

FAO TRADE POLICY TECHNICAL NOTES

on issues related to the WTO negotiations on agriculture

No. 14 Towards appropriate agricultural trade policy for low income developing countries¹

CONTENTS

	00///2///0	
1	Unresolved questions and contradictions	1
2	Supporting agriculture as an engine of growth in the context of underdeveloped markets	2
3	Components of agricultural trade strategies – determining the appropriate balance between agricultural export expansion and import competition	4
4	Evidence casting doubt on the primacy of agricultural trade liberalization at earlier stages of agricultural development	7
5	What policy space is required to allow agricultural productivity improvements to be made?	10
6	Appropriate trade policies for different stages of development	12
R	eferences	14

1 Unresolved questions and contradictions²

Many developing countries are currently under pressure to reduce their trade barriers to the entry of agricultural products. This pressure comes both as a result of ongoing trade negotiations (multilateral, plurilateral or bilateral) and due to policy advice from donors and international organizations based on the assumption that a liberal agricultural trade policy is necessary to allow growth through trade expansion.

Although developing countries are very heterogeneous both in terms of their economic standing and in terms of what is asked of them in trade negotiations, these sources of pressure have tended to become conflated into a common consensus that further agricultural trade liberalization is appropriate for all countries, regardless of their level of development or of their trading partners' trade policy stance.

Proponents of more liberal trade policies argue that with greater openness to trade, countries' economic sectors would be exposed to greater competitive pressures, promoting efficiency gains as resources freed-up from sectors that contract in the face of increased competition (i.e. from lower priced imports) are redeployed or invested in sectors where they would receive a higher return. This argument has been supported by an array of global trade simulation modelling

However, debates relating to trade policy reform are also increasingly characterized by calls for flexibilities to allow developing countries to retain some level of protection for some agricultural products. Such calls reflect concerns that some countries may be opening their agriculture sectors to international competition too extensively and too quickly and that this will hinder rather than enhance their growth prospects, and in turn their ability to meet poverty reduction and food security targets.⁵

This seeming contradiction between, on the one hand, the mounting "evidence" that fuller

¹ This technical note draws upon a subset of presented papers and related discussion at an FAO workshop on WTO Rules for Agriculture Compatible with Development held at FAO headquarters on 2 and 3 February 2006: Morrison and Sarris; Morrissey; Matthews; Nash; Osakwe; Foster and Valdés.

approaches, many of which have generated substantial empirical "evidence" that countries gain from reducing their barriers to trade.³ Even in those studies where liberalization is found to result in losses, the fact that these losses are found to be relatively small as a proportion of existing levels of indicators such as GDP, has still been used to make the case for a more liberal trade policy.⁴

² Section 1 draws on Morrison and Sarris (2006).

³ See FAO 2005a for a review of contemporary model results.

⁴ Ardnt (2006) for example, finding that welfare changes as a result of trade liberalization in Mozambique are likely to be negative but small, argues that the implications of trade liberalization are therefore small and that "presuming that a more liberal trading regime will positively influence growth, an opportunity exists to put in place such a regime without imposing significant adjustment costs".

⁵ For example, the acceptance that countries should have recourse to provisions such as Special Products (SP) and a Special Safeguard Mechanism (SSM) is an acknowledgement that countries will not fully liberalize their agricultural trade policies in the current WTO round.

trade liberalization is the optimal strategy for developing countries to adopt, and on the other hand the calls for flexibility in the implementation of reforms to trade policies, could be dismissed as being a result of the mercantilist stance taken by many trade negotiators in reflecting their countries' "interests", or perhaps as simply reflecting a debate regarding the trade offs between efficiency and non-efficiency objectives (such as those related to self sufficiency objectives).

Whilst such dismissals may well be valid in considering the case of today's industrialized countries, or of developing countries with more competitive agricultural export sectors, or even of poorer countries where agriculture is not a significant component of national economic activity, there are important efficiency arguments for questioning whether further liberalization of trade in some agricultural products by some poorer developing countries should be a key component of an optimal approach to trade policy reform.

The basis for such efficiency arguments derives from (a) observations of past experience of the trade policy strategies adopted by now industrialized or emerging market economies when at earlier stages of development, and (b) insights from the agricultural development literature on the role that agriculture can play in economic growth and on the assistance that it might require in fulfilling that role.

The orthodox view supporting further liberalization tends to be based on analytical studies of reforms to agricultural trade policies which either fail to recognize, or which are unable to incorporate, insights from the agricultural development literature. As an example, it is well established in the agricultural development literature that agricultural producers in many developing countries face widespread market failures which can significantly reduce their ability to generate investible surpluses from agricultural production and then to use these surpluses to facilitate the use of their factor endowments in higher value activities. Both steps are requisite for the resource reallocations that drive the efficiency gains generating the positive results from most global trade simulation models⁶, but which are simply assumed to occur unassisted in such analyses.

The process of agricultural commercialization and the associated diversification into higher value added activities in cases of successful agriculture led growth has been observed to require significant government intervention at early stages of development to alleviate the

⁶ See FAO (2005) FAO Trade Policy Technical Note No.13 for further discussion of this issue http://www.fao.org/trade/policy_en.asp.

pervasive nature of market failures as reflected in weak input and output markets, lack of seasonal financing, and limited risk management instruments (see for example Dorward *et al.* 2004). Similarly, at higher levels of processing, there may also be arguments for providing some level of support while nascent agro-processing sectors develop. For example, interventions to support investments along the supply chain are likely to be needed to allow the formation of reliable local and regional markets.

However, whilst such literature suggests that government intervention is likely to be critical to the development of poorer economies, there is still an unresolved question as to whether a less than liberal trade policy is a component part of such intervention.

This technical note seeks to shed light on this question by reviewing a number of related aspects that have tended to cloud the debate as to the appropriate agricultural trade policy strategy for countries at different stages of development and with different potential roles for their agriculture sectors. It takes as an initial premise, the contention that trade <u>expansion</u> is critical to further growth and poverty reduction, but that trade policy <u>liberalization</u> is not necessarily a key component of a pro-poor trade policy strategy.

Section 2 begins by briefly outlining the potential role that agriculture can play as an engine of growth, and the importance of recognizing both the difficulty that it faces in fulfilling that role in the context of widespread market failures, and the different policy interventions that will be required to support this role as the sector develops. This is used as a backdrop for moderating the debate surrounding export expansion and import substitution as different components of an appropriate agricultural trade strategy in Section 3. Section 4 comments upon the evidence used to underpin the arguments that all countries will gain from further agricultural trade liberalization, looking first at the experience of past use of trade policy in the now industrialized countries and then at ex post experience of policy reform and results of ex ante analyses of further trade liberalization by developing countries. Section 5 then introduces a number of issues under debate in determining what "policy space" different developing countries may require. Section 6 attempts to draw conclusions as to some of the key parameters that might inform the identification of appropriate trade strategies.

2 Supporting agriculture as an engine of growth in the context of underdeveloped markets

A dynamic agricultural sector can make significant contributions to broader development, but the relative importance and nature of these contributions varies in different country situations and as the importance of the agricultural sector

declines within the economy as a whole. Where the agricultural sector accounts for a large proportion of GDP and an even larger proportion of employment, increasing agricultural productivity is essential first for capital investment in agriculture itself and then for the steady release of surplus capital and labour to other sectors of the economy (Dorward and Morrison, 2000).

As development proceeds, the agricultural sector becomes less important in its share of the economy and, later, in its share of employment. Its role as an engine of growth for the overall economy then becomes less important, but it still retains importance as a major employer. As DFID (2005) argue, agricultural development strategies must reflect the fact that agriculture's role in economic growth and poverty reduction changes as countries develop.

Given that increasing agricultural productivity is most critical in the earlier stages of development, DFID suggests that "it is justifiable for the government to give a clear priority to agriculture when investing public money and to play a proactive role in stimulating and facilitating agricultural development (particularly overcoming market failure) so that the country can get on the pathway to more diversified and faster economic growth".

There is significant evidence of the high degree of correspondence between patterns of agricultural growth and patterns of poverty reduction across developing country regions. There is strong econometric evidence for the povertyreducing impact of agricultural growth (Thirtle et al. 2001). There is also a well-developed theoretical literature explaining why agricultural growth can have disproportionately positive impacts. For example, Johnston and Mellor (1961) demonstrated long ago the important contribution that agriculture can make, perhaps most importantly to stimulating increased domestic demand, via increased rural incomes, that in turn can support growth in other sectors. In practice also, there are few obvious alternatives to agriculture as drivers of broadly-based growth in countries still in the early stages of development.

The characteristics of agricultural development which will lead to a greater positive impact on broader economic development generally involve it having substantial linkages with the local economy. Such "linkage rich" agricultural development will generally be encouraged by labour intensive, rather than capital and/or specialist knowledge intensive methods of production, by more equitable distribution of

⁷ See DFID 2005 for further review of these issues.
⁸ Backward linkages use locally provided inputs or services; forward linkages produce products that are processed locally; and consumption linkages generate income that is spent on goods and services with a large local content.

income, by local consumption patterns favouring local rather than imported goods and services, and by links to wider produce markets that can absorb continuing production increases without large falls in produce prices.

Dorward and Morrison summarize the common elements that appear to have been critical to achieving above average agricultural growth and which policy makers need to promote in economies seeking dynamic agricultural growth. In addition to the now widespread recommendations that success requires stable macroeconomic and sectoral policies. technological opportunities, access to seasonal finance, and improved physical infrastructure, they also highlight the requirement for two aspects of institutional development: (i) a conducive institutional environment, where political, legal and economic institutions play a major supportive role, and, perhaps more importantly, (ii) context specific institutional arrangements. On the latter, they note that sectoral growth has been associated with the development of particular institutional arrangements for overcoming market constraints for the major crops, for example through development of specific contractual arrangements between farmers and traders.

A key finding of the Dorward and Morrison study is that countries that have achieved periods of sustained agricultural productivity growth have tended to lift the constraints to continued growth in a seguential manner, while at the same time intervening to secure the necessary favourable environment for the transformation of their agriculture sectors, rather than adopting a liberal policy stance from the start. Often, the story of success can be depicted as a series of measures which have promoted increases in production. During phases of border protection, for example, instances of induced innovation have been observed, with productivity growth rates exceeding those that might have been achieved in more liberal environments.

When the increase in production associated with a reform has reached a plateau, another reform (or set of reforms) has generally been required to release further potential. For example, early production increases have often been associated with the use of surplus labour. However, especially in the Asian cases of success, rising real wages have affected production systems and their costs. Where real wages were increasing and investment in new technology was restricted by credit constraints, productivity increases were constrained until these were alleviated. For growth to be sustained. there needs to be a dynamic ability for technology. resource use, institutions and markets to be adapted to deal with successive bottlenecks or constraints affecting particular commodity systems.

The fact that the constraints limiting agricultural growth change as economies develop is recognized in recent papers such as DFID (2005). The arguments developed above also bear a striking resemblance to conclusions drawn in a series of recent articles reflecting on recent reviews of the impact of economic reforms more generally during the 1990s.⁹

Hausmann et al. (2006) argue that "countries need to figure out the one or two binding constraints on their economies and focus on lifting these". They explain that while reforming a policy to reduce a distortion is expected to increase aggregate welfare, this is only the case when there is only one distortion. When there are other distortions, the interaction with them needs to be determined, and if these second best interactions exacerbate other existing distortions, the welfare gain is reduced and the reform can even end up producing an overall loss. The authors critique different approaches to reducing the uncertainty over such interactions: "wholesale reform"; "reform as much as possible"; "second best reform"; "target the biggest distortion", but reject each for difficulties either in identification of approach or in the practicality of implementation. Rather, they suggest identifying reforms that alleviate the most binding constraints, in other words focusing on the bottlenecks directly. They give the example of low levels of private investment as being due to either low returns to economic activity or high cost of finance, as a first step in diagnosing the key causes. A decision tree approach is then used to focus in on the key alleviable constraints, for example, coordination failures preventing investment in new technology.

The importance of a dynamic approach to intervention is also reflected in Leipziger and Zagha (2006) who note that "in any growth process as one constraint is lifted, another will emerge then another and then yet another. What is required to sustain growth should not be confused with what is required to initiate it".

⁹ Drawing lessons from a recently published World Bank (2005) study - Economic growth in the 1990s: Learning from a decade of reform - Zagha et al. (2006) suggest that results of reform during the 1990s have been unexpected - they exceeded the most optimistic forecasts in some cases and fell well short in others .In East and South Asia (including China and India) success came despite the fact that reforms were implemented in a manner that departed from conventional wisdom in terms of speed and design of reform, a large state presence and, until well into the 1990s, high levels of import protection. Zagha et al. argue that "a frequent mistake in the 1990s was to translate principles that growth was best achieved with macroeconomic stability, market al. location of resources and openness to international trade into "minimize fiscal deficits, minimize inflation, minimize tariffs, maximize privatization, maximize liberalization of finance".

The focus of this technical note is on poorer countries where agriculture still has a potentially significant role to play as an engine of growth, but where markets are often missing or weakly developed. The motivation for the succeeding discussion is that agricultural trade policy needs to be consistent with a sequenced alleviation of the constraints to increased productivity in order for the sector to fulfil its role.

3 Components of agricultural trade strategies – determining the appropriate balance between agricultural export expansion and import competition

International organizations dominating debates on applied trade policy have tended to focus on promoting opportunities for increased exports to international markets (be they traditional or non traditional), whilst playing down the potential role that trade policy could play in enhancing the competitiveness of import competing products. An example of this would be in supporting the development of market opportunities for agricultural products in domestic and regional markets where there are often widespread market failures. Although trade policy should encapsulate the roles of both border protection and export enhancement, the focus of trade diagnostic studies under the WTO's Integrated Framework for Least Developed Countries (LDCs), for example, is almost exclusively on export expansion, and on promoting the private sector's role in this, as an avenue for agriculture led growth.

Evidence suggests that agricultural export expansion alone has not necessarily provided a viable option for poverty reduction in many developing countries. ¹⁰ If poorer countries have found it difficult to stimulate agriculture led growth and poverty reduction through the promotion of more favourable conditions for the production of exportables, is there a case for a greater focus on policies conducive to growth based on the production of import competing commodities?

A difficulty with the current debate is that such questions tend to be associated with the promotion of protectionist food self sufficiency/food sovereignty strategies with their associated, perhaps reasonably in many circumstances, negative connotations. However, to cast the choice of trade strategy in these terms is overly simplistic.

This section develops a rationale for a more balanced approach to determining appropriate agricultural trade policy. This rationale is *not intended as* an argument in support of the achievement of food security objectives through increased domestic production for domestic consumption. Indeed, whilst the self sufficiency vs. self reliance arguments for ensuring national

-

¹⁰ Section 3 discusses evidence for this contention in more detail.

level food security objectives often dominate in this debate, a less discussed aspect is that stimulating increases in the productivity of agricultural products can play an important role in driving agriculture led growth, particularly where the agriculture sector is dominant in terms of total employment and income.

 Trade expansion through export promotion or import substitution

Key questions arise as to when to support agricultural productivity increases and how. In some circumstances, some level of protection of domestic or regional markets may be required to allow productivity increases (as discussed later). A side effect of this is likely to be the displacement of imported products, but this does not imply that the main objective of using border protection is one of achieving food self sufficiency. As Morrissey (2005) argues, "a 'food first strategy' is not necessarily an argument for import substitution per se (substituting for imports is not the main objective), but import displacement will result from increasing the productivity of local producers".

It is critically important therefore that the debate does not confuse calls for protectionist policies consistent with self sufficiency objectives, with calls for some level of trade protection where there is scope for increasing productivity levels in activities that are currently uncompetitive in international markets and which could be undermined by more competitive imports. It is important therefore not to misinterpret the objectives of trade policies seeking to promote productivity increases, where these could be critical to the country's growth process.

But what are the main arguments for and against reliance on export expansion as opposed to a "food first" strategy? On the arguments for, Nash (2006) contends that the World Bank has generally advised countries "to reduce agricultural trade barriers to enhance sectoral competitiveness, promote better integration into the global trading system and an outward-oriented development strategy, and to improve the welfare of consumers, especially the poor (see for example, World Bank, 2004)". While suggesting that in general, explicit policy barriers to exports should be removed as a high priority, and that "behind-the-border" measures including investments, capacity building, and institutional reforms need to be made in order to encourage agricultural export development, especially of nontraditional products, Nash acknowledges that a more controversial question is how to advise governments with respect to protection of domestic producers against competition from imports.

Nash lists a number of reasons why "high import barriers in the name of food security *or to support an import-substitution agricultural development strategy* is bad long-run policy"

(italics added). His key argument relates to the impact of potentially higher food prices on the poor due to the suppression of imports of lower cost food products. Certainly, a situation where there are significantly higher domestic food prices than could be achieved by allowing food imports at low or zero tariff rates, would be expected to impact negatively on the disposable income of urban consumers. But the argument does not fully account for the fact that (a) the majority of the poor still reside in rural areas and that their incomes are in large part contingent upon agricultural activities, whether through sales or employment, (b) the level of food staple prices in rural areas affects different rural households in quite different ways, and (c) the major concern of poor urban households is employment income rather than the price of food products.

Nash makes the point that "the benefit of the protection of food crops to the rural poor is less than it might appear because the poorest are (in many countries) landless and are therefore harmed in their capacity as net consumers, and the next poorest class are often self-sufficient (non-commercial) producers, who neither gain nor lose". Whilst acknowledging that higher food prices can benefit the rural poor as labourers, he suggests that a protectionist policy will reduce potential growth in employment opportunities in other sectors so that the overall result is uncertain. However, building on case study evidence, other studies reviewed in Morrison and Sarris, 2006 (for example, Dorward et al. 2004, Poulton et al. 2005) provide a more detailed typology of the net food staples trade position of poor rural households, leading to more differentiated conclusions as to the impact of food prices on rural economies, and highlighting the fact that it is the impact of policy interventions on real incomes rather than on price levels per se that is important.

Nash also contends that to raise farmers' incomes on a sustainable basis, it is necessary either to raise the returns to labour in other sectors, or their productivity in agriculture itself, and that to reduce the gap between farm and nonfarm incomes permanently requires measures that facilitate faster out-migration from agriculture, such as more effective investments in rural education and infrastructure. In supporting this case, he points to Chile's experience where export growth has generated off-farm rural employment in such areas as food processing plants and transport services, slowing the need for a drift to the cities (Valdés and Foster 2003) and suggests that it was food processing, and not agriculture, which had the biggest impact on the wages of unskilled labour.

• The diversity of country situations

But how typical is Chile of the situation more generally found in developing countries? In Chile, both the share of agriculture in total employment

and the share of agricultural exports in total merchandise exports are less than 20 percent. and agriculture's share of GDP is less than 10 percent. Nash does acknowledge that the size of the sector matters in determining the impact of reforms, "where the agricultural sector is a large part of the economy, rapid reduction in protection for the sector as a whole may generate significant unemployment and rural-urban migration. On the other hand, where the sector as a whole is a modest part of the whole economy and a fortiori, where it is a modest part of the rural economy, any unemployed labour may be rapidly reabsorbed". The latter may reflect the Chilean case, but it is more likely to be an exception than the norm, a fact that is often not well elaborated in debates related to trade liberalization.

The use of such examples does not always reflect well the impact of market structure on the distribution of gains across households within these economies. In some cases of export led growth there is evidence that consolidation into larger farms has displaced the livelihoods of small producing households. The number of individuals absorbed into alternative employment is likely to be less than the number displaced. The impact on the distribution of income in a country such as Chile where the agriculture sector accounts for a "relatively" small proportion of labour, may be negative but is likely to be viewed as "insignificant". However, a negative outcome with respect to the distribution of gains and losses would be more visible in countries with larger agricultural sectors.

In most Latin American countries, the share of agricultural employment in total employment is less than 20 percent, but it is significantly higher in Sub Saharan Africa (SSA) (66 percent) and in Asia (56 percent) (Osakwe, 2006). However, these aggregate numbers hide far greater heterogeneity at the country level, not just in terms of the importance of the agriculture sector in employment and in aggregate output, but also in terms of the production structures and the net trade positions of countries within different regions. For example, in the Latin America and Caribbean (LAC) region, agricultural exports represent more than 25 percent of total exports in nine of a sample of twenty-two countries examined in Foster and Valdés (2006), and exceed 40 percent in six of these countries, whilst agricultural import shares were generally smaller at 8 to 20 percent. However, and perhaps surprisingly, in terms of food trade, although the region as a whole is a net food exporter (as commonly perceived), only six of the twenty-two countries reported are net food exporters (Brazil, Argentina, Uruguay, Paraguay, Bolivia and Nicaragua).

Clearly, while the six countries listed would benefit from global food trade liberalization in terms of greater export opportunities, it is not clear that the remaining sixteen would (Foster and Valdés, 2006). Interestingly, Foster and Valdés also conclude that reforms in the region have not left agriculture sectors worse off as a whole, but equally have not benefited all sectors (for example, small farmers and farmers in low productivity areas) and overall did not contribute to the reduction in poverty. The authors suggest that the growth of agriculture is constrained by limited domestic demand and thus the growth of the agro-food sector in LAC is highly dependent on exports.

In Africa, only nine of the fifty-three countries were net food exporters over the period 2000-2004. More surprisingly perhaps, given the dominance of the agriculture sector in many of these countries, only eighteen countries were net agricultural exporters (Osakwe, 2006).

The diversity of trade situations, production status, and roles of agriculture across developing countries suggests that a "one size fits all, trade liberalization/export expansion strategy" could well be inappropriate in a variety of contexts, despite the downsides of using border protection identified by Nash. For example, Morrissey (2006) provides a number of reasons for supporting food production for local and regional markets which include inherent problems with dependence on cash crop exports, quality standards for exports to developed country markets which are often higher than justified by genuine health concerns and are often changed suddenly, imposing risks and high costs on exporters, and a reduction in the need for domestic farmers to contract as suppliers to multinationals, encouraging greater independence. Morrissey argues that it is often easier and less risky to produce for local or regional markets and that a trade strategy can be designed to address the specific needs of smallscale, peasant farming without neglecting the needs of more commercial, large-scale producers.

Enhancing local and regional market opportunities

The scope for increasing supply to food markets in sub-Saharan Africa is discussed in some detail in Morrison and Sarris, who argue that most poorer countries in that region are not yet at a stage where there is a viable domestic market for higher value products, that distortive OECD policies and imperfect global markets will continue to make the development of traditional export markets difficult, and that there is considerable potential for growth in the absolute value of staple food markets. It is also important to more fully recognize that the import competing food staple sectors are where the majority of the rural poor operate, particularly in countries at lower levels of development. For many of these poorer producers, the domestic market is likely to provide a more promising outlook in the short to medium term than international markets.

However, a key issue that remains is how incentives to improved levels of productivity can

be provided without damaging the food security status of net (urban) consumers. It is not clear that this concern necessarily rules out the use of trade related measures to increase, and to help stabilize, basic food prices. In general, poor producers do not produce an identical product to that consumed in the urban market, where consumption is likely to be of transformed (e.g. milled or processed) and/or substitute products. Whilst the expectation may be that consumer food demand in urban markets directly affects local producer returns, this is not always clearly the case where domestic markets are weakly connected.

Of course, it could then be argued that small scale producers do not need to be protected from exposure to greater openness to (especially low cost and/or subsidized) imports whilst improvements in productivity are being achieved, particularly if the competition with imports happens elsewhere in the supply chain. However, while urban markets comprise products from both local markets and imports, consumer choice can affect decisions of actors at higher levels in the supply chain in terms of their sourcing of domestic vis-à-vis imported commodities, and hence their willingness to invest in strengthening domestic market opportunities for locally produced products.

It is, therefore, important to assess the role that trade policy could play in strengthening market opportunities for less competitive producers. Large domestic internal markets have often been found to be a pre-requisite to agriculture based growth in Asian economies, since they facilitated the marketing of surplus commodities to deficit areas, helping to ensure that effective local demand was maintained even in times of surplus and therefore assisting in stabilizing prices. In many of today's poorer developing countries, domestic markets are relatively small and cannot fulfil this critical role. Here there may be a potential role for regional markets with common external tariffs but with no restrictions to internal trade, as a substitute for the lack of a large domestic market.

- 4 Evidence casting doubt on the primacy of agricultural trade liberalization at earlier stages of agricultural development
- Historical experience of trade policy strategies by more developed economies

Given the arguments that increases in agricultural productivity are requisite for agriculture to play its role in wider economic growth and development, what evidence is there that countries have in the past benefited from providing some level of protection to their agricultural sectors at critical stages of development?

Although reviews of the role of state intervention during periods of agricultural productivity growth have not focused sufficiently

on the national trade policy regime that was adopted, a number of recent papers suggest that some lessons might be learnt from the past use of industrial sector trade policy, although such lessons may, of course, need to be qualified given the quite different environment in which agricultural productivity growth must take place today.

For example, Gallagher (2005, p. 7) argues that "Taiwan, South Korea, Thailand, Singapore and to some extent Brazil and Mexico focused on reliance on major public outlays for infrastructure, planning, tariffs, import licensing, quotas, exchange rate controls, wage controls and direct government investment in key sectors". He suggests however that protection was given in exchange for concrete results and that lending and support were conditional on local content requirements, price controls, technological innovation, capacity and exports. Such policies led to the creation of national leaders in the form of State-owned, or State-patronized enterprises.

Whilst the trade policy strategy adopted was obviously less than liberal, Gallagher acknowledges that it is difficult to get the Statemarket balance right, particularly with respect to selectivity of interventions and identification of activities with significant linkages - vital when fiscal resources are limited.

Chang (2006) provides a number of examples to suggest that when they were developing countries themselves, the now developed countries used virtually none of the policies and institutions that they are currently recommending to developing countries. He provides the example of eighteenth-century laissez-faire Britain (which he notes was actually more interventionist than other European countries such as France at that time). Between 1721 and 1846 (with the Repeal of Corn Laws), Britain made extensive use of infant industry protection, export subsidies, import tariff rebates for inputs used for export, export quality controls etc. Very high tariffs on manufactured goods remained in place for as long as two decades after the start of the Industrial Revolution, at a time when the economy was well ahead of that of its competitors. Similarly, in the United States between 1816 and World War Two tariff levels were amongst the highest in the world and it was only when it had achieved "unchallenged industrial supremacy" that it liberalized and started to champion free trade.

Chang also contends that almost all newly industrialized developing countries used some form of infant industry promotion strategy. Even countries that were subject to treaties which restricted the level of tariff that they could apply (e.g. Japan had an average tariff of less than 5 percent until 1911) made extensive use of non-tariff barriers (NTBs).

Chang counters arguments that average tariffs in developing countries are significantly higher

now than those used by the now developed countries in the past, by arguing that the productivity gap between developed and developing countries is far greater now than it was between the then "catch-up" and the "frontier" economies. Therefore, he implies that the fact that average industrial tariffs were lower in the past is largely irrelevant as developing countries would now need much higher tariffs to give similar levels of protection. He also challenges those who suggest that while such policies may have been beneficial in the past, times have changed, by pointing to the generally poor performance of the relatively more liberal African developing countries today.

The arguments reviewed above point to the fact that policy induced technical change in the agriculture sector has been more obvious where some level of border protection has been in place. There is a concern raised by Osakwe (2006, p. 13) that if countries are not able to provide this type of support, then deindustrialization could occur, whereby countries are forced to specialize in commodities. He gives evidence from a CGE model-based paper by Achterbosch et al. (2004) which suggests that full reform of trade policies in sub-Saharan African countries would result in a contraction in higher value added (light and heavy industrial and service sector) activities and an expansion of traditional agricultural commodity production. Osakwe's concern is one of countries becoming locked into production patterns reflected by their current comparative advantage, rather than being allowed to develop a comparative advantage in higher value activities.

Indeed, on the basis of lessons from countries with now more developed agriculture sectors, it has been argued (e.g. Dorward et al., 2004) that many of the contemporary poorer countries have by-passed a critical stage of support to their agriculture sectors. Many of these countries are now left with relatively liberal trade policies, but weakly developed agriculture sectors, the development of which policy makers are now less able to support in the longer term and which, by virtue of low levels of applied border protection, are also more susceptible to short term external shocks.11

Ex-post evidence on the impacts of trade liberalization

There are also evidence-based reasons for questioning the over-reliance on export expansion and a more liberal approach to border protection as components of agricultural trade policy strategies, which are based on insights from experience garnered through ex post analysis.

Although the policy regimes in many commodity dependent countries have changed significantly over the past two decades (see Thomas and Morrison, 2006, for a synthesis of case study experiences), in general, the structure of importables, exportables and non tradables has remained relatively constant in the majority of these countries and especially those in sub-Saharan African countries (see for example Tables 1 and 2 in Morrison and Sarris. 2006). There have been some exceptions to the general stickiness of these activities, for example Côte d'Ivoire has seen a significant shift away from the production of non tradables towards the production of both importables and exportables, but by contrast, Malawi has seen a fall in the share value of production of both importables and exportables.

One explanation that may be provided for this limited structural change is that price incentives have been counter to the development of the tradables sector. However, evidence does not bear this out. Thomas and Morrison (2006) provide trends in agricultural terms of trade in 15 case study countries. For many of the reported countries, there has been an upward (or at least not decreasing) trend in the agricultural terms of trade. To a large extent, this positive movement in the face of declining primary commodity prices over the period is explained by favourable exchange rate movements as previously overvalued exchange rates were devalued, or allowed to depreciate. These "corrections" tended to occur in the 1980s/early 1990s and real domestic agricultural tradables prices often increased as a result.

The case studies reviewed in Thomas (2006) also highlight the difficulty of disentangling the effects of one element of policy reform from other elements of reform. However, the direction of change appears to have been towards greater openness in both internal and external trade in all sample countries.

Ex ante estimation of the impacts of trade liberalization

Partly as a reflection of ex post observation, the results from global trade policy simulation models that are being used to inform debates on the appropriateness of greater trade openness are increasingly being questioned from a number of angles (see for example FAO (2005b)).

In the context of the discussion in this technical note, a key limitation of the simulation exercises is that the efficiency gains estimated by models are contingent upon resources shifting from uncompetitive to higher return activities. But as Morrison and Sarris note, the investments required to allow shifts of resources out of traditional agricultural activities into higher value added activities are not likely to occur where market failures are pervasive without some form of state intervention, a contention that appears to

¹¹ An ongoing FAO project is investigating the incidence of import surges in a number of developing countries. Details are available at:

http://www.fao.org/es/esc/en/20953/22218/highlight 10 8226en.html

be borne out by the lack of responsiveness to changes in price incentives that have resulted from reforms in poor developing countries. Similar arguments are made by Stiglitz and Charlton (2005).

Model-based analyses that have been used to bolster the case for further trade liberalization are often overly optimistic in their assumptions as to the ability for resources to be invested in "higher return" activities, and the use of their results in arguing for further agricultural trade liberalization in poorer economies could be misleading. In addition to the limited attention given in many global trade models to the pervasiveness of market failures that are preventing the resource reallocations in poor economies that would be necessary to realize the estimated gains, in many such models, the products and countries of interest are often highly aggregated. 12 A particular difficulty related to the level of aggregation is that the within-country distributional impact is not well reflected. Experience suggests that the losers are often found at the bottom of the economic pyramid (i.e. a lot of poor people are negatively affected) but in aggregate this maybe offset by the "gains". The importance of the loss incurred by these poorer individuals is not well reflected in the aggregate welfare measures (see also FAO 2005b).

As suggested in Morrison and Sarris, some of the more recent model based studies (e.g. those collated in Hertel, 2006) attempt to investigate the impact on different sectors and households in individual economies more closely. However, the applications are "still limited in number, and although casting doubt on the ability of poor rural economies to gain from further trade liberalization given the widespread nature of market imperfections, have had limited impact on the trade policy debate to date".

The assumptions made to allow models to solve are also critical to the results. To a certain extent, assumptions can be made to reflect imperfections in factor markets. For example, land mobility between activities can be assumed to be constrained and the labour market configured to reflect the commonly observed situation of surplus labour. But the assumptions made can affect the results dramatically.

A case in point is the external financing rule. As tariffs fall, the country will, as expected, import more of the product. To pay for these additional imports, it must export more. But exporting more requires a fall in the export price (in foreign exchange terms) because of the structure of such models, which implies that the country is a

monopoly supplier in the export of each commodity. In some models, a negative terms of trade effect is observed through the reduction in the export unit value as a result of this. In other studies, a negative terms of trade effect is felt through an increase in import prices. As explained in FAO (2005b), the effect can be very difficult to decipher, especially where the choice and implications of the assumptions are not carefully defined and explained.

Related to the issue of external financing is the issue of tariff revenues which often comprise a substantial part of government revenues, particularly at early stages of development. Whilst it might be argued that this is an inappropriate or inefficient approach to revenue collection¹³, the removal of this option is largely unrecognized in global trade simulation models. Osakwe shows that several African countries rely on trade taxes for government revenue and suggests that they are concerned that trade liberalization would erode the fiscal base. Table 1 from Osakwe presents information on the number of countries in the region for which trade taxes represent a given percentage of total revenue.

Table 1: Dependence on trade taxes in sub-Saharan Africa

Trade tax	Number of countries		
revenue (as percentage of total revenue)	1985 - 1994	2000 – 2003	
0 – 10.9	5	7	
11 – 20.9	11	8	
21 – 30.9	5	10	
31 – 40.9	11	10	
41 – 50.9	7	7	
51 – 100	3	2	
Total	42	44	

Source: Osakwe (2006) – computed using data from African Development Indicators 2005.

In both periods represented, taxes on international trade amounted to more than 20 percent of the total government revenue in more than half of the countries in sub-Saharan Africa for which there was data. Over the period 2000-2003, they represented more than 50 percent of total revenue in Comoros, Gambia, and Niger and more than 40 percent in Benin, Lesotho, Madagascar, Mali, Sierra Leone, Togo and Uganda.

Osakwe notes that "in the public finance literature it is typically argued that the revenue consequences of trade reform are likely to be small in the early stages of liberalization which involves tariffication of quotas and reduction of

Debates with respect to food staples are further complicated by the fact that many producers are often net consumers and that decisions regarding their joint production/consumption decisions are not well reflected in SAM/CGE models.

¹³ For example, Nash contends that economic analysis suggests that trade taxes are very inefficient forms of raising revenue.

prohibitively high tariffs which are likely to raise imports and hence revenue. While it is generally acknowledged that the second stage of reform might lead to a reduction in trade tax revenue, the general argument is that developing countries should not worry about this as they can recover the lost revenue by switching from trade to domestic taxes". However, he also provides arguments that tariff reductions could lead to a reduction in government revenue in economies with large informal sectors due to the inability of governments to derive significant revenue from domestic taxes. Osakwe provides empirical evidence (Baunsgaard and Keen, 2004) that suggests that poor countries that switched from trade to domestic taxes did not recover the lost revenue from liberalization. This implies that the fiscal implications of trade liberalization should be better taken into account in the analysis of the impacts of proposals under discussion in multilateral trade negotiations.

5 What policy space is required to allow agricultural productivity improvements to be made?

A challenge often used against the adoption of a less than fully liberal trade policy regime is that government interventions will be distortive and result in an inefficient use of resources. For countries that are now developed and/or middle income (and which generally supported their agricultural sectors during the critical stages of development), analytical evidence suggests that the reform of agricultural and trade policies would result in significant net welfare gains.

However, this contention is less strongly grounded where governments are intervening to correct the pervasive market failures that are preventing required investments in activities in which the country would otherwise hold a comparative advantage, as in the case of many contemporary poor countries. A key point from the review in the previous section is that assumptions concerning the ability to reallocate resources into higher value added activities are not reflective of the widespread market failures often faced by producers in traditional agricultural sectors.

But if there are arguments for a less than liberal trade policy stance, particularly as concerns import competing food staple production, how much flexibility do developing countries need to retain in trade negotiations to allow them to pursue such policies? A commonly used term for such flexibilities is "policy space". This section briefly reviews arguments related to the extent to which such policy space may be required and on whether agreements reached at the WTO specifically are likely to restrict this space.

• Is policy space required?

In assessing whether a strategy consistent with the promotion of productivity growth in food staples is supportive of agriculture led growth objectives, as opposed to food self sufficiency objectives, it is important to consider the stage of agricultural development within a country:

- In the more advanced developing countries, often having relatively commercialized agricultural sectors, current arguments for more protectionist agricultural trade policy regimes are generally made on the basis of national food security concerns (as defined by the level of food self-sufficiency), the need to maintain agricultural producers' incomes, and/or the provision of public goods.
- By contrast, in poorer developing countries, where the agricultural sectors are less developed, but potentially more important in terms of contribution to the development and economic growth that underpins household level food security, the arguments for intervention are based more solidly on the existence of widespread market failures and the difficulties in inducing technological improvements to allow productivity increases in this context.

The distinction between different types of country is important. It is argued by some negotiators in the context of the current Doha Round of negotiations that it is imperative that policy flexibility is maintained for some categories of countries to allow them to support their agricultural sectors until they are at a level where (i) they are in a better position to compete with more competitive, or subsidized, imports, and (ii) the central, though transitory, role of agriculture in the economic development of these countries has been played out to a sufficient extent during the process of successful economic development. However, others argue that providing the policy space envisaged through Special Safeguard Measures (SSM) and special product provisions, will give an unfair advantage to the more competitive developing country exporters who could use these provisions to restrict access to their markets and in doing so provide a level of support to their producers over and above that allowable in developed countries.

Key arguments *against* the provision of policy space are supported by some model based studies which suggest that even where countries are provided with the flexibility to continue to protect only a very small proportion of tariff lines, the gains from multilateral trade liberalization are all but wiped out (e.g. Anderson *et al.* 2006). However, a recent model based study by Polaski (2006) suggests that the "losses" incurred by recourse to special product provisions by developing countries are likely to be minimal. Such analyses can be persuasive and the Carnegie Endowment study elaborated in Polaski has created a more open debate on the likely impact of the use of special product provisions.

However, the acceptance of such arguments is contingent upon an acceptance of the limitations of CGE models for investigating the impact of these provisions. Whether or not recourse to special product provisions would reduce potential *global* gains, their use has been agreed to on the basis that they will assist *individual* countries in achieving their development objectives by continuing to provide some level of protection to specific agricultural products.

Osakwe makes an additional and important point regarding the provision of policy space, suggesting that there are often inconsistencies evident in countries' policies affecting the incentives for the production of different commodities. For example, he notes that some countries have "given away" policy space when changing monetary policy, without appearing to have accounted for the impact on so-called special products.

An additional argument against the provision of such flexibility is that, particularly in the case of staple food production in sub-Saharan Africa, producers in rural areas may already be well "insulated" from competition from world markets, with or without tariff protection, due to the wide gaps between import and export parity prices in producing areas as a result of high transportation costs (akin to natural protection). Critical to stimulating greater volumes in rural markets is the alleviation of constraints contributing to such margins through, for example, improvements in rural infrastructure. However, infrastructural improvements would also allow greater penetration of competitive imports against which local producers may be unable to compete. As transport costs fall, some level of border protection may therefore be required to prevent surges in imports while investments in local production are made to take advantage of the reductions in transaction costs and risks. Following this line of argument, the required level of such protection could then be argued as being that which corresponds to the reduction in transaction costs, so as to maintain the relative level of competitiveness with imported products for a limited period.

Would a WTO agreement inappropriately constrain policy space?

In the context of current WTO debates, it has been argued that for most countries requiring policy space, the proposed agreements will not restrict their ability to implement required policies. Indeed, on the basis of (a) the fact that many (but importantly not all) countries have space between bound and applied tariffs, (b) that most developing countries don't use close to their *de minimis* levels of domestic support, and (c) that LDCs are anyway exempt from reduction commitments, many argue that a possible reduction in policy space as a result of a WTO agreement is a non issue.

However, being able to demonstrate that there will be no loss in policy space following an agreement is different from being able to state that the existing policy space is sufficient. There are still a number of unresolved questions related to the use and availability of policy space. For example, does saying that policy space is sufficient send the wrong message with regard to appropriate policy intervention? Is it compatible for example with the recent arguments (e.g. DFID, 2005) for targeted interventions to support input provisions? Does it acknowledge that different sorts of intervention are needed at different levels of agricultural development, and in this context, will the required policy space in the future be restricted?

Thus, as Morrissey points out, "governments should be cautioned of the difficulties and disadvantages of using trade protection to further development objectives (typically, protection is not the best policy option), but this does not mean that governments should be denied such policy options".

• The issue of differentiation

One important factor that is clouding the debate is that whilst some countries will need policy space to ensure that they are not constrained from pursuing policies in line with agriculture led growth as outlined in section 2, other currently competitive developing countries could (in theory) use such space to further develop their sectors. In the WTO, only two categories of developing countries are recognized - LDCs and other developing countries. There has been significant debate as to how to further differentiate between countries to allow developed countries to agree to further significant special and differential treatment (SDT) being available to those countries that need it, whilst alleviating their fears that it will be (mis)used by countries with more competitive sectors.

Matthews notes that the "one size does not fit all" argument is one of three identified by Paugam and Novel (2005) as possible bases for greater differentiation, suggesting that differentiation of rules should be limited to the group of countries likely to be adversely affected by stringent rules that impinge upon their development prospects.

Morrissey suggests that "in a standard view, countries at low levels of development start from a position of having a large, non-commercial agriculture sector that accounts for the greatest share of economic activity. In this view, balanced growth would be achieved if the agriculture sector becomes increasingly commercialized and competitive while the manufacturing sector grows. Initially, manufacturing may be based on agriculture, through processing and agri-business, but ultimately manufacturing and the economy will become diversified, and agriculture will account for a diminishing share of the economy as growth continues". Morrissey argues that "although this

may be a reasonably accurate broad-brush picture, and is consistent with the LDC-developing country dichotomy in the WTO, it is too simplistic". He suggests characterizing the current stage of developing countries according to three criteria – endowments, commercialization and potential of agriculture.¹⁴

This relates to another argument cited by Matthews that trade policy may be a second best development instrument for countries with very weak institutions and resource bases in achieving their development objectives. He mentions the threat of food insecurity to producers in the face of a sudden drop in world prices or resulting from an import surge. As an example, he suggests that while a first best solution might be to use marketbased risk management mechanisms or social safety nets to offset the income risk, these may simply be out of reach for poor countries with many resource-poor farmers. The ability to implement tariff increases to safeguard domestic producers may then be the most realistic option to provide relief in these circumstances.

Noting that developing countries have resisted efforts to introduce differentiation due to a perceived interest in being grouped together as a bargaining force in the negotiations (see e.g. FAO, 2005a), Matthews suggests that "elements of *de facto* differentiation are already appearing in the agriculture negotiations and that it would be more effective to build on these elements than to attempt to construct an all-embracing typology to make distinctions between developing countries".

He lists three possible approaches to differentiation based on modalities: (a) formal rule based thresholds, such as the provision in the subsidies code that countries with a per capita income less than US\$1 000 are entitled to use export subsidies; (b) voluntary declarations of intent on the part of specific countries to abstain from availing of general SDT provisions, examples of which would be the declaration by some developing countries, not corresponding to any income or other group, that they would not use the TRIPS/drugs import provisions or countries opting not to use the SSM; and (c) implicit differentiation, for example, where the provision that input subsidies generally available to low income or resource poor producers are exempt from Aggregate Measurement of Support (AMS) reduction commitments - because countries will have different proportions of such producers - this provision effectively has a differentiated impact.

6 Appropriate trade policies for different stages of development

Given the preceding discussions, there is a primary, but critical, distinction to be made between state intervention per se and trade policy intervention. It is recognized that trade policy should not be used as the main instrument to "correct" for market failures that are preventing productivity increases in agricultural production and/or investment into higher value activities. Rather, the argument being made on the basis of the discussions throughout this note is that for a defined period during which state interventions to promote productivity enhancing investments are being made, some level of border protection may be required in order for producers to be able to react positively to the incentives created by such interventions aimed at making markets work more effectively for poor producers.

The question therefore becomes one of when (rather than if) countries should open their agriculture sectors to greater competition. Many arguments for, or against, further liberalization essentially come down to the issue of sequencing.

The long term objective of a more liberal agricultural trading system, where trade barriers would play a minimal, if any, role in offsetting or reducing the risks associated with appropriate levels of private sector investment in agriculture is *not* questioned here. But this is because in the long run, markets (input, credit, output including adequate risk management instruments) are expected to function adequately, thus not necessitating government interventions over and above regulatory controls.

However, in the absence of such well functioning markets, and perhaps in conjunction with other targeted state interventions, a less than liberal trade policy regime may have a role to play in countries with underdeveloped agriculture sectors, much as it did in the now more advanced economies when they too were at earlier stages of development. When markets begin to function more competitively, it may then be appropriate to liberalize agricultural trade policy to release further agricultural growth potential.

The arguments set out in this technical note do *not* support a case for a blanket protectionist trade policy stance, but do reflect a recognition that the stage of agricultural transformation is critical to determining appropriate agriculture related policy, and that the desired resource reallocation at early stages will not necessarily take place without some form of intervention. It is also recognized that this role will change as the sector matures.

The specific role for trade policy as a component part of state support to the sector is however still very much an open question. The main entry points for intervention in agriculture relate to the ability and/or willingness of actors (not just producers, but traders and processors) in the sector to invest in more productive

¹⁴ Morrissey notes that the underdevelopment of agriculture implies that it is difficult to assess potential, i.e. agriculture has not yet reached the stage where comparative advantage can be identified.

technologies. In terms of trade policy, Morrison and Sarris isolate two components from the agricultural development literature for further discussion:

- the way in which trade policy can affect relative production incentives, for which an improved understanding of the way in which price levels and stability affect investment decisions of producers is required, and
- the way in which trade policy can affect incentives facing actors further up the marketing chain, (i.e. where competition with imported commodity actually occurs) and for which an improved appreciation of the marketing chain is required.

Clearly, there is great opportunity to learn from the agricultural development literature in addressing such issues. For example, there is evidence that market (not just trade) liberalization may have worked in favour of some cash crops, which were often taxed under previous regimes. but where the risks facing investors could be reduced by interlinking imperfect input and output markets (e.g. cocoa in Ghana and tobacco in Uganda¹⁵). However, the scope for development of risk reducing non-market institutions to overcome similar imperfections is more limited with staple food crops in the absence of direct state support. The withdrawal of the state from support of the food staples sector has often removed some critical elements needed for their commercialization.

In circumstances where the agriculture sector is still to play out its potential role, border protection can have potentially important roles to play in complementing policies to assist the expansion of agricultural trade, by:

providing a more stable and remunerative investment environments for import competing commodity sectors in which the country does not necessarily hold a comparative advantage, and which may be expected to contract in the face of greater competition, but which are critical to the development of agricultural and wider rural growth. Providing a better investment environment could promote levels of investment in productivity enhancing technologies, generating surpluses and in turn allowing the diversification of resources into the more "competitive" sectors. This is a prima facie case for a moderate level of protection (e.g. through for example, special product provisions) while such improvements in productivity are being achieved.

 preventing short term disruption to domestic sectors which may otherwise be competitive, but which by virtue of susceptibility to risk in conjunction with limited access to risk management instruments, could suffer from exposure to low cost, often subsidized, imports and associated price instability. This provides a case for a variable level of protection (e.g. through access to a Special Safeguard Mechanism).

In conclusion, there is still a very important research agenda in analyzing appropriate agricultural trade policies geared at trade expansion at different stages of agricultural development. It is likely that a variety of trade policies for agriculture will be appropriate to achieve agriculture led growth. While some similarities and generalizations may be made by drawing on current and future research under specific and generally quite narrow assumptions, the larger challenge is to explore, at the country level, the use of such policies in a manner that can inform policy makers who are concerned with accelerated development as well as with the various constraints that trade agreements may be imposing on their flexibility to respond to changing circumstances.

¹⁵ However, this success may equally be attributed to significant exchange rate devaluations – see FAO case studies reported in Thomas (2006).

References

Achterbosch, T., Ben Hammouda, H., Osakwe, P. N., & van Tongeren, F. W. 2004. *Trade liberalization under the Doha Development Agenda: options and consequences for Africa*. The Hague: Agricultural Economics Research Institute (LEI).

Anderson, K., Martin, W. & van der Mensbrugghe, D. 2006. Global impacts of the Doha scenarios on poverty. *In* T. Hertel & L.A. Winters (eds.) *Poverty and the WTO: Impacts of the Doha Development Agenda.* Washington. Palgrave Macmillan and the World Bank.

Ardnt, C. 2006. The Doha Round and Mozambique. *In* T. Hertel & L.A. Winters (eds.) *Poverty and the WTO: Impacts of the Doha Development Agenda*. Washington. Palgrave Macmillan and the World Bank.

Baunsgaard, T. & Keen, M. 2004. *Tax revenue and (or?) trade liberalization*. Mimeo, International Monetary Fund.

Chang, Ha-Joon. 2006. Policy space in historical perspective with special reference to trade and industrial policies. *Economic and Political Weekly*. February 18 2006.

DFID (Department for International Development). 2006. *Growth and poverty reduction: the role of agriculture. A DFID policy paper.* London. DFID.

Dorward, A., Kydd, J., Morrison, J. & Urey, I. 2004. A policy agenda for pro-poor agricultural growth. *World Development*, 32 (1) 73-89.

Dorward, A. & Morrison, J. 2001. The agricultural development experience of the past 30 years: lessons for LDCs. Imperial College London. Paper prepared for FAO.

FAO. 2005a. Special and differential treatment in agriculture. *FAO Trade Policy Technical Note No. 10*. FAO, Rome. Available at http://www.fao.org/trade/policy_en.asp

FAO. 2005b. Trade policy simulation models: estimating global impacts from the Doha Round. *FAO Trade Policy Technical Note No. 13.* FAO, Rome. Available at http://www.fao.org/trade/policy_en.asp

Foster, W & Valdés, A. 2006. Regional trade concerns in Latina America and the Caribbean and implications for WTO rules on Agriculture. Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2 – 3 February 2006, FAO, Rome.

Gallagher, **K.** (ed). 2005. *Putting development first: the importance of policy space in the WTO and international financial institutions*. London. Zed Books.

Hausmann, R., Rodrik, D & Velasco, A. 2006. Getting the diagnosis right. *Finance and Development*. 43(1). Washington. IMF.

Hazell, P. 2005. *Does policy research matter? A farewell lecture*. November 21, 2005. Available at http://www.ifpri.org/events/seminars/2005/20051121hazell.asp.

Johnston, **B. & Mellor**, **J.** 1961. The role of agriculture in economic development. *American Economic Review*, 51(4), 566–593.

Leipziger, D. & Zagha, R. 2006. Getting out of the rut. Finance and Development. 43(1). Washington. IMF.

Matthews, **A.** 2006. Shallow versus deep Special and Differential Treatment (SDT) and the issue of differentiation in the WTO among groups of developing countries. Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2 – 3 February 2006, FAO, Rome.

Mold, A. 2005. Non-tariff barriers and the Hong Kong negotiations: How much of a risk do phytosanitary controls pose?. *Bridges No. 1.0* December 2005, 20-21 (www.ictsd.org).

Morrison, J. & Sarris, A. 2006. Determining the appropriate level of import protection consistent with agriculture led development in the advancement of poverty reduction and improved food security Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2 – 3 February 2006, FAO, Rome.

Morrissey, O. 2005. Imports and implementation: neglected aspects of trade in the report of the Commission for Africa. *Journal of Development Studies*, 41(4), 1133-1153.

Morrissey, O. 2006. What types of WTO-compatible Trade policies are appropriate for different stages of development? Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2-3 February 2006, FAO, Rome.

Nash, J. 2006. WTO agreement limits as a development instrument: synergies and complementarities of WTO rules for agriculture with reform programs sponsored by the World Bank and IMF. Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2 – 3 February 2006, FAO, Rome.

Osakwe, **P.** 2006. *Emerging Issues and Concerns of African Countries in the WTO Negotiations on Agriculture and the Doha Round*. Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2 – 3 February 2006, FAO, Rome.

Paugam J-M. & Novel, A-S. 2005. Why and How Differentiate Developing Countries in the WTO? Theoretical Options and Negotiating Solutions. Paper presented at the FAO Workshop on WTO Rules for agriculture compatible with development 2 – 3 February 2006, FAO, Rome.

Polaski, S. 2006. *Winners and losers: impact of the Doha Round on developing countries*. Washington. Carnegie Endowment for International Peace.

Stiglitz, J. & Charlton, A. 2005. *Fair trade for all: how can trade promote development?* Oxford, UK. Oxford University Press.

Thirtle, C., Irz, X., Wiggins, L., Lin, S. & McKenzie-Hill, V. 2001. *Relationship between Changes in Agricultural Productivity and the Incidence of Poverty in Developing Countries*. Paper prepared for DFID. London: Imperial College.

Thomas, H. & Morrison, J. 2006, forthcoming. Trade-related reforms and food security: a synthesis of case study findings. *In* H. Thomas (ed) *Trade Reforms and Food Security: Country Case Studies*. FAO, Rome.

Thomas, H. (ed.). 2006, forthcoming. Trade reforms and Food Security: Country Case Studies. FAO, Rome.

Valdés, A. & Foster, W. 2003. *The positive externalities of Chilean agriculture: the significance of its growth and export orientation*. A synthesis of the Roles of Agriculture Chile Case Study. Rome: FAO.(http://www.fao.org/es/ESA/ROA).

World Bank. 2004. *Trade progress report: focus on agricultural trade*. SecM2004-3090. World Bank, Washington DC.

World Bank. 2005. Economic growth in the 1990s: Learning from a decade of reform. World Bank, Washington. Cited in Leipziger & Zagha. 2006.

Zagha, R., Nankani, G. & Gill, I. 2006. Rethinking growth. *Finance and Development*. 43(1). Washington. IMF.

Food and Agriculture Organization of the United Nations (FAO) Viale delle Terme di Caracalla 00100 Rome, Italy

Telephone: (+39) 06 57051 Fax: (+39) 06 57053152

E-mail: TradePolicyBriefs@fao.org

www.fao.org