auction committee. The main criticism of regulated markets is that they do not reduce the long chain of intermediaries between the farmer and the consumer, which adds to the costs of agricultural commodities to consumers on the one hand, and decreases farmer returns on the other.

China

By the late 1970s, central planning policies in agriculture were abandoned in favour of an 'open door' policy that was also a broader response to the economic depression affecting the country after the Cultural Revolution (1966-1976). The 'open door' policy committed China to adopting policies promoting foreign trade and economic investment. Reforms started in the late 1970s with the phasing out of collectivized agriculture and the adoption of a 'socialist' market economy (OECD, 2005c).

Policy reforms included land tenure reform which increased agricultural productivity by facilitating farm level adjustment and also involved the creation of township and village enterprises (TVEs) which have helped absorb excess farm labour and limited rural migration to urban centres.

As a result of the reforms producer support has fluctuated from around 3 percent through the 1990s, to 8 percent of gross farm receipts from 2001 to 2003, being just under one-fifth of the OECD average of 31 percent. The increase is attributable to the setting of minimum prices for selected grains, direct payments to grain producers and subsidies for higher quality grain, soybean seeds and selected machinery.

On the issue of tariff structures, Yao (2007) argues that China is quite liberalised. In 2002, China and India had applied tariffs of 15.3 percent and 36.9 percent respectively, compared to Brazil at 10.2 percent, the United States at 12.3 percent and the EU at 29.3 percent.

Producer assistance is therefore currently dominated by price support and input subsidies, which the OECD argues are among the least efficient and most trade-distorting ways of providing agricultural assistance (OECD, 2005e). Price support results in prices received being 5 percent higher than in world markets, and at least 20 percent higher for cotton, sugar and maize, with wheat prices being 10 percent lower (Huang et al., 2008).

State subsidies also distort competition. Yao (2007) points out that many medium and large State Owned Enterprises (SOEs) 'continue to receive generous state subsidies' while smaller SOEs have been privatised. For example, SOEs are eligible for 'easy loans' to enable them 'to survive competition from non-state actors as well as imports' (Yao, 2007). Price support provided to enable grain production targets to be met for self-sufficiency reasons require a protectionist policy for grain trade. Opening up the market to grain imports, for example from Australia or the United States, would undermine the price support program making it financially unfeasible. In addition, the banking sector is largely state owned and considered

inefficient. The non-performing loans ratio, for example, is high at 25–30 percent (OECD, 2005c).

Efforts to achieve higher agricultural production through the increased application of fertiliser, pesticides and mechanical inputs have led to severe problems of land degradation, desertification, soil erosion, water pollution and loss of biodiversity. At 280 kg per hectare, China's use of fertilisers is one of the highest in the world (OECD, 2005a) with the OECD highlighting the potentially significant damaging impacts on soil organic matter and water quality (e.g. nitrogen pollution).

Competition Policy Developments

China's competition policy framework continues to involve a top-down bureaucratic approach focused on compliance with WTO accession requirements and the implementation of their Anti-Monopoly Law. Extensive internal market reforms made during the period leading up to WTO accession, and which to some extent are on-going, are currently constrained by grain security and rural income policy objectives.

China's Anti-Monopoly Law came into force in 2008 prohibiting anti-competitive monopoly agreements and the misuse of market power and transactions that lead to a concentration of market share, merger control, and administrative monopolies (the anti-competitive effects of misuse of government power).

Competition within China's huge internal agricultural market is generally considered inefficient given the oversupply of labour and the fragmentation of wholesale and retail markets. Wholesale markets are a recent development having been usurped in the past by State Owned Enterprises (SOEs). WTO accession in 2001 led to additional policy and institutional reforms to improve the competitiveness of Chinese products in both domestic and foreign markets. This development was an extension of liberalisation trends established in the 1990s that included allowing market prices to prevail for most agricultural products and reducing controls on marketing channels. Since 2004, tobacco is the only product which remains under state monopoly control.

China's accession to the WTO on 11 December 2001 made its intentions on competition policy reforms clear. Morrison (2006) for example, noted that China's agreed to the following initiatives:

- reducing the average tariff for industrial goods and agriculture products to 8.9 and 15 percent, respectively, with most cuts made by 2004 and all cuts completed by 2010;
- limiting subsidies for agricultural production to 8.5 percent of the value of farm output and eliminating export subsidies on agricultural exports;
- granting full trade and distribution rights to foreign enterprises within three years of accession with exceptions (e.g. certain agricultural products, minerals, and fuels);
- providing non-discriminatory treatment to all WTO members with foreign firms in China treated no less favourably than Chinese firms for trade purposes;
- implementing the WTO's Trade-Related Aspects of Intellectual Property Rights (TRIP) Agreement upon accession;
- accepting a 12-year safeguard mechanism, available to other WTO members in cases where a surge in Chinese exports cause or threaten to cause market disruption to domestic producers; and
- fully opening the banking system to foreign financial institutions within five years. Joint ventures in insurance and telecommunication to be permitted (with various degrees of foreign ownership allowed).

Competition policy is influenced in part by the role of State Trading Enterprises (STEs) which have a high share of agro-food exports, for example 44 percent in 2003 (OECD, 2005a). COFCO (China National Cereals, Oils and Foodstuffs Import and Export Corporation) is one of the largest STEs in the world and following WTO accession state trading was permitted for rice, corn, soybeans, tea, cotton and silk.

China's grain security objective requires price support. Cost-effective grain production would require significant adjustment to larger and more mechanised farms, however, a more efficient outcome may be achieved through imports.

Apart from grain production, there is very limited direct government intervention in the production, pricing and marketing of agricultural products: 'Market forces have largely replaced government plans and targets' and agricultural productivity has increased in response (OECD, 2005a).

Rae (2008) concludes that the livestock revolution has had a tremendous impact on the domestic industry, but little impact on China's international trade. Increasing exports would require improvements in 'food safety, disease status, inspection systems, and other concerns of importers'.

Regarding exports, China is cost competitive in exports of labour-intensive horticultural products, and export potential may strengthen as sanitary and phytosanitary standards improve.

Yao (2007) points out that total expenditure on subsidies is much more affordable for rich, developed countries than for China, which has about 40 percent of its total employment in agriculture. In addition, farmers cannot exert the same amount of power on the political process as in OECD countries as a result of trade associations being required to be affiliated with a government agency, thereby reducing their independence and due to the large number of small holdings making it difficult to organise a persuasive lobby.

South Africa

During the 1950s and 60s, South Africa's economy grew at a steady rate, averaging 4 – 5 percent per annum. During the 1970s, however, growth declined, slowing further during the 1980s and early 90s. GDP per capita peaked in 1981 and did not increase further until the end of the apartheid system and the introduction of wide ranging economic reforms by the African National Congress (ANC) Government in 1994 (OECD, 2006). Since then, GDP growth has been consistently positive, being as high as 4.9 percent in 2005.

Livestock and livestock products have been the most significant category of agricultural production accounting for over 40 percent of output in recent years. Poultry meat, beef, milk and other dairy products are the largest contributors, followed by eggs, sheep meat, wool and mohair, and pork (OECD, 2006). Livestock products are mainly consumed domestically with wool being the only significant export commodity, earning around US\$200 million in 1990.

Field crops are the next most significant category with maize and sugar cane the two largest, followed by wheat and sunflower. South Africa has traditionally been a net exporter of maize and sugar and a net importer of wheat.

Horticulture crops are the third major production category with citrus fruits (mainly oranges), apples, grapes and vegetables being the major products. The horticultural sector has grown the fastest of all agricultural categories over recent years, increasing in value from 21 percent of total agricultural output in 1990 to 29 percent in 2004 (OECD, 2007).

Significantly, those commodities that have experienced the highest rates of growth, such as pig meat, poultry products and horticulture, are also those with the lowest levels of PSE. A further influencing factor, however, may be government efforts to encourage and assist the black majority play a greater role in agriculture, with many of these high-growth commodities able to be produced on small-scale farms.

South African agricultural policy reform began in the mid-1990s due to international pressure and democratisation that accompanied apartheid being replaced with black majority rule. Among the many policy challenges was the dualistic nature of the agricultural sector with some 45,000 highly developed and capital-intensive commercial farms run predominantly by white farmers accounting for 86 percent of agricultural land, while small subsistence farms run by black farmers account for the other 14 percent (OECD, 2006).

The agriculture sector was subject to a range of government interventions that provided producer support with price support being a significant component. Export marketing regulation was administered by a range of statutory commodity marketing boards, most of which operated single export desks.

Subsequent policy reform therefore had the two main drivers of improving access to and participation in the agricultural economy by the formerly repressed black majority and the opening up of international trade and access to markets for South African products.

Tax concessions favouring the agriculture sector were abolished and budgetary expenditures to the sector reduced. A few minor input subsidies have remained such as a diesel fuel rebate.

Around 96 percent of remaining producer support is provided by way of border protection and tariffs which have the effect of maintaining domestic market prices for selected commodities higher than world markets. Support levels are variable, being highest for sugar with domestic prices being 46 percent higher than world prices in 2003 (Chitiga et al, 2008). Other commodities subject to price support, but at much lower levels, include wheat, maize, milk, meat and fruit.

Overall, the PSE has fallen from an average of 15 percent in 1995 to around 8 percent in 2004. Interestingly, the policy objectives used to justify such measures include assisting economic growth, increasing employment and supporting the emergence of small and medium-sized farms.

Input subsidies are now limited to specific grants for viable projects under the *Comprehensive Agricultural Support Program* and to subsidised interest rates under the *Agricultural Finance Schemes*. The Land Bank, a successor to the Agricultural Credit Board, operates on a commercial basis by lending money raised on financial markets to the agricultural sector. Its exemption from paying tax and dividends enables it to set its interest rates slightly lower than other commercial providers. In addition, under the Micro-Agricultural Finance Scheme, small loans are made to targeted beneficiaries at slightly reduced interest rates.

Certain programs are also in place to address water, land use and biodiversity issues including policies on sustainable and equitable access to water as well as resource conservation programs, awareness programs and local community capacity building programs.

Competition Policy Developments

Following the election of the ANC Government in 1994, a new competition policy framework was developed with the release of the 'Proposed Guidelines for Competition Policy' in a document entitled 'A Framework for Competition, Competitiveness and Development'.

Following a period of consultation with stakeholders, this resulted in the passage of the *Competition Act 1998*.

The stated purpose of the Act is to promote and maintain competition in South Africa in order to achieve the following objectives:

- to promote the efficiency, adaptability and development of the economy;
- to provide consumers with competitive prices and product choices;
- to promote employment and advance the social and economic welfare of South Africans;
- to expand opportunities for South African participation in world markets and recognise the role of foreign competition in the Republic;
- to ensure that small and medium-sized enterprises have an equitable opportunity to participate in the economy; and
- to promote a greater spread of ownership, in particular to increase the ownership stakes of historically disadvantaged persons.

The introduction of the *Competition Act 1998* has variously impacted on agricultural assistance. Field crop prices have adjusted down toward world market levels encouraging farmers to adopt more efficient and less input intensive production systems such as minimum till (requiring less fertiliser and fuel) and movement of production from marginal areas. Prices now better reflect transport cost and seasonal differentials.

Livestock production has also shifted from marginal areas and the removal of highly prescriptive processing and selling controls has enabled meat to be slaughtered closer to areas of demand making it more readily available to consumers. While deregulation resulted in sharp declines for some horticultural products and some hardship was felt by producers in the short term (ie. the citrus industry), conditions have significantly improved over time. Total fruit exports have increased, varieties and new plantings, as well as quality standards are more responsive to demand, a wider range of markets is being supplied and new technologies are more widely used enabling an extension of the production and marketing season.

Preliminary Observations

The agricultural sectors of the BRICs economies have generally responded positively to policy reform efforts to date with clear trends in most countries toward production specialisation and trade. Nevertheless, continuing sensitivities around farm incomes and food security, particularly in countries where agriculture accounts for a significant proportion of the population, present significant challenges to further agricultural policy reform.

The outcomes from reforms appear mixed in terms of their consistency with accepted microeconomic reform principles and outcomes

- emphasis has often been placed on privatisation initiatives, rather than on broader regulatory reform;
- direct regulation in agriculture (industrial policy) does appear to have reduced government incentives to progress competition law initiatives in the agri-food chain. Similarly, direct regulation in agriculture appears likely to be reducing government incentives to consider alternative approaches to poverty and the maintenance of socially acceptable levels of farm family welfare; and
- strong growth of the non-agricultural sectors in most developing countries may also be having the effect of making direct regulation and transfer payments more 'affordable' and less of a priority for reform.

Of some concern is that reform efforts to date appear largely to represent a set of responses to certain economic crises and WTO pressures, and for the most part, have failed to provide a legacy of ongoing, internally-driven, policy reform processes.

While WTO requirements appear to have played a significant role in the establishment of reform priorities, the extent to which they have otherwise diverted attention from the development of broader, internally driven, capacity building in efficient policy settings may be an issue.

Agricultural policy objectives in many developing countries continue to reflect traditional industrial policy approaches with general references to outcomes such as rural development and food security. The generality of such objectives provides significant discretion for governments to retain an array of regulatory approaches.

It follows that internal processes are required which enable these objectives to be 'unpacked' in terms of the specific market failure issues involved and the respective roles of the government and private sectors. Processes are required that make more transparent the unintended consequences of regulation throughout the agri-food chain such as:

- limiting competition and impeding price signals and income gains that might flow to farmers from border reforms;
- the extent to which they detracting from, rather than enhance, international food security;
- the extent to which they diminish the productive capacity and employment potential of agriculture by distorting production away from that which represents a country's true comparative advantage and in so doing distort public and private investment decisions in areas like infrastructure provision and R&D; and
- their longer term impacts on the environmental sustainability of agriculture and its associated productivity and employment capacity.

On a positive note, the prognosis suggests the availability of significant growth and productivity gains to those developing countries who are early adopters of appropriate internal processes of policy reform.

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