

Farm trade: tapping the hidden potential

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February 2013**

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List of Acronyms

ASEAN	Association of Southeast Asian Nations
AOA	Agreement on Agriculture
APEDA	Agricultural and Processed Food Products Export Development Authority
CACP	Commission for Agricultural Costs and Prices
CCEA	Cabinet Committee on Economic Affairs
CIF	Cost, Insurance & Freight
CIS	Commonwealth of Independent States
CSO	Central Statistics Office
DES	Directorate of Economics & Statistics
DGFT	Directorate General of Foreign Trade
DOC	Department of Commerce
FAQ	Fair Average Quality
FCI	Food Corporation of India
FOB	Free on Board
FY	Financial Year
GDP	Gross Domestic Product
HRW	Hard Red Winter
IGC	International Grains Council
IRRI	International Rice Research Institute
ISA	International Sugar Agreement
LIFFE	London Futures Exchange
MSP	Minimum Support Price
NAFED	National Agricultural Cooperative Marketing Federation of India Limited
OECD	Organization for Economic Co-operation and Development
OGL	Open General License
QR	Quantitative Restrictions
R&M	Rapeseed & Mustard
RCAC	Registration-cum-Allocation Certificate
SMP	Skimmed Milk Powder
SRW	Soft Red Winter
TE	Triennium Average
USDA	United States Department of Agriculture
WTO	World Trade Organization



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Summary

Agri-exports by India during the FY 2011-12 were more than US\$ 37 billion against an import of agri-commodities worth around US\$ 17 billion. India emerged as the world's largest exporter of rice, replacing Thailand and Vietnam. India also emerged as the largest exporter of beef (buffalo) meat, exporting 1.7 million tonnes worth almost US\$ 3 billion, beating Brazil, Australia and US, which are traditionally the largest exporters of beef. The temporal behavior of India's exports and imports shows that India has consistently remained a net exporter of agri-products during the last two decades. Indian agriculture has increasingly integrated with the world markets but relatively less than the entire Indian economy. The agri-trade (exports plus imports) as a percentage of agri-GDP, which was about 5 percent in 1990-91 when economic reforms started is today more than three times of that, touching 18 percent in 2011-12. It is still low as compared to the share of total trade in goods and services as a percent of India's GDP that has increased from 17.5 percent to 59.1 percent over the same period.

India is a net exporter of agricultural commodities with agricultural exports constituting 11.9 percent of India's total exports and agricultural imports constituting only 3.4 per cent of India's total imports in 2011-12, indicating India's 'Revealed Comparative Advantage' in agriculture. India's share in total global exports of agri products has increased from 0.8 percent in 1990 to 2.1 percent in 2011. This share is more than the share that India has in global merchandise exports, i.e., 1.7 percent in 2011 (0.6 percent in 1990). Thus, from that point of view too, Indian agriculture seems to have a greater comparative trade advantage than manufactured goods. However, it needs to be appreciated here that India's agri-trade policy has been relatively restrictive and unstable. The success of the agri-sector against this backdrop, therefore, deserves all the more credit and signifies that a more supportive and liberal trade policy can help propel growth and prosperity in rural areas.

An analysis of the composition of agricultural trade over the last decade shows that traditional agri-exports of India, such as tea, coffee, cashews, spices, etc have been over taken by new and more dynamic sectors like rice and maize, cotton, meat, guar gum, and the like, with the biggest change being registered in cotton. India has also emerged as the largest importer of edible oils and pulses. A significant change has been the imports of raw cotton which accounted for 10.1 percent of total agri-imports in TE 2001-02 but now is the second biggest agri-export accounting for 11.4 percent of total India's agri-exports. So the decade of 2000s really belongs to cotton, with most spectacular increase in production, exports and declining imports- all being driven by the new Bt technology in cotton and newly found export markets in China.

A comparison of international prices and domestic prices for major crops shows that these have increasingly aligned over the last decade indicating that Indian agriculture is very much in tune with global markets for major agri-products. In several commodities, our domestic prices are below fob prices indicating our trade competitive advantage. But the uncertain and somewhat unstable trade policy orientation has not promoted resource



allocation in line with this inherent competitive advantage, and thus did not allow Indian agriculture to fully reap the efficiency gains from trade. India has adopted a cautious approach towards agri-trade permitting exports only after ensuring that it would not have adverse impact on domestic prices. Agri-trade continues to be strictly regulated and any adverse price movement makes the Government adopt knee-jerk trade, tariff and administrative means to restrain prices. The export ban on wheat and common rice (1996-2000 and again from 2007-11) are stark examples of this policy of restrictive agri-exports. Such restrictions resulted in massive accumulation of grain stocks (63 mt on July 1, 2002 and 82 mt on June 1, 2012), leading to large wastages and efficiency losses. Indian trade policy has oscillated between complete export bans to high import duties with an overarching objective to attain domestic price stability at relatively low price levels. This in-built pro-consumer bias prevents farmers from realizing a remunerative value for their produce, and thereby slows down investments and growth in agriculture.

Lifting of a four year ban on rice has led to record rice exports in 2011-12. India has emerged as a large exporter of cotton and maize due to open trade policies. But recent and abrupt policy changes in case of cotton have led to erosion of confidence of the international market in India and hurt India's image as a regular supplier. India is a large importer of pulses and edible oils. Imports of pulses are permitted under OGL at zero duty but exports are prohibited except for kabuli chana and 10,000 tonnes of organic pulses & lentils per annum. Imports of crude edible oils and refined edible oils are freely allowed with zero and 7.5 percent duties respectively but exports are banned. There is another anomaly in as much higher import duties of 30 per cent apply on oilseeds. Logically, the import duty is graduated from low on raw material to highest on refined product. For sugar, imports have been allowed at zero import duty since August 2009 (10% duty imposed on raw and refined sugar since July, 2012) while exports of sugar have been tightly controlled and were subject to release orders from the Directorate of Sugar until recently. This was despite surplus production years of 2010-11 and 2011-12. This restrictive export policy along with free imports clearly shows a pro-consumer bias and needs to change in order to take into account producer interest as well. Exports need to be fully opened as also imports to have a neutral trade policy for producers as well as consumers.

A stable, liberal and neutral (for producers as well as consumers) trade policy with only moderate duties of 5-10% in most of the years, with provision of Special Safeguards, would promote resource use efficiency, generate surpluses and promote agri-growth. The guiding principle should be the alignment of the domestic and international prices and guard against sharp spikes and troughs through Agricultural Special Safeguards. The key requirement is to continuously monitor domestic and international price trends and identifying the trigger points for prompt action. And the regulatory instrument used should be tariffs and not quantitative restrictions as they are inefficient and make the policy biased.



Farm trade: tapping the hidden potential

I. Backdrop

1. A major challenge that the Indian economy faces today is of increasing merchandise trade deficit. In the year 2011-12, this trade deficit would have been higher but for buoyant agricultural exports. As per latest data released by WTO (WTO, 2012a), India's exports of agricultural products increased by an astounding 49 per cent in 2011. India emerged as the world's largest exporter of rice, replacing Thailand and Vietnam, which are generally the two largest exporters of rice. India also emerged as the largest exporter of beef (buffalo) meat, exporting 1.7 million tonnes worth almost US\$ 3 billion, beating Brazil, Australia and US, which are traditionally the largest exporters of beef¹. In all, agri-exports by India during the FY 2011-12 were more than US\$ 37 billion against an import of agri-commodities worth around US\$ 17 billion.

2. The year 2011-12 may have been an upswing year for Indian agriculture, but the long term trends do suggest that Indian agriculture is globally competitive (Hoda & Gulati, 2007) and one can tap this potential even more to benefit its farming community provided we have a stable, more predictable, and rational agri-trade policy. It is to this effect that this paper highlights the gradual integration of Indian agriculture with world markets over the last two decades or so, and what benefits it has brought about to Indian farmers and economy in general.

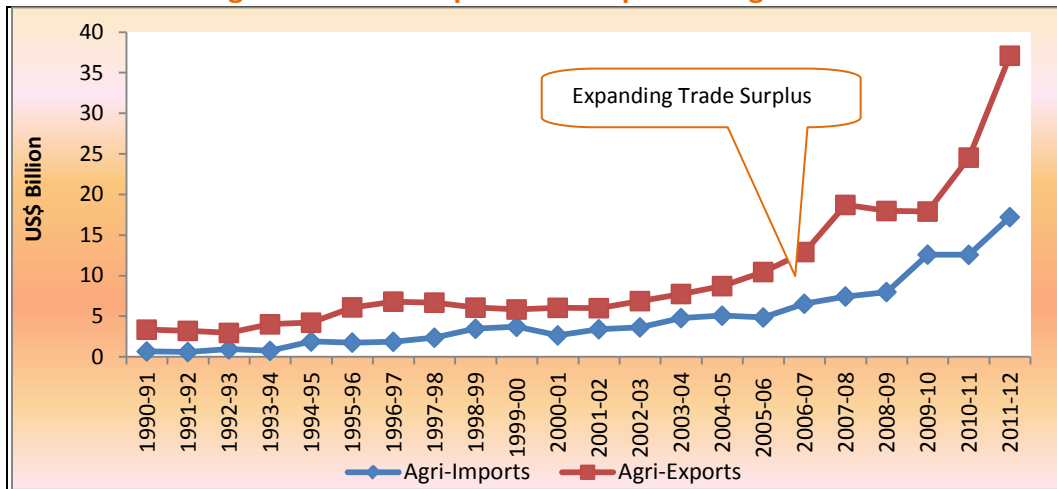
II. India's Agricultural Trade-Trends

3. The temporal behavior of India's exports and imports shows that India has consistently remained a net exporter of agri-products during the last two decades. Agri-Exports have increased more than ten times from US\$ 3.5 billion in 1990-91 to US\$ 37.1 billion in 2011-12 growing at an annual average rate of 13.6 percent. Agri-Imports have increased from US\$ 0.7 billion in 1990-91 to US\$ 17.2 billion in 2011-12 growing at an even higher annual average rate of 21.4 percent. Though agri-imports have risen at a higher rate, the trade surplus has widened during this period as is clearly depicted in Figure 1.

¹ http://www.fas.usda.gov/psdonline/circulars/livestock_poultry.pdf



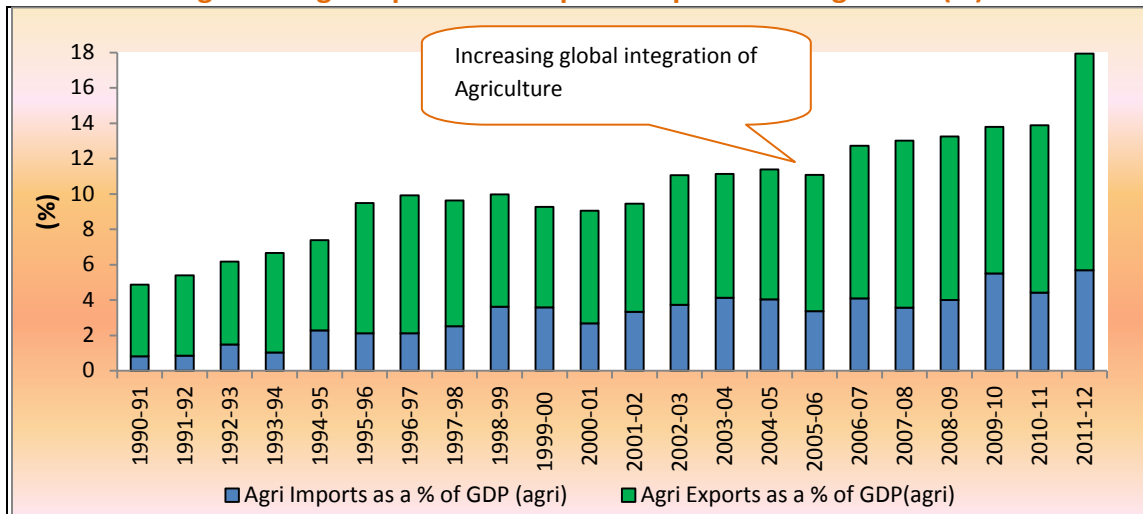
Figure 1: India's exports and imports of agri-commodities



Source: Agricultural Statistics at a glance- various issues & Department of Commerce

4. Indian agriculture has increasingly integrated with the world markets as measured by agri-trade as percentage of agri-GDP. The agri-trade (exports plus imports) as a percentage of agri-GDP, which was about 5 percent in 1990-91 when economic reforms started is today more than three times of that, touching 18 percent in 2011-12 (Figure 2). It is still low as compared to the share of India's total merchandise exports & imports as a percent of India's GDP, which increased from 14.7 per cent to 46.2 percent over the same period, and if one includes the trade in services, Indian economy is even more integrated to the world economy. The share of total trade in goods and services as a percent of India's GDP has increased from 17.5 percent to 59.1 percent over the same period with software consulting services emerging as a major service export.

Figure 2: Agri-exports and imports as percent of agri-GDP (%)



Source: CSO, Agricultural Statistics at a glance- various issues & Department of Commerce

5. India is a net exporter of agricultural commodities with agricultural exports constituting 11.9 percent of India's total exports and agricultural imports constituting only 3.4 per cent of



India's total imports in 2011-12, indicating a 'Revealed Comparative Advantage (RCA)²' in agriculture, whenever Indian agri-trade policy has been somewhat liberal. India's agricultural exports constituted a higher 18.5 percent of India's total exports in 1990-91 while agricultural imports constituted 2.8 percent of India's total exports in 1990-91. Thus, over this period agri-exports have increased at a slower pace than other merchandise exports while agri-imports have marginally increased their share in total imports. One of the reasons for India's agri-exports growing slower than its agri-imports is that when international commodity prices are on an upswing, and Indian agriculture could be exporting large quantities, India puts a ban on exports of several agri-commodities, be it onions or potatoes, or cereals like rice and wheat, pulses or oilseeds, or milk (SMP) and milk products, etc. This is based on the fears that keeping agri-trade open will lead to higher food prices at home, and given large mass of poverty, India would not be able to protect their interests. On the other hand, it opens imports of several essential commodities, especially those which are in short supply at home, at zero or very low import duty, be it pulses, or edible oils, or sugar, etc. to augment domestic supplies and suppress prices. Thus, it uses a restrictive export policy and liberal import policy to achieve equity objectives, i.e., protecting the poor consumers. But in this process, it suppresses incentives to cultivators and thus remains in a low-level equilibrium trap as far as agri-growth is concerned. It would be much better if India could devise a transparent income policy for the poor and allow the price and trade policies to do their main function of allocating resources efficiently, and thereby promoting growth in agriculture.

6. In any case, despite these restrictions, the net exports of agri-commodities from India have been increasing, and in 2011-12, it stood at US\$ 20 billion. Thus, the skepticism about gains from opening up agricultural trade (Chand, 2002) has been unfounded. In fact, Indian farmers have latched onto the opportunities provided by a wider market & better prices. India's share in total global exports of agri products has increased from 0.8 percent in 1990 to 2.1 percent in 2011. This share is more than the share that India has in global merchandise exports i.e 1.7 percent in 2011 (0.6 percent in 1990). Thus, from that point of view, Indian agriculture seems to have a greater comparative trade advantage than manufactured goods. This has been possible as the sector has responded by undergoing a structural transformation which we will elucidate in the next section. It needs to be appreciated here that India's agri-trade policy has been relatively restrictive and unstable. The success of the sector deserves all the more credit and signifies that a supportive trade policy can help propel growth and prosperity, especially in rural areas.

² Balassa's Revealed Comparative Advantage (RCA) Index is computed as: $Rih = (Xih/Xit)/(Xwh/Xwt)$,

Where Rih= Balassa's Index of RCA, Xih= Country i's export of product h, Xit=total export of country i, Xwh=world export of product h, Xwt=total world export.

As per Balassa's RCA for agricultural products, the index for India was 1.6 in 1991 & 2001 and 1.2 in 2011. These estimates should be used with one caveat that there have been long periods when agri-exports were banned, and that makes these estimates as underestimates.

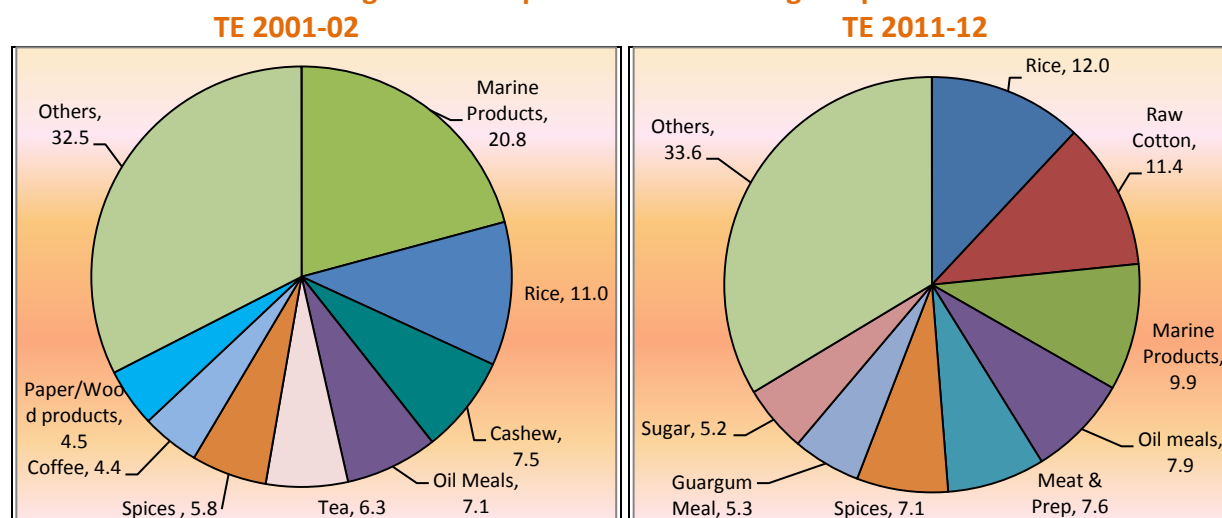


III. Structural Transformation of Indian Agricultural Trade

Composition of Agri-Exports:

7. The composition of agri-exports has evolved over the last decade according to the opportunities provided by the global demand patterns and inherent competitive edge in play with India's trade policy. During triennium average ending (T.E) 2011-12, rice was the leading agriculture export product (with a share of 12.0 percent) closely followed by raw cotton (11.4 percent), marine products (9.9 percent), oil meals (7.9 percent), meat & preparations (7.6 percent), spices (7.1 percent), guar gum meal (5.3 percent) and sugar (5.2 percent) (Figure 3). During T.E 2001-02, marine products were the largest agricultural exports accounting for one-fifths of the total followed by rice (11.0 percent), cashew (7.5 percent), oil meals (7.1 percent), tea (6.3 percent) and spices (5.8 percent). Analyzing the current pattern of agricultural trade it can be inferred that traditional agri-exports of India, such as tea, coffee, cashews, spices, etc have been overtaken by new and more dynamic sectors like rice and maize, cotton, meat, guar gum, and the like, with the biggest change being registered in cotton (Figure 3).

Figure 3: Composition of India's Agri-Exports



Source: Agricultural Statistics at a Glance, various issues & Department of Commerce

8. Looking at the decade of 2000 more minutely, one finds that the share of food grains in total agri-exports has hovered around 15 percent during the decade. *Rice* has remained a consistent export while exports of wheat have been substituted by maize. India has emerged as a major corn exporter with exports expanding by more than 10 times from 0.3 million tonnes in 2000-01 to 3.9 million tonnes in 2011-12. Wheat exports have languished as they were banned for a major part of the decade. Another interesting case is *cotton* which has emerged as the second largest agri-export of India. India is now the world's second largest exporter of cotton and together with US accounts for more than half of the world's exports. *Meat & preparations* have emerged another significant export accounting for 7.6 percent in TE 2011-12 – India has emerged as the world's largest exporter of beef in 2012. *Marine products* are still significant agri exports though their share has declined from 20.8 percent in TE 2001-02 to 9.9 percent in TE 2011-12. *Oil meals* are other significant agri-exports and have increased their share in total agri-exports from 7.1 percent in TE 2001-02 to 7.9 percent in TE 2011-12. *Spices* have also



increased their share from 5.8 percent to 7.1 percent in the same period. *Guargum meal* exports have lately emerged as a major agri-export and account for 5.3 percent in TE 2011-12. India has also emerged as a major exporter of *sugar* during this decade with its share increasing from 2.4 percent in TE 2001-02 to 5.2 percent in TE 2011-12. But a closer look reveals that sugar exports have been largely cyclical with trade policy for sugar playing an important role, which we will examine later. Traditional exports like tea, coffee and cashew together accounted for 18.2 percent in TE 2001-02, which fell to 7.9 percent by TE 2011-12 signifying diversification of India’s agri exports. The share of exports of Fresh fruits & vegetables has also increased from 2.9 percent in TE 2001-02 to 4.0 percent in TE 2011-12 signaling a movement towards high-value exports in line with the global/national demand (Table 1). That this can happen even with weak and fragmented supply lines is a commendable feat, which is only likely to increase as India improves its supply lines for fresh produce.

Table 1: Comparative Share of Major Agri-Products in Total Agri-Exports

Item	Share	
	TE 2001-02	TE 2011-12
Foodgrains	15.8	15.9
Rice	11.0	12.0
Cotton	0.41	11.4
Marine Products	20.8	9.9
Oil Meals	7.1	7.9
Meat & Prep	4.1	7.6
Spices	5.8	7.1
Guargum Meal	2.3	5.3
Sugar	2.4	5.2
Fresh Fruits & Vegetables	2.9	4.0
Traditional Exports – Tea, Coffee & cashew	18.2	7.9

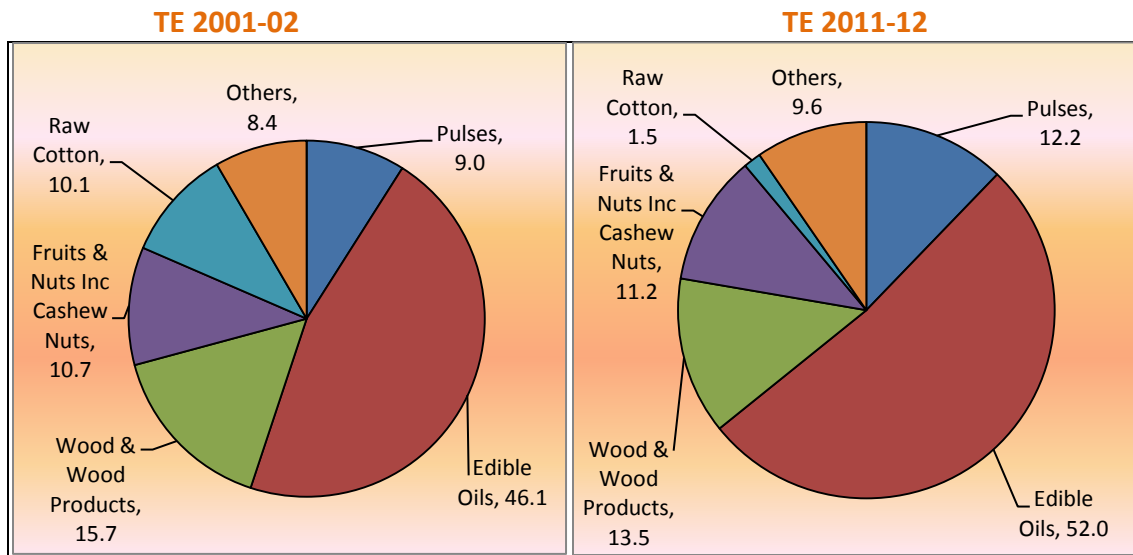
Source: Agricultural Statistics at a Glance, various issues & DOC

Composition of Agri-Imports

9. The composition of agri imports has remained similar over the period of last ten years with pulses and edible oils accounting for more than half of the total (Figure 4). The share of pulses has increased from 9.0 percent in TE 2001-02 to 12.2 percent in TE 2011-12 while edible oils have increased their share from 46.1 percent to 52.0 percent in the same period. Wood & wood products remain the other significant agri-import. Fruits & nuts (including cashew nuts) accounted for 10.7 percent in TE 2001-02 and 11.2 percent in TE 2011-12. A significant change has been the imports of raw cotton which accounted for 10.1 percent of total agri-imports in TE 2001-02. In TE 2011-12, it accounted for only 1.5 percent. This reflects the increase in the domestic production of cotton such that cotton is the second largest agri-export now. So the decade of 2000s really belongs to cotton, with most spectacular increase in production, exports and declining imports- all being driven by the new Bt technology in cotton and new found markets in China (Chaudhary & Gaur, 2011).



Figure 4: Composition of India's Agri-Imports

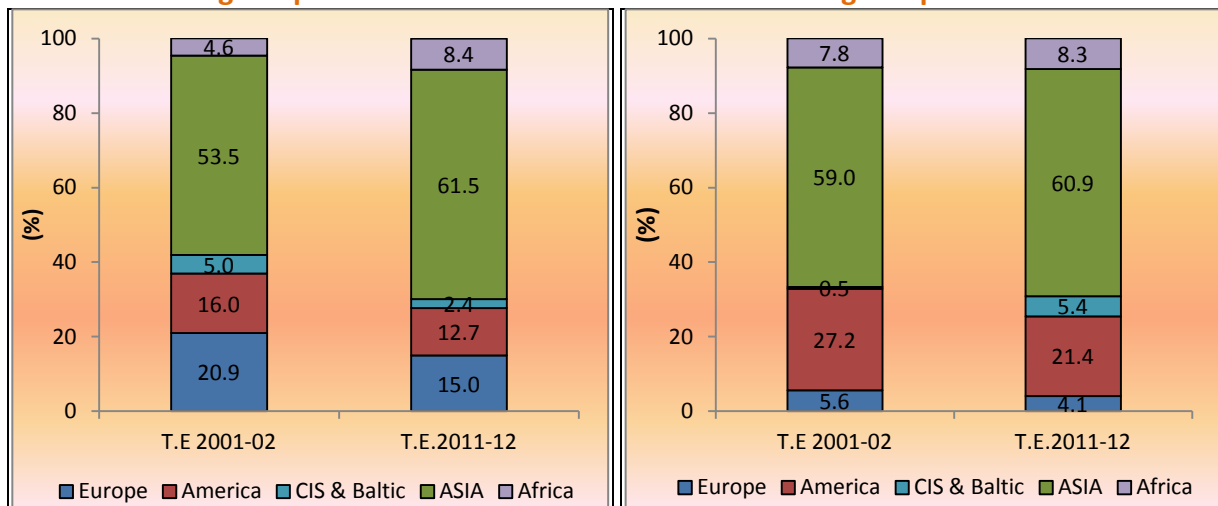


Source: Agricultural Statistics at a Glance, various issues & Department of Commerce

Regional Transformation of Agri-trade

10. Asia remains India's major trading partner. In terms of agri-trade, Asia & Africa have increased their share while there has been a decline in shares of America and Europe. CIS countries have shown a decline in share of agri-exports but have shown a major increase in agri-imports (largely due to vegetable oils). Within Asia, ASEAN has shown an increase in total agri-trade (Figure 5).

Figure 5: Regional Composition of India's Agri-trade, TE 2001-02 to TE 2011-12



Source: Collated from data available from DOC

11. Against the background of evolution of the regional composition of India's trade in agricultural products it is a pity that in the recent FTA type arrangements that India has entered into with the ASEAN, Japan and Korea, no effort has been made to stimulate agricultural trade



flows. One feature of all these agreements is that there are substantial exclusions of agriculture products from tariff liberalization. India has excluded almost all the principal agricultural commodities that feature in international trade viz, poultry and poultry meat, milk and milk products, cut flowers, fresh vegetables, dehydrated vegetables, fresh fruits, spices, wheat, rice, millet, wheat and meslin flour, groundnut and other oilseeds, edible oils except olive oil, sugar, chocolate and chocolate products, prepared and preserved vegetables, prepared and preserved fruits, coffee and tea, wines and spirits, oilcakes, manufactured and unmanufactured tobacco. There are minor differences in the agreements in respect of the excluded products and in the agreement with the ASEAN countries some weak efforts have been made to stimulate trade in a few products such as palm oil, pepper and tea.

IV. Comparison of International, Domestic & Support Prices for Major Crops

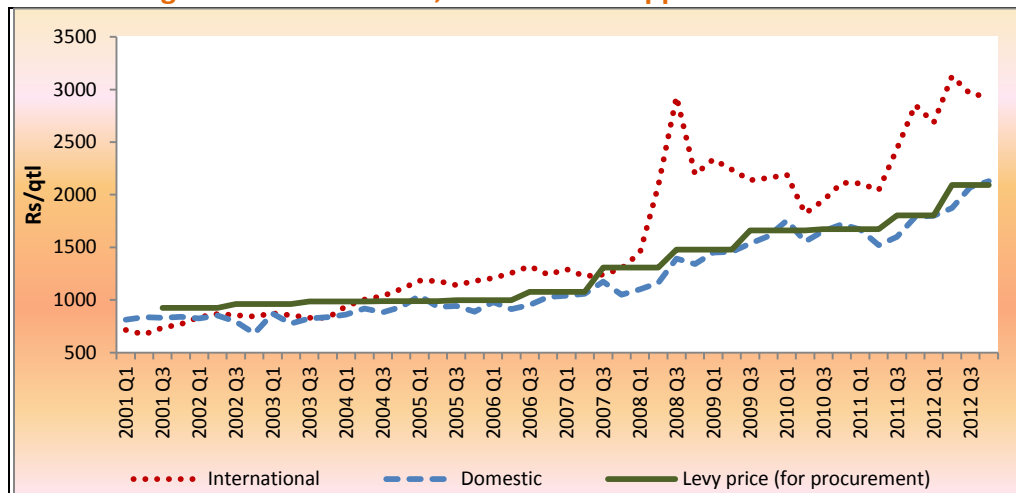
12. Trade can expand if our trade policy is more open, liberal and stable. Efficiency gains from trade can be tapped not only by exporting commodities in which we have competitive advantage but also importing those where we don't have competitive edge. This also helps the domestic production to restructure itself in line with global comparative advantage. But trade competitiveness is a dynamic phenomenon, which would vary depending upon the changes in international and domestic prices consequent upon demand and supply of commodities, as well as by changing technologies impacting costs of production and market conditions. In its simplest form trade competitiveness can be measured by comparing domestic prices with its export/import parity reference price measured over a period of time, which in turn is derived by deducting/adding freight, port handling, margins etc from the fob/cif price of that commodity. If domestic price of any commodity is lower than the export/import parity reference price, then the commodity is export/import competitive (Hoda & Gulati, 2007). In the absence of reliable data on transport and other charges, an attempt has been made to compare the domestic and international prices of major agri crops over the last decade to get an idea of the alignment between them, which can also help shaping the domestic minimum support price policy to ensure that our prices are not very much out of line with global price vector of important agri-commodities.

CEREALS

13. *Rice*: Domestic wholesale prices and support prices of rice have been lower than international prices especially during the last six years (Figure 6). As exports of non-basmati rice were banned since April 2008, Indian farmers could not exploit this price competitiveness (Dawe *et al*, 2010). Since, exports of non-basmati rice have been opened wef September, 2011; India has exported record 7.2 million tonnes in FY 2011-12 and 4.7 million tonnes in first half of FY 2012-13. As per FAO, India has emerged as the world's largest exporter of rice in calendar year 2012.



Figure 6: International, Domestic & Support Prices of Rice



Source: World Bank and Directorate of Economics & Statistics (DES)

Note: 1. International prices are of Rice (Thailand), 25% broken, government standard, f.o.b. Bangkok

2. Domestic wholesale prices for rice are calculated by averaging monthly data across mandis in India available from DES

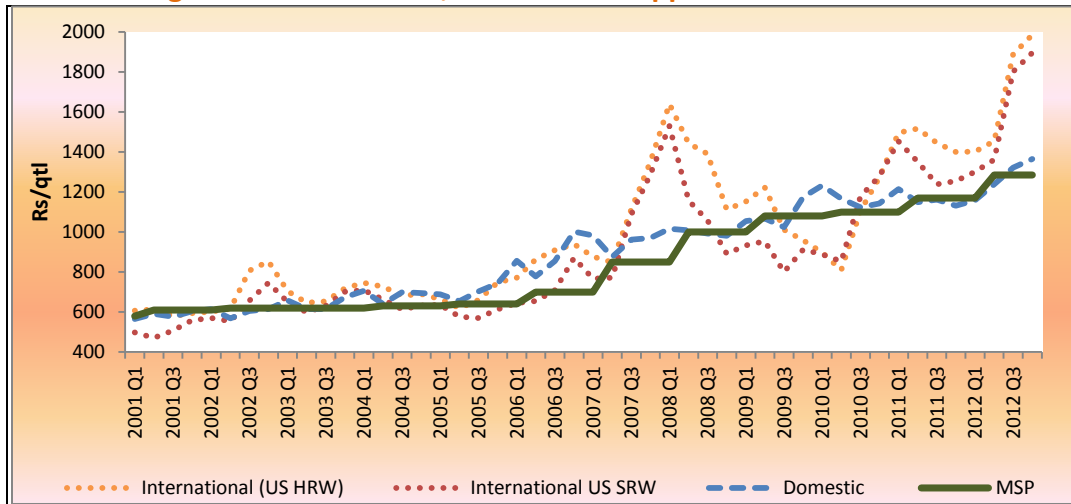
3. All India Average Levy Price is calculated by weighing levy prices in top five states with their shares in rice procurement. Levy Price is imposed by FCI on FAQ (Fair Average Quality) Rice with 25% broken component.

14. *Wheat*: Indian wheat prices have closely followed the trend line of international wheat prices of Hard Red Winter (HRW) and Soft Red Winter (SRW); fob US Gulf (Figure 7). The domestic prices of wheat hover between fob and cif prices and ensure that wheat production is largely for self-sufficiency. Therefore, India is not a major player in global wheat trade despite being the world's second largest producer. International prices peaked in 2008 and again in 2011 but export ban on wheat since February, 2007 prevented farmers to gain from these spikes. India opened its wheat exports in September 2011 after four years of ban—just as the international prices were declining making Indian wheat uncompetitive. As a result, despite record harvest, India could export only 7.4 lakh tonnes in FY 2011-12. But as international prices have flared up after mid-2012 primarily due to adverse weather in US and Russia, India has exported 2.4 million tonnes in the first half of FY 2012-13. It is expected that total wheat exports during the FY 2012-13 are likely to be around 6.5 million tonnes³. During 2013-14, if the global prices remain above \$300/ton, as they have been in the second half of 2012, India may be exporting even larger amounts of wheat, given the bulging stocks of wheat at home.

³ <http://www.igc.int/downloads/gmrsummary/gmrsumme.pdf>



Figure 7: International, Domestic & Support Prices of Wheat

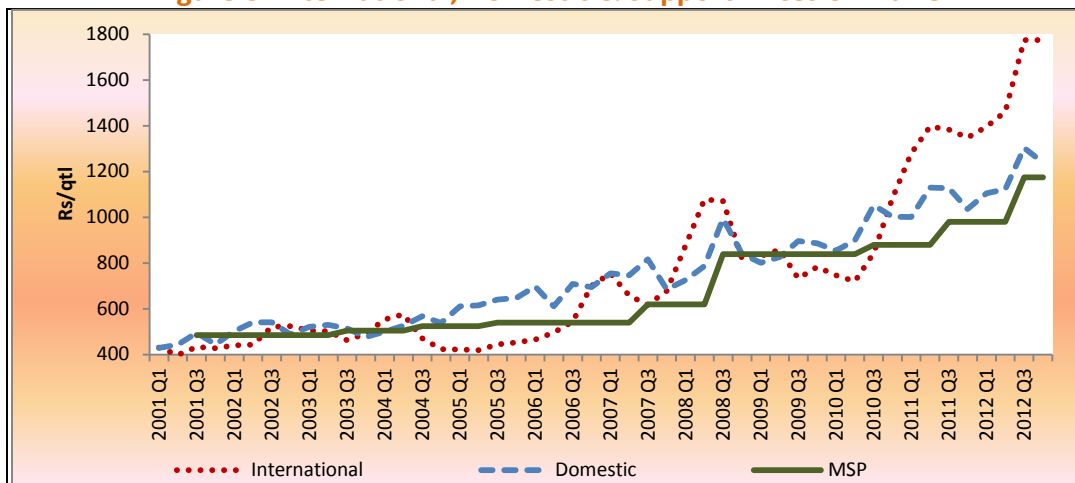


Source: World Bank and DES

Note: 1. International prices are of wheat (US), no. 1, hard red winter (HRW), and no. 2, soft red winter (SRW), export price delivered at the US Gulf port
 2. Domestic wholesale prices are calculated by averaging monthly data across mandis in Punjab & UP

15. *Maize/Corn*: Domestic wholesale prices of maize have been broadly in line with the international prices (Figure 8) till 2010. The support price has been slightly lower than the domestic prices. In recent years, international prices have risen and India exported a record 3.9 million tonnes in FY 2011-12 and 2.1 million tonnes in the first half of FY 2012-13. It won't be a surprise if in FY 2012-13, India's corn exports cross 4 million tonnes, setting a new record.

Figure 8: International, Domestic & Support Prices of Maize



Source: World Bank and DES

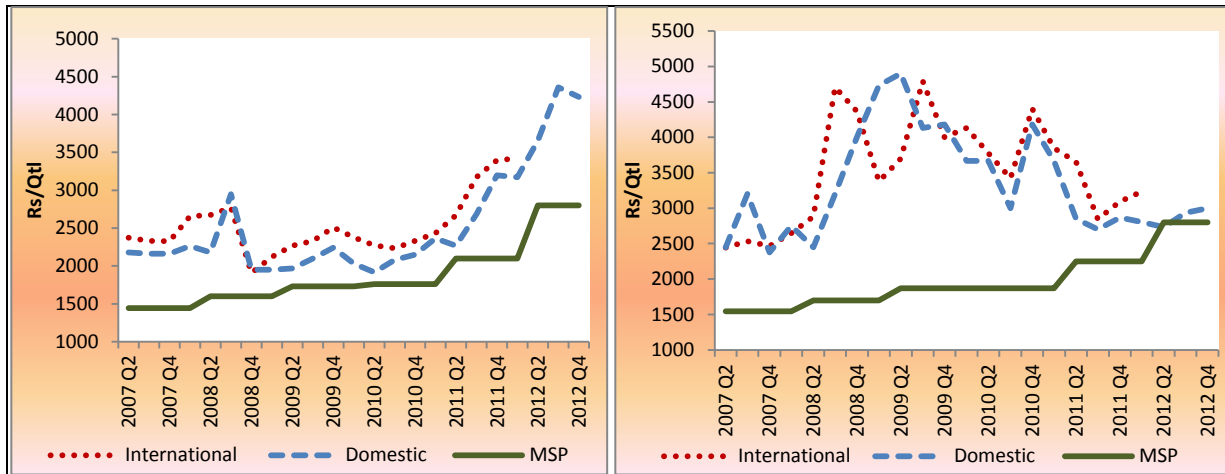
Note: 1. International prices are of Maize (US), no.2, yellow, f.o.b.US Gulf ports
 2. Domestic wholesale prices are calculated by averaging monthly data across mandis in Karnataka & AP



PULSES

16. Domestic wholesale prices of major pulses like gram, lentil have been in line with the international prices (Figure 9) during the last five years as imports are allowed at zero duty to fill the demand-supply gap for pulses.

Figure 9: International, Domestic & Support Prices
Gram Lentil

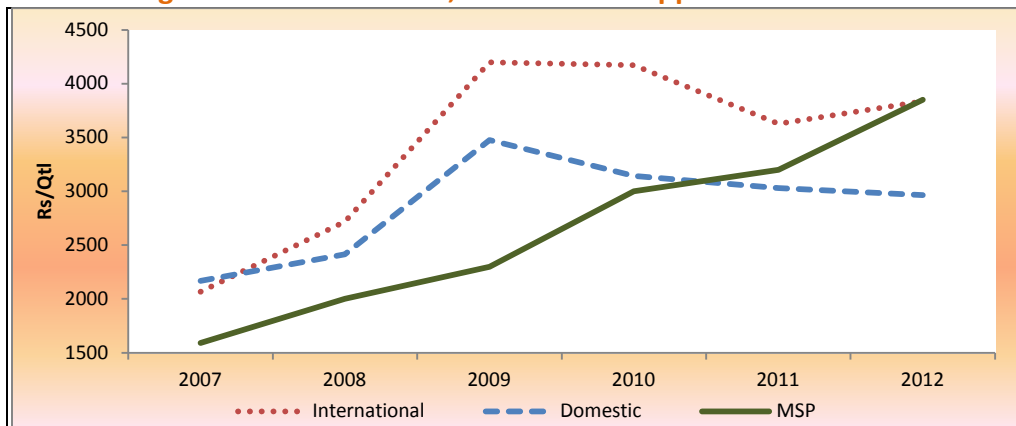


Source: NAFED and DES

Note: Domestic wholesale prices for gram are calculated by averaging monthly data in Bhopal in MP. International prices of gram (Australia origin) are C&F Price at Indian port provided by NAFED. Domestic wholesale prices for lentil are calculated by averaging monthly data in Sagar in MP. International prices of lentil (Canada origin) are C&F Price at Indian port provided by NAFED

17. Domestic wholesale prices for Tur have been lower than the international prices (Figure 10) during the last five years. This may have been due to large imports of yellow peas which is an effective substitute for tur.

Figure 10: International, Domestic & Support Prices of Tur



Source: NAFED and DES

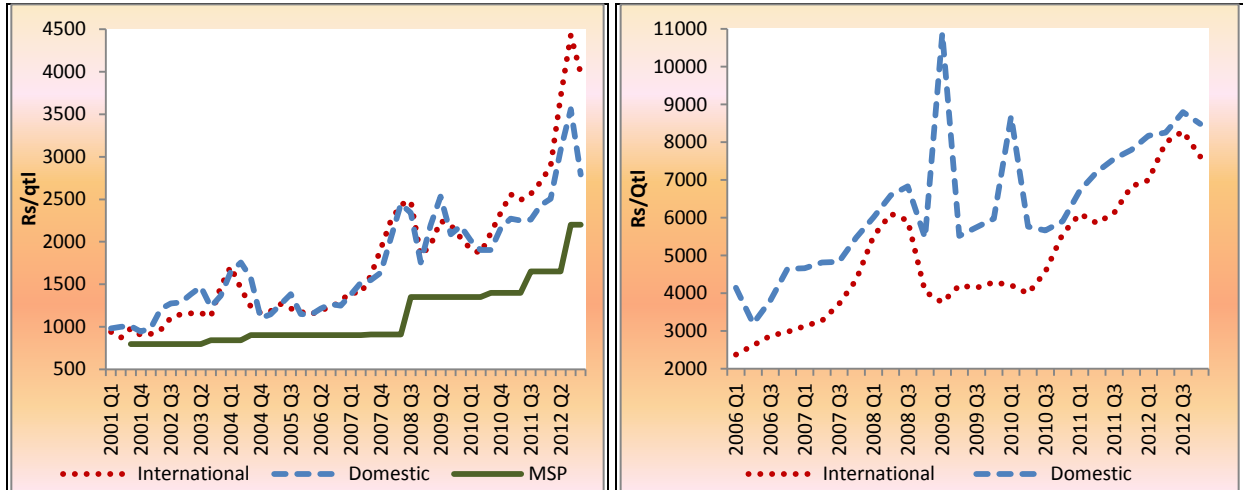
Note: Domestic wholesale prices are calculated by averaging monthly data in Jalgaon in Maharashtra



OILSEEDS/OILS

18. *Soyabean*: International prices and domestic prices of soyabean have been in sync during the last ten years (Figure 11). Domestic prices of soyabean oil have remained higher than the international prices though the gap has been reducing over the years with the gradual reduction of import duties.

Figure 11: International, Domestic & Support Prices Soyabean Soyabean Oil



Source: World Bank and DES

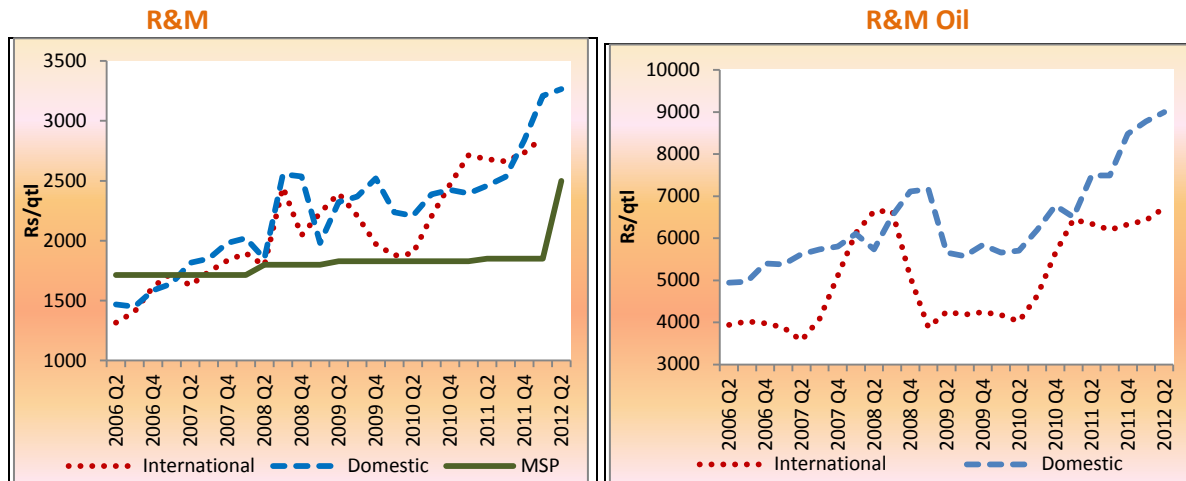
Note: 1. International prices are of Soybeans (US), c.i.f. Rotterdam and of crude Soybean oil (Any origin), f.o.b. ex-mill Netherlands

2. Domestic wholesale prices for soyabean & soyabean oil aren calculated by averaging monthly data across mandis in MP available from DES

19. *Rapeseed/Mustard Seed (R&M)*: While the domestic prices of mustard oil have been higher than international prices of rapeseed oil (mustard oil commands a premium over rapeseed oil); the domestic prices of mustard seed have been in line with international prices of rapeseed (Figure 12). Given that, mustard seed commands a premium over rapeseed; this may indicate that India has a competitive advantage in production of mustard seeds. But export of oilseeds is banned.



Figure 12: International, Domestic & Support Prices



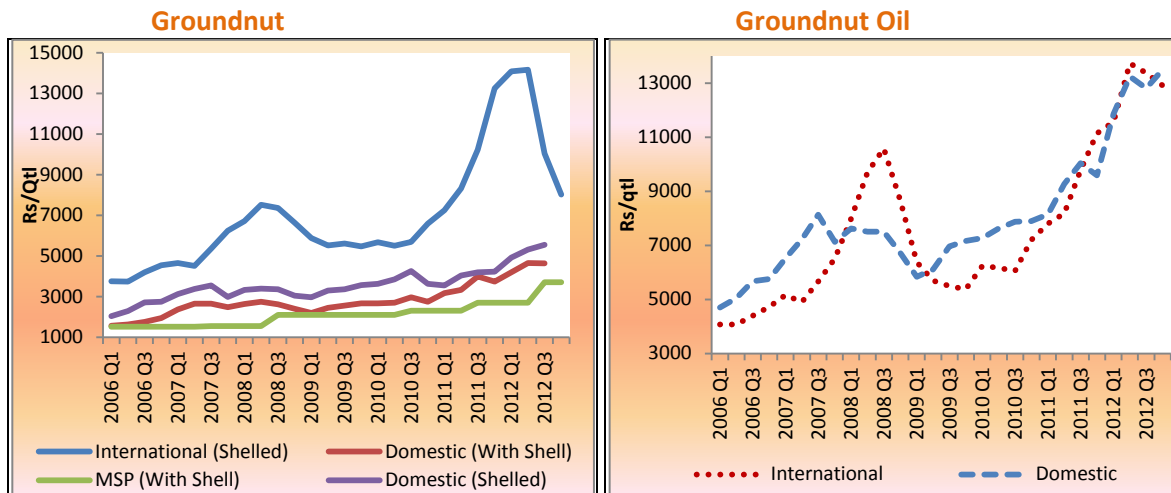
Source: IMF, DES

Note: 1. International prices of crude rapeseed oil, fob Rotterdam; for rapeseed (Canola Seed-fob Vancouver) prices have been taken from Cereals & Oilseeds Review-Statistics Canada.

2. Domestic prices are for mustard oil have been calculated by averaging monthly data at Jaipur mandi (Rajasthan) and for mustard seed at Sriganganagar (Rajasthan) mandi.

20. **Groundnut:** The domestic prices and support prices of groundnut have been much lower than the international prices (Figure 13). The domestic and international prices of groundnut oil have moved in sync with each other during last five years.

Figure 13: International, Domestic & Support Prices



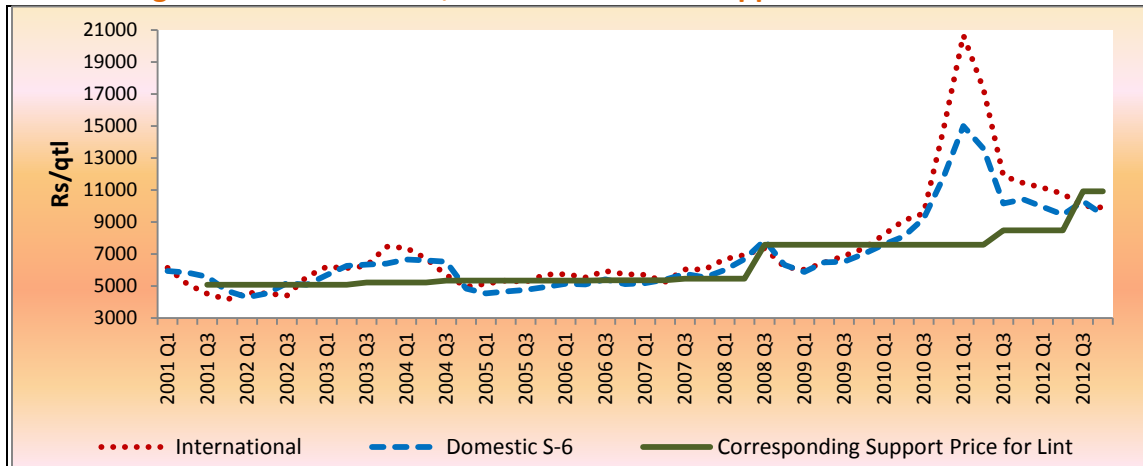
Source: World Bank, DES

Note: International prices of groundnuts (US), Runners 40/50, shelled basis, c.i.f. Rotterdam, and Groundnut oil (any origin), c.i.f. Rotterdam. Domestic prices have been calculated by averaging monthly data at Rajkot in Gujarat

21. **Cotton:** The domestic and support prices for cotton have followed the trend line of international prices during the last ten years (Figure 14). India exported a record 12.9 million bales (of 170 kg) of cotton in 2011-12 (cotton season).



Figure 14: International, Domestic Prices & Support Prices of Cotton



Source: World Bank and Cotton Corporation of India

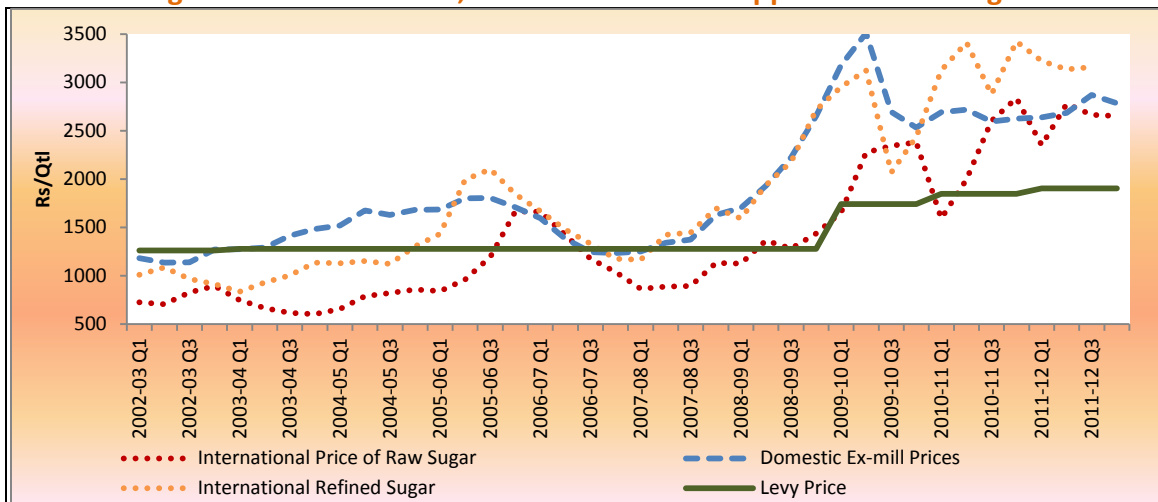
Note: 1. International prices are Cotton (Cotton Outlook "CotlookA index"), middling 1-3/32 inch, traded in Far East, C/F beginning 2006; previously Northern Europe, c.i.f.

2. Domestic prices for Cotton lint are for S-6 variety from Cotton Corporation of India

3. MSP for Raw cotton has been converted to corresponding support price for cotton lint by using the conversion factor of 0.33.

22. **Sugar:** Domestic ex-mill prices have broadly followed the trend in international prices (Figure 15). India has been an occasional exporter of importer depending upon the demand-supply balance and trade policy.

Figure 15: International, Domestic Prices & Support Prices of Sugar



Note: 1. International prices of refined white sugar are as traded at the London Futures Exchange (LIFFE)

2. International Prices of Raw Sugar are taken from World Bank and refer to International Sugar Agreement (ISA) daily price, raw, f.o.b. and stowed at greater Caribbean ports.

3. Domestic Ex-mill prices have been taken from Directorate of Sugar, Department of Food & Public Distribution and refer to crystal sugar. There is on an average 30 percent premium on refined sugar over raw sugar. Crystal sugar (preferred in India) commands a premium over refined sugar (preferred worldwide)

4. Levy Price refers to ex-factory levy price in western UP



V. Trade Policy

23. Relative international prices and domestic prices determine a country's international competitiveness. Whether or not this translates into actual trade flows depends on the country's sectoral or crop-specific trade policies. India has adopted a cautious approach towards agri-trade permitting exports only after ensuring that it would not have adverse impact on domestic prices. Duty-free import of essential commodities has been allowed to augment domestic supplies especially for pulses and oils. The guiding principle, purportedly, has been to balance producers and consumers' interests (Chand & Bajar, 2012). But a restrictive export policy along with free imports –which has been the norm for most agri-commodities- clearly shows a pro-consumer bias and needs to change in order to take into account producer interest as well. The earlier section showed that for most agricultural commodities, Indian domestic prices are below world prices, indicating a pro-consumer bias in agri-trade policy.

24. The main objectives of agri-trade policy before the initiation of economic reforms in 1991 were import-substitution and self-sufficiency. The overvalued exchange rate itself acted as a barrier to agri-exports and thus inflicted an 'implicit tax' on agri-producers. This was corrected during the 1990s economic reforms, but the apprehensions on exposing Indian agriculture to world markets remained (Gulati, 2012). Agri-trade continues to be strictly regulated and any adverse price movement makes the Government adopt knee-jerk trade, tariff and administrative means to restrain prices. The export ban on wheat and common rice (1996-2000 and again from 2007-11) are stark examples of this policy of restrictive agri-exports. Due to lack of a planned and sustained strategy towards agri-trade, there is tremendous year to year variation in India's trading partners and the volume of trade with them for most agricultural commodities.

CEREALS

25. The removal of export bans on common rice and liberalizing the exports of basmati rice in 1994 helped India emerge as the world's second largest exporter of rice in 1995-96. But exports of common rice and wheat were banned during 1996-2000 and then again during 2007-2001. Since the lifting of the ban in September, 2011, India has emerged as the world's largest rice exporter in 2012. In case of wheat, India has been an occasional exporter as well as importer depending upon the demand-supply situation at home. During most of the period after mid-1990s, wheat has been largely import competitive. In case of maize, India has emerged as a large exporter as there have been no policy interventions. The import duty for cereals remains at a high of 50-80% which is a pro-producer policy. These need to be drastically reduced to follow a neutral trade policy.

PULSES

26. India is a large importer of pulses and imports are to the tune of 2 to 3.5 million tonnes every year. Imports are permitted under OGL at zero duty since 8th June, 2006 – this is to ensure the availability of pulses at reasonable prices. Pulses exports from India, however, are prohibited since 27th June, 2006 except for kabuli chana⁴ and 10,000 tonnes of organic pulses⁵

⁴ DGFT Notification dated 7th March 2007



& lentils⁶ per annum. This restrictive export policy along with free imports of pulses at zero import duty clearly shows a pro-consumer bias. This needs to change and exports need to be fully opened also to have a neutral trade policy for producers as well as consumers.

OILSEEDS/OILS

27. Till mid 1990s, imports of edible oils were tightly controlled through canalization. In 1994–95, India introduced a phased liberalization of edible oil imports and import duties have been reduced to the levels of zero percent and 7.5 percent for crude oils and refined oils respectively with effect from 1st April, 2008⁷ (GOI, 2012a). The effective rates of duty are even lower as the tariff value, the base price on which custom duty is determined, has remained fixed since 31st July 2006. Only recently since 1st August, 2012, the tariff value on imported RBD palmolein has been defreezed⁸. On 17th January, 2013, the Cabinet Committee on Economic Affairs (CCEA) has approved to defreeze the tariff values of all edible oils and notify their tariff values on the basis of their prevailing international prices⁹. India is a large importer of edible oils-it imported around 10 million tonnes in 2011-12 (Nov-Oct). Given that it is a large importer, it can exert a monopsonistic advantage by bargaining for a better price-it can exercise the option of imposing an import duty equal to the export duties imposed by Malaysia/Indonesia on export of edible oil.

28. On the other hand, imports of oilseeds continue to be restricted with 30 percent import duty. Logically, the import duty is graduated from low on raw material to highest on refined product. The duty structure of nil duty on crude edible oils and 7.5 percent duty on refined edible oils and high duty of 30 percent on import of oilseeds defies economic sense. The import duty on oilseeds need to be reduced to zero per cent so that domestic edible oil industrial units are able to import oilseeds at lower prices and are able to compete with the cheaper import of crude as well as refined edible oil in the domestic market (GOI, 2012b).

29. Export of edible oils has been banned with effect from 17th March 2008, except coconut oil and minor forest based produce¹⁰, and edible oils in branded consumer packs of upto 5 kgs subject to a limit of 10,000 tons per year¹¹ (increased to 20000 tons per year¹²). This also has a pro-consumer bias, which needs to be changed and edible oil exports need to be fully opened for exports to have a neutral trade policy for consumers and producers/processors (GOI, 2012b). It may be noted, however, that oilmeals are a major agri-export of India, and its export policy is open and liberal (though there is an import duty of 15% on imports of oilmeals).

⁵ DGFT Notification dated 23rd March 2011

⁶ DGFT Notification dated 3rd June 2011

⁷ CCEA has recently given its approval for the enhancement of import duty on crude edible oils from 0 to 2.5%, while retaining the present import duty of 7.5% on all refined edible oils vide PIB release dated 17th January, 2013.

⁸ The tariff value on imported RBD palmolein has been defreezed 31.7.2012 vide DGFT's Notification No. 66/2012-CUSTOMS (N.T.).

⁹ <http://www.pib.nic.in/newsite/erelease.aspx?relid=91632>

¹⁰ vide DGFT Notification dated 1.4.2008 and Notification dated 19.8.2008

¹¹ vide DGFT Notification dated 20.11.2008

¹² vide DGFT Notification dated 19.10.2012



COTTON

30. Cotton exports from India during the nineties (and even in 1980s) were placed under quota restrictions. The government liberalized raw cotton exports since July 2, 2001 and placed the same under OGL. Since then, India has emerged as the world's second largest exporter of cotton. But recently, cotton exports were banned in mid-2010 and then export caps were placed for 2010-11. The quantitative restrictions on cotton exports were lifted in August, 2011 and exports of cotton were made free subject to registration of contracts with DGFT. India exported a record 12.9 million bales (of 170 kg each) in 2011-12 cotton season. On 5th March, 2012, cotton exports were suddenly banned with immediate effect, which created a lot of opposition from farmers and ginners and their political leaders, given that a large amount was committed for exports. The ban was soon lifted but it was a reminder of the 'flip-flop' policy followed for agri-exports. These frequent policy changes not only cripple export performance of the country and lead to erosion of confidence of the International market for India as a regular supplier but also the farmers from realizing a remunerative value for their produce, and thereby slow down investments and growth in agriculture.

31. Cotton has been imported into India under the OGL since April 1994. Till July 8, 2008, a custom duty of 10 percent and 4 percent special countervailing duty were levied on cotton imports. However, from July 8, 2008, the Government abolished duty on cotton imports, thus enabling the domestic textile mills to import cotton as per their requirements. So the cotton trade policy, to be neutral to farmers and textile mills (consumers) should be open ended and stable on exports as well as imports. And if there is any need to protect consumers (textile mills) from spikes in global prices or farmers from troughs in global prices, a moderate duty should be imposed on exports/imports, whenever domestic prices cross the trigger points. Abrupt bans do not serve any good purpose.

SUGAR

32. During the last ten years, India has been a net exporter of sugar. This has been despite constant government interventions in external trade of sugar with intermittent ban on exports. Sugar exports were canalized till 15th January, 1997 when exports were de-canalized and permitted subject to obtaining Registration-cum-Allocation Certificate (RCAC) from Agricultural and Processed Food Products Export Development Authority (APEDA). Since 1st April, 2001, this requirement of RCAC was dispensed with and export of sugar after obtaining the export release order from Directorate of Sugar, Department of Food and Public Distribution. As domestic prices of sugar surged between January-June, 2006, exports of sugar were banned w.e.f. 22nd June, 2006. Due to high production in sugar season 2007-08, the ban on export of sugar against advance licenses was relaxed on 4th January, 2007 and later for exports under OGL was permitted from 23rd January, 2007. Within a span of six months, due to the cyclicity in production of sugarcane and consequently sugar, trade policy was changed from complete ban on exports to open exports through OGL. As 2008-09 was also a good production year, the requirement of obtaining export release orders from Directorate of Sugar (except for export to



EU and US) was also relaxed till 31st December, 2008¹³. This requirement was reintroduced w.e.f. 1st January, 2009 in view of the lower expected production of sugar in 2009-10. Sugar production improved in 2010-11 and due to comfortable sugar stocks in the country, exports of 1.5 million tonnes of sugar were allowed under OGL during March-August, 2011 and 2 million tonnes during December 2011-February, 2012. Recently, free exports of sugar have been allowed subject to prior registration of quantity from 14th May, 2012. Obtaining export release orders from Directorate of Sugar has also been dispensed with by notification dated 11th May, 2012 (GOI (2012 c)).

33. Imports of sugar were allowed under OGL with zero duty since March 1994. A basic customs duty of 5% and a countervailing duty of Rs. 850.00 per tonne was imposed on imported sugar w.e.f 27th April, 1998 which was gradually increased from 20% w.e.f. 14th January, 1999, to 60% w.e.f 9th February, 2000 along with continuance of countervailing duty of Rs. 850/- per tonne (increased to Rs 950 per tonne w.e.f. 1.03.2008 plus 3% education cess). During January-June 2006, due to surge in sugar prices, imports of sugar were permitted without any quantitative restrictions upto 30th September, 2006. The import duty on sugar was abolished on 6th August, 2009. Government allowed import of raw sugar under Advance Authorization Scheme by sugar mills at zero duty upto 30-09-2009 and import of raw sugar at zero duty under OGL by the sugar mills/Private Trade upto 31-03-2010 which was further extended upto 31-12-2010. Levy obligation was removed in respect of all imported raw sugar and white or refined sugar. The Government also allowed duty free import of white/refined sugar by STC/MMTC/PEC and NAFED upto 1 million tons by 01-08-2009 which was extended upto 30-11-2009. Further, duty free import of white/refined sugar under OGL has also been opened to other Central/State Government agencies and to private trade in addition to existing designated agencies. Department of Revenue has extended the period of duty free import of raw, white and refined sugar from time to time till 30th June 2012. Recently, due to surge in domestic prices an import duty of 10 percent has been imposed on raw and refined sugar w.e.f. 13th July, 2012¹⁴ (GOI (2012 c)).

34. Thus, the Government has been following broadly a consumer-oriented trade policy as imports have been allowed at zero import duty since August 2009 while exports of sugar have been tightly controlled and were subject to release orders from the Directorate of Sugar until recently. This was despite surplus production years of 2010-11 and 2011-12. This is a clear case of 'urban consumer bias' in our sugar trade policy.

35. Thus, the above analysis shows that competitive advantage in agri-products in play with the trade policy has determined the fate of agri-trade. In trade theory, restrictive export policy indicates a "pro-consumer" and "anti-farmer" bias, with export bans reflecting an "implicit taxation" of the producers and "cross-subsidization of consumers". On the other hand, high import duties reflect "anti-consumer" and "pro-producer" bias. Indian trade policy has

¹³ vide DGFT notification dated 31st July, 2007

¹⁴ Ministry of Finance (Department of Revenue) No. 45/2012- Customs, dated the 13th July, 2012



oscillated between complete export bans to high import duties with an overarching objective to attain domestic price stability at relatively low price levels.

VI. Agri-Trade: India and the WTO

36. India maintained firm control over imports and exports of agricultural goods before the 1990s. While quantitative restrictions on imports of some agricultural commodities, most notably pulses and edible oils, were freed up in the 1980s and 1990s, the general removal of quantitative restrictions on agricultural trade occurred following the Uruguay Round Agreement on Agriculture (AoA) (Hoda, 2002). The AoA required India to bind agricultural tariffs at ceiling rates ranging from 0 to 100 percent for primary products, 150 percent for processed products, and 300 percent for edible oils. In 1997, when India lost the balance-of-payments waiver that allowed it to maintain restrictive trade policies, India accelerated the process of lifting quantitative import restrictions (QRs). India completed the removal of QRs in April 2001, and nearly all agricultural products can now be imported subject to a tariff and to sanitary & phytosanitary standards. As export controls are not restricted by the terms of the AoA, India continues to impose bans and quotas on exports of agricultural commodities to meet its domestic price policy goals.

37. Due to its strategic importance and food security concerns, India considers it necessary to maintain protection and offers the agricultural sector greater tariff protection than to others. Average tariff protection for agriculture (33.2%) remains, therefore, substantially higher than for manufactured goods (8.9%). Some 57% of agricultural goods bear tariffs of 30%, and 13% bear tariffs above 30%. This contrasts with trade liberalization in manufacturing, which has been more noteworthy, with the reduction of "peak tariff" rates to 10% (with some exceptions) (WTO, 2011).

38. Bound tariff rates for agricultural products range from 10- 300 percent- among the highest in the world. The final bound simple average import duty for agricultural goods was 113.1 percent and only 34.6 percent for non-agricultural goods in 2010 (WTO, 2012b). For many agricultural products, there is a wide spread between bound and applied tariff rates (Table 2), which allows modification of tariffs substantially while complying with WTO commitments. India tends to modify tariffs frequently on food staples, such as wheat, pulses, rice, sugar, and vegetable oils. India's policy has usually been to adjust applied tariffs periodically to keep domestic prices stable; either raising tariffs to help strengthen producer prices or reducing tariffs to help moderate rising consumer prices. This variability, as well as the complex process for the notification of tariff rate changes, creates uncertainty and acts as an impediment to trade (WTO, 2011).



Table 2: India's bound and applied agricultural tariffs, 2010

Item		Bound rate	Applied advalorem rate
Cereals	Wheat	100	0
	Paddy	80	80
	Rice (milled/semi-milled)	70	70
	Corn	70	50
	Wheat flour	150	30
	Sorghum	80	80
	Other cereals (rye, Barley)	100	0
Pulses		100	0
Oilseeds		100	30
Oil cakes		100	15
Crude vegetable oils	Palm/Groundnut/Sunflower/Safflower/Coconut	300	0
	Rapeseed	75	0
	Soybean	45	0
Refined Edible Oils	Soybean	45	7.5
	RBD Palmolein/Palm/Groundnut/Sunflower/Coconut/	300	7.5
	Rapeseed	75	7.5
Sugar		150	0
Dairy products	Milk	100	30
	Butter/Cheese	40	30
	Milk powder	60	60
Poultry & fish	Chicken leg	150	100
	Whole chicken	100	30
	Fish	Unbound	30
Fruit & vegetables	Apples	50	50
	Strawberries	100	30
	Onions	100	5
	Potato	150	30
	Frozen vegetables	55	30

Source: WTO tariff analysis database & Agricultural Statistics at a Glance, 2011

VII. The way forward

39. There is reasonably large potential in the agricultural sector to emerge as a major player in global agri-trade, both in exports as well as imports. But the trade policy orientation has not promoted resource allocation in line with inherent competitive advantage, and thus has not allowed Indian agriculture to reap the efficiency gains from trade (Gulati & Kelley, 1999). In order to tap the full potential of agriculture sector, a long-term consistent, stable and predictable agri-trade policy is the need of the hour. And it has to be as much focused on exports as on imports, giving a trade neutral level to producers as well as consumers.



40. A stable and liberal trade policy with only moderate duties of 5-10% in most cases will go a long way in achieving this end. This would promote resource use efficiency, generate surpluses and promote agri-growth. The guiding principles should be the alignment of the domestic and international prices along long-term trends while also guarding against sharp spikes and troughs. Only when the global prices collapse below some pre-identified triggers, say 15-20% below the trend line, higher import duties may be imposed. Similarly, when world prices are say more than 15-20% above the trend line, an export duty of may be imposed on a calibrated basis. The key issue to implement such a policy is to continuously monitor domestic and international price trends and identify the trigger points for prompt action. This responsibility can be entrusted to an institution like Commission for Agricultural Costs and Prices (CACP), which has been tracking international price behaviour for its MSP mandated crops on regular basis, and it can advise the government when to hike or lower import duties, or impose export duties, depending upon when the international prices hit the trigger points, both in downward or upswing cycles. And the regulatory instrument used should be tariffs and not quantitative restrictions as they are inefficient and make the policy biased. The idea should be to regulate international trade flows in both directions with interventions that mitigate the effects of wide fluctuations in international prices but do not choke off such flows.

41. Besides identifying trigger points for changes in trade policy, CACP can also help the government in identifying the distortions in import duty structures of a crop complex with a view to streamline those to get efficiency gains. For example, in case of edible oils, we have seen that the import duty structure of nil duty on crude edible oils and 7.5 percent duty on refined edible oils and high duty of 30 percent on import of oilseeds defies economic sense. This duty structure needs to be rationalized in the order of economic value added- in increasing order on oilseeds, crude oils and refined oils. Similar examples abound in many other agri-commodities.

42. For the Government of India to retain the flexibility to raise the applied import duties on various products up to 15-20 per cent when the need arises it would be necessary to ensure that the bound duties are retained at that or slightly higher level, so that the tariff level can be raised or lowered on receipt of the advice from the CACP without affecting our specific commitments under the WTO. If agreement is reached in the WTO on Special Agricultural Safeguards whereby governments are enabled to raise import duties automatically on the basis of agreed price or import volume triggers, India can lower the bound duties further.

43. One issue that often comes in this regard is that OECD countries give large subsidies on their agriculture, and therefore exports emanating from those countries have inherent subsidies. How can India, therefore, allow unhindered imports from those countries without risking its own agriculture? There are several global studies that have been done¹⁵, which indicate the extent of likely increase in global prices of those commodities in case all those

¹⁵Hertel, T.W., and R. Keeney. 2006. "What is at Stake: The Relative Importance of Import Barriers, Export Subsidies, and Domestic Support," Chapter 2 in *Agricultural Trade Reform and the Doha Development Agenda*, K. Anderson and W. Martin eds., Palgrave Macmillan and The World Bank, New York.



subsidies are withdrawn. Most of these range from 5 to 15%. It is a matter of concern that there is a prolonged impasse in the WTO negotiations and a solution has not been agreed. If the Special Agricultural Safeguards referred to above are agreed, importing countries would be able to deal with the international price effects of these subsidies to some extent. However, it is imperative that the negotiations are continued until the objective of imposing meaningful disciplines on the subsidy practices of developed countries has been accomplished and the loophole that allows them to exacerbate the volatility in international commodity prices through subsidies is plugged.

44. We have seen that India's regional trade in agricultural products has been buoyant and there is potential for considerably increasing agricultural trade with East and South East Asian countries. For the potential to be realized it would be necessary to review the substantial exclusion of agricultural products from the FTA type arrangements particularly with the ASEAN, but with Japan and Korea as well, and reach agreement with them to reduce and even remove the impediments in the two way trade.

45. Overall, notwithstanding the complexities of subsidies and domestic support, the main aim should be a stable, rational and a visionary agri-trade policy so that India can gain from its inherent competitive edge. A wider market would not only enhance incomes but also encourage efficient resource allocation to the products in which we have productive advantage. This would go a long way in harvesting rich returns from agriculture and benefiting the farmers and rural economy!



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