

UNIT III

International Monetary Fund (IMF), United Nations (UN) specialized agency, founded at the Bretton Woods Conference in 1944 to secure international monetary cooperation, to stabilize currency exchange rates, and to expand international liquidity (access to hard currencies).

ORIGIN

The first half of the 20th century was marked by two world wars that caused enormous physical and economic destruction in Europe and a Great Depression that wrought economic devastation in both Europe and the United States. These events kindled a desire to create a new international monetary system that would stabilize currency exchange rates without backing currencies entirely with gold; to reduce the frequency and severity of balance-of-payments deficits (which occur when more foreign currency leaves a country than enters it); and to eliminate destructive mercantilist trade policies, such as competitive devaluations and foreign exchange restrictions—all while substantially preserving each country's ability to pursue independent economic policies. Multilateral discussions led to the UN Monetary and Financial Conference in Bretton Woods, New Hampshire, U.S., in July 1944. Delegates representing 44 countries drafted the Articles of Agreement for a proposed International Monetary Fund that would supervise the new international monetary system. The framers of the new Bretton Woods monetary regime hoped to promote world trade, investment, and economic growth by maintaining convertible currencies at stable exchange rates. Countries with temporary, moderate balance-of-payments deficits were expected to finance their deficits by borrowing foreign currencies from the IMF rather than by imposing exchange controls, devaluations, or deflationary economic policies that could spread their economic problems to other countries.

After ratification by 29 countries, the Articles of Agreement entered into force on December 27, 1945. The fund's board of governors convened the following year in Savannah, Georgia, U.S., to adopt bylaws and to elect the IMF's first executive directors. The governors decided to locate the organization's permanent headquarters in Washington, D.C., where its 12 original executive directors first met in May 1946. The IMF's financial operations began the following year.

ORGANIZATION

The IMF is headed by a board of governors, each of whom represents one of the organization's approximately 180 member states. The governors, who are usually their countries' finance ministers or central bank directors, attend annual meetings on IMF issues. The fund's day-to-day operations are administered by an executive board, which consists of 24 executive directors who meet at least three times a week. Eight directors represent individual countries (China, France, Germany, Japan, Russia, Saudi Arabia, the United Kingdom, and

the United States), and the other 16 represent the fund's remaining members, grouped by world regions. Because it makes most decisions by consensus, the executive board rarely conducts formal voting. The board is chaired by a managing director, who is appointed by the board for a renewable five-year term and supervises the fund's staff of about 2,700 employees from more than 140 countries. The managing director is usually a European and—by tradition—not an American. The first female managing director, Christine Lagarde of France, was appointed in June 2011.

Each member contributes a sum of money called a quota subscription. Quotas are reviewed every five years and are based on each country's wealth and economic performance—the richer the country, the larger its quota. The quotas form a pool of loanable funds and determine how much money each member can borrow and how much voting power it will have. For example, the United States' approximately \$83 billion contribution is the most of any IMF member, accounting for approximately 17 percent of total quotas. Accordingly, the United States receives about 17 percent of the total votes on both the board of governors and the executive board. The Group of Eight industrialized nations (Canada, France, Germany, Italy, Japan, Russia, the United Kingdom, and the United States) controls nearly 50 percent of the fund's total votes.

ROLE OF IMF

Stabilizing currency exchange rates

Under the original Articles of Agreement, the IMF supervised a modified gold standard system of pegged, or stable, currency exchange rates. Each member declared a value for its currency relative to the U.S. dollar, and in turn the U.S. Treasury tied the dollar to gold by agreeing to buy and sell gold to other governments at \$35 per ounce. A country's exchange rate could vary only 1 percent above or below its declared value. Seeking to eliminate competitive devaluations, the IMF permitted exchange rate movements greater than 1 percent only for countries in "fundamental balance-of-payments disequilibrium" and only after consultation with, and approval by, the fund.

Financing balance-of-payments deficits

Members with balance-of-payments deficits may borrow money in foreign currencies, which they must repay with interest, by purchasing with their own currencies the foreign currencies held by the IMF. Each member may immediately borrow up to 25 percent of its quota in this way. The amounts available for purchase are denominated in Special Drawing Rights (SDRs), whose value is calculated daily as a weighted average of four currencies: the U.S. dollar, the euro, the Japanese yen, and the British pound sterling. SDRs are an international reserve asset created by the IMF in 1969 to supplement members' existing reserve assets of foreign currencies and gold. Countries use the SDRs that have been allocated to them by the IMF to settle international debts. More than 20 billion SDRs were allocated to members in successive allocations from 1969 through 1981. SDRs are not part of the quota subscriptions supplied by members, and thus they are not part of the general asset pool available for loans to members. The IMF uses the SDR as its unit of account for all transactions. Drawing on the IMF by a country raises the fund's holdings of that country's currency but lowers its holdings of another country's currency by an equal amount. Thus the composition of the fund's resources changes, but the total resources as measured in SDRs remains the same. The country repays the loan over a specified period (usually three to five years) by using member currencies acceptable to the IMF to repurchase its own national currency. Only about 20 currencies are borrowed during a typical year, with most borrowers exchanging their currency for the major convertible currencies: the U.S. dollar, the Japanese yen, the euro, and the British pound sterling. Countries whose currencies are borrowed by other member governments receive remuneration—about 4 percent of the amount borrowed.

Advising borrowing governments

The IMF consults annually with each member government. Through these contacts, known as "Article IV Consultations," the IMF attempts to assess each country's economic health and to forestall future financial problems. The fund also operates the IMF Institute, a department that provides training in macroeconomic analysis and policy formulation for officials of member countries.

Criticism and debate

The impact of IMF loans has been widely debated. Opponents of the IMF argue that the loans enable member countries to pursue reckless domestic economic policies knowing that, if needed, the IMF will bail them out. This safety net, critics charge, delays needed reforms and creates long-term dependency. Opponents also argue that the IMF rescues international bankers who have made bad loans, thereby encouraging them to approve ever riskier international investments.

IMF conditionalities have also been widely debated. Critics contend that IMF policy prescriptions provide uniform remedies that are not adequately tailored to each country's unique circumstances. These standard, austere loan conditions reduce economic growth and deepen and prolong financial crises, creating severe

hardships for the poorest people in borrowing countries and strengthening local opposition to the IMF.

IBRD (WORLD BANK)

The International Bank for Reconstruction and Development (IBRD), commonly referred to as the World Bank, is an international financial institution whose purposes include assisting the development of its member nation's territories, promoting and supplementing private foreign investment and promoting long-range balance growth in international trade.

The World Bank was established in December 1945 at the United Nations Monetary and Financial Conference in Bretton Woods, New Hampshire. It opened for business in June 1946 and helped in the reconstruction of nations devastated by World War II. Since 1960s the World Bank has shifted its focus from the advanced industrialized nations to developing third-world countries.

Organization and Structure:

The organization of the bank consists of the Board of Governors, the Board of Executive Directors and the Advisory Committee, the Loan Committee and the president and other staff members. All the powers of the bank are vested in the Board of Governors which is the supreme policy making body of the bank.

The board consists of one Governor and one Alternative Governor appointed for five years by each member country. Each Governor has the voting power which is related to the financial contribution of the Government which he represents.

The Board of Executive Directors consists of 21 members, 6 of them are appointed by the six largest shareholders, namely the USA, the UK, West Germany, France, Japan and India. The rest of the 15 members are elected by the remaining countries.

Each Executive Director holds voting power in proportion to the shares held by his Government. The board of Executive Directors meets regularly once a month to carry on the routine working of the bank.

The president of the bank is pointed by the Board of Executive Directors. He is the Chief Executive of the Bank and he is responsible for the conduct of the day-to-day business of the bank. The Advisory committees appointed by the Board of Directors.

It consists of 7 members who are experts in different branches of banking. There is also another body known as the Loan Committee. This committee is consulted by the bank before any loan is extended to a member country.

Capital Resources of World Bank:

The initial authorized capital of the World Bank was \$ 10,000 million, which was divided in 1 lakh shares of \$ 1 lakh each. The authorized capital of the Bank has been increased from time to time with the approval of member countries.

On June 30, 1996, the authorized capital of the Bank was \$ 188 billion out of which \$ 180.6 billion (96% of total authorized capital) was issued to member countries in the form of shares.

Member countries repay the share amount to the World Bank in the following ways:

1. 2% of allotted share are repaid in gold, US dollar or Special Drawing Rights (SDR).
2. Every member country is free to repay 18% of its capital share in its own currency.
3. The remaining 80% share deposited by the member country only on demand by the World Bank.

Objectives:

The following objectives are assigned by the World Bank:

1. To provide long-run capital to member countries for economic reconstruction and development.
2. To induce long-run capital investment for assuring Balance of Payments (BoP) equilibrium and balanced development of international trade.
3. To provide guarantee for loans granted to small and large units and other projects of member countries.
4. To ensure the implementation of development projects so as to bring about a smooth transference from a war-time to peace economy.
5. To promote capital investment in member countries by the following ways
 - (a) To provide guarantee on private loans or capital investment.

(b) If private capital is not available even after providing guarantee, then IBRD provides loans for productive activities on considerate conditions.

Functions:

World Bank is playing main role of providing loans for development works to member countries, especially to underdeveloped countries. The World Bank provides long-term loans for various development projects of 5 to 20 years duration.

The main functions can be explained with the help of the following points:

1. World Bank provides various technical services to the member countries. For this purpose, the Bank has established “The Economic Development Institute” and a Staff College in Washington.
2. Bank can grant loans to a member country up to 20% of its share in the paid-up capital.
3. The quantities of loans, interest rate and terms and conditions are determined by the Bank itself.
4. Generally, Bank grants loans for a particular project duly submitted to the Bank by the member country.
5. The debtor nation has to repay either in reserve currencies or in the currency in which the loan was sanctioned.
6. Bank also provides loan to private investors belonging to member countries on its own guarantee, but for this loan private investors have

to seek prior permission from those countries where this amount will be collected.

WTO (WORLD TRADE ORGANISATION)

The World Trade Organization is an intergovernmental organization that regulates and facilitates international trade between nations. Governments use the organization to establish, revise, and enforce the rules that govern international trade.

Headquarters: Geneva, Switzerland

Founded: 1 January 1995

Purpose: Reduction of tariffs and other barriers to trade

Membership: 164 countries (160 UN countries, EU, Hong Kong, Macau and Taiwan)

Official languages : English, French, Spanish

OBJECTIVES

The WTO has six key objectives:

- (1) to set and enforce rules for international trade,
- (2) to provide a forum for negotiating and monitoring further trade liberalization,
- (3) to resolve trade disputes,
- (4) to increase the transparency of decision-making processes,
- (5) to cooperate with other major international economic institutions involved in global economic management,
- (6) to help developing countries benefit fully from the global trading system.
- (7) to protect the environment.

FUNCTIONS

1. To implement rules and provisions related to trade policy review mechanism.
2. To provide a platform to member countries to decide future strategies related to trade and tariff.
3. To provide facilities for implementation,
administration and operation of multilateral and bilateral agreements of the world trade.
To administer the rules and processes related to dispute settlement.
5. To ensure the optimum use of world resources.
6. To assist international organizations such as, IMF and IBRD for establishing coherence in Universal Economic Policy determination.

PRINCIPLES OF WTO

- Non discrimination – MFN
- National treatment – imported and locally produced goods should be treated equally in the market
- Fair competition
- Transparency
- Free trade
- Predictability- stability in market to foresee market demand
- Encourage development and economic reforms

ACHIEVEMENTS

- i. Greater market orientation has become the general rule;
 - ii. Use of restrictive measures for BOP problems has declined markedly;
 - iii. Services trade has been brought into the multilateral system and many countries, as in goods, are opening their markets for trade and investment either unilaterally or through regional or multilateral negotiations;
- Tariff-based protection has become the norm rather than the exception;
- vii. The trade policy review mechanism has created a process of continuous monitoring of trade policy developments;
 - vii. It has been agreed to reduce import tariffs on industrial goods,

LIMITATIONS

- i. The trade reform process is incomplete in many countries.
- ii. Some reversals in the overall liberalisation process in some developing countries.
- iii. Did not encourage non tariff barriers to imports from UDCs
- iv. International trade is given priority over other local issues.
- v. Trade policy implementation issues.
- vi. Policies and rules appropriate to the industrialised world are getting established.
- vii. Benefits of WTO enjoyed more by countries of North.
- viii. Combination of globalisation and technological change benefits high skill and creates social division.

INDIA'S PATENT POLICY

Legal rights issued by government for 20 years after that product enters market domain.

China grants maximum patents to its people.

For multiple countries PCT is filed (Patent Co-operation treaty)

Types of patent-

Design – Unique designs, surface ornamentation, design is inseparable from the object.

Plant – new distinctive plant that no one has seen or heard about before. Plants through grafting.

Utility – Processes/Methods, Machines, composition of matter, socially useful to mankind.

Method of filing patent

- File preparation – details, specifications
- Draft application
 - Provisional – If invention is still in its development phase - 12 months to finish
 - Complete – Invention is complete – product is published in 18 months if complete
- Examination request – handling objections
 - Uniqueness
 - Novelty/ original

Section 3 and 4 of the patent act, 1970, what cannot be patented-

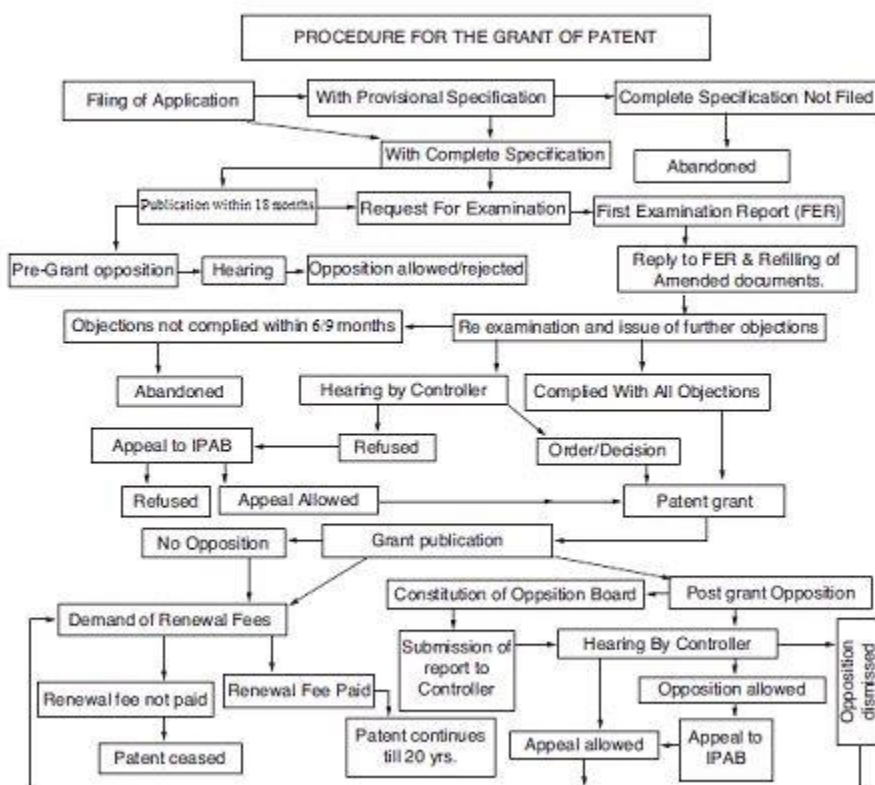
Background

The history of Patent law in India starts from 1911 when the Indian Patents and Designs Act, 1911 was enacted. The present Patents Act, 1970 came into force in the year 1972, amending and consolidating the existing law relating to Patents in India. The Patents Act, 1970 was again amended by the Patents (Amendment) Act, 2005, wherein product patent was extended to all fields of technology including food, drugs, chemicals and micro-organisms. After the amendment, the provisions relating to Exclusive Marketing Rights (EMRs) have been repealed, and a provision for enabling grant of compulsory license has been introduced. The provisions relating to pre-grant and post-grant opposition have been also introduced.

An invention relating to a product or a process that is new, involving inventive step and capable of industrial application can be patented in India. However, it must not fall into the category of inventions that are non-patentable as provided under sections 3 and 4 of the (Indian) Patents Act, 1970. In India, a patent application can be filed, either alone or jointly, by true and first inventor or his assignee.

Procedure for Grant of a Patent in India

After filing the application for the grant of patent, a request for examination is required to be made for examination of the application in the Indian Patent Office within 48 months from the date of priority of the application or from the date of filing of the application. After the first examination report is issued, the applicant is given an opportunity to meet the objections raised in the report. The applicant has to comply with the requirements within 6 months from the issuance of the first examination report which may be extended for further 3 months on the request of the applicant. If the requirements of the first examination report are not complied with within the prescribed period of 9 months, then the application is treated to have been abandoned by the applicant. After the removal of objections and compliance of requirements, the patent is granted and notified in the Patent Office Journal. The process of the grant of patent in India can also be understood from the following flow chart:



Filing of Application for Grant of Patent in India by Foreigners

India being a signatory to the Paris Convention for the Protection of Industrial Property, 1883 and the Patent Cooperation Treaty (PCT), 1970, a foreign entity can adopt any of the aforesaid treaties for filing of application for grant of patent in India.

Where an application for grant of patent in respect of an invention in a Convention Country has been filed, then similar application can also be filed in India for grant of patent by such applicant or the legal representative or assignee of such person within 12 months from the date on which the basic application was made in the Convention Country, ie, the home country. The priority date in such a case is considered as the date of making of the basic application.

Pre-grant Opposition

A representation for pre-grant opposition can be filed by *any person* under s 11A of the Patents Act, 1970 within six months from the date of publication of the application, as amended (the "Patents Act") or before the grant of patent. The grounds on which the representation can be filed are provided under section 25(1) of the Patents Act. There is no fee for filing representation for pre-grant opposition. Representation for pre-grant opposition can be filed even though no request for examination has been filed. However, the representation will be considered only when a request for examination is received within the prescribed period.

Post-grant Opposition

Any *interested person* can file post-grant opposition within twelve months from the date of publication of the grant of patent in the official journal of the patent office.

Grounds for Opposition

Some of the grounds for filing pre-and post-grant opposition are as under:

- (a) Patent wrongfully obtained;
- (b) Prior publication;
- (c) The invention was publicly known or publicly used in India before the priority date of that claim;
- (d) The invention is obvious and does not involve any inventive step;
- (e) That the subject of any claim is not an invention within the meaning of this Act, or is not patentable under this Act;
- (f) Insufficient disclosure of the invention or the method by which it is to be performed;
- (g) That in the case of a patent granted on convention application, the application for patent was not made within twelve months from the date of the first application for protection for the invention made in a convention country or in India;
- (h) That the complete specification does not disclose or wrongly mentions the source and geographical origin of biological material used for the invention; and
- (i) That the invention was anticipated having regard to the knowledge, oral or otherwise, available within any local or indigenous community in India or elsewhere.

Term of Patent

The term of every patent in India is 20 years from the date of filing the patent application, irrespective of whether it is filed with provisional or complete specification. However, in case of applications filed under the Patent Cooperative Treaty (PCT), the term of 20 years begins from the international filing date.

Payment of Renewal Fee

It is important to note that a patentee has to renew the patent every year by paying the renewal fee, which can be paid every year or in lump sum.

Restoration of Patent

A request for restoration of patent can be filed within eighteen months from the date of cessation of patent along with the prescribed fee. After the receipt of the request, the matter is notified in the official journal for further processing of the request.

Patent of Biological Material

If the invention uses a biological material which is new, it is essential to deposit the same in the International Depository Authority (IDA) prior to the filing of the application in India in order to supplement the description. If such biological materials are already known, in such a case it is not essential to deposit the same. The IDA in India located at Chandigarh is known as Institute of Microbial Technology (IMTECH).

Rights granted by a Patent

If the grant of the patent is for a product, then the patentee has a right to prevent others from making, using, offering for sale, selling or importing the patented product in India. If the patent is for a process, then the patentee has the right to prevent others from using the process, using the product directly obtained by the process, offering for sale, selling or importing the product in India directly obtained by the process.

Before filing an application for grant of patent in India, it is important to note "*What is not Patentable in India?*" Any invention which is (a) frivolous, (b) obvious, (c) contrary to well established natural laws, (d) contrary to law, (e) morality, (f) injurious to public health, (g) a mere discovery of a scientific principle, (h) the formulation of an abstract theory, (i) a mere discovery of any new property or new use for a known substance or process, machine or apparatus, (j) a substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance, (k) a mere arrangement or rearrangement or duplication of known devices, (l) a method of agriculture or horticulture and (m) inventions relating to atomic energy, are not patentable in India.

Maintainability of Secrecy by the Indian Patent Office (IPO)

All patent applications are kept secret up to eighteen months from the date of filing or priority date, whichever is earlier, and thereafter they are published in the Official Journal of the Patent Office published every week. After such publication of the patent application, public can inspect the documents and may take the photocopy thereof on the payment of the prescribed fee.

Compulsory Licensing

One of the most important aspects of Indian Patents Act, 1970, is compulsory licensing of the patent subject to the fulfillment of certain conditions. At any time after the expiration of three years from the date of the sealing of a patent, any person interested may make an application to the Controller of Patents for grant of compulsory license of the patent, subject to the fulfillment of following conditions, ie,

- the reasonable requirements of the public with respect to the patented invention have not been satisfied;
- that the patented invention is not available to the public at a reasonable price; or
- that the patented invention is not worked in the territory of India.

It is further important to note that an application for compulsory licensing may be made by any person notwithstanding that he is already the holder of a licence under the patent.

For the purpose of compulsory licensing, no person can be stopped from alleging that the reasonable requirements of the public with respect to the patented invention are not satisfied or that the patented invention is not available to the public at a reasonable price by reason of any admission made by him, whether in such a licence or by reason of his having accepted such a licence.

The Controller, if satisfied that the reasonable requirements of the public with respect to the patented invention have not been satisfied or that the patented invention is not available to the public at a reasonable price, may order the patentee to grant a licence upon such terms as he may deem fit. However, before the grant of a compulsory license, the Controller of Patents shall take into account following factors:

- The nature of invention;
- The time elapsed, since the sealing of the patent;
- The measures already taken by the patentee or the licensee to make full use of the invention;
- The ability of the applicant to work the invention to the public advantage;
- The capacity of the applicant to undertake the risk in providing capital and working the invention, if the application for compulsory license is granted;
- As to the fact whether the applicant has made efforts to obtain a license from the patentee on reasonable terms and conditions;
- National emergency or other circumstances of extreme urgency;
- Public non-commercial use; and
- Establishment of a ground of anti-competitive practices adopted by the patentee.

The grant of compulsory license cannot be claimed as a matter of right, as the same is subject to the fulfilment of above conditions and discretion of the Controller of Patents. Further judicial recourse is available against any arbitrary or illegal order of the Controller of Patents for grant of compulsory license. In 2012, the Controller of Patents has granted the first compulsory license to Natco Pharma to sell a generic version of the patented cancer drug 'Nexavar' in India. However, the subsequent applications, by BDR Pharmaceuticals for Bristol-Myers Squibb's Dasatinib and Lee Pharma for AstraZeneca's Saxagliptin, to sell generic version of these patented drugs were rejected.

The Government of India has while exercising its power under section 66 of the Patents Act, 1970 in the Public Interest, revoked Patent No. 252093, entitled "a synergistic, ayurvedic functional food bioactive composition (Cinata) and a process of preparation thereof" granted to m/s Avesthagen Ltd., on the ground that the aforesaid patent is prejudicial to public.

Infringement of Patent

Patent infringement proceedings can only be initiated after grant of patent in India but may include a claim retrospectively from the date of publication of the application for grant of the patent. Infringement of a patent consists of the unauthorised making, importing, using, offering for sale or selling any patented invention within the India. Under the (Indian) Patents Act, 1970 only a civil action can be initiated in a Court of Law. Further, a suit for infringement can be defended on various grounds including the grounds on which a patent cannot be granted in India and based on such defence, revocation of Patent can also be claimed.

Licensing and Assignment of Patent

An assignment in a patent or a share in a patent or a mortgage, license or the creation of any other interest in a patent is permissible. In the case of patents, assignment is valid only when it is in writing and the agreement is reduced to the form of a document embodying all the terms and conditions governing the rights and obligations of the parties to the agreement. The application for registration is required to be made by the transferee in the prescribed form.

Meaning of patent

A patent is an exclusive right granted by the Government to the inventor to exclude others to use, make and sell an invention is a specific period of time. A patent is also available for improvement in their previous Invention. The main motto to enact patent law is to encourage inventors to contribute more in their field by awarding them exclusive rights for their inventions. In modern terms, the patent is usually referred to as the right granted to an inventor for his Invention of any new, useful, non-obvious process, machine, article of manufacture, or composition of matter. The word "patent" is referred from a Latin term "patere" which means "to lay open," i.e. to make available for public inspection. There are three basic tests for any invention to be patentable:

- Firstly, the invention must be novel, meaning thereby that the Invention must not be in existence.
- Secondly, the Invention must be non- obvious, i.e. the Invention must be a significant improvement to the previous one; mere change in technology will not give the right of the patent to the inventor.

- Thirdly, the invention must be useful in a bonafide manner, meaning thereby that the Invention must not be solely used in any illegal work and is useful to the world in a bonafide manner.

An invention considered as new if, on the date of filing the application, any such invention is not known to the public in any form, i.e. oral, writing, or any other form. Anything shall not be termed as inventive if such a thing is already known to the public domain. The patent has a limited term of 20 years, which is counted from the date of filing of the patent application. A patent is a territorial right. Thus it can only be applied in the country where it has been granted. A patent is a territorial right. Thus it can only be applied in the country where it has been granted. Therefore, any legal action against infringement or infringement of patent rights can only be taken in that country. To obtain patent protection in different countries, each country must apply for a patent. The Patent Cooperation Treaty (PCT) provides a way to file an international patent application in which a patent can be filed through a single patent application in a large number of countries. However, the PCT of a patent remains discretionary of the individual patent office only after the application is filed.

Under the Indian patent law, a patent can be obtained only for an invention which is new and useful. The invention must relate to the machine, article or substance produced by a manufacturer, or the process of manufacture of an article. A patent may also be obtained for innovation of an article or of a process of manufacture. In respect to medicine or drug and certain classes of chemicals, no patent is granted for the substance itself even if it is new, but the process of manufacturing and substance is patentable. The application for a patent must be true and the first inventor or the person who has derived title from him, the right to apply for a patent being assignable.

Some inventions cannot be patented. In the European Patent Convention (EPC) law there is the list of non-patentable subject-matter which includes methods of medical treatment or diagnosis, and new plant or animal varieties. Further information on such fields can be obtained from a patent attorney. Nor many patents be granted for inventions whose exploitation would be contrary to public order or morality (obvious examples being land-mines or letter-bombs). The following are not regarded as inventions, discoveries, innovations, scientific theories and mathematical methods, aesthetic creations, such as art or literature works or art of writing, schemes, rules and methods for performing mental acts, playing games or doing business, presentations of information, computer software.

History of Patent

The first step of the patent in India was Act VI of 1856. The main objective of the legislation was to encourage the respective inventions of new and useful

manufactures and to induce inventors to reveal their inventions and make available for public. The Act was repealed by Act IX of 1857 as it had been enacted without the approval of the British Crown. Fresh legislation was enacted for granting 'exclusive privileges' was introduced in 1859 as Act XV of 1859. This legislation undergoes specific modifications of the previous legislation, namely, grant of exclusive privileges to useful inventions only, an extension of priority period from 6 months to 12 months. The Act excluded importers from the definition of an inventor. The Act was then amended in 1872, 1883 and 1888.

The Indian Patent and Design Act, 1911 repealed all previous acts. The Patents Act 1970, along with the Patent Rules 1972, came into force on 20 April 1972, replacing the Indian Patent and Design Act 1911. The Patent Act is basically based on the recommendations of the report Justice Ann. The Ayyangar Committee headed by Rajagopala Iyengar. One of the recommendations was the allowance of process patents in relation to inventions related to drugs, drugs, food and chemicals. Again The Patents Act, 1970 was amended by the Patents (Amendment) Act, 2005 regarding extending product patents in all areas of technology including food, medicine, chemicals and microorganisms. Following the amendment, provisions relating to exclusive marketing rights (EMR) have been repealed, and a provision has been introduced to enable the grant of compulsory licenses. Provisions related to pre-grant and anti-post protests have also been introduced.

What can be patented?

[Sections 3 and 4 of the Indian Patents Act, 1970](#) clearly mentioned the exclusions regarding what can be patented in India. There are certain criteria which have to be fulfilled to obtain a patent in India. They are:

- Patent subject:

The most important consideration is to determine whether the Invention relates to a patent subject matter. Sections 3 and 4 of the Patents Act list non-patentable subject matter. Unless the Invention comes under any provision of Section 3 or 4, it means that it consists of a subject for a patent.

- Novelty:

Innovation is an important criterion in determining the patent potential of an invention. Under [Section 2\(I\) of the Patent Act](#), a novelty or new Invention is defined as "no invention or technology published in any document before the date of filing of a patent application, anywhere in the country or the world". The complete specification, that is, the subject matter has not fallen into the public domain or is not part of state of the art".

Simply, the novelty requirement basically states that an invention that should never have been published in the public domain. It must be the newest which have no same or similar prior arts.

- Inventive steps or non-clarity:

Under [Section 2\(ja\) of the Patents Act](#), an inventive step is defined as “the characteristic of an invention that involves technological advancement or is of economic importance or both, as compared to existing knowledge, and invention not obvious to a person skilled in the art.” This means that the invention should not be obvious to a person skilled in the same field where the invention is concerned. It should not be inventive and obvious for a person skilled in the same field.

- Capable of industrial application:

Industrial applicability is defined in [Section 2 \(ac\) of the Patents Act](#) as “the invention is capable of being made or used in an industry”. This basically means that the Invention cannot exist in the abstract. It must be capable of being applied in any industry, which means that it must have practical utility in respect of patent.

These are statutory criteria for the patent of an invention. In addition, other important criteria for obtaining a patent is the disclosure of a competent patent. A competent patent disclosure means a patent draft specification must adequately disclose the Invention, so as to enable a person skilled in the same field related to carrying out the Invention with undue efforts.

Rights and obligations of the patentee

Rights of Patentee

- Right to exploit patent: A patentee has the exclusive right to make use, exercise, sell or distribute the patented article or substance in India, or to use or exercise the method or process if the patent is for a person. This right can be exercised either by the patentee himself or by his agent or licensees. The patentee’s rights are exercisable only during the term of the patent.
- Right to grant license: The patentee has the discretion to transfer rights or grant licenses or enter into some other arrangement for a consideration. A license or an assignment must be in writing and registered with the Controller of Patents, for it to be legitimate and valid. The document assigning a patent is not admitted as evidence of

title of any person to a patent unless registered and this is applicable to assignee not to the assignor.

- **Right to Surrender:** A patentee has the right to surrender his patent, but before accepting the offer of surrender, a notice of surrender is given to persons whose name is entered in the register as having an interest in the patent and their objections, if any, considered. The application for surrender is also published in the Official Gazette to enable interested persons to oppose.
- **Right to sue for infringement:** The patentee has a right to institute proceedings for infringement of the patent in a District Court having jurisdiction to try the suit.

Obligations of patentee

- **Government use of patents:** A patented invention may be used or even acquired by the Government, for its use only; it is to be understood that the Government may also restrict or prohibit the usage of the patent under specific circumstances. In case of a patent in respect of any medicine or drug, it may be imported by the Government for its own use or for distribution in any dispensary, hospital or other medical institution run by or on behalf of the Government. The aforesaid use can be made without the consent of the patentee or payment of any royalties. Apart from this, the Government may also sell the article manufactured by patented process on royalties or may also require a patent on paying suitable compensation.
- **Compulsory licenses:** If the patent is not worked satisfactorily to meet the reasonable requirements of the public, at a reasonable price, the Controller may grant compulsory licenses to any applicant to work the patent. A compulsory license is a provision under the Indian Patent Act which grants power to the Government to mandate a generic drug maker to manufacture inexpensive medicine in public interest even as a patent in the product is valid. Compulsory licenses may also be obtained in respect of related patents where one patent cannot be worked without using the related patent.
- **Revocation of patent:** A patent may be revoked in cases where there has been no work or unsatisfactory result to the demand of the public in respect of the patented invention.
- **Invention for defence purposes:** Such patents may be subject to certain secrecy provisions, i.e. publication of the Invention may be restricted or prohibited by directions of Controller. Upon continuance of such order or prohibition of publication or communication of patented

Invention, the application is debarred for using it, and the Central Government might use it on payment of royalties to the applicant.

- Restored Patents: Once lapsed, a patent may be restored, provided that few limitations are imposed on the right of the patentee. When the infringement was made between the period of the date of infringement and the date of the advertisement of the application for reinstatement, the patent has no authority to take action for infringement.

Procedure of Patent

- Step 1: Write about inventions (idea or concept) with each and every detail.

Collect all information about your Invention such as:

1. Field of Invention
2. What does the Invention describe
3. How does it work
4. Benefits of Invention

If you worked on the Invention and during the research and development phase, you should have some call lab records which are duly signed with the date by you and the concerned authority.

- Step 2: It must involve a diagram, drawing and sketch explains the Invention

Drawings and drawings should be designed so that the visual work can be better explained with the invention work. They play an important role in patent applications.

- Step 3: To check whether the Invention is patentable subject or not.

Not all inventions can be patentable, as per the Indian Patent Act there are some inventions which have not been declared patentable (inventions are not patentable).

- Step 4: Patent Discovery

The next step will be to find out if your Invention meets all patent criteria as per the Indian Patent Act-

1. The invention must be novel.
2. The Invention must be non- obvious.
3. The Invention must have industrial applications.

- Step 5: File Patent Application

If you are at a very early stage in research and development for your Invention, then you can go for a provisional application. It offers the following benefits:

1. Filing date.
2. 12 months time for filing full specification.
3. Lesser cost.

After filing a provisional application, you secure the filing date, which is very important in the patent world. You get 12 months to come up with the complete specification; your patent application will be removed at the end of 12 months.

When you have completed the required documents and your research work is at a level where you can have prototypes and experimental results to prove your inventive move; you can file the complete specification with the patent application.

Filing the provisional specification is an optional step if you are in the stage where you have complete knowledge about your Invention you can go straight to the full specification.

- Step 6: Publication of the application

Upon filing the complete specification along with the application for the patent, the application is published 18 months after the first filing.

If you do not wish to wait until the expiration of 18 months from the filing date to publish your patent application, an initial publication request may be made with the prescribed fee. The patent application is usually published early as a one-month form request.

- Step 7: Request for Examination

The patent application is scrutinized only after receiving a request for an RFE examination. After receiving this request, the Controller gives your patent application to a patent examiner who examines the patent application such as the various patent eligibility criteria:

1. Patent subject
2. Newness
3. Lack of clarity
4. Inventory steps
5. Industrial application

6. By enabling

The examiner makes the first examination report of the patent application upon a review for the above conditions. This is called patent prosecution. Everything that happens for a patent application before the grant of a patent is usually called patent prosecution.

The first examination report submitted to the Controller by the examiner usually includes prior art (existing documents prior to the filing date) that are similar to the claimed invention and is also reported to the patent applicant.

- Step 8: Answer the objections

Most patent applicants will receive some type of objections based on the examination report. The best thing is to analyze the examination report with the patent professional (patent agent) and react to the objections in the examination report.

This is an opportunity for an inventor to communicate his novelty over the prior art in examination reports. Inventors and patent agents create and send a test response that tries to prove that their Invention is indeed patentable and meets all patent criteria.

- Step 9: clearance of objections

The Controller and the patent applicant is connected for ensuring that all objections raised regarding the invention or application is resolved and the inventor has a fair chance to prove his point and establish novelty and inventive steps on other existing arts.

Upon receiving a patent application in order for grant, it is the first grant for a patent applicant.

- Step 10:

Once all patent requirements are met, the application will be placed for the grant. The grant of a patent is notified in the Patent Journal, which is published periodically.

Grounds for opposition

An application for a patent may be opposed by either a prior grant or a subsequent grant by any person on the grounds specified in s 25 (1) and 25 (2) of the former Act. No other grounds stated in the Act can be taken to oppose the patent. Some major opposition grounds, common to both pre-grant and post-grant opposition, are mentioned below:

1. The Invention was published previously in India or elsewhere or was claimed previously in India.
2. The Invention is the formation of a part of the prior public knowledge or prior public use or traditional knowledge of any community.
3. The Invention is obvious and lacks an inventive step.
4. The Invention does not constitute an invention within the meaning of the Act, or the Invention is not patentable under the Act.
5. Failure to disclose information or furnishing false information relating to foreign by the applicant.

Pre-Grant Protest: [Section 25 \(1\) of the Patent Act](#) and [Rule 55 of the Patent Rules, 2003](#) provide the procedure to be followed for pre-grant opposition. Pre-grant opposition can be initiated by anyone after the application is published and before the patent is granted. If a request for examination is filed to oppose the application, the Controller considers representation only. If a request for examination has not been made by the applicant, it is possible for the opponent as an interested person to first file a request for examination under Section 11B, and then file a pre-grant opposition.

Post-grant opposition: The procedure is followed to oppose the grant under [Section 25 \(2\) of the Patents Act, 1970](#) and [Rule 55A to 70 of the Patent Rules, 2003](#). A Post-grant opposition can be filed by any person interested in any of the specific grounds before a period of one year from the date of publication of the grant of the patent. Unlike a pre-grant protest, a pre-grant protest must be filed by an individual and not by a person. The expression (people interested) is defined under section [2\(t\) of the Patents Act, 1970](#) wherein a person/party is engaged, or is conducting research in the same field with which the Invention (which is to be opposed) is concerned.

What are the Authorities concerning patent

The Controller of Patents is considered as the principal officer responsible for administering the patent system in India. The Controller is regarded as the overall supervisor of the four Patent Offices in Chennai, Delhi, Mumbai and Kolkata. Since the Controller also acts as the Registrar of Trademarks with the Head Office of the Trade Office in Mumbai, the Controller acts as a patent from his office in Mumbai. Officially, the patent has its head office in Kolkata (Calcutta). Patents granted under the Patents Act and other officers of the Patent Office discharge their functions under the direction or regulation of the Controller.

Patent Infringement

Patent infringement is a violation which involves the unauthorized use, production, sale, or offer of sale of the subject matter or Invention of another's patent. There are many different types of patents, such as utility patents, design patents, and plant patents. The basic idea behind patent infringement is that unauthorized parties are not allowed to use patents without the owner's permission.

When there is infringement of patent, the court generally compares the subject matter covered under the patent with the used subject matter by the "infringer", infringement occurs when the infringer Uses patent material from in the exact form. Patent infringement is an act of any unauthorized manufacture, sale, or use of a patented invention. Patent infringement occurs directly or indirectly.

Direct patent infringement: The most common form of infringement is direct infringement, where the Invention that infringes patent claims is actually described, or the Invention performs substantially the same function.

Indirect patent infringement: Another form of patent infringement is indirect infringement, which is divided into two types:

- Infringement by inducement is any activity by any third party that causes another person to infringe the patent directly. This may include selling parts that can only be used realistically for a patented invention, selling an invention with instructions to use in a certain method that infringes on a method patent or licenses an invention that is covered by the patent of another. The inducer must assist intentional infringement, but does not require intent to infringe on the patent.
- Contributory infringement is the sale of components of material that are made for use in a patented invention and have no other commercial use. There is a significant overlap with indications, but contributor violations require a high level of delay. Violations of the seller must have direct infringement intent. To be an obligation for indirect violations, a direct violation must also be an indirect act.

Doctrine of Equivalents And Doctrine of Colourable Variation

Patent infringement generally categorized into two, i.e. literal infringement and infringement in the doctrine of equivalents. The term "literal infringement" means that each element heard in a claim has the same correspondence in the alleged infringement device or process. However, even if there are no literal

violations, a claim can be infringed under the doctrine of equivalents if the accused device or some other element of the process performs the same function, in substantially the same way to obtain substantially the same result. The principle of equivalence is a legal rule in most patent systems in the world that allows a court to hold a party liable for patent infringement, even though the infringing instrument or process does not fall within the literal scope of the patent claim, but Still equal to the claimed Invention.

This is not an expansion of coverage of a claim permitted by the principle of equivalence. Rather, the scope of coverage given to the patent owner is limited by

(i) the “prosecution history estoppel” and

(ii) the principle of the prior art.

The analysis of infringement determines whether a claim claimed in a patent “literally reads on the accused infringer’s instrument or process”, or covers the allegedly infringing device in the doctrine of equivalents.

The steps in the analysis are:

- Oppose the scope of the “literal” language of claims.
- Comparing claims with the accused device or process to determine if there is a literal violation.
- If there is no literal violation, reduce the scope of claims under the principle of equality.

The doctrine of equivalents is considered as an equitable doctrine which effectively expands the scope of the claims beyond their literal language to the true scope of the inventor’s contribution to the art. However, there are limitations in the scope of equivalents to which the patent owner is entitled.

Remedies for Patent Infringement

Patent infringement lawsuits can result in significantly higher losses than other types of lawsuits. Some laws, such as the Patent Act, allow plaintiffs to recover damages. Patent infringement is the illegal manufacture or usage of an invention or improvement of someone else’s invention or subject matter who owns a patent issued by the Government, without taking the owner’s consent either by consent, license or waiver. Several remedies are available to patent owners in the event of an infringement. Measures available in patent

infringement litigation may include monetary relief, equal relief and costs, and attorneys' fees.

Monetary Relief: Monetary relief in the form of compensatory damages is available to prevent patent infringement:

1. Indemnity compensation – A patent owner may have lost profits for infringement when they established the value of the patent.
2. Increased damage – Up to three times, compensation charges can be charged in cases of will or violation of will.
3. The time period for damages – The right to damages can be claimed only after the date when the patent was issued and only 6 years before the infringement claim is filed.

Equitable relief: Orders are issued by the court to prevent a person from doing anything or Act. Injunctions are available in two forms:

1. Preliminary injunction – Orders made in the initial stage of lawsuits or lawsuits that prevent parties from doing an act that is in dispute (such as making a patent product)
2. Permanent injunction – A final order of a court which permanently ceases certain activities or takes various other actions.

Conclusion

Patents can provide great value and increased returns to individuals and companies on the investment made in developing new technology. Patenting should be done with an intelligent strategy that aligns business interests to implement the technology with a wide range of options in the search for how, where and when to patent. As an example, with a focus on international considerations and regulations in specific countries, it is possible for a company to achieve significant savings and improve the rights gained using patents.

REGIONAL ECONOMIC INTEGRATION

Regional economic integration occurs when countries come together to form free trade areas or customs unions, offering members preferential trade access to each others' markets. The article reviews the economic effects of such agreements on member countries and on the world trading system. Effects on member countries include the benefits and costs of trade creation and trade diversion, as well as gains from increased scale and competition. 'Deeper' integration can be pursued by going beyond abolition of

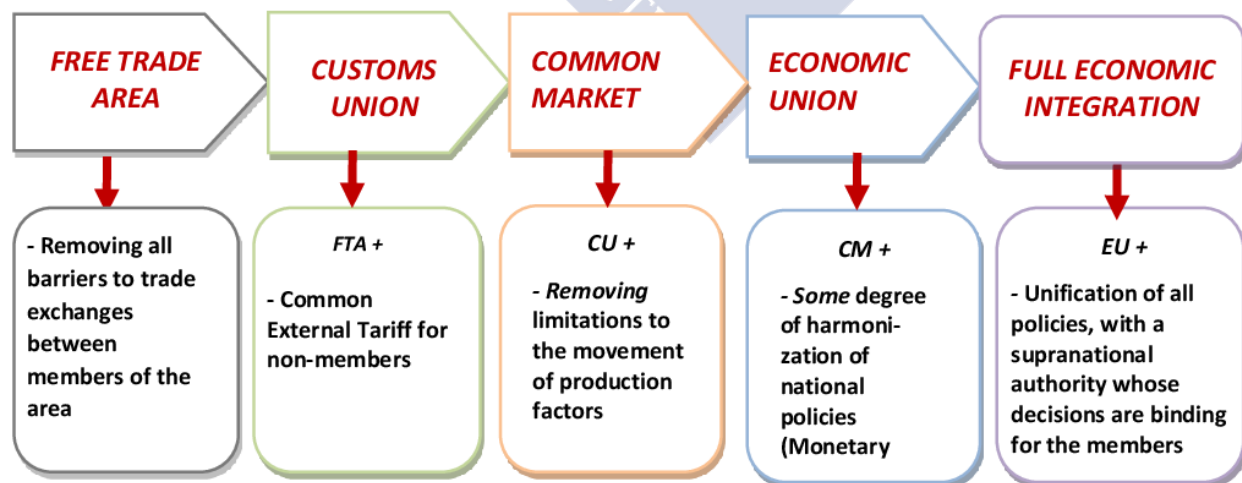
import tariffs and quotas, to further measures to remove market segmentation and promote integration. Effects on the world trading system are not clear-cut. There is little evidence that regionalism has retarded multilateral liberalization, but neither is there support for the view that continuing expansion of regional agreements will obviate the need for multilateral liberalization efforts.

Five Potential Levels of Regional Integration

Level of Integration	Free Trade Area	Customs Union	Common Market	Economic and (sometimes) Monetary Union	Political Union
Members agree to eliminate tariffs and non-tariff trade barriers with each other but maintain their own trade barriers with non-member countries. Examples: NAFTA, EFTA, ASEAN, Australia and New Zealand Closer Economic Relations Agreement (CER)					
Common external tariffs Example: MERCOSUR					
Free movement of products, labor, and capital Example: Pre-1992 European Economic Community					
Unified monetary and fiscal policy by a central authority Example: The European Union today exhibits common trade, agricultural, and monetary policies					
Perfect unification of all policies by a common organization; submersion of all separate national institutions Example: Remains an ideal; yet to be achieved					

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Figure 1.1. Forms of Economic Integration



LEVEL OF ECONOMIC INTEGRATION

Basic classification Economic integrations are progressing from low level integration to higher levels of integrations with the growth of trade and investment.

There are FIVE levels of economic integration starting from lower level of preferential trade agreement to deeper level of political union.

1 Preferential Trade Agreement (Free Trade Agreement) Simplest and most common arrangement of economic integration. Member countries agree to gradually reduce (and even eliminate) barriers to trade in products and services within the bloc. However, in case of preferential trade agreement member nations agree to reduce or eliminate tariff barrier on selected goods whereas in case of free trade agreement member nations agree to reduce or remove tariff barriers on all goods. Each member country maintains an independent trade policy for non-member countries outside the bloc. Examples of FTA are North American Free Trade Agreement (NAFTA)

2 Custom Union Similar to Free Trade Agreement except that the member countries of a given bloc also have common trade policies towards non-member nation implying common tariff (nontariff) barriers on trade with non-member nations. Example MERCOSUR (Argentina, Brazil, Paraguay, and Uruguay), Andean Community. More difficult to negotiate as compared to Free Trade Agreement.

3 Common Market Similar to custom union but in addition to it, common market also allows free movement of labor and capital within the bloc. No restriction on emigration, immigration and cross boarder flow of capital among member countries. Requires substantial cooperation from member countries on labor, economic and employment policies.

4 Economic Union It's a deeper level of integration. Along with the advantages of earlier stages of integration member economies also agree to have a common monetary and fiscal policy including identical tax rates, fixed exchange rates, and free convertibility of currencies and free movement of capital. European Union (EU) is an example of economic union. EU members have eliminated cross border controls, have a monetary policy with a single currency (euro).

5 Political Union It represents the most advanced level of integration with a common government and single constitution. The sovereignty and democratic rights of the member economies are significantly reduced.

PTA (Preferential trade agreement) – reduce tariffs eg- SAPTA

FTA (Free trade area)– remove barriers (no internal tariffs) between member countries eg- NAFTA

CUSTOM UNION (CU)– remove barriers + Common external policy with non member countries eg- CACM central american common market

COMMON MARKET (CM) – FTA + CU + Free flow of factors of production

ECONOMIC UNION - FTA + CU + CM + (Common currency+ common tax rate+ common budgetary and monetary policy) eg – European Union currency EURO

POLITICAL UNION – FTA + CU + CM + EU + Common political apparatus i.e common govt. Eg- EU will become Political union in future.

BENEFITS ASSOCIATED WITH REGIONAL ECONOMIC INTEGRATION

Regional economic integration promotes better flow of goods and services among member nations. Hence, the positive impact of regional economic integrations can be seen but the magnitude of advantages may differ for each member of the bloc.

Some of the common benefits can be seen as follows:

1) Trade creation Regional economic integration brings about policies and measures to reduce trade barriers. Such an environment helps to boost trade among the member nations. Reduction in tariff encourages member economies to expand the market size, look for more competitive products, reduction in trade cost, and reduction in the cost of factors of production. Hence, trade creation takes place between members.

2) Larger market size Regional economic integration provides a larger market as compared to the domestic market in isolation since the consumer can easily look for product and services offered by all members who belong to a bloc. The larger market so

created would lead to high degree of specialization of product offered leading to industrial development.

3) Enhance political cooperation Economic integration links economies which makes them more dependent upon each other, providing incentive for political cooperation among member nations. Integration is a vital tool for addressing the issues of political instability and conflicts. Moreover, by grouping, member nations can enjoy political strength in the world.

4) Generating Employment prospects Economic integration leads to trade liberation, market expansion, and better cooperation among member nations which creates employment prospects. People are free to migrate from one nation to another for better job opportunities and/or better pay. Industries may shift their production processes to nations that provide cheaper inputs like low wage workers, cheap raw materials, less cost of establishment, cheaper equipment and tools.

5) Supports economic growth Economic integration promotes better production and consumption which leads to rise in real income generated. Nevertheless, member nations try to harmonize key policies such as trade, fiscal and monetary policies that encourages flow of both trade and investment.

COSTS ASSOCIATED WITH ECONOMIC INTEGRATION

Economies entering into regional economic integration suffer various limitations along with the benefits.

1) Destruction of indigenous (domestic) industries Some producers may manage to cope up with the competition rising due to economic integration whereas others, which lack international standards, may lose the market. Even some industries may need to make painful adjustments to sustain in the market like lower profits, retrenchment of labor, bearing high cost of production, etc.

2) Concerns over national sovereignty In the wave of economic integration member nations need to harmonize key policies like monetary, fiscal and trade policies for deeper integration and in the process need to give up considerable control over key policies.

3) Risk of unemployment As member countries may have different wage structures, there may be movement of worker at low cost or/and better skill which may hamper the employment level in the domestic country.

