

Agricultural Export Diversification and Competitiveness in South Asia

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Introduction

- Why do countries diversify their export baskets?
 - As a risk minimizing strategy
 - Stabilize export earnings in the longer run (Ghosh and Ostry, 1994)
 - To expand domestic industries as a means of promote economic growth (Hesse, 2008)
 - Progression from traditional to non-traditional exports (Samen, 2010)
 - Countries should diversify from primary exports into manufactured exports in order to achieve sustainable growth (Chenery, 1979)

Introduction

- But can we just simply diversify exports?
- There are many factors to consider
 - Resource endowment
 - Information
 - Geography
 - Socio-economic factors
 - Competitiveness
- Trade competitiveness is a key determinant in expanding agro-food trade (Bojnec and Ferto, 2009)
- Export Competitiveness
 - Export competitiveness can be defined as the ability of a firm to compete on international markets (Samen, 2010)

Background

- South Asia
 - Moving from protectionism to liberalization
 - Nature of exports and trends in export diversification
 - Recent development
- Agricultural exports in South Asia
 - Share of agriculture in GDP
 - High dependency on agricultural exports

Objectives

1. Examine the degree of competitiveness of the agricultural exports in South Asian countries
2. Examine the role of potential competitive sectors for export diversification
3. Identify the changes in the composition of competitive products/product mix for South Asia


Method of Analysis & Data Compilation

- Export Competitiveness
 - Balassa (1965) introduced the Revealed Comparative Advantage Index (RXA) to measure the Export competitiveness

$$RXA = \left(X_{ij} / \sum_{t \in j} X_{it} \right) / \left(\sum_{n, n \neq i} X_{nj} / \sum_{n, n \neq i} \sum_{t \in j} X_{nt} \right)$$

- Where;
 - $RXA > 1$ is Competitive
 - $RXA < 1$ is not Competitive
- RXA is an easy way of measuring Competitiveness due to its simplicity in calculation and interpretation (Seymen, 2004)

Method of Analysis & Data Compilation

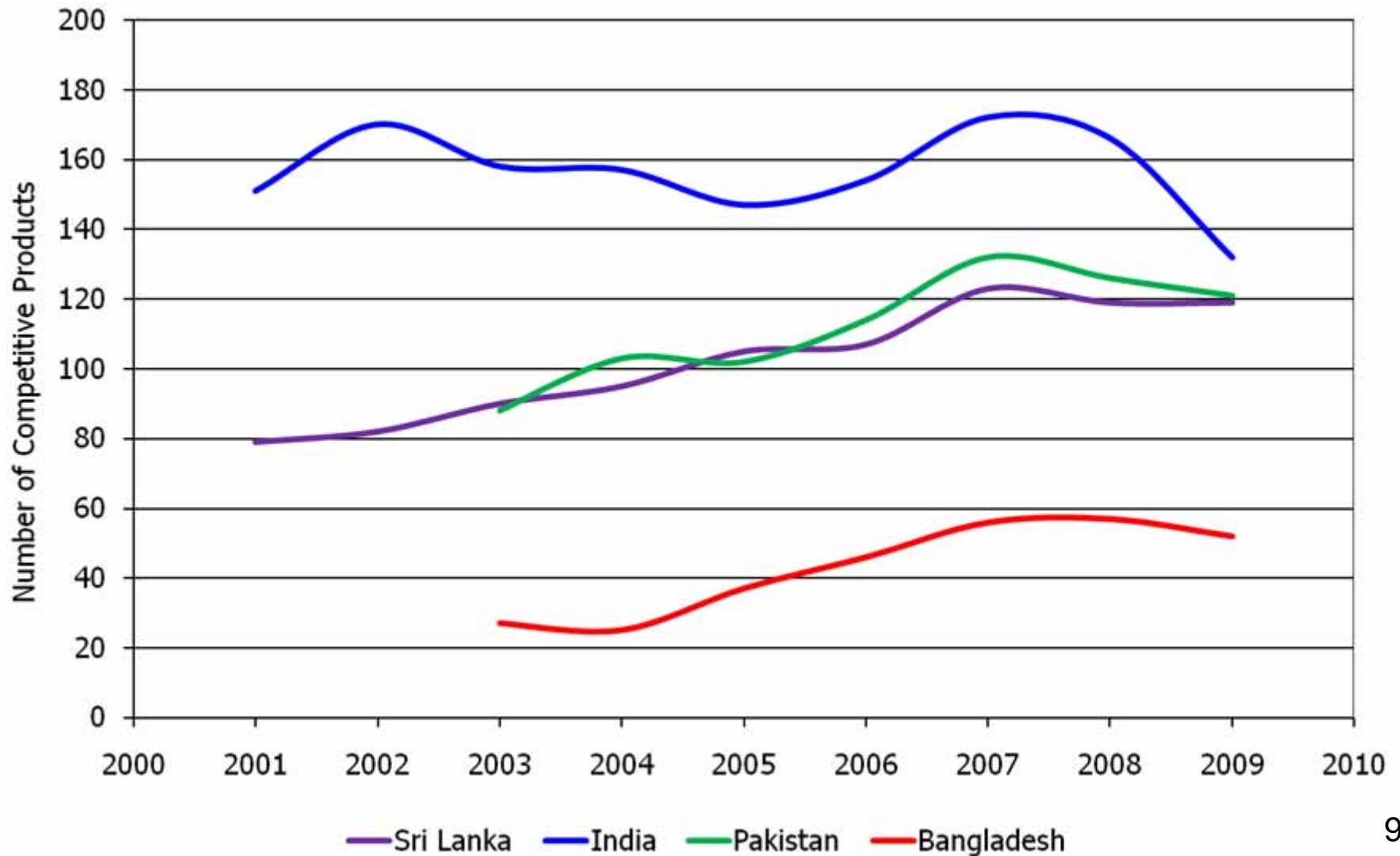
- HS codes 1 – 24 (Agricultural products) 
- Time period (2001– 2009)
- UN Comtrade database and Trade Map (ITC)
- Study was conducted for four countries namely Sri Lanka, India, Pakistan and Bangladesh
- The products were categorized into following classifications and the RXA was calculated for the composite commodity
 - Animal Vs Plant origin
 - Value added Vs Non value added
 - HS 1-24 Product groups
- Change in composition of the most competitive products for each year

Results

Number of Products and Competitive Products

Year	World	Sri Lanka		India		Pakistan		Bangladesh	
	All Products	Competitive products	All Products	Competitive products	All Products	Competitive products	All Products	Competitive products	All Products
2001	704	79	558	151	693	-	-	-	-
2002	769	82	600	170	752	-	-	27	462
2003	769	90	600	158	752	88	565	25	462
2004	769	95	600	157	752	103	565	37	462
2005	766	105	599	147	749	102	565	46	462
2006	765	107	600	154	749	114	565	56	462
2007	792	123	618	172	766	132	576	57	471
2008	780	119	617	166	756	126	576	52	471
2009	777	119	616	132	753	121	575	33	471

Competitive Products Exported at HS 6 digit level



Competitiveness among groups of commodities

- Animal origin Vs. Crop origin



- Primary Vs. Value added



- HS 01-24 Product groups



Changes in the Product Mix

- The ten most competitive exports for each year were mapped in a graph
 - Sri Lanka 
 - India 
 - Pakistan 
 - Bangladesh 

Conclusions

- Number of competitive products over time in terms of RXA has increased in Sri Lanka, India, Pakistan and Bangladesh.
- Competitiveness across sectors
 - Animal based Vs Crop based
 - Primary Vs Value added
 - HS 1-24 groups
- Changes in the competitive product mix suggest countries of attempting to diversify trade

Thank You

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Year	SL	IN	PAK	BAN	SL	IN	PAK	BAN
	Animal Based				Crop Based			
2001	1.03	1.53			4.86	2.21		
2002	0.86	1.48		3.77	4.70	1.99		0.17
2003	1.04	1.24	0.96	3.19	4.64	1.84	2.36	0.17
2004	0.94	1.13	0.89	3.37	5.02	1.89	2.37	0.32
2005	1.06	1.19	0.86	3.08	5.73	1.62	3.24	0.56
2006	1.44	1.11	1.04	3.46	5.88	1.65	3.31	0.44
2007	1.60	1.01	1.02	3.94	5.93	1.72	3.23	0.40
2008	0.98	0.88	1.12	2.58	6.14	1.81	5.00	0.18
2009	0.76	0.73	1.25	1.97	5.41	1.17	3.60	0.13



Year	SL	IN	PAK	BAN	SL	IN	PAK	BAN
	Primary Products				Value Added Products			
2001	1.11	1.58			5.42	2.23		
2002	1.15	1.26		0.37	5.08	2.19		1.66
2003	0.91	1.52	0.91	0.30	5.15	1.72	2.70	1.41
2004	1.14	1.51	0.94	0.58	5.46	1.70	2.62	1.49
2005	1.19	1.17	0.77	0.91	6.22	1.66	3.73	1.47
2006	1.42	1.29	0.93	0.71	6.49	1.58	3.83	1.59
2007	1.38	1.48	1.19	0.75	6.74	1.50	3.54	1.67
2008	1.50	1.69	1.33	0.46	6.87	1.41	5.72	0.96
2009	1.35	1.03	1.42	0.22	6.24	1.03	4.00	0.81



Sri Lanka

Code	Product label	2001	2002	2003	2004	2005	2006	2007	2008	2009
3	Fish, crustaceans, mollusks, aquatic invertebrates	3.14	2.63	3.24	2.99	3.06	4.00	4.66	4.76	4.45
8	Edible fruit, nuts, peel of citrus fruit, melons	1.90	1.70	1.96	2.49	1.80	2.19	2.36	2.70	2.07
9	Coffee, tea, mate and spices	101.52	108.14	105.81	105.84	97.66	94.96	94.51	105.68	96.04
11	Milling products, malt, starches, inulin, wheat glute	1.56	2.06	2.01	2.72	6.10	10.33	6.92	7.45	5.18
14	Vegetable planting materials, vegetable products	7.33	11.77	13.46	18.45	16.50	20.13	25.86	39.94	47.94
24	Tobacco and manufactured tobacco substitutes	2.35	2.58	3.18	3.96	3.72	3.53	3.87	3.89	2.93
All	Total Agriculture	3.43	3.26	3.32	3.49	4.01	4.27	4.41	4.51	4.02

India

Code	Product label	2001	2002	2003	2004	2005	2006	2007	2008	2009
3	Fish, crustaceans, mollusks, aquatic invertebrates	4.20	4.11	3.15	2.69	2.73	2.42	2.25	1.64	1.41
7	Edible vegetables and certain roots and tubers	1.48	1.32	1.39	1.42	1.69	1.60	1.36	1.24	1.15
8	Edible fruit, nuts, peel of citrus fruit, melons	2.53	2.32	1.75	1.97	1.87	1.64	1.38	1.45	1.07
9	Coffee, tea, mate and spices	8.58	7.57	6.63	6.51	5.15	5.30	5.22	4.96	3.76
10	Cereals	4.12	5.80	4.84	5.23	4.72	3.29	3.82	3.47	2.85
12	Oil seed, oleagic fruits, grain, seed, fruit	2.02	1.40	1.94	1.92	1.41	1.53	1.69	1.37	0.82
13	Lac, gums, resins, vegetable saps and extracts	15.54	13.60	11.68	12.44	13.38	11.78	9.95	9.43	5.85
14	Vegetable planting materials, vegetable products	5.60	4.93	4.66	6.13	5.51	4.65	4.81	5.06	4.03
23	Residues, wastes of food industry, animal fodder	3.43	1.79	3.60	4.01	2.95	4.10	3.98	4.94	2.36
24	Tobacco and manufactured tobacco substitutes	1.12	1.24	1.27	1.36	1.24	1.39	1.44	1.78	1.86
All	Total Agriculture	2.06	1.85	1.67	1.64	1.48	1.47	1.50	1.53	1.00

Pakistan

Code	Product label	2003	2004	2005	2006	2007	2008	2009
3	Fish, crustaceans, mollusks, aquatic invertebrates	1.82	1.48	1.66	1.92	1.86	2.38	1.91
5	Products of animal origin	2.09	2.60	1.99	2.10	2.23	2.50	2.94
8	Edible fruit, nuts, peel of citrus fruit, melons	1.51	1.72	1.41	1.59	1.59	1.64	2.10
10	Cereals	11.54	11.09	17.54	17.94	14.46	21.97	18.94
11	Milling products, malt, starches, inulin, wheat glute	4.79	4.59	8.26	9.93	6.85	1.15	1.14
13	Lac, gums, resins, vegetable saps and extracts	6.28	5.74	4.85	5.56	6.55	6.33	3.41
14	Vegetable planting materials, vegetable products	3.14	2.34	2.18	2.54	4.27	4.66	3.47
17	Sugars and sugar confectionery	3.00	3.65	2.77	2.35	1.57	5.80	2.31
All	Total Agriculture	1.56	1.53	2.01	2.12	2.07	1.33	2.31



Code	Product label	2002	2003	2004	2005	2006	2007	2008	2009
3	Fish, crustaceans, mollusks, aquatic invertebrates	9.56	8.37	9.04	8.25	9.29	11.51	7.63	5.30
9	Coffee, tea, mate and spices	1.68	0.98	1.29	1.38	0.58	0.66	0.58	0.17
14	Vegetable planting materials, vegetable products	2.50	1.18	0.62	0.14	0.33	0.42	1.28	0.65
24	Tobacco and manufactured tobacco substitutes	0.25	0.45	0.99	1.12	0.72	0.83	0.87	0.99
All	Total Agriculture	0.90	0.75	0.87	0.96	0.97	1.02	0.58	0.43



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	2003	2004	2005	2006	2007	2008		2009

Bangladesh



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'230240							8	5
'240290		6						

HS Code	Name
01	Live animals
02	Meat and edible meat offal
03	Fish, crustaceans, mollusks, aquatic invertebrates
04	Dairy products, eggs, honey, edible animal product
05	Products of animal origin
06	Live trees, plants, bulbs, roots, cut flowers etc
07	Edible vegetables and certain roots and tubers
08	Edible fruit, nuts, peel of citrus fruit, melons
09	Coffee, tea, mate and spices
10	Cereals
11	Milling products, malt, starches, inulin, wheat glute
12	Oil seed, oleagic fruits, grain, seed, fruit
13	Lac, gums, resins, vegetable saps and extracts
14	Vegetable planting materials, vegetable products
15	Animal, vegetable fats and oils, cleavage products
16	Meat, fish and seafood food preparations
17	Sugars and sugar confectionery
18	Cocoa and cocoa preparations
19	Cereal, flour, starch, milk preparations and products
20	Vegetable, fruit, nut, etc food preparations
21	Miscellaneous edible preparations
22	Beverages, spirits and vinegar
23	Residues, wastes of food industry, animal fodder
24	Tobacco and manufactured tobacco substitutes

