



## **India's Trade Experience with SAARC and the Future of SAFTA**

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### **I-Introduction**

In the current scenario, regional economic integration is considered as a means of strengthening international competitiveness and as an engine of economic growth by most of the countries. For a number of South Asian nations, the 1990s marked as liberalizing of trade and investment regimes to intensify their integration with the world economy. Regional economic co-operation is defined as 'the creation of most desirable structure of international economy, removing artificial hindrances to the optimal operation and introducing deliberately all desirable elements of co-ordination or unification'. There are various advantages of international economic integration to the member nations of a regional group as: (i) improvement in the quality as well as quantity of the factor of production due to technological changes and increased capital movement, (ii) enhancement in the volume of output due to better exploitation of resources, (iii) enhancement in the volume of trade and (iv) increased economic efficiency within the participating nations due to increased competition among the member nations etc. The idea of regional co-operation in South Asia was initiated by Bangladesh at first during 1979-80. In this direction, one such regional forum in the South Asian Association for Regional Co-operation (SAARC) was established in 1985. It is an important endeavor on the part of the seven nations (Bangladesh, Bhutan, Nepal, India, Maldives, Pakistan and Sri Lanka) of the SAARC to accelerate economic and social development and to facilitate optimum utilization of human and

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material resources through the concept of collectively self-reliant co-operation and harmony in certain areas of co-operation especially in the foreign trade.

The World Trade Organization (WTO) which came into existence on January 1, 1995 with a view to ensure global cooperative trade environment, to raise incomes and to create ample job opportunity for the nations through fair and open trade, has added new dimensions in India's foreign trade sector. India, one of the founding members of the GATT (1947) and WTO (1995), favors multilateral approach to trade relations.

India is also committed to ensure that the special and differential treatment provisions for developing countries under different WTO agreements are translated into specific enforceable dispensations. Currently, India has adopted WTO norms in these sectors i.e. Agriculture, Trade and Industry, Intellectual property and services (WTO: Report on India's trade policies Review, May 2002).

SAARC is moving towards a Free Trade Area and South Asia Free Trade Agreement (SAFTA) that is an initial step in the evolution of the South Asian Association for Regional Cooperation as a regional trade block and an economic union. SAFTA was signed on January 6, 2004, during the Twelfth SAARC Summit in Islamabad. But how favorably it will affect the intra-regional trade it is uncertain as economic trouble for India could be created through the Free Trade Agreements.

In the early 1991, Indian economy faced several economic crises like fiscal imbalances, mounting inflationary pressure and severe balance of payment crisis. The Congress government, which assumed office at the end of June 1991, responded quickly to these problems. As a result, the policy of Structural Adjustment Programmes (SAPs) was introduced in July 1991. Apart from the other regulatory measures to correct the prevailing distortions in the Indian economy, the broad approach was to initiate reform in the external sector, which was emphasized in the report of the high level committee on Balance of Payment (Chairman: C. Rangrajan). The objectives of reforms in the external sector were conditioned by the need to correct the deficiencies that were responsible for payment imbalances of 1991. Before 1991, although several committees [Tandon Committee (1980), Abid Husain Committee (1984) Narshimann Committee (1985)] recommended measures to correct the anomalies in the foreign trade sector of the Indian economy, but these recommendations failed to bring the desired reform in the external sector of the Indian Economy.

In the present paper, an attempt has been made to depict India's foreign trade with SAARC nations considering the structural changes in Indian Economy as well as WTO Arrangements in 1995 and also the future of the SAFTA. Second section deals with the research methodology and data structure. India's trade relation with SAARC nations is discussed in third section. Findings and policy implication are presented in section four.

## II-Research Methodology & Data

For the purpose of the study time series as well as panel data has been utilized. The data of India's export and import to the SAARC countries has been taken for the period 1984-85 to 2005-06. The data are collected from the various issues of Statistical Yearbook for Asia and the Pacific, Handbook of statistics on Indian Economy, Economic survey and Center for Monitoring Indian Economy.

In order to estimate average annual growth of the India's trade with SAARC countries during 1985 to 2005 time series data has been converted in to panel data. For this purpose, the technique of slope dummy and intercept dummy has been employed (Gujarati, 1995). We have utilized the following regression model for country wise average annual growth rate of India's export and import with SAARC nations.

$$\ln Y_{it} = \alpha_0 + \alpha_1 t + \alpha_2 d_1 + \alpha_3 d_1 t + \alpha_4 d_2 + \alpha_5 d_2 t + \alpha_6 d_3 + \alpha_7 d_3 t + \alpha_8 d_4 + \alpha_9 d_4 t + \alpha_{10} d_5 + \alpha_{11} d_5 t + \alpha_{12} d_6 + \alpha_{13} d_6 t + \alpha_{14} d_7 + \alpha_{15} d_7 t + u_i$$

.....(2.1)

In equation (2.1),  $\ln Y_i$  = India's export and import with SAARC countries in natural log form.  $d_1, d_2, d_3, d_4, d_5, d_6$ , and  $d_7$  are the dummy variables<sup>1</sup>.  $u_i$  is the random disturbance term and  $t$  is the panel trend for SAARC countries.

In the above regression equation, average annual growth is measured by

$$g_{\text{World}} = \hat{\alpha}_1 * 100 \dots \dots \dots (2.2)$$

$$g_{\text{SAARC}} = (\hat{\alpha}_1 + \hat{\alpha}_3) * 100 \dots \dots \dots (2.3)$$

$$g_{\text{Bangladesh}} = (\hat{\alpha}_1 + \hat{\alpha}_3 + \hat{\alpha}_5) * 100 \dots \dots \dots (2.4)$$

$$g_{\text{Bhutan}} = (\hat{\alpha}_1 + \hat{\alpha}_3 + \hat{\alpha}_5 + \hat{\alpha}_7) * 100 \dots \dots \dots (2.5)$$

$$g_{\text{Maldives}} = (\hat{\alpha}_1 + \hat{\alpha}_3 + \hat{\alpha}_5 + \hat{\alpha}_7 + \hat{\alpha}_9) * 100 \dots \dots \dots (2.6)$$

$$g_{\text{Nepal}} = (\hat{\alpha}_1 + \hat{\alpha}_3 + \hat{\alpha}_5 + \hat{\alpha}_7 + \hat{\alpha}_9 + \hat{\alpha}_{11}) * 100 \dots \dots \dots (2.7)$$

$$g_{\text{Pakistan}} = (\hat{\alpha}_1 + \hat{\alpha}_3 + \hat{\alpha}_5 + \hat{\alpha}_7 + \hat{\alpha}_9 + \hat{\alpha}_{11} + \hat{\alpha}_{13}) * 100 \dots \dots \dots (2.8)$$

$$g_{\text{Sri Lanka}} = (\hat{\alpha}_1 + \hat{\alpha}_3 + \hat{\alpha}_5 + \hat{\alpha}_7 + \hat{\alpha}_9 + \hat{\alpha}_{11} + \hat{\alpha}_{13} + \hat{\alpha}_{15}) * 100 \dots \dots \dots (2.9)$$

Further an attempt has been made to estimate average annual growth in India's trade with SAARC nations for sub period like 1985-91, 1991-94, 1995-2004 and 2005-06. For this purpose time series data has been utilized. More specifically in the present study, we have adopted the regression equation as mentioned below:

$$\ln Y_i = \beta_0 + \beta_1 t + \beta_2 d_8 + \beta_3 d_8 t + \beta_4 d_9 + \beta_5 d_9 t + \beta_6 d_{10} + \beta_7 d_{10} t + v_i \dots \dots (2.10)$$

Where,

$$d_8 \text{ is the first dummy} = \begin{array}{ll} 1984-85 \text{ to } 1990-91 & = 0 \\ 1991-92 \text{ to } 2006-07 & = 1 \end{array}$$

$$d_9 \text{ is the second dummy} = \begin{array}{ll} 1984-85 \text{ to } 1994-95 & = 0 \\ 1995-96 \text{ to } 2006-07 & = 1 \end{array}$$

$$d_{10} \text{ is the third dummy} = \begin{array}{ll} 1984-85 \text{ to } 2004-05 & = 0 \\ 2005-06 \text{ to } 2006-07 & = 1 \end{array}$$

And,  $v_i$  is the random disturbance.  $\ln Y_i$  same as explain in equation no 2.1 and  $t$  is the time trend form 1985 to 2006.

In the above regression equation, growth in India's export and import with SAARC nation's for the sub period is measured by

$$g_{yx \text{ 1985-91}} = \hat{\beta}_1 * 100 \dots \dots \dots (2.11)$$

$$g_{yx \text{ 1991-95}} = (\hat{\beta}_1 + \hat{\beta}_3) * 100 \dots \dots \dots (2.12)$$

$$g_{yx \text{ 1995-04}} = (\hat{\beta}_1 + \hat{\beta}_3 + \hat{\beta}_5) * 100 \dots \dots \dots (2.13)$$

$$g_{yx\ 1995-04} = (\hat{\beta}_1 + \hat{\beta}_3 + \hat{\beta}_5 + \hat{\beta}_7) * 100 \dots\dots\dots (2.14)$$

The policy makers and researchers may assume that export and import have increased over the years. In view of this we may assume that per annum growth in India's export and import during the period 1995 to 2006 has been higher during 1991 to 1995 per annum growth of export and import during the period 1984 to 1991. The above-mentioned conditions may be stated as,

$$g_{yx\ 2004-06} > g_{yx\ 1995-04} ;$$

$$g_{yx\ 1995-2004} > g_{yx\ 1991-95} ;$$

$$g_{yx\ 1991-95} > g_{yx\ 1985-91} ;$$

i.e.

$$(\hat{\beta}_1 + \hat{\beta}_3 + \hat{\beta}_5 + \hat{\beta}_7) * 100 > (\hat{\beta}_1 + \hat{\beta}_3 + \hat{\beta}_5) * 100$$

$$(\hat{\beta}_1 + \hat{\beta}_3 + \hat{\beta}_5) * 100 > (\hat{\beta}_1 + \hat{\beta}_3) * 100;$$

$$(\hat{\beta}_1 + \hat{\beta}_3) * 100 > \hat{\beta}_1 * 100;$$

### III- Empirical Results

#### Foreign Trade of India with SAARC Nations (1984-85 to 2006-07): Export, Import and Terms of Trade:

Table 1 (Please visit [www.rcssindia.org/Alok/tables.aspx](http://www.rcssindia.org/Alok/tables.aspx) for table 1) shows India's foreign trade with rest of the world (during 1984-2006). It is quite noticeable that India's trade balance with rest of the world has always been negative during the study period as import is always greater than the exports. The huge import of POL products has been the major factor behind it. When we consider percentage change in export and import over the previous year, we find that the percentage change in export has been negative for the years 1985, 1991, 1998 and 2001. The slow growth of world trade in 1985 and the increasing protectionist barriers imposed by the developed countries created an unfavorable environment for export growth by developing countries including India. The striking fall in the international prices of some of the commodities of export interest to India has also constrained export earnings (Economic Survey 86-87). While percentage change in import has been negative only for the years 1986 and 1991. In the year 1986 the decline in import was due to fall in

international oil prices and also by the falls in the bulk import of fertilizers, fertilizers and materials, etc (Economic Survey 87-88) and prevailing economic conditions in Indian economy during 1990.

Table – 2: Regression Results: Average Annual Growth Rate of India's export and import to SAARC Nations.

| Variables         | Model I (India's Export) |           | Model II ( India's Import) |           |
|-------------------|--------------------------|-----------|----------------------------|-----------|
|                   | Coefficients             | t- values | Coefficients               | t- values |
| Constant          | 8.944                    | 48.50     | 9.264                      | 30.43     |
| t                 | 0.109                    | 8.13      | 0.103                      | 4.65      |
| D <sub>1</sub>    | -6.921                   | -13.48    | -8.402                     | -9.91     |
| D <sub>2</sub>    | -3.633                   | -3.95     | -4.286                     | -2.82     |
| D <sub>3</sub>    | -13.607                  | -6.99     | -18.006                    | -5.60     |
| D <sub>4</sub>    | 0.364                    | 0.16      | 13.518                     | 2.75      |
| D <sub>5</sub>    | 5.264                    | 2.38      | -8.223                     | -1.70     |
| D <sub>6</sub>    | -14.187                  | -5.36     | 8.490                      | 1.94      |
| D <sub>7</sub>    | 2.096                    | 0.68      | -19.071                    | -3.75     |
| D <sub>1</sub> *t | 0.034                    | 1.79      | 0.029                      | 0.94      |
| D <sub>2</sub> *t | -0.008                   | -0.42     | -0.013                     | -0.41     |
| D <sub>3</sub> *t | 0.076                    | 3.01      | 0.167                      | 4.02      |
| D <sub>4</sub> *t | -0.047                   | -1.84     | -0.222                     | -4.38     |
| D <sub>5</sub> *t | -0.049                   | -2.61     | 0.095                      | 2.23      |
| D <sub>6</sub> *t | 0.073                    | 3.82      | -0.082                     | -2.63     |
| D <sub>7</sub> *t | -0.029                   | -1.52     | 0.097                      | 3.10      |
| R-squared         | 0.975                    |           | 0.953                      |           |
| Adj. R-squared    | 0.973                    |           | 0.948                      |           |
| RSS               | 29.656                   |           | 77.353                     |           |

Note: Average annual growth rate in Indian's export and import with SAARC Nation has been established on the basis of figures as given in Table 1 and equation 2.10.

Table - 3: Country wise Average annual Growth rate of India's Export and Import (%)

| Country    | India's Export | India's Import |
|------------|----------------|----------------|
| World      | 10.9           | 10.3           |
| SAARC      | 14.3           | 13.2           |
| Bangladesh | 13.5           | 11.9           |

|                  |      |      |
|------------------|------|------|
| <b>Bhutan</b>    | 21.1 | 28.6 |
| <b>Maldives</b>  | 16.4 | 6.4  |
| <b>Nepal</b>     | 11.5 | 15.9 |
| <b>Pakistan</b>  | 18.8 | 7.7  |
| <b>Sri Lanka</b> | 15.9 | 17.4 |

Note: Average Annual Growth in Country wise Export and Import has been calculated on the basis of coefficients as given in Table 2.

India's foreign trade with SAARC nations reveals that the trade balance with SAARC countries has always been positive for the study period because India's export to the SAARC countries is greater than its import. It is worth mentioning here that the percentage change in the export and import over the year during the post WTO period has been negative for the years 1996, 1997 and 1999. The slow down in the export growth after WTO is recorded due to the external factors. These factors are environment concerns regarding leather, labor issues related to carpets, non availability of good quality of gemstone and shift in the pattern of western consumer demand for textiles and leather accessories. For the same period, the decline in Indian import growth is found due to the weak domestic demand and slow down in industrial activities (Economic Survey 1997, 98 and 2000). India's foreign trade with Bangladesh, Maldives and Sri Lanka has been always positive during 1984-2006. The geographical factors can be attributed for it as these countries are adjacent to India. And in case of Bhutan, Nepal and Pakistan mixed trend has been shown.

#### **India's foreign trade with SAARC nations during the post SAFTA period:**

India's trade balance as well as the percentage change in the export and import over the year with Maldives and Pakistan has been positive during the post SAFTA period due to promotion of legal trade and reduction of high tariff and restrictions. India's trade balance and percentage change in export over the year with Nepal and Sri Lanka which has been positive during the post SAFTA period but percentage change in import over the year has been negative in the year 2006. Though the trade balance has been positive in case of Bangladesh during post SAFTA period but the percentage change in the export has been negative in the year 2006. But the picture is quite different in case of Bhutan as trade balance and percentage change in the export has been negative for the year 2006.

#### **Average annual Growth rate of India's Export and Import with SAARC nations:**

Country wise average annual growth rate in Indian exports and imports with the SAARC nations for the study period (1984-2006) has been calculated on the basis of

equations (2.1) and regression results are shown in Table 2. Based on coefficient of regression equations as shown in Table 2, country wise average annual growth in Indian export for the entire period is presented in Table 3. It is clear from the table that in case of Bangladesh, Maldives and Pakistan the average annual growth rate of India's export has been greater than the average annual growth rate of India's import. And in case of Bhutan, Nepal and Sri Lanka average annual growth rate of export has been less than the average annual growth rate of import. Among the SAARC nations the average annual growth rate of export has been the highest i.e. 21.1 percent in case of Bhutan and has been the lowest i.e. 11.5 percent in case of Nepal. The average annual growth rate of import has been highest in case of Bhutan (28.6 %) and the lowest in case of Nepal with 7.7 percent.

Table - 4: Regression Result: Average Annual Growth Rate for the sub periods of India's export and import to SAARC Nations.

| Country    | Model    | Variables |        |        |        |        |        |        |        |                |                    | RSS    |
|------------|----------|-----------|--------|--------|--------|--------|--------|--------|--------|----------------|--------------------|--------|
|            |          | Constant  | t      | d8     | d9     | d10    | d8t    | d9t    | d10t   | R <sup>2</sup> | Adj-R <sup>2</sup> |        |
| World      | Model I  | 8.930     | 0.123  | -0.257 | 0.386  | -1.989 | 0.012  | -0.036 | 0.108  | 0.987          | 0.980              | 0.167  |
|            |          | 100.27    | 6.15   | -0.56  | 0.79   | -0.59  | 0.23   | -0.74  | 0.70   |                |                    |        |
|            | Model II | 9.470     | 0.083  | -0.594 | 0.250  | -2.603 | 0.041  | -0.017 | 0.139  | 0.985          | 0.979              | 0.170  |
|            |          | 105.25    | 4.10   | -1.28  | 0.50   | -0.77  | 0.79   | -0.35  | 0.92   |                |                    |        |
| SAARC      | Model I  | 5.459     | 0.099  | -0.823 | 1.212  | -0.785 | 0.121  | -0.110 | 0.049  | 0.975          | 0.963              | 0.543  |
|            |          | 33.92     | 2.77   | -0.99  | 1.37   | -0.13  | 1.31   | -1.26  | 0.18   |                |                    |        |
|            | Model II | 4.542     | -0.006 | 0.043  | -0.873 | 1.392  | 0.049  | 0.100  | -0.047 | 0.959          | 0.939              | 0.812  |
|            |          | 23.10     | -0.14  | 0.04   | -0.81  | 0.19   | 0.44   | 0.93   | -0.14  |                |                    |        |
| Bangladesh | Model I  | 4.185     | 0.217  | -0.281 | 1.859  | -      | 0.008  | -0.153 | -0.001 | 0.973          | 0.963              | 0.548  |
|            |          | 26.76     | 6.20   | -0.35  | 2.19   | -      | 0.10   | -1.82  | -0.09  |                |                    |        |
|            | Model II | 3.099     | -0.108 | -6.745 | 7.528  | -      | 0.763  | -0.633 | 0.045  | 0.918          | 0.887              | 1.855  |
|            |          | 10.77     | -1.68  | -4.54  | 4.82   | -      | 4.62   | -4.07  | 2.57   |                |                    |        |
| Bhutan     | Model I  | -6.352    | 1.019  | -      | 5.769  | -      | -0.202 | -0.612 | -0.004 | 0.589          | 0.403              | 13.946 |
|            |          | -1.32     | 1.44   | -      | 1.12   | -      | -0.80  | -1.19  | -0.06  |                |                    |        |
|            |          |           |        |        |        |        |        |        |        |                |                    |        |
|            | Model    | -10.257   | 1.433  | -      | 11.223 | -      | -      | -      | 0.0335 | 0.911          | 0.870              | 3.964  |

|  |    |       |      |   |      |   |       |       |      |  |  |  |
|--|----|-------|------|---|------|---|-------|-------|------|--|--|--|
|  | II |       |      |   |      |   | 0.262 | 1.032 |      |  |  |  |
|  |    | -3.99 | 3.80 | - | 4.08 | - | -1.93 | -3.76 | 1.08 |  |  |  |

Table – 4 Continued.....

| Country   | Mode I    | Variables |        |        |        |     |       |        |        |                |                    |        |
|-----------|-----------|-----------|--------|--------|--------|-----|-------|--------|--------|----------------|--------------------|--------|
|           |           | Constant  | t      | d8     | d9     | d10 | d8t   | d9t    | d10t   | R <sup>2</sup> | Adj-R <sup>2</sup> | RSS    |
| Maldives  | Mode I I  | 0.004     | 0.244  | -1.184 | 0.785  | -   | 0.102 | -0.145 | 0.001  | 0.927          | 0.899              | 2.239  |
|           |           | 0.01      | 3.45   | -0.73  | 0.46   | -   | 0.56  | 0.85   | 0.03   |                |                    |        |
|           | Mode I II | -5.171    | 1.089  | -      | 0.892  | -   | 0.742 | -0.161 | 0.049  | 0.852          | 0.778              | 2.736  |
|           |           | -1.39     | 1.74   | -      | 0.23   | -   | -2.79 | -0.43  | 1.84   |                |                    |        |
| Nepal     | Mode I I  | 4.697     | -0.110 | -1.747 | -0.628 | -   | 0.274 | 0.0275 | 0.006  | 0.915          | 0.882              | 1.514  |
|           |           | 0.259     | 0.058  | 1.341  | 1.410  | -   | 0.149 | 0.141  | 0.0159 |                |                    |        |
|           | Mode I II | 4.478     | -0.381 | -1.955 | -0.748 | -   | 0.471 | 0.112  | -0.031 | 0.674          | 0.552              | 17.230 |
|           |           | 5.11      | -1.94  | -0.43  | -0.16  | -   | 0.93  | 0.24   | -0.57  |                |                    |        |
| Pakistan  | Mode I I  | 2.001     | 0.232  | 0.723  | 0.517  | -   | 0.102 | 0.048  | 0.039  | 0.964          | 0.951              | 1.362  |
|           |           | 8.11      | 4.21   | 0.57   | -0.39  | -   | -0.72 | 0.36   | 2.62   |                |                    |        |
|           | Mode I II | 2.757     | 0.144  | 3.936  | 3.731  | -   | 0.399 | 0.331  | 0.047  | 0.703          | 0.592              | 3.678  |
|           |           | 6.80      | 1.59   | 1.88   | -1.70  | -   | -1.72 | 1.51   | 1.89   |                |                    |        |
| Sri Lanka | Mode I I  | 4.401     | 0.013  | -1.103 | 0.642  | -   | 0.225 | -0.082 | 0.009  | 0.967          | 0.954              | 0.907  |
|           |           | 21.86     | 0.29   | -1.06  | 0.59   | -   | 1.95  | -0.76  | 0.71   |                |                    |        |
|           | Mode I II | 1.926     | 0.137  | -2.232 | 0.167  | -   | 0.197 | -0.067 | 0.006  | 0.914          | 0.882              | 3.143  |
|           |           | 5.14      | 1.64   | -1.16  | 0.08   | -   | 0.92  | -0.33  | 0.28   |                |                    |        |

Note: Average annual growth rate in Indian's export and import with SAARC Nation has been established on the basis of figures as given in Table 1 and equation 2.10.

Table - 5: Country wise average annual growth rate of India's Export and Import (%) for the sub periods.

| Country | India's Export | India's Import |
|---------|----------------|----------------|
|---------|----------------|----------------|

|                   | Pre-liberalization | Post-liberalization | Post WTO    | Post SAFTA  | Pre-liberalization | Post-liberalization | Post WTO    | Post SAFTA  |
|-------------------|--------------------|---------------------|-------------|-------------|--------------------|---------------------|-------------|-------------|
| <b>World</b>      | <b>12.3</b>        | <b>13.5</b>         | <b>9.9</b>  | <b>20.7</b> | <b>8.3</b>         | <b>12.4</b>         | <b>10.7</b> | <b>24.6</b> |
| <b>SAARC</b>      | <b>9.9</b>         | <b>22.0</b>         | <b>11.0</b> | <b>15.9</b> | <b>-0.6</b>        | <b>4.3</b>          | <b>14.3</b> | <b>9.6</b>  |
| <b>Bangladesh</b> | <b>21.7</b>        | <b>22.5</b>         | <b>7.2</b>  | <b>7.1</b>  | <b>-10.8</b>       | <b>66.5</b>         | <b>3.2</b>  | <b>7.7</b>  |
| <b>Bhutan</b>     | <b>101.9</b>       | <b>81.7</b>         | <b>20.5</b> | <b>20.1</b> | <b>143.3</b>       | <b>117.1</b>        | <b>13.9</b> | <b>17.3</b> |
| <b>Maldives</b>   | <b>24.4</b>        | <b>34.6</b>         | <b>20.1</b> | <b>20.2</b> | <b>108.9</b>       | <b>34.7</b>         | <b>18.6</b> | <b>23.5</b> |
| <b>Nepal</b>      | <b>-11.0</b>       | <b>16.4</b>         | <b>19.2</b> | <b>19.8</b> | <b>-38.1</b>       | <b>9.0</b>          | <b>20.2</b> | <b>17.1</b> |
| <b>Pakistan</b>   | <b>23.2</b>        | <b>13.0</b>         | <b>17.8</b> | <b>21.7</b> | <b>14.4</b>        | <b>-25.5</b>        | <b>7.6</b>  | <b>12.3</b> |
| <b>Sri Lanka</b>  | <b>1.3</b>         | <b>23.8</b>         | <b>15.6</b> | <b>16.5</b> | <b>13.7</b>        | <b>33.4</b>         | <b>26.7</b> | <b>27.3</b> |

Note: Average Annual Growth in Country wise Export and Import for the sub periods has been calculated on the basis of coefficients as given in Table 4.

Country wise average annual growth in Indian exports and imports with the SAARC nations for sub period like Pre liberalization period (1984-90), Post liberalization period (1991-94), Post WTO period (1995-2004) and Post SAFTA period (2005-06) has been estimated on the basis of equation (2.10) and estimated regression results are presented in Table 4. Based on coefficient of regression equations as shown in Table 4, country wise average annual growth in Indian export and import for the sub-periods is presented in Table 5. It is obvious from the table that India's export to the rest of the world has been the highest (20.7%) during the post SAFTA period and has been the lowest during the post WTO period with 9.9 percent. When country wise average annual growth rate is compared it is found maximum (101.9%) in case of Bhutan and minimum in case of Nepal (-11.0%) during the pre liberalization period. During the post liberalization period the country wise average growth rate of India's export has been the highest in case of Bhutan (81.7%) and has been lowest in case of Pakistan with 13 percent.

During the post WTO period (1995-04) the average annual growth rate of India's export has been maximum in case of Bhutan (20.5%) and lowest in case of Bangladesh (15.6%). During the post SAFTA period the average annual growth rate of India's export has been the highest in case of Pakistan (21.7%) and has been lowest in case of Bangladesh (7.1 %).

The average annual growth rate of India's import to the rest of the world has been the highest with 24.6 percent during the post SAFTA and has been the lowest with 8.3 percent during the pre liberalization period. Country wise average annual growth rate of India's import has been negative in case of Bangladesh and Nepal with -10.8 percent and 38.1percent respectively. It has been highest i.e. 143.3 percent in case of Bhutan and the lowest i.e. 13.7 percent in case of Sri Lanka during the pre liberalization period. During the post liberalization period the average annual growth rate of India's import has been negative i.e. -25.5 percent in case of Pakistan, and has been the maximum in case of Bhutan and the minimum in case of Nepal with 9.0 percent. During the post WTO era the country wise average annual growth rate of India's import has been the highest i.e. 26.7 percent in case of Sri Lanka and the lowest i.e. 7.6 percent in case of Pakistan. During the post SAFTA period results shows that the average annual growth rate of India's import among the SAARC nations has been the highest in case of Sri Lanka (27.5 %) and has been the lowest in case of Bangladesh (7.7 %)

#### **IV-Policy Consideration**

In the present study an attempt has been made to address the trade relationship of India with SAARC countries under the canvas of economic reforms (SAPs), WTO arrangements and SAFTA agreements. In order to find out the trade balance, average annual growth of export and import to SAARC countries from the period 1984 to 2006 have been taken into account. Outgoing facts regarding India's trade relations with other SAARC nations especially in the light of SAPs reveal that India's import (in general as well as with individual SAARC nations) and export (in general) have increased during the post reform period and post SAFTA period.

Being the largest economy among the SAARC nations, India has contributed significantly towards the spirit of formation of SAFTA as India has augmented its import as well as export to the SAARC countries even at the cost of its declining BOP situation during post reform period. And also the success of SAFTA depends to great extent on the liberalization of trade and economic integration among the member countries of SAARC to adopt regional arrangements rather than to have bilateral agreements. It will not only generate income but also curb the unemployment and poverty in these countries.

#### **Note:**

1 The values of Dummy Variables are:

$d_1=0$  for rest of the world and 1 for SAARC, Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka

$d_2=0$  for rest of the world & SAARC and 1 for Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka

$d_3=0$  for rest of the world, SAARC & Bangladesh and 1 for Bhutan, Maldives, Nepal, Pakistan and Sri Lanka

$d_4=0$  for rest of the world, SAARC, Bangladesh & Bhutan and 1 for Maldives, Nepal, Pakistan and Sri Lanka

$d_5=0$  for rest of the world, SAARC, Bangladesh, Bhutan & Maldives and 1 for Nepal, Pakistan and Sri Lanka

$d_6=0$  for rest of the world, SAARC, Bangladesh, Bhutan, Maldives & Nepal and 1 for Pakistan and Sri Lanka

$d_7=0$  for rest of the world, SAARC, Bangladesh, Bhutan, Maldives, Nepal & Pakistan and 1 for Sri Lanka

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