Technology transfer from the developed to the developing countries has been accepted as a sine-qua-non of development for developing countries. However, in recent years a public debate has ensued over the efficacy and viability of the present forms of technology transfer. The existing legal mechanism of technology transfer process is established predominantly by advanced countries. It is largely recognised that these mechanisms have not served the interests of the lower developing countries (LDCs).

The institutional mechanism of the transfer of technology is more inclined towards the private property rights of the technology owners. Less attention is being paid by the foreign technology owners towards the developmental needs of the recipient countries. Apart from various contradictions inherent in the transfer process, the institutions operating at international level have reassured the control of technology owners over the productive processes. Despite a large number of technology transfers to developing countries there has not been a clear cut diffusion of advanced technology to the lower developing countries.

The lower developing countries have ascribed their technological dependence on developed countries to their historic past and the lack of a clear cut legal and institutional
frame work. They have argued that private transactions in technology transfer cannot be equated with a well organized legal framework applicable to LDCs. Thus they have been contending in the past decades for such a framework, through the United Nations. This pressure for norm making may be traced to the goals of the New International Economic Order. In fact the developing countries have been arguing for a thorough revision of world economic set up, of which technology transfer forms an intrinsic part.

This chapter reviews the issues inherent in transfer of technology. These issues constitute the core of the proposed Code of Conduct, which is being formulated under the auspices of United Nations. The chapter also reviews the major attempts towards international regulation of technology transfer through an international Code of Conduct.

I. Transfer of Technology: A Review of Issues

Technology transfer has been considered as an alternative to generation of local technology by LDCs. Given their financial, technical and other constraints the LDCs depend to a large extent on the technology generated in the developed countries. It is presumed that the technology from advanced countries could easily be transferred. However, the transfer process has created several problems for the developing countries since most of the technology is sold rather than transferred.¹

International Commercial transactions in technology have taken place within a certain framework of rules, established by custom, administrative action and law. The nature of these rules, their coverage and mechanism of enforcement, influence significantly the efficiency and equity of the commercial transactions. The legal rules operating at national and international levels have safeguarded the individual private rights of technology owners. Paris Convention on Industrial Property (1963), as we shall see later, safeguards fundamental rights in industrial property on the basis of which dealings in technology are completed through various forms of contractual arrangements. Licensing has provided as one of the most important vehicles of the transfer of technology to developing countries. However, as far as licensing is concerned, it protects the private rights and freedom of parties. The holders of technology do not concern themselves with the public purpose of technology transferred. The DCs have consistently argued that in the absence of an international legal framework for technology transfer, the technology owners from developed countries have indulged in practices which frustrate the developmental aspirations of the developing countries.

The advanced countries have established national legal framework whose essential aim is to protect the consumer through competition. The competitive market is maintained by

well known antitrust rules and regulations. The advanced
countries have also created a common geographical zone
where a state of competition is considered necessary among
themselves, known as common market. It may be seen that any
arrangement or license or contract for technology transfer
which threaten competition or is abuse would come under the
prohibition either of Sherman Act (1890) or Common Market
(Art. 86 of Treaty of Rome). 4 However, with the enterprises of
developing countries the western suppliers fix conditions and
terms which would otherwise have been held illegal by their
own national laws. 5 The institution of contract has enabled
the western technology holders to extract harsh often unreasona-
ble terms from the other party. As a result there is considerable
degree of criticism of the system of protection of rights
in technology either through patents or other industrial
rights. The 'freedom of contract' on which the transfer of
technology is based has enabled unequal transactions to be
concluded. 6 The absence of an international legal framework
has strengthened the control of technology owners over the
technology transfers taking place to developing countries.
Nevertheless the developing countries have of late, laid down

4. J. Delorme, "Changing Legal Framework for Transfer"
in OECD North-South Technology Transfer (1982). P. 94

5. Under the antitrust legislations of U.S.A. the person or
firm whose conduct is challenged is afforded in most
situations the opportunity to show that the practice or the
contractual restriction is 'reasonable' and does not substan-
tially impair competition. However, a few types of
agreements and practices are conclusively presumed to be
unreasonable and therefore illegal without an enquiry as to
the precise harm they have caused. Thus among
the practices which are held to be per se unreasonable are
price fixing agreements, group boycott, tied clauses and
agreements to divide markets. Sherman Act (1914) and Federal Trade Commissions Act (1914) are the most
important U.S. statutes in this connection. See UNCTAD, Control
of Restrictive Business Practices in Transfer of Technology
Transactions (1982) E. 82. II. U. 8) 1-5.
rules at the national level to deal with the development of appropriate technology. These national changes have been necessitated because of adverse terms of trade in technology transfer. 7

The debate about international technology trade and the accompanying legal framework has moved forward as a sub-component about the terms and conditions and other institutional arrangements of technology trade. Technology trade has constituted an important element of international trade. 8 The specific issues in technology transfer have concerned about the role of Multinational Corporations in international transfer of technology. People both on right and left see technology transfer questions as indivisible from overall issues concerning MNCs and international business. 9

The MNCs have not shown a satisfactory rate of economic development, despite large flows of private and non-private aid to them. The MNC has been the object of attack which is a major international instrument of capital transfers. 10

Technology transfers by MNCs either through direct investment or licensing has become quite controversial. It is because there are many physical and practical obstacles inherent in technology transfer. Part of the problem stems from the fact that the process has not evolved a suitable and comfortable

9. See UN, Multinational Corporation in World Development (1985)
legal framework. More often than not the technology transfer arrangements are private individualized transactions between the parties mostly through licensing. Moreover, it does not even qualify to be a part of international trade which contains standardized transactions and has evolved an international legal framework.

Technology transfer has always been associated with contradictory approaches. Western suppliers who are ardent followers of market principles reiterate that 1) the system of the industrial property protection remains intact. They argue that through this most of the innovations in research and development and new technology take place. Industrial property protection has contributed to the economic development of these countries and thus should not be disturbed; 2) technology transfer can only be accomplished by arms length transactions that should be evaluated according to commercial law and practice; 3) technology transfer agreements should be restrained if they go afoul of behaviour prescribed by anti-trust regulations; 4) Western Governments are helpless to liberalize transfer of technology. On the other hand the developing countries argue that they have a right to share the world's resources of science and technology as part of common heritage of mankind. At the same time the institutions of contract and industrial property have restrained the effective utilization of

13. Supra note 7, p. 6.
advanced technology by developing countries. Thus they argue that the sanctity of contracts and industrial property should be balanced with the needs of developing countries. It is argued that technology transfer agreements should go beyond the interests of the parties and should contribute to social development. The developing countries consider the present international legal framework insufficient to meet their demands. Furthermore, the world economy has not shown any genuine favours towards developing countries. In fact, the unregulated world economy has, it is contended, been responsible for bad shape in economic development of LDCs. The functioning of the present international legal framework and institutions concerning transfer of technology favours and benefit mainly the technology suppliers from industrialized countries.

The difference in the conceptual approaches to technology transfer has given rise to several issues. These issues have become the cornerstone of arguments for international regulation of transfer of technology. The success of international regulation as argued by LDCs would by and large depend upon the extent to which the international regulatory instrument takes care of these issues to which we turn.

1. Access to Technology

The divergence of opinion about the nature of technology is characterized by conflicting claims and perceptions about


16. See UNCTAD Report of Intergovernmental Group of Experts on an International Code of Conduct, DOC.TO/A.C.1/11; See also UNCTAD, Major Issues Arising from the Transfer of Technology to Developing Countries (UN:1975.11.D.2)

transfer of technology.\textsuperscript{18} The conflict of interest is between the owners of technology and the intended users of technology. The suppliers are business and profit oriented transnational corporations which generate and own most of the technology. Their main concern is the protection of their proprietary know how and the price for technology.\textsuperscript{19} The transnational corporations have an inherent proprietary interest in technology. This is because of the large sums of money they invest in research and development and consequent production of new technologies. The Brandt Commission Report notes that over 90\% of the world's investment in research and development is invested by transnational corporations in developed countries.\textsuperscript{20}

This characterization of technology has affected the access of developing countries to the advanced technology. For transnationals, technology is an important source of income. As Goulet puts it, technology is not like fauna falling from the leaves. It is embodied and embedded somewhere. Technology is available but for a price.\textsuperscript{21} Consequently, the developing countries have to obtain the advanced technology albeit at a price to be determined by the transnational corporations. The suppliers are supported by national and international law in the protection of their property rights and the realization of

\begin{itemize}
  \item \textsuperscript{18} Howard v. Perlmutter Tagi Najad. \textit{International Technology Transfer: Guidelines, Codes and a Muffled Quandriloque}\textsuperscript{(1981).}
  \item \textsuperscript{19} See UNCTAD. \textit{An International Code of Conduct on Transfer of Technology}, Supra note 15, p.10.
  \item \textsuperscript{20} See UN. \textit{North-South Programme for Survival, Report of Independent Commission}(1980).
  \item \textsuperscript{21} D. Goulet; \textit{Paradox of Technology Transfer} 13 \textit{Bulletin of Atomic Scientists}(1975), p.39.
\end{itemize}
the price of the said technology.22

The returns from the sale of technologies possessed by transnationals constitute an important source of revenue for their home countries. The home countries and their transnationals have thus a little interest for the needs of LDCs. As Helliener points out, the process of diffusion of technology to LDCs is of little consequence to these technology owners. Consequently the institutions, legal arrangements and so forth that govern technology matters have been constructed by and large in the interests of only developed countries.23 For developing countries, technology is the life blood of economic growth. Most of the developing countries have initiated development plans in which technology has a lead role.24 On the ground that they need more of it they argue that they have a right to share the world's advanced technology.25 Industrial Countries on the other hand maintain international transfer of technology to be left to market subject to freedom of contract in a global environment that protects industrial property rights.26

The access of developing countries to the advanced technology is highly restricted. The technology is not often available freely being covered by a number of secretive institutions which act as a barrier to LDC's access to world technology.27 The exchange takes place in conditions where no

23. G.K. Helliener, Supra note 3, p. 198.
27. UNCTAD, Role of Patents System in Transfer of Technology to Developing Countries (UN: E. 75. 11. D. G), 42.
market exists, nor a price for technology nor any institution, which shall regulate the terms of transfer of technology.28

The developing countries suffer from a structural weakness in world economy. The present conditions of the world economy have further deteriorated their conditions of under-development. The world economy which is characterized by increasing protectionism has hampered the prospects of the LDCs.29 This structural weakness and deteriorating world market has considerably affected the power of access, utilizations and choice of technology by LDCs. The technology is available to them but at a considerable disadvantage to their economy in terms of cost, appropriateness and balance of payments.30

The growing conflict of interest is particularly visible in the channels and mechanism of technology transfer. The mechanism and channels operated by the transnationals have often been favouring the suppliers rather than the recipients. Because of the controlling capacity of the MNCs and the weak bargaining position of LDCs, the terms of transfer have deteriorated the capacity of LDCs to exploit world technology.31

The access of developing countries to technology is also affected by the nature of legal institutions accompanying technology trade. One of the important legal institution of technology trade has been the Industrial Property rights

28. UNCTAD Industrial Policies of Developed Market Economies
30. As net exporters of foreign technology, US Companies net receipts of royalties and fees from foreign affiliates abroad as calculated to be $ 3 billion per year, likely to be increasing. See Chung & Fouch. Survey of Current Business (1983) 45.
regime notably the Paris Convention. Paris Convention on Industrial Property 1883, deals with the protection of industrial property rights namely patents, trade marks and other intellectual property rights. The national intellectual property legislations of various countries have incorporated the principles envisaged by the convention. The net result of this institution has been that the rights and interests of the owners have been largely protected at the expense of the interests of LDCs. Paris Convention as we shall see in Chapter 1 has protected exploitative rights of the owners of industrial property throughout the world. These rights have hindered the free flow of technology to LDCs.

In the area of legislation there is also a conflict of interest. The legislations of developed countries are designed to protect technical property rights of MNCs and to promote its activities while as the LDCs increasingly seek to control the activities of MNC. This dichotomy has led to many conflicts in the area of transfer of technology. The industrialized home countries of MNCs have moreover through domestic legislations and policies restrained the MNCs to export technology to various countries both developing and developed.

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32. The principles incorporated are National treatment, Right of Priority, Right of Importation, Compulsory Licensing and Revocation of Patents. See Chapter 4.
34. For example United States has a number of national Legislations, under which the exports of technology are being controlled. Among them the most important is Export Administration Act, 1976. See Hefbaur and Carlson, "US Policy Towards the Transfer of Proprietary Technology" 14 Vand. J. Trans' L. L. (1981) pp. 337-45.
Traditionally the transfer of technology to developing countries has occurred in the form of either direct investment or licensing of industrial property. These transfers are noteworthy for three important characteristics. First the principal instruments of technology transfer are the MNCs. They own most of the advanced technology. In early seventies they accounted for 1/8th of all international trade; in eighties they controlled 1/4th of international trade in technology. Consequently they exercise a concentrated control over technology. In the process of such transfers MNCs have been settling the terms and conditions of such transfers. Secondly, large part of influx of technology to the developing countries is in response to the policy of industrialization through import substitution. In doing so they have tried to follow the western style of development involving the application of advanced technology.

Thirdly, in eighties there has been a slackening in technology transfers through wholly owned subsidiaries or majority owned subsidiaries. New forms of technology transfers have come to play a significant role. The terms new forms connote joint international business ventures and other kinds of international contractual arrangements involving no equity capital. These forms have increased the relevance of MNCs.

38. Ibid.
for developing countries. Moreover, the MNCs have increasingly pocketed huge sums of money through them.40

In all these transfers the world wide market has had a pervasive influence in the determination of the price of technology transfers. The market in technology transfer has various peculiarities.41 It is highly imperfect with great monopoly advantages for the seller because of the protection of patents and related rights. The market being totally unregulated, the transfer is affected under terms that are the outcome of negotiations between buyers and sellers; The final outcome of the bargain depends upon the relative position of the MNCs and the recipients.42 The international market is characterized by serious imbalances in the bargaining strength of enterprises of developing countries and MNCs. The legal monopolies granted to the originator has helped him in approximating monopoly profits from his innovations.43

The technology markets depending upon the nature of technology range from fairly competitive to highly monopolistic. In the process it has been found that developing countries have to pay a very high price for the technology they import.44 However, the nature of the bargain is also conditioned by the capacity of the purchaser. The more advanced a purchaser is in the realm of industry, more will be his ability to unpackagerequired technology at less cost. Moreover, the technological weakness and information gaps on the part of developing

41. See UNCTAD, Major Issues Arising From Transfer of Technology, Supra note 16.
42. See Lall, Supra note 10, p. 124.
countries have compounded the imperfections of the world market in technology. Thus it is argued that the developing countries as net purchasers get a raw deal at the hands of suppliers notably the MNC and have to pay high costs. The imperfections in market have enabled the supplying firms to extract excessive returns on their technology.

Transnational Corporations have acquired considerable market power vis-à-vis the Governments and enterprises of developing countries. This has been due in part to their command over resources of various kinds, finance, management marketing networks, skills, technology and know how generally and in part to their ability to combine and deploy such resources across the world. Moreover, the transnational corporations enjoying monopolistic positions have integrated their subsidiaries and affiliates into the company as a whole. Transnational corporations have been able to take advantage of their strong bargaining positions in a variety of ways. They have on occasions interfered in the political affairs of the host country and have often acted in ways whereby the benefits of growth and industrialization are distributed inequitably setting at naught the self reliant measures of developing countries. The developed countries professing free market philosophy have been unable to control the exploitative operations of MNCs.

45. Lall, Supra note 10, p.127; See also Sakti Mukerjee and Indrani Mukerjee, A New International Economic Order (1986) 124.


47. Ghosh, Supra note 2, p.325. See UN. Towards the New Economic Order, Report in the Field of international Economic Corporation (1982); See also Khoeraw Fatemi, "Multinational Corporations, Developing Countries and Transfer of Technology" 2 Issues in International Business (1985) 1-6.
The MNCs undertake their activities in order to make profits, taking due account of the risks involved. The maximization of profits is achieved through means available at their disposal notably transfer pricing and over valuation of technology and its components. The MNC extends all sorts of controls over its affiliates which prevents a linkage between the affiliate and the local economy.  

### Cost of Technology

The internationalization of production by MNC has no doubt resulted in an expansion of the geographical areas over which modern techniques are deployed. Nevertheless it has not resulted in an effective transfer of technology to host countries. Given the monopolistic advantage of the supplier and an indeterminacy about market, the LDCs have always faced the difficulty of ascertaining costs which could be deemed as reasonable. Since the technology is sold rather than transferred, the suppliers charge a heavy price for the technology. It is found that the prices are not competitive but are monopolistic rents charged by the transferors. Furthermore, in the transfer of proprietary know-how not only the costs are high but there are organizational and strategic impediments associated with using the market to


49. See UNCTAD, A Strategy for Technology Transformation of Developing Countries (UN) E. 84. 11. D. 19.

effectuate a transfer. It is found that MNCs frequently select internal channels for technology transfer. Mansfield has discovered that foreign subsidiaries are the principal channels of transfer during the first five years after commercialization. For the second five years after commercialization licensing has turned out to be more important. Large firms tend to rely more on transfers through subsidiaries, rather than the smaller firms. It is through subsidiaries that the MNC would capitalize more of its assets.51

The sale of technology is especially a complex transaction in which the ways of charging for it are rarely clearly stated. In the case of subsidiaries of MNCs most of the arrangements for transfer of technology are implicit. They do not form part of explicit agreements for the transfer. On the other hand transfer through licensing is usually affected through explicit agreements, but even here there are instances of implicit arrangements.52 The LDCs have thus to pay both direct and indirect costs. The direct costs include profits, royalties, fees etc., and indirect costs are incurred in the form of restrictive clauses, transfer pricing and monopolistic pricing practices.53 The studies conducted by UNCTAD confirm that there is a wide variation in prices charged for the same technologies in different countries.54

51. See Mansfield. Economics of Technological Change (1968)p. 98.
53. See Major Issues Arising from Transfer of Technology, Supra note 16.
54. Lall, Supra note 10, p. 130.
The fact that technology is sold to LDC at exorbitant prices is justified by MNCs by the argument that what is being transferred is experience obtained at great cost in course of many years of research. Moreover, the protection afforded to foreign affiliates of well established transnational firms helps them to charge potential monopoly profits which are then remitted through channels of transfers pricing, payments for know-how and trade marks, which appear as costs on the affiliate's income statements.

There are some distinct practices which increase the costs and diminish the benefits of technology transfer to developing countries. These include the tendency of the MNC to rely on sources of finance within the host country, the imposition of formal and informal restrictions by MNCs on exports by subsidiaries and independent transfeerees, specifying the particular sources of supply of technology for affiliates of MNCs and independent licensees. Overpricing of technology, technical aid and services, semimanufactures, parts and components supplied by the licensor holder has been found quite rampant in transfer of technology.

Another practice which has perpetuated the high prices of technology is import substitution policies of the host countries. High tariffs and restrictions shutting out competing


58. Komlev, Supra note 56, p. 85.
imports of consumer goods and low tariffs on capital goods have permitted protected industries to price their products well above market prices. Further protection afforded to independent affiliates of MNCs enable them to earn monopoly profits, through transfer pricing, payments for know-how and trade marks. 59

According to an UNCTAD study six types of costs are incurred by technology receiving countries. These are (1) costs for rights to use patents, licence and know-how and trade marks. (ii) costs for technical knowledge and know-how at preinvestment and operation stage (iii) costs for profits capitalized in the acquisition of shares in the technology receiving countries, and (iv) costs for overpricing of capital goods and equipment. 60

These direct costs of technology transfer represent a considerable burden on the balance of payments of developing countries. The overall balance of payment impact of individual investment projects often has been on the negative side. Studies have shown a negative value added calculated at world prices for number of industries in developing countries and a negative aggregate impact from the activities of MNCs on the balance of payments of host countries. 61

According to estimates made by UNCTAD 96.4 billions of dollars have been paid by developing countries to import capital goods in 1985. The book value of direct foreign


60. Quoted in Mukerjee, Supra note 45, p. 98.

investment by developed countries in developing countries was 7.7 billion dollars in 1985. The receipts of royalties and fees by FRG, Japan and U.S. amounted to 2.3 billion dollars in 1985. These countries received 104 billion dollars for their technology exports to LDCs in 1985.62

The external enterprises succeed in obtaining effective royalty payments which range to as much as 10-30% of the value of sales with substantial repatriation in foreign exchange. These costs amount to some 2½ times the domestic expenditure on R&D by LDCs and constitute 0.7% of the GDP of the developing countries.63

(ii) Indirect Costs:

The hidden costs or the indirect costs form a much larger part of the total. The indirect costs are paid in various ways. Chief amongst them are payments through, inter-alia;

1. Overpricing of imports of intermediate products and equipment.
2. Profits on capitalization of know-how;
3. a portion of repartitioned profits of the wholly owned subsidiaries which appear as costs to the subsidiary
4. price mark-up for technology included in the cost of imported capital goods and equipment.64

Evidence on hidden costs has been found in almost all Latin American and Asian Countries. A sample affirm in Pharmaceuticals in Chile indicated overpricing of imported products in excess of 500%, while in Peru the range was between 200-300%.65

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63. Ibid.
64. Patel, Supra note, 61, p. 86.
65. Mukerjee, Supra note 45, p. 122.
The MNC which supplies technology follows various restrictive and discriminatory practices which has the effect of increasing the indirect costs of technology transfer. The intrafirm trade offers greater opportunity to extract high profits through arbitrary transfer pricing and overpricing of inputs and invoicing of exports. The overpricing is quite acute when technology is transferred in a packaged form, where recipients pay not only for requested technology but also for tied in purchases of machinery, equipment and related technical know-how and marketing services. Rough estimates by UNCTAD show that these costs grow each year by about 20%. Furthermore, in packaged transfers the cost charged does not always bear a relation to the technology transferred. Sometimes the cost represents payments for amalgamated and other techniques which the MNC has acquired over the years. In that case the LDC enterprises are paying less for technology and more for other services.

Other forms of restrictions also impose costs which are difficult to estimate, such as the restrictions on exports and local innovation. An investigation of 250 contracts for technology transfer in Bolivia, Columbia, Ecuador and Peru revealed that 81% of contracts prohibited exports totally and a further 5% of contracts incorporated some restrictive clauses in exports. A UN study showed that in four of the five technology importing countries, 66% of the contracts involved tied purchases. Given

66. See UNCTAD. An international Code of Conduct, Supra note 15, p.3.
67. Ibid.
68. Stewart, Supra note 50, p.24.
69. Mukherjee, Supra note 45, p.122.
such a circumstance of importing technology, it is argued that the technology transfer generates an amorphous form of 'technological dependence' of developing countries.  

IV. Contractual Agreements

The transfer of technology has mostly taken place through licensing and other contractual arrangement. Licensing especially after 70's has proved quite useful for the transfer of patents and trade marks. Under the license, the transferee obtains rights for appropriate royalty to manufacture the patented product or to use the patented process. Any necessary supporting requirement in the form of know-how also passes with the license. The transfer arrangement is the license or the grant or the contract as the case may be. The license regulates the rights and duties of the parties in question. Licensing is recognized by both the national legal systems and the international conventions. It is often said that Paris Convention (1883) provides the basis for transfer of technology through licensing. Patents, Trade marks and know how has come to play a major part in the licensing of technology.

In transfers through contractual agreements, two categories of agreements can be discerned. First, where a

70. Miller, Supra note 8, p.47.
71. UNCTAD. Supra note, 49.
73. See WIPO, Supra note, 11, p.24.
74. Bailerich note 71.
75. Peter Nanyanka, Technology Transfer and International Law (1980); 43-53; See also Robbock and Simmonds, International Business, (1983).
technology transfer takes place through explicit agreement, in which the main elements of the transfer are easy to distinguish. Most of these are generally stated explicitly in the contractual agreements.\(^7\) These agreements may be said do not pose any problems of identification and qualification as this is usually the case when enterprises of one country enter into collaboration agreements with the other enterprises.\(^7\) On the other hand the transfer process becomes quite intricate when the transfer takes place through the establishment of wholly owned subsidiaries and affiliates. In such arrangements there are often implicit agreements between the parent and the subsidiary which pose problems of identification, as a subsidiary is more often than not governed through these implicit agreements by the parent.\(^8\)

A. Fatouros writes about the implications of the present framework.

Though the international legal framework is seemingly neutral, but its actual operation has been historically far from neutral and impartial. The politically most powerful nations have utilized the freedom of action allowed under the system to insist on proper protection of industrial property rights in other countries; on occasions they have exerted strong pressures on less developed countries to enact 'modern' legislation on the subject and to adhere to international conventions. The classical international law provides little protection to weaker countries against open pressures from Powers.\(^7\) The international legal framework allows considerable freedom to the owners of the industrial

\(^7\) J. Delorme, Supra note 4, p. 94; Ghai, Supra note 6, p. 18.


property rights through ownership devices such as unpatented technology, know-how in their dealings with buyers. Moreover, economic forces are given free play within a strict protective framework for both the creation of industrial property rights and the enforcement of technology transfer contracts are assured by the exercise of public power.  

The criticism from the point of developing countries is that the licensing agreements contain a large number of restrictive covenants, which have serious adverse effects upon the ability of these countries to take full advantage of such knowledge. These restrictive covenants have the effect to inhibit their growth, penetration of foreign markets, the adaptation of technology and the protection of their foreign reserves. These restrictive covenants are found even in explicit collaboration agreements.

UNCTAD has outlined some broad categories of restrictions and limitations imposed by technology supplying Multinational Corporations. It may be noted that some of these restrictions form a part of industrial property licences granted by the licensor which have the sanction of law. They are:

a) Restrictions on export;

b) Restrictions on sources of capital goods, material inputs and competing technologies;

c) Excessively long periods for payment of royalties;

80. Ibid.


82. UNCTAD, Supra note 27, pp 24-28.
d) Demand of guarantees against changes in tax, tariffs and exchange rates affecting profits, royalties and remittances

e) Limitation on competing sources of supply by restricting imports, preventing competition for local resources and obtaining local patents to eliminate completion;

f) Restrictions limiting local research and development and grant back clauses. 83

The effect of these restrictive convenants is that they act as a decisive key to the effective control of technology produced by the MNC. Effective control would mean the ability of the transferor to influence the future course of operations by the recipient firm. If direct control ownership should be impossible or insufficient, MNCs have effected these controls through commercial convenants. 84 Furthermore, the developed countries have an established technological base while the developing countries usually have to acquire a package of technology including technical assistance, and other know-how. This places the supplier of technology in a commanding position to specify conditions that virtually amounts to controlling the technology receiving enterprises irrespective of their capital participation. 85 Statistical analysis has indicated that increased supplier control entails significant costs for the technology recipient. 86

83. Ibid, p. 27-8, See also UNCTAD Control of Restrictive Business Practices in Transfer of Technology Transactions. TD/AC.1/17.


All these restrictions are disadvantageous, abusive and unfair in the light of commercial interest. However, many of these restrictions are inherently bound with the commercial character of the technology transfer and proprietary interest in technology. Developing countries have objected to this and have demanded unpackaging.  

These issues have challenged some of the conventional thinking about the role of technology in the developing countries. The critics have argued that most of the technology transferred is quite inappropriate for developing countries. Apart from the transfer being costly, it is argued that the present form of technology transfer is a form of self-perpetuating feature of technological dependence for developing countries. UNCTAD has given four reasons for this:

1. A large part of transfer of technology has taken place through direct investment, which has resulted in many instances in majority owned subsidiaries. These foreign controlled subsidiaries have not done much for local technological innovation.

2. In case of licensing of patents and trademarks and imports of machinery and equipment goods, the national entrepreneur has always cashed on the foreign proved technology. Because once the branded product has gained widespread consumer acceptance, there is little incentive for local innovation and research.

90. Ibid.
3. The developing countries have introduced elite consumer goods, produced by transnational enterprises. Once these new products are introduced, the developing countries have committed themselves to the perpetual importation of new technology. Thus instead of inducing local production, the developing countries have become perpetual importers of new products and process. \(^91\)

4. The scientific and technological institutions in developing countries have been alienated from productive activities. The developing countries have utilized these MNCs unlike developed countries. \(^92\)

**National Regulations**

In the post war period the activities of MNCs increased very rapidly. By the end of 60's the MNCs have got established as major instruments of international flow of capital and resources to developing countries. The increase in activities of MNCs were facilitated by the progressive reduction of foreign exchange and other restrictions on the part of developing countries. As a matter of fact these countries had quite liberal policies towards foreign MNCs and even offered incentives so that the alien owned corporations would generously invest their capital in developing countries. The major understanding was that by allowing the MNCs the developing countries would progress economically and technologically. \(^93\)

However, the period of seventies was most crucial in the contemporary political relations between developed and

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91. Ibid.

92. Ibid.

developing countries. The activities of MNCs in developing countries raised controversial issues in areas of foreign investment and technology transfer. A realization dawned on developing countries that the alien enterprises controlled their economies. Important investment decisions regarding developing countries were taken by foreign MNCs regardless of effects of these decisions on the domestic economies. In essence, the foreign enterprises were exercising a concentrated control over the domestic economies of developing countries. The liberal policies of developing countries towards foreign enterprises accounted for the outside economic control of the economies of these countries. 94

The developing countries realized that political independence is not synonymous with economic independence. The developing countries found themselves heavily dependent on external assistance in the form of private foreign investment and official loan. The developed countries and their corporations controlled the production and distribution of world's resources. The rapidly growing activities of MNCs in developing countries were exploitative and eating the vitals of their economies. The alien owned enterprises exploited the vital national resources of developing countries for their own benefit and for the benefit of their home countries. The control by alien enterprises led to the suppression of national entrepreneurship and development. It was generally believed that gains from the continued operation of alien enterprises are outweighed by their social costs. 95

94. A. Akinsanya, "Host Governments' Responses to Foreign Economic Control" 30 J.C.L.Q. (1981) 769-784.

95. See UNCTC, National Legislation and Regulations Relating to Transnational Corporations (UN: 1983) 1-10.
The resentment by developing countries of foreign economic control and exploitation by alien enterprises was large in seventies. The 'Brand Commission Report' highlighted specific fields where conflict between a host government and MNC was apparent. These areas included ownership and control, finance, the evaluation of technology brought into the country, employment conditions for locally recruited staff, taxation, and transfer pricing. The report culminated in the formation of a permanent commission on Transnational Corporation to work out a draft Code of Conduct on Transnational Corporations, which would encompass a wide variety of issues.  

Various agencies set up under UN auspices pursued their own policies towards multinational corporations. The agencies like UNCTAD, UNIDO, ILO which are dominated by developing countries tended to be highly critical of the activities of the MNCs. These agencies mooted new proposals for developing countries relations with MNCs. These proposals were summarized in the Algiers Conference of Non Aligned States in 1973 and included the following recommendations:

1) Central Government control of foreign investment;
2) Investment by foreign enterprise should introduce appropriate technology, save foreign exchange, ensure employment opportunities;
3) Investments should create new industry rather than buying over existing companies.
4) Appropriate controls on profits remittances;
5) Key industries should be prohibited to foreign investment.  

The ILO 'Tripatriate Declaration' (1977) included statements that MNCs should give priority to local personnel in

97. Livingstone. The International Enterprise, p.233-34;
employment and training, (2) use technologies which generate employment and (3) provide workers with information about the firm to allow meaningful negotiations.\textsuperscript{97(a)} In Latin America, a group of authors known as 'nationalist school' came out with stiff opposition to conventional resource transfers including direct investment and technology transfers. These authors argued that there is an urgent need of analysis of foreign investment and multinational corporate behaviour in the light of internal political and economic priorities. They contended that the activities of the foreign corporations need to be controlled by developing countries. Moreover, they argued that it is important to limit the influence of foreign decision making in developing countries and to allow a pattern of foreign investment which contributes more effectively to the realization of the economic objectives of the host countries.\textsuperscript{98}

With this background in mind the developing countries of Asia, Africa and Latin America enunciated new policies and measures towards foreign corporations. These countries began to assert their control over economic activities by alien corporations. The result was that most of the developing countries enacted new laws and regulations relating to foreign investment and transfer of technology. These laws are quite restrictive in nature and they continue to be so. The conflicts of interest between the goals and requirements of national development and the pursuit of purely private profits by external enterprises furnished the impetus for national control to safeguard national interests. Thus it may be seen that 70's marked a departure from the previous policy of

\textsuperscript{97(a)} See XVII I.L.M (1978) 423.

allowing unrestricted access to the domestic markets by foreign enterprises and capital. 99

The changes introduced by these legislations are that they tend to diminish the degree of foreign economic control. These legislations centre around strengthening national enterprises, promoting national investments, reserving to national enterprises certain sectors of economy and the access to local resources such as credit and incentives. 99(a)

The legislations contain provisions for the compulsory registration of foreign investment and technology transfer which is allowed after a thorough screening by specialized authorities established for the purpose. Laws have prescribed specific fields of activity in which foreign investments are not permitted. Similarly in those sectors where technology is already available, no fresh import of technology is permitted. Some laws have specifically mentioned the areas in which instead of foreign investment through equity ownership, foreign collaborations or only joint ventures are permitted. Apart from this, strict local financial, ownership, employment requirements are enforced by the authorities of developing countries. Moreover, repatriation of profits and dividends have been regulated. A specific provision is made about takeover and acquisition of foreign control in new enterprises. Similarly these countries have made known their requirements for divestment or 'fade-out', and 'local settlement of disputes', to the foreign enterprises. 100


99(a). See supra note 95; See also Mason and Muller, International Business (1981).

100. Bladel, supra note 95; See also Mason and Muller, International Business (1981).
A general review of these legislations indicates that developing countries have consolidated laws and regulations governing the establishment and operation of foreign enterprises. A tendency to centralize the administration of investment and technology transfer laws have been apparent in the application of these laws.

3. Regional Regulations.

Concurrently at the regional level efforts were afoot to provide some sort of guidelines and regulation on foreign investment. These efforts had the twin object of generating a harmonious and hospitable investment climate and to provide some sort of a regulatory framework for foreign investments and technology transfer. These efforts continued both on the part of developing countries and developed countries. 101

Three factors contributed to the growth of regional regulations of foreign investment and MNCs; (i) the growth of regional cooperation in recent decades; (2) domination of the developing countries over the non-financial institutions of the United Nations system; and (3) the failure of the UN to regulate international economy. These factors have impelled both developed and developing countries to formulate their policies elsewhere. 102


A significant initiative towards regional regulations was the Declaration on International Investment and Multinational Enterprises and its subsidiary documents adopted on June 21, 1976 by the Council of Ministers of OECD. The OECD Guidelines, as the package of the declaration and subsidiary documents widely known, was an attempt towards regulation of foreign investment and MNC. The main feature of the Guidelines was that it was voluntary in nature. The Guidelines established standards of good conduct for all MNCs whether private, state owned or mixed which operated in OECD countries. Further the Guidelines deal with major MNC activities such as general corporate policies, disclosure of company information, competition, financing, taxation, employment, technology and improper payments.

The Guidelines provided for international cooperation in matters concerning foreign investment and the activities of MNCs. The member countries agree to extend their cooperation with non-members particularly developing countries to efforts with a view to improve the welfare and living standards of people both by encouraging the positive contribution of MNC and in resolving the problems which may arise in connection with their activities.

The observance of the Guidelines was however, voluntary and legally un-enforceable. The Guidelines it was hoped would ensure that the operations of MNCs are in harmony with national policies of the countries where they operate, and to strengthen the basis

103. Declaration on International Investment and Multinational Enterprises, OECD DOC (76)99 (1976).


of mutual confidence between enterprises and the States. The Guidelines provided that the use of appropriate international dispute settlement mechanism including arbitration should be encouraged as a means of facilitating the resolution of problems arising between enterprises and member countries.

With these policies in mind the Declaration provided Guidelines for Multinational Corporations. However, it was stipulated that these Guidelines were laid down with a clear-cut mandate on the member countries to fulfil their responsibilities to treat enterprises equitably and in accordance with international law and international agreements, as well as contractual obligations to which they have subscribed. Nevertheless it was acknowledged that every State has the right to prescribe the conditions under which MNCs operate within its national jurisdiction through subject to international law and international agreements. MNCs located in various countries are subject to the laws of these countries. The Guidelines contained 9 points for the behaviour of Multi-national enterprises. Enterprises should, inter-alia:

1) Take fully into account general policy objectives of the member countries in which they operate.
2) In particular give due consideration to the aims and priorities of host countries with regard to economic and social progress, including industrial and regional development, the protection of the environment, the creation of employment opportunities, the promotion of innovation and the transfer of technology;

106. Ibid, p.113.
107. Ibid.
108. Ibid.
109. Ibid.
3) While observing their legal obligations supply any information to the authorities of the countries where they are located. They should also give relevant information to the aforesaid authorities taking into account legitimate requirements of their business confidentiality.

4) Favour close cooperation with local community and business interests;

5) Allow their component entities freedom to develop their activities and to exploit their competitive advantage in domestic and foreign markets consistent with the need for specialization and sound commercial practices;

6) When filling responsible posts in each country of operation take due account of individual qualifications without discrimination as to nationality, subject to particular national requirements in this respect;

7) Not render any bribe or other improper benefit direct or indirect to any public servant or holder of public office nor should they be solicited or expected to render any bribe or other improper payment or inducement.

8) Unless legally permissible, the MNCs should not make contributions to candidates for public office or to political parties or organizations; and

9) Abstain from any improper involvement in local political activities. 110

In the realm of science and technology it was ordained that enterprises should endeavour to ensure that their activities

fit satisfactorily in scientific and technological policies and plans of the countries in which they operate and contribute to the development of national scientific and technological capacities, including as far as appropriate the establishment and improvement in host countries of their capacity to innovate. Secondly, they should to the fullest possible extent, adopt in the course of their business activities practices which permit the rapid diffusion of technologies with due regard to the protection of industrial and intellectual property rights. Thirdly the enterprises when granting rights for the use of industrial property rights or when otherwise transferring technology to host countries should do so on reasonable terms and conditions. 111

Similar provisions were provided (though not as exhaustive as the OECD Guidelines) by International Chamber of Commerce, and the internal Code of some Multinational Corporations themselves. 112

The OECD Declaration more or less furnished Guidelines as to how states ought to behave in their dealings with multinational enterprises. The content of the Guidelines was to harmonize the treatment of the enterprises by the member countries in addition to disallowing some of the undesirable activities of the firms. 113 However, it is not established that the MNCs adhered to these Guidelines in their dealings with the host countries including

111. UNCTAD, Supra note 105 p. 119.
113. Vagts, Supra note 96, p. 6.
the developing countries. The interviews conducted by one author found that OECD Guidelines had no significant effect on the decision of companies to locate their manufacturing and sales facilities. It was also found that the voluntary nature of the Code made its acceptance tolerable, although compliance would be less than certain on some issues. Nor is there any evidence to suggest that the member countries enacted the rules into their national law. It is conceded that only binding codes would have any effect on the behaviour of the enterprises.114

Although the Guidelines provided a useful guide towards transnational regulation of MNCs, yet the poor acceptability of the Guidelines may be attributed to the reason that they were voluntary in nature and legally unenforceable. The voluntary nature of Guidelines could not be deemed to contribute much to the change in legal relationship of the MNCs. Especially, as far as developing countries are concerned they have always been in favour of mandatory rules towards MNCs. Because with regard to gathering information about MNCs the developing countries are in a disadvantageous position as compared to advanced countries.115 The developed countries on the other hand seem to be satisfied with the voluntary nature of Codes on MNCs. The reason for this may be that these countries are both host and home to the MNCs. That accounts for the reason why the OECD Guidelines continue to remain in force.116


The European Economic Community’s ‘Draft Code of Principles for Multinational Enterprises and Governments’ was another attempt for regional regulation of MNCs and foreign investment. The proposal was presented to the EEC Parliament to form a basis for negotiation of binding set of rules on MNCs in the North Atlantic region. The matters dealt in the draft proposal included maintenance of fair competition, protection of workers, concerning, tax avoidance and disclosure of companies’ activities. The proposal however, did not come through because neither the U.S. nor the EEC backed it later on.117

Similarly, the developing countries on their part exercised to formulate a regional regulatory policy towards the MNCs. Among them mention may, be made of Non-Aligned Countries’ ‘Draft Statute for the Treatment of Foreign Investment, Transnational Corporations, and the Transfer of Technology’ and Organization of American States’ ‘Code of Conduct for Behaviour of Transnational Enterprises.’118 These proposals highlighted the potential areas of conflict between the host countries and the foreign corporations. Among the measures proposed were the clear cut exercise of sovereignty of the host countries over the foreign corporations, so that these corporations offered continuing benefits to the host countries. However, the proposals were not acceptable to the developed countries, nor did these proposals mature into full fledged Codes.119

117. Grosse, Supra note 114, p. 419.


119. Bladel, Supra note 95, p. 329; Grosse, Supra note 114, p. 420-21.
The Andean Foreign Investment Code is one of the attempts of developing countries to provide mandatory regulations on foreign investment and technology transfer. The Code entitled "Common Regime of treatment of Foreign Capital and of Trademarks, Patents Licences and Royalties" was formed in 1969 by a group of Latin American countries (Bolivia, Columbia, Ecuador, Peru and Venezuela). It was the first major Latin American regional instrument which provided for a hardline approach towards MNCs. The Code was formulated through an agreement of these countries called as 'Cartengana Agreement.' The 'Cartengana Agreement' formulated a decision called Decision 24, which the signatories agreed to implement through national legislations. The Code is the only existing regional foreign investment Code that seeks to channelize foreign direct investment under mandatory rules in these group of countries.120

Decision 24 is a common strategy towards foreign investment, MNCs, and technology transfer. The Code is the most restrictive transnational policy on foreign investment. It places numerous mandatory restrictions on the operation of foreign owned firms in the above five common country markets. The rules enunciated in the Code pertain to foreign ownership, fade out policies and technology contracts etc.121 Underlying the hardened approach is the belief that foreign transnationals formerly obtained excessively favourable terms in investment and

120. Robert Grosse, Supra note 112, p.96.
121. Robert Grosse, Supra note 114, p.419.
technology transactions by exploiting the lack of coordination among the members of the region which weakened the individual bargaining power of each country. 122

Decision 24 in its five Chapters and 11 articles sets forth a comprehensive package of rules for the entry and operation of foreign owned business establishment in the Andean Pact nations. The Code provides varying criteria for the admission of new MNCs in the sub-region. It denotes various categories of the foreign investments and the conditions in which such an investments can be admitted into. Every project has to be authorised and approved by a competent national authority, which is authorized to reject investments that fail to follow Decision 24 and other sub-regional development guidelines. 123

The regime prohibits foreign direct investment in various sectors. The decision specifically prohibits new foreign direct investment in the public utilities sector as well as in areas of insurance, commercial banking and financial institutions, domestic transport, media and enterprises involved in the domestic marketing of any kind of product. 124 The regime further prohibits foreign direct investment in activities considered adequately developed by existing enterprises or more appropriate for investment by national or sub-regional investors. 125

The Code prescribes strict ownership requirements for investors. In certain sectors no investment with foreign ownership above 20% is allowed. These sectors include public services, insurance, commercial banking and finance and domestic

122. Graham, supra note 59, p. 68; See also Robinson, National Control of Business Entry (1983).
123. Grosse, supra note 112, p. 100.
marketing. In other sectors a maximum of 40% ownership by foreign investors is allowed. However, in certain sectors depending upon the nature and character of sector, ownership of more than 49% will be allowed subject to other conditions e.g. its contribution to the economy and its export performance.126

The Code introduces a 'fade out' or 'divestment scheme' to reduce the concentration of foreign ownership in the sub-regional economy. This has constituted the main element of the Code. Under 'fade out' scheme foreign corporation is to progressively reduce its ownership and transfer corresponding share to national investors over a period of time. The maximum number of years prescribed is (15 years in Columbia, Peru and Venezuela) and 20 years in Equador and Bolivia.127 Under this scheme foreign enterprises are to be transformed into 'national enterprises' or joint venture enterprises.128 However, divestment is to happen voluntarily and in sectors in which it is thought that national enterprises have reached technical and scientific maturity.128

The motive behind fade out provision is to enable national capital to assume control of the industrial and manufacturing in Latin America, where foreign corporations had assumed a considerable control. The enterprises which do not submit to divestment are denied various incentives prescribed under the Cartengana Agreement. However, the provision of fade out is not applicable to foreign controlled enterprises which export 80% or more of their production or which are engaged in tourism nor can

126. Robinson, Supra note 168.
128. Radway, Supra note 25.
such enterprises take advantage of the liberalization benefits.\textsuperscript{129}

The Code also puts a limit on the repatriation of capital and remittance of profits abroad and grants preferential treatment to sub-regional investors who maintain local control over national and mixed enterprises. The owners of foreign capital are authorized to transfer abroad a maximum of 20\% per year of the net profits of the investment after approval by the competent supervisory organ. Moreover, the law enhanced the rate of taxation over profits earned by the enterprises. The Code does not allow reinvestment of profits which is not permitted without prior registration and authorization.\textsuperscript{130} However, the Code permits Governments of member countries to authorize automatic reinvestment of profits in the same enterprises without proper authorization if this does not exceed 7\% of the total capital of the enterprise and is registered with the government.\textsuperscript{131}

Finally, the Code specifies that foreign investors must disclose several types of information to the competent national authority of the host country so that accurate records can be kept by the secretariat of the Pact concerning foreign investors' activities.\textsuperscript{132}

In addition to its investment feature Decision 24 provides a common regime regarding the importation of technology and the


\textsuperscript{130} Ibid., 252-53.

\textsuperscript{131} Art.11. Decision 24,

\textsuperscript{132} Grosse, Supra note 114,p.427.
sub-regional use of patents and trademarks. The decision introduces adequate controls over contracts for technology transfer in order to prevent excessive payments, for imported technology, technical assistance and foreign licenses. These controls are also designed to avoid the presence in such contracts of clauses unfavourable to the local partner as a result of his lack of adequate knowledge of modern technology and of the alternatives available in the international market. 133

The controls enunciated in technology transfer may be summarized as under. All technology transfer contracts in any form whatsoever have to be duly authorized by the appropriate authorities constituted by national Governments. All such contracts in order to have legal effects in the local economy have to be registered with the national registries created by national Governments. The legal effects include qualifying for profit repatriation and the payment of foreign exchange to the transferors. 134

The Code has put remittance ceilings on the amount of profits to be repatriated (5% of the net assets), apart from financial and fiscal limitations. It is specifically provided that intangible technological contributions by the foreign investors are not to be registered as capital contributions and cannot be subject of royalty payments without prior authorization of the appropriate national agency. 135 Where technological contributions are made by a foreign enterprise either by its parent company or other affiliates within the same enterprise, the Code prohibits

133. Naon, Supra note 178, p. 255.
134. Radway, Supra note, 117.
135. Arts. 20, 21, Decision 24.
the payments of royalties and disallows any deduction for tax purposes. This amounts to treating contracts between the affiliates of the same group as internal acts. Such payments constitute remittances of profits abroad and therefore, subject to tax by the host country. 135

Similarly, Decision 24 puts certain restrictions on the licensing of patents and trade marks. The decision does not favour the use of foreign trade marks, since patents and trade marks have been utilized by their owners to control the technology. The code puts restrictions on these licensing arrangements in order to remove the imbalances and to see that the technology licensing is equitable. Concern is equally given to the terms and conditions of the licensing agreements and to the removal of restrictive conditions and business practices. Moreover, Art. 51 of Decision 24 prohibits any choice of forum outside the receiving country in investment agreements or technology contracts.

Finally, it may be noted that the policies in Decision 24 are implemented through national legislations in each country and enforcement of the Code is the responsibility of each country. 137 Many other developing countries apart from Latin America have adopted national legislations on technology transfer on the lines similar to Decision 24. 138

It has been argued that the shortcomings with the existing national and regional controls are that they have not resulted in significant control either over the MNCs or over the transfer of technology. In response to these controls, MNCs have reacted in ways which have a negative impact on LDC industry or

137. See supra note 129.
resulted in decreased transfer of foreign investment and technology
to LDCs. The regulations which limit foreign ownership and
management are not effective because it is argued that the MNC has
other means of exercising control over technology and the sources of
market. The MNC has got the capacity and power to evade the national
regulatory controls. Further it may have an effect on limiting domestic
competition. Many developing countries do not have the internal
infrastructure or capital markets with the result that the divestment o
fade out arrangements do not operate to the advantages of LDCs.

Moreover, the regulations on royalty payments and profits may
diminish the flow of foreign technology to developing countries. There
is an evidence to suggest that restrictive business practices, may
still continue in technology transfer contracts. There is often
a possibility that MNCs would react to the controls in such a way as
not to diminish their profitability and the goals of stability. Given
the flexibility of MNC they can often switch over to other less
controlled countries.

To overcome these apprehensions it has been argued that there
should be international regulations over MNCs and transfer of
technology. It is also argued that the international regulation will
obviate the difficulties created by individual conflicting legal system
by providing uniform international standards over foreign investment and
transfer of technology. Thus we turn to need for international regula-

139. Joseph Jova, Supra note 98.
140. See Akinsanya, Supra note 99.
141. See K.K. Subramaniam, "Technology Import" Eco.&Pol.Weekly
(1986) August,9,1946);See also Countess Jeffries, "An
Evaluation of UNCTAD Code of Conduct", 18 Harvard Int L.J.
142. See Stephen Conrood, "Code of Conduct on MNC" 13 Harvard
Int.L.J, (1977) Also,N.Horn(ed),The Legal Effects of Code
4. **Transfer of Technology Towards International Regulation.**

The developing countries do not show a satisfactory rate of development given the present rate of resource transfers to them. They are nowhere near either the Lima target or the proposals of the Third United Nations Development Decade. Since the adoption of the strategy, there has been a deterioration in the world economic environment. More and more developing countries are affected by low growth, falling exports, declining investment demand and rising unemployment. The volume of the world trade is stagnating, commodity prices are at their lowest level, protectionism is spreading. The developing countries are facing acute foreign exchange problems.

In the field of transfer of technology, the position of the developing countries may be summed as under:-

1. At the present the developing countries which constitute 75% of the world's population produce only 7-8% of its industrial output. The Lima target had visualized a growth rate of 25% of world's industrial production, given the present terms and conditions of the exchange of technology, the developing countries did not manage to achieve the targets set by the Lima target. The third United Nations Development Decade provides framework for the development of developing countries during 1980's. The strategy calls for GDP of developing countries to grow at an annual average rate of 7%. This growth rate of 7% per year is high enough to enable the developing countries to double their average per capita income by the middle of 1990's. For this growth to be attained these countries will need to invest about 28% of their GDP by 1990. The Lima target (1975) had fixed up the industrial output of developing countries to 25% of the total world industrial production. By any measure it is hard to actually arrive share in world output is less than 7%.


144- Ibid.
countries can hardly afford the technology necessary for industrial expansion and technological growth. Furthermore, all research and development activities take place in developed countries. Therefore, all research and development activities of MNCs are directed to the needs and preferences of consumers in affluent societies. It is estimated that only 2% of the world's total R & D expenditure is devoted to the particular problems of the LDCs.¹⁴⁵

(2) The existing arrangements of investment and technology transfer do not lead to adequate technology transfer. The developing countries are technologically dependent on developed countries which is evident in present day international trade relations. The advanced countries supply only primary commodity industrial goods. The structure of international trade is governed by and for developed countries. All this would mean that the developing countries are less able to take decisions vital for their development.¹⁴⁶

(3) Because of the absence of international integration in the world economy the developing countries have initiated unilateral measures for controlling the imports of technology. These unilateral measures may affect the readiness and willingness of the supplier firms to invest in the developing countries. Moreover, in eighties most of the investment is directed towards the developed countries, themselves with the result the developing countries receive only a tiny proportion of world's total investment.¹⁴⁷

¹⁴⁵ Delorme, Supra note 4, p. 95.
¹⁴⁶ S. K. Agarwala, Supra note 36, p. 249.
¹⁴⁷ See UNCTAD, Supra note 62, p. 75.
In these circumstances it is natural that the developing countries argued for a better deal in transfer of technology. This could be achieved only, if an international framework could be devised for transfer of technology. According to developing countries the process of technology transfer is too important to be left to private channels. There is an imminent necessity for such a framework. Moreover, because of the absence of international legal control over MNCs, the developing countries have also favoured international regulation of MNCs. Thus the developing countries have vehemently argued for international Code of Conduct on both MNCs and transfer of technology. The demands for the regulation of MNCs and the transfer of technology may be taken as an assault on MNCs and developed countries in respect of practices adopted by them for transfer of resources and technology. As MNCs regard themselves more and more the victims of MNCs, the assault by them on MNCs continue. It is argued that where there has been apparent transfer of technology it has generally resulted in the transfer of inappropriate technologies that do not generate sufficient jobs for rapidly growing third world population. The developing countries have been pressing for universal codes for MNCs and allied subjects at the United Nations. The


genesis of demands for most of these codes has been the Third World demand for change and for alteration in existing international economic practices. The main thrust of such a codification exercise is directed at controlling the powers and channelling the activities of multinational corporations. Consequently at the present moment there are at least half a dozen of codes in preparation, at the United Nations. 151

United Nation's concern with the transfer of technology to the third world can be traced back to sixties. The international convention dealing with technology, to which most of the countries of Third World are members has granted for reaching rights to the owners of technology. The frustration of developing countries with these conventions was apparent when they called for the revision of certain provisions of the Paris convention, which according to them has, instead of facilitating the transfer of technology, hindered its transfer. 152

UNCTAD has been a pioneering institution in focussing the attention on transfer of technology to developing countries. From the very beginning it has been highlighting various issues inherent in transfer of technology. Since UNCTAD(1) the subject of transfer of technology has been taken up for discussion by intergovernmental bodies and private groups to create an atmosphere and understanding for international regulation. The role of foreign technology in


developing countries was on the agenda of first United Nations Development decade. The General Assembly in 1961 called for a report containing a survey of patent legislations in developed and developing countries. It was specifically recommended to hold an international conference to examine the problems of patents in developing countries and its possible effects on transfer of technology. 153

The United Nations Advisory Committee on the Application of Science and Technology to Development at its nineteenth session in Geneva attached great importance to the formulation of the Code of Conduct on transfer of technology. Furthermore, it was emphasized that there is an emergent need to strengthen the domestic scientific and technological capabilities of the developing countries. It may be pointed out that UNCTAD has been carrying forward this mandate of the technological progress of developing countries, to a great extent. 154

The Pugwash Conference on Science and World Affairs in its (1973) conference considered specifically the formulation of a draft code of conduct apart from discussing the problems involved in the transfer of technology. As per its recommendation, the special group constituted by the Conference formulated a draft code of conduct on transfer of technology, which latter on became the background of group of 77 draft code of conduct. 155

153. See UNCTAD An International Code of Conduct on Transfer of Technology, Supra note, 15.
154. UNCTAD, Supra note, 143.
The qualitative break-through in this sphere was UNCTAD-III (1972). Apart from focussing attention on issues of technology transfer, it focussed upon the national framework for transfer of technology. Resolution 39(14) para 9 initiated the programme of an international code of conduct on transfer of technology. Since the adoption of this resolution, UNCTAD at its subsequent sessions has been continuing the work on transfer of technology, specially for the formulation of a code of conduct.  

The UN Group of Eminent persons highlighted various inequalities between the developed and the developing countries. The report called for a reorganization of the world economy on an equitable basis with special attention to the problems concerned with direct investment and transfer of technology. The group recommended that machinery for screening and handling investment proposals be carefully examined. Furthermore, the Group suggested that as much research as possible be undertaken through affiliates in host countries and that affiliates should be permitted to export their technology to other parts of MNC's organization at appropriate prices. The group also recommended alternate means of obtaining technology other than direct investment.  

The United Nations had to respond to the changing situation of fifties and sixties with the independence of former colonial nations of Asia and Africa and their admission  

in United Nations. While the world economy was growing at a considerable rate the poor countries of Asia and Africa showed no signs of growth. With their increased number in institutions of the UN the LDCs showed a remarkable solidarity in attacking institutions like Bretton woods, GATT etc. With such an increased number the developing countries generally called as group of 77 (number exceeds now 120) prepared themselves for a confrontation with developed countries for renegotiation of the existing world order. The General Assembly's Sixth Special Session was the most combative session in the history of United Nations. The Third World moved towards domination of General Assembly and began its active campaign to close the gaps existing between the developed and the developing nations in income, in the quality of life and in rates of economic development. The sessions produced two resolutions approved by consensus without a recorded vote, the "Declaration On the Establishment of a New International Economic Order" and the accompanying "Programme of Action on the Establishment of a New International Economic Order."

The objectives of the New International Economic Order were stated as follows:

The benefits of technological progress are not shared equitably by all members of the international community. The developing countries which constitute 70 percent of the world's population account for only 30 percent of the world’s income. It has proved impossible to

achieve an even and balanced development of the international community under the existing international economic order. The gap between the developed and developing countries continues to widen in a system which was established at a time when most of the developing countries did not even exist as independent States and which perpetuates inequality.

The present international economic order is in direct conflict with current developments in international political and economic relations.162

On May 1, 1974 a second resolution was adopted on the Programme of Action on the Establishment of a New International Economic Order. It contains ten chapters dealing with specific areas including problems of raw materials, the international monetary system, industrialization, transfer of technology, regulation and control over activities of transnational corporations; charter of economic rights and duties of states; promotion of cooperation among developing countries; assistance in the exercise of permanent sovereignty over natural resources; The role of the United Nations in economic cooperation; and a "special programme" to provide emergency relief and development assistance.163

In December 1974, the G.A. adopted the Charter of Economic Rights and duties of States but this time with a divided vote. The charter of Economic Rights and Duties of States also referred to as the NIEO Charter, was proposed and promoted by Mexico. The NIEO Charter is a long and complex document. Many of its provisions have the merit of universal acceptance.164

162. Id. See Natier, Supra note 104, 275.
Art. 13 of the Charter provides;

All States should promote international scientific and technological co-operation and the transfer of technology, with proper regard for all legitimate interests including inter-alia the rights and duties of holders, suppliers and recipients of technology. In particular all States should facilitate the access of developing countries to the achievements of modern science and technology and the creation of indigenous technology for the benefit of the developing countries in forms and in accordance with the procedures which are suited to their economies and their needs.\textsuperscript{165}

Article 13 is somewhat reassuring to many MNCs because of the recognition of the rights and duties of holders and suppliers of technology. The implied suggestions that the United States Government should intervene in negotiations for transfer however are not viewed with favour by MNCs.\textsuperscript{166}

Para 4 of Article (13) touches directly on the sensitive issue of implementation of transfer of technology.

\[
\text{All States should cooperate in exploring with a view to evolving internationally accepted guidelines or regulations for the transfer of technology taking fully into account the interests of developing countries.}\textsuperscript{167}
\]

These resolutions have been much commented upon from the points of view of both developed and developing countries. The former do not regard it as essentially binding, because of reservations entered by developed states to the Resolutions. The latter on the other hand regard it as the guiding principle in their negotiations with transnational corporations for transfer of technology.\textsuperscript{168}

\textsuperscript{165} Ibid., See I.L.M. (1975) p.269,
\textsuperscript{166} Nailer, Supra note 104, p.276.
\textsuperscript{167} Meagher, Supra note 107, p.55.
The call for New International Economic Order has appreciated the need for a sort of codification in developing the required legal institutions and mechanisms in transferring technology. The mounting disjunction that the international economic order is experiencing underlines the need for a new system of managing the world economy which is geared to equity and efficiency. A 1979 General Assembly resolution recognizes this urgency and seeks to consolidate the principles and norms of international economic law into one or more legal instruments.169

As its seventh special session on development and international cooperation the G.A. adopted resolution 3362 (S-VII whereby it recommended to all states to cooperate in evolving an international Code of Conduct for the transfer of technology, corresponding in particular to the needs of the developing countries.170


The work of formulating an international Code of Conduct was entrusted to a specially convened intergovernmental Group of Experts by UNCTAD. Since 1978, the negotiations on the formulation of a Code of Conduct are continuing.171

There have been a number of drafts of the technology transfer Code. The first Code was formulated at 1973 unofficial Pugwash Conference. The official negotiations in UNCTAD resulted in three separate draft Code in 1979 by the Group of 77 (developing countries), Group B (developed countries) and Group U (Socialist Countries). However, since 1978, when the

169. See UN, Towards the New International Economic Order. Analytical Report on Developments since Sixth Special Session (1982); See P.K. Ghaosh, Supra note 2.
171. Ibid.
GA directed the holding of a conference on International Code of Conduct on transfer of technology, the UN Conferences have helped to arrive at a single consolidated text with disputed provisions explained in notes. The Annual sessions of the Conference have been held in Geneva; the last session was held in 1985. 172

In the last session the Conference could not arrive at a consensus over the disputed provisions. It may be seen that last ten years of negotiations over the draft Code have come a long way, for agreement has so far been reached on as many as 150 out of 200 provisions. Should a code be adopted it may become a forceful instrument in aid of development for developing countries. 173 The Code would, in the opinion of developing countries promote growth and ensure equity in economic relations with the developed countries. The proposed international Code would legitimize the existing national regulations on transfer of technology. 174 Moreover, it is argued that the proposed Code of Conduct would constitute a complete regime for international transfer of technology as it would separate technology transfer from other trade and investment transactions. 175 The arguments in favour of an international code of conduct emphasize viewpoint of developing countries that access to technology is an issue of utmost importance.


