

**ALTERNATE FORMS OF TRADING
ARRANGEMENTS IN INDIAN OCEAN BASIN
Implications for India from IOR-ARC**

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ALTERNATE FORMS OF TRADING ARRANGEMENTS IN INDIAN OCEAN BASIN: Implications for India from IOR-ARC*

Rajesh Mehta**
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I. INTRODUCTION

Substantive steps towards economic co-operation in Indian Ocean Basin are of comparatively recent origin, beginning with the agreement of the seven countries about the launching of the Indian Ocean Rim Association for Regional Co-operation (IOR-ARC) in September 1996.

The idea of the formation of the Indian Ocean community was first mooted by the Foreign Minister of South Africa Mr. Pick Botha in 1990, and the thought was well received by number of countries including India, Mauritius and Australia. Later other countries, namely Oman, Singapore and Kenya, joined the forum in supporting the notion of forming a regional economic co-operation in the Afro-Asia-Australasia region. These seven countries including South Africa formed the 'core' group, which took the initiative in formalising an economic area in the Indian Ocean Basin.

Since early 1990s, several initiatives have been made towards evolving a viable economic area among the countries in the vast stretch of the Indian Ocean Region (IOR). The support of various Governments to the idea of the formation of the region at the formative stage, had provided impetus to various organisations and institutions, which in turn, proliferated activities in the region in holding seminars, consultative meetings and initiating studies to gauge the potentials of the proposed economic area.

In these meetings, various contentious issues were discussed, and consensus approach was adopted to resolve some of the outstanding issues. Among others, the membership issue was figured

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prominently in all these meetings. While some of the participating countries pleaded for giving a relatively wider coverage to the regional forum, others had favoured a smaller group to start with. It was argued that a bigger group (of countries) would create a large market, which might facilitate voluminous flow of goods and services, and attract inflow of investment from within and outside the region. But the region may lose this opportunity when the size of the economic group becomes small. On the contrary, the opposite view stressed that a large economic group is not only operationally unmanageable but also capable of making the organisation non-starter even before its inception. Therefore the group should be small and economically viable to start with, and others may join the forum later when the group starts yielding positive results. After several rounds of discussion, it was decided in 1996 that each 'core country' would nominate name of another country for membership in the new forum, and in the process, name of seven new countries, namely Indonesia, Malaysia, Madagascar, Mozambique, Sri Lanka, Tanzania and Yemen, were added to the existing list of seven 'core countries'. The charter of the new regional forum was formally agreed upon by the Member countries, and the IOR-ARC finally came into existence in early 1997.

One of the main objectives of the charter is to promote sustained growth and balanced development by formulating projects for economic co-operation relating to trade facilitation, promotion and liberalisation; promotion of foreign investment; scientific and technological exchanges; tourism; movement of natural persons and services; and development of infrastructure and human resources.

The council of ministers of the association is the apex body, which meets once in two years. The first meeting was held in Mauritius in March 1997. The second meeting was held in March 1999 in Maputo. In the second meeting the membership of IOR-ARC was increased to 19 by adding five more IOR countries, namely, Bangladesh, Iran, Seychelles, Thailand and United Arab Emirates (UAE). Although the total size of the membership is 19, the analysis is presented in this paper for 14 member states only.

In the ministerial meetings and other forums, number of other issues were also discussed for evolving action plans for the coming years. Among the issues which figured prominently in the deliberations were: form of the trading arrangement, business facilitation issues specifically the regulatory environment, currency convertibility, trade promotion, investment facilitation and

promotion, co-operation in specific high priority sectors including technology transfer, telecommunication, transport, human resource development, financial services, research and development, regional environmental issues, maritime co-operation on existing structures and co-operation to combat maritime natural disasters.

Until now, the member countries have yet to evolve a consensus regarding the nature of the economic group¹. For this kind of economic forum, which is mostly represented by developing countries with asymmetric level of economic development, 'economic co-operation' is rather more preferable than 'economic integration' so far as optimisation of regional welfare is concerned. Balassa (1976) argued that the main objective of economic integration is to eliminate discrimination between local and foreign goods, services and factors. To reach the level of complete integration, the region has to undergo at least four stages: free trade area, customs union, common market and economic union. On the other hand, 'regional co-operation' minimises discrimination in select areas of common interest. Operatically, 'regional co-operation' is, rather, more tenable than 'regional integration' because of its limited scope and selected areas of collaboration among the participating countries. Commenting on various forms of regional integration among developing countries, Langhammer and Hiemenz (1990) observed that "economic integration in the traditional sense (customs union, common market, joint investment planning) has proven not to be viable ... what remains are scattered examples of regional co-operation ... among partner countries ... Turning from the past to the future, the latter appears to offer the only starting point for a promotion of " regional integration among developing countries. In another study, De Melo and Panagariya (1992) pointed out that "regional integration ... among developing countries (is) ill-advised In the future, the role of regionalism among developing countries should be limited to co-operation ... "

Taking note of the fact that the regional co-operation would benefit the new economic forum more effectively than the regional integration, the member countries are looking for various alternative approaches for regional arrangement within the framework of regional co-operation. Some of the important policy alternative could be open-regionalism, preferential trading arrangement, sectoral preferences, non-tariff concessions, commodity approach, etc. in the framework of 'regional co-operation'.

Although these policy alternatives are commonly seen in the literature, implication of each of these policies means differently for individual member countries. Therefore, each country should examine the implication of these policy alternatives on their economy before reaching at a consensus position through consultation with individual countries, a consensus can be evolved on the specific form of regional arrangement.

In this context, we have attempted to analyse the question that which form of regional arrangement would be appropriate to suit the interest of India's trade with the IOR-ARC. Taking India's import data at 8-digit HS level, we have tried to estimate the size of market that India can create for Indian Ocean community under different form of regional arrangements.

The remainder of this paper is organised as follows. The trend and growth of inter- and intra-regional trade are discussed in section 2. The data and the estimation are presented in Appendix. Section 3 deals with scenario analysis of India. The paper presents some concluding observations in the last section.

2. EXPANDING TRADE LINKAGES IN THE INDIAN OCEAN BASIN

In this section an attempt is made to analyse the trend, growth and pattern of trade between countries in the whole of the Indian Ocean Basin (WIOB). As discussed above, a new economic organisation in the region was launched in the first quarter of 1997, and is consisting of 14 countries covering the regions of Africa, Asia, Middle East and Australasia. The present analysis is focussed on the existing trade links between the countries of the IOR-ARC and other countries in the Indian Ocean Basin. The purpose of this section is to reflect on the trade dynamics of the region prior to the formal trade arrangement of the region.

2.1 *Regional Trade Flows: Major Destinations*

Trade flows of the IOR-ARC and other countries in the Indian Ocean Basin to major trade destinations are presented in Table 1. It provides a brief account of intra-regional trade activities of the IOB region and also to different sub-regions of the world. Some attempt has been made to

¹ It is sometimes said that the charter of IOR-ARC is based on 'open regionalism'.

address some of the important issues concerning the region such as: What extent the IOR and IOR-ARC are dependant on other regions of the World? Is there any sign of trade polarisation of the region in recent years? Whether the existing pattern of trade would promote South-South co-operation in trade or not?

In order to take a broader picture of the IOR, we have covered larger number of countries in this study. For the present analysis, 44 countries from the Africa-Asia-Australasia region are selected, from which 14 countries² belong to the group of IOR-ARC, and the remaining 30 countries are either having common coast line with the Indian Ocean or hinterland nations. From the 30 countries, which we denote as 'Other Indian Ocean Rim Countries', 9 of them are drawn from Asia, 12 from Africa and the remaining 9 from the Middle East region.

The total trade of Indian Ocean Rim Countries has increased moderately between 1988 and 1994 and the volume of trade of the region has almost doubled during this period. While total trade of the IOR-ARC region has made a two fold increase during this period, other sub-regions have shown slow progress in this regard. During the period 1988-94, the region has shown persistently adverse balance of trade with the rest of the world. However, this syndrome is similar to both IOR-ARC and other IOR countries. However, the trade gap of these different sub-regions has declined significantly during the period 1988-94. The total export of the Indian Ocean Basin was 97 per cent of the region's total imports in 1988, and this ratio declined marginally in 1994. The Middle East is the only sub-region in the IOB, which maintained favourable balance of trade during this period. Among various sub-regions in the group of 'other IOR', trade deficit continue to be alarming for Asian and African countries. If appropriate measures are not taken the trade deficit of some countries, particularly in the African region, may plunge into serious macro-economic crisis. The trade pattern of the IOR region shows that this sub-region has more trade with developed countries than developing ones. Moreover each segment of the IOR has favourable balance of trade with developing countries and adverse balance of trade with developed countries in both the years under study. The countries in the region are relatively more dependent on developed countries' imports than exports.

² In this study, we have not taken recently included five members of IOR-ARC, namely Bangladesh, Iran, Seychelles, Thailand and UAE.

Significant part of the IOR-ARC trade is concentrated in Asia, and the trade intensity of the region with countries of Africa is very low. While total trade of IOR-ARC made a three fold increase in Asia during the period 1988-94, the region's trade with Africa was increased by two times during the same period. Among other countries in Indian Ocean Region, trade complementarity of the sub-region of Asia with Asian continent was very high than that of Africa. On the contrary, the sub-region of Africa in IOB shows neither high trade complementarity with Africa or Asia. To make the new economic forum vibrant the Afro-Asian trade linkages should be geared up in the coming years.

The growth performance of the region and its sub-regions indicate that both exports and imports have increased at a faster rate with developing countries as compare to the similar indices for the world as a whole. The IOR-ARC region has not only shared the major segment of the total trade of the IOB region but grew at a rapid rate during the period 1988-94. This trend is equally applicable to both exports and imports of the sub-region. Although the share of trade of 'other Asian countries' in the whole of IOR region is small (about 9 per cent), the sub-region trade grew at the rate of 28 per cent per annum. The growth performance of the Middle East region is sluggish as compared to other sub-regions of the IOB. One of the noticeable features of the regional trade is that all the sub-regions of the IOR-region have maintained high growth rate of exports and imports with countries in Asia.

The formation of IOR-ARC may create new identity for the countries in the IOR. The whole of IOR has improved its share in the world trade between 1988-94. The region as a whole shares more than 11 per cent of the world's total trade flow in 1994, while the similar figure was 9.6 per cent in 1988.

The IOR-ARC region shares about 65 per cent of the IOR trade and more than 7 per cent of the world trade in 1994. While the share of "other IOR" countries (4 per cent) remain unchanged in the world trade between 1988-94. The share of IOR-ARC in world trade increased from 5.6 per cent in 1988 to more than 7 per cent in 1994.

The intra-regional trade flow in the IOB is presented in Table 2. In 1994, the total intra-regional trade in the whole of the IOB was \$233 billion, and the IOR-ARC alone contributed \$153 billion.

Among the countries in the IOR-ARC, the contribution of Asian countries, particularly India, Indonesia, Malaysia and Singapore to the intra-regional trade is substantial. In the total trade of the IOR-ARC to the IOB, these five countries contribute about 82 per cent of the total trade flow. In the regional trade of IOB, the size of exports is more than that of imports as a result of which the region maintains trade surplus within the region.. The 14 countries of IOR-ARC generate trade surplus the tune of \$5 billion from the whole of IOB in 1994.

The, 'Other Asian and African' sub-regions also have registered trade deficit with the IOB region. But the magnitudes of trade deficits have come down substantially due to the surplus generated by the Middle East. One may observe that trade pattern differs significantly from one sub-region to another and proper representation of countries from different regions may be maintained effectively to reduce trade imbalances in the region.

Growth performance of the intra-regional trade in the IOB region and its different sub-regions are shown in Table 3. The IOB region grew at the rate of more than 19 per cent during the period 1988-94. The intra-regional trade of IOR-ARC maintained a growth rate of more than 26 per cent during this period. The trade pattern suggests that the IOR-ARC region is emerging as the most dynamic segment of the IOB region in the 1990s.

3. **ALTERNATIVE TRADING ARRANGEMENTS: An Estimate of Trade Potential to India.**

A number of alternative methods have been developed in the literature to estimate the size of economic welfare due to formation of a regional trading bloc³. The scope of this study is very limited. We are attempting to estimate the possible increase in India's import due to formation of (a) regional co-operation (b) free trade arrangement, and (c) free trade area. In this exercise, the definition of above forms of arrangements have been used in loose sense. We refer to some actions which will lead to changes in certain factors relating to non-price (like providing facilities for transport and infrastructure) and price (like reduction in tariff for intra-regional trade or access to

³ For example, see Krugman (1933), Srinivasan et. Al. (1993), Hinojosa and Robinson (1994), Hufbauer and Schott (1994), Srinivasan and Canonero (1993) and USITC (1992).

larger market), of tradable commodities. The descriptions of above alternatives are discussed below.

SCENARIO 1: Regional Co-operation: In this scenario, it is assumed that such an arrangement will enhance the existing facilities for promotion of trade within the bloc. The facilities could be in terms of providing infrastructure for trade, i.e. transportation network among the countries of the region, or minimum capacity at the ports to handle the trade or availability of vessels etc. In other words, it is assumed that the arrangement will lead to provide the same facilities to the countries of Indian Ocean Rim (almost similar or equivalent to the non-members of Indian Ocean Rim) for intra-regional. It is assumed that there will be no preferential treatment (like reduced tariff) given to goods for intra-regional trade. In other words, there will be no fiscal action taken by the member countries, which will reduce the foreign price (including reduction in tariff) of the commodities imported within the bloc.

SCENARIO 2: Free Trade Arrangement: In this scenario, the countries of the bloc will follow free trade arrangement and there will be no imposition of import tariffs for intra-regional trade. For example, it will be assumed that India, a member of IOR-ARC, will not impose any tariff for imports from the countries of the region. In other words, the rate of the import duties will be zero for all the commodities which are imported by India.

SCENARIO 3: Free Trade Area: In this scenario, it is assumed that the trading bloc will provide larger market. The large market will lead to increasing scale economies and hence reduction in the cost of production of various commodities. It is assumed that the scale parameter will change production structure to such an extent that the cost of the production within the countries of Indian Ocean Rim will decline significantly.

The model for estimating the amount of likely increase in India's imports in the above scenarios is simple and a number of assumptions are imposed. The details of model, estimation technique, definition of variables and the sources of data are given in the Appendix. In fact, world-trading environment is not so simple as assumed in these scenarios. Further, the analysis is conducted in a simple partial framework. However, the result will give a feel of extent of market access by a

member-country, if alternate trade arrangements are discussed. It will also help in giving a sequence of various steps in the formation of trading bloc.

To estimate the amount of incremental trade, we first identify the commodities (at 8 digit HS classification) which India's is importing from the countries of Indian Ocean Rim (IOR) as well non-member of Indian Ocean Rim (NIORC). In the second step, we calculate the amount of imports of these identified commodities at the inter-bloc and intra-bloc level. Further, we estimate the amount of trade, which can be diverted from Non-IOR countries to IOR countries, for imports by India. An estimate of amount of this trade (from Non-IOR countries to IOR countries) has been carried out, in three stages, for above forms of trading arrangement. The technical details about these alternate forms of trading arrangement are given in the Appendix.

Table 4 gives the amount of India's import from the countries of Indian Ocean Rim (i.e. 40 countries) and the rest of the world during the year 1994-95. It shows that out of the total amount of India's import of Rs. 89966 crores, Rs. 37060 crores originates from the countries of Indian Ocean Rim. In other words, India is dependent on the countries of Indian Ocean Rim to the extent of 41.2 per cent for its imports. Table 4 also gives the percentage distribution of India's import from IORC and NIORC, by broad commodity groups' for the year 1994-95. It shows that the distribution is highly skewed with the share of a commodity group, i.e. mineral & mineral products, being more than 55 per cent in total imports from IORC. To be precise, the value of India's import for mineral & mineral products is Rs. 20478 crores out of total imports of Rs. 37060 crores from the countries of Indian Ocean Rim. Other notable commodity groups are chemical & chemical products, electrical machinery, basic metals and textile products - the corresponding share being 4.6 per cent, 3.4 per cent, 2.5 per cent and 1.1 per cent, respectively. The distribution of India's imports from NIORC does not follow the same form. Infact, the amount of India's import of mineral & mineral products from NIOR is Rs. 2725 crores as compared to the amount of imports of Rs. 20478 from IORC. The distribution of India's imports by broad commodity groups from NIORC, is not highly skewed and is not similar to the distribution of IORC.

We also tried to identify the number of the commodities, which are imported from IORC and NIORC. In 1994-95, India imported approximately 6600 commodities⁴ from different countries.

⁴ Based on 8-digit HS-ITC data, during 1994-95, released by DGCIS.

As shown in Table 4, India imported 3669 commodities from IORC out of total number of 6600 commodities. A small number of commodities⁵ (265) are exclusively imported from IORC, while the rest of the commodities (3404) are imported simultaneously from IORC and NIORC. However, the values of 265 commodities, exclusively imported from IORC, amount to Rs. 12975 crores - 35 per cent of the total imports from IORC. Out of these 265 exclusive commodities, 16 commodities of mineral & mineral products amount for 60 per cent. In other words, a few number of commodities account for of exclusive import from IORC. On the other hand, the total number of commodities exclusively imported by India from the NIORC is very large amounting to 2931 commodities during 1994-95. However, the value of these commodities in India's imports is very small to the extent of Rs. 369 crores.

The last column of the Table 4 gives the number of the commodities and their value which are simultaneously imported by India from the countries of IOR and NIOR. In fact, the analysis conducted in this study is based on the identification of these commodities (and amount of imports) which will originate from NIORC as against IORC, under the above discussed three alternative scenarios. It is assumed the amount of imports by India, from IORC of these commodities will enhance by a diverting the existing imports from NIORC. As noticed in last column of Table 4, a large number of these commodities belong to the groups of machinery, chemicals etc. While the value of imports is significant for commodities belonging to mineral products, machinery (particularly electric), chemical etc. Table 5 gives decomposition of the amounts of the imports given in the last column of Table 4, under alternative scenarios as per details given in Appendix. To be precise the table gives the decomposition of the amounts of imports of commodities under five categories: (i) amount of imports of commodities from IORC and NIORC under Scenario I, (ii) amount of imports of commodities from IORC and NIORC under Scenario II, (iii) amount of imports of commodities from IORC and NIORC under Scenarios III, (iv) amount of imports of commodities which cannot be diverted from NIORC to IORC, under the above mentioned three scenarios and (v) amount of imports of commodities which could not be analysed due to non-availability of data on prices. The following paragraphs present the amount of change in India's imports, based on these results, under alternate scenarios.

⁵ In this study, we assume the commodity defined at the 8-digit HS-ITC disaggregate level is same and almost of similar quality. We are aware that this is a restrictive assumption. However, due to non-availability of data, our analysis could not be carried out at more

The first two column of Table 5 present the amount of import of those commodities (from IORC and NIORC) where the unit value of India's import from IORC countries is less than the unit value of India's imports from NIORC (i.e. Scenario I). In other words, IORC have comparative price (and cost) advantage in these commodities, but a large part of the trade (Rs. 24385 crores in 1994-95) originates from NIORC. The countries of IORC could not meet this demand inspite of comparative price advantage. In other words, India's import demand of these commodities could not be met by IORC due to non-price factors. It is presumed that Regional Co-operation of IOR will led to improvement of export facilities and the countries of IOR are able to capture this market. The amount of the incremental trade (originating from NIOR as against IORC) is large to the tune of 27.1 per cent of India's total import. As shown in Table 6a, IORC can capture this market in all the sectors of tradable commodities. However, a significant increase is noticed in imports of commodities groups like electrical machinery (6.7 per cent) Base metals (4.8 per cent), chemical (3.8 per cent), mineral (2.32 per cent).

The countries of IOR will acquire an additional 11.6 per cent of India's market under Scenario II. The significant increase is noticed in imports of commodities from sectors like chemical (2.9 per cent) and prepared foodstuff (2.02 per cent).

Under Scenario III, India's import from IORC is likely to increase by another 11.6 per cent of its total imports due to this factor. The Indian imports are likely to increase in broad product groups like Gems & jewellery (5.1 per cent) and Electrical machinery (2.4 per cent).

4. CONCLUDING OBSERVATIONS

This paper presents a brief review of initiatives towards formation of regional bloc in Indian Ocean Rim, the linkage of the region to global trade and the level of intra-regional trade, and potential for enhancing intra-regional trade under alternative forms of trade arrangements. Some of the important conclusions of the paper are:

1. Indian Ocean Rim Association for Regional Co-operation (IORARC) was formally launched with fourteen Member countries (7 from Asia, 6 from Africa and 1 from Oceania). The countries are India, Indonesia, Kenya, Madagascar, Malaysia, Mauritius, Mozambique, Oman, Singapore, Sri Lanka, South Africa, Tanzania, Yemen Republic and Australia. Now the association has 19 member countries
2. The Indian Ocean Rim has substantial potential to become a zone of economic co-operation and the advantages of making it a trade bloc would be manifold. The trade structure of countries of Indian Ocean Rim have a great degree of complementarity and the level of intra-regional Trade in its total trade is 40per cent. A major portion of trade by most of the countries of IORARC is destined towards this region.
3. The extent of the intra-regional Trade of this region has been increasing over the last few years. It has been noticed that a large number of countries have shown a higher growth in their export to IORC then to the rest of the world.
4. The different fora of IOR have been discussing the possible format of the regional co-operation, viz. an association 'open regionalism', preferential trading arrangements, free trade area etc.. However, no systematic attempt has been made, to authors knowledge, to estimate the amount of likely change in trade due to the formation of alternative trading arrangements in Indian Ocean Basin. In this note we have attempted to measure the amount of increase in intra-regional trade under three scenarios of regional arrangements. (a) Economic association (b) PTA and (c) FTA. This has been conducted using the trade information of 40 Indian Ocean Rim countries to India for 6600 commodities, using a simple method of cost comparative advantage. Our results show that the intra-regional trade can be increased to an extent of 22 per cent in case regional economic association is formed by the countries of IOR. The intra regional trade can be further enhanced by 11 per cent, if the countries follow free trade arrangements. Further, the block can increase its intra-regional trade by an additional 11 per cent due to increase in scale economies.

5. Our case study shows that the countries of the Indian Ocean rim will captured a large market of India's import by enhancing their trade in sectors like, electric machinery, chemical & chemical products, base metals, mineral products, transport equipments and textiles. A large number of this increase will be realised by providing facilities like export infrastructure, transportation facilities etc.

METHODOLOGY FOR ESTIMATING THE AMOUNT OF LIKELY INCREASE IN INDIA'S IMPORTS UNDER ALTERNATE SCENARIOS

Scenario I: Non price factors: Identification of commodities where the foreign price (or unit value) of commodities exported by IOR countries to imports by India is less than the corresponding foreign price by Non-IOR countries:

$$p_{i,I} < p_{i,NI},$$

where,

p_{iI} = Price (or unit value) of commodity i charged by IORC, and

$p_{i,NI}$ = Price (or unit value) of commodity i charged by NIORC

The value of import of such commodities, which originates from, NIORC, can then originate from IORC after post-co-operation era.

Scenario II: Price factor with preferential trading arrangements: Identification of commodities where the foreign price of IORC is higher than the foreign price charged by the NIORC to the maximum extent of India's tariff rates:

$$p_{i,NI} < p_{iI} < (p_{i,NI} + TR_i),$$

where

TR_i = Tariff rate of India's import for commodity i.

The value of import of such commodities from Non-IORC can be diverted to IORC, if there is preferential trading arrangement among IORC so that there is no tariff imposed by member countries on Intra-regional trade. In other words, we assume that tariff rates of India's import will decline from present level of average rate of (TR=)30 per cent to zero. It is sometimes called as potential of 'trade diversion' from NIORC to IORC.

Scenario III: Price factors with large market: In this scenario, it is assumed that the producers in member countries will have large markets due to regional arrangements. The large markets will lead to reduction in cost due to high scale economies. Firstly, we will identify the commodities where the foreign price of IORC is higher than the foreign price of NIORC to the extent of a pre-assumed level of reduced cost:

$$p_{i,NI} (1+TR_i) < p_{i,I} < p_{i,NI} (1+RC_i)$$

where

RC_i = Reduction in cost of production of commodity due to scale economies.

In this study, we assume $RC_i=50$ per cent. The import of such commodities will not originate from Non-IORC, if the scale economies is achieved.

DGCIS publishes data on the value and quantity of India's imports and exports on commodities by countries on monthly/yearly basis. It now follows the Harmonised Systems (HS) of International Trade Classification (ITC). ITC gives the data on trade by Sections (21 broad commodity groups), and Chapters (99 commodity groups based on two-digit HS level). The trade statistics of these broad groups are further disaggregated in commodities/commodity groups at 4 digit level (1253 commodities/commodity groups), 6 digit classification (5068 commodities/commodity groups) and eight digit classification (108301 commodities/commodity groups). This data is available for imports and exports in value and quantity from different countries.

In this study, we have used the data on (a) value of India's imports from 40 countries of Indian Ocean Rim and from other countries not falling in Indian Ocean Rim and (b) the quantity of India's imports for the corresponding countries, for the year 1994-95. Based on this information of value and quantity we calculated the unit value (or price denoted by p) of commodities imported by India from (a) countries of Indian Ocean Rim (IOR) and (b) countries which do not belong to Indian Ocean Rim (NIOR).

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