GLOBAL ISSUES

3.1. GLOBALIZATION

Globalization means integration of countries through commerce, transfer of technology, and exchange of information and culture. In a way, it includes acting together and interacting economies through trade, investment, loan, development schemes and capital across countries. In a different sense, these flows include knowledge, science, technology, skills, culture, information, and entertainment, besides direct human resource, tele-work, and outsourcing. This interdependence has increased the complex tensions and ruptures among the nations. For the engineers, the issues such as multinational organizations, computer, internet functions, military development and environmental ethics have assumed greater importance for their very sustenance and progress.

3.1.1. Features of Globalization

The main features of globalization are stated below.

1. Liberalisation: The freedom of the industrialist/businessman to establish industry, trade or commerce either in his country or abroad; free exchange of capital, goods, service and technologies between countries.

2. Free Trade: Free trade between countries; absence of excessive governmental control over trade.

3. Globalization of Economic Activities: Control of economic activities by domestic market and international market; coordination of national economy and world economy.

4. Connectivity: Localities being connected with the world by breaking national boundaries; forging of links between one society and another, and between one country and another through international transmission of knowledge, literature, technology, culture and information.

5. Borderless Globe: Breaking of national barriers and creation of inter- connectedness; the ideal of 'borderless globe' articulated by Kenichi Ohmae.

6. A Composite Process: Integration of nation-states across the world by common economic, commercial, political, cultural and technological ties; creation of a new world order with no national boundaries;

7. A Multi-dimensional Process: Economically, it means opening up of national market, free trade and commerce among nations, and integration of national economies with the world economy. Politically, it means limited powers and functions of state, more rights and freedoms granted to the individual and empowerment of private sector; culturally, it means exchange of cultural values between societies and between nations; and ideologically, it means the spread of liberalism and capitalism.

8. A Top-Down process: Globalization originates from developed countries and the MNCs (multinational corporations) based in them. Technologies, capital, products and services come from them to developing countries. It is for developing countries to accept these things, adapt themselves to them and to be influenced by them.

As a result, the values and norms of developed countries are gradually rooted in developing countries. This leads to the growth of a monoculture – the culture of the north (developed countries) being imposed on the South (developing countries). This involves the erosion and loss of the identity and the cultures of developing countries. Globalization is thus a one-way traffic: it flows from the North to the South.

But this view of globalization has been contested. Some scholars have argued that globalization tends to provoke backlash at the community, local, regional and ethnic levels when the national government fails to resist or counter the invasion of globalization.

In the face of aggression of globalization, the people, in protest against the failure of the national government to defend them, develop or strengthen their allegiance to their community, locality, region or ethnic group. In this process, local identity, regional identity and ethnic identity take root and get strengthened. Thus globalization goes hand in hand with localization, regionalization and multiculturalism.

9. Global State vs Global Civil Society: In protest against the harmful effects of globalization on the vast multitude of people all over the world, particularly in developing countries, protest marches, demonstrations and meetings have been organized in different countries. These protests have taken militant forms in the last decade. Protest groups have tried to disturb and paralyse the meetings of WTO, World Bank and IMF.

3.1.2. Advantage

Supporters of globalization argue that it has the potential to make this world a better place to live in and solve some of the deep-seated problems like unemployment and poverty.

1. Free trade is supposed to reduce barriers such as tariffs, value added taxes, subsidies, and other barriers between nations. This is not true. There are still many barriers to free trade. The Washington Post story says "the problem is that the big G20 countries added more than 1,200 restrictive export and import measures since 2008."
2. The proponents say globalization represents free trade which promotes global economic growth; creates jobs, makes companies more competitive, and lowers prices for consumers.
3. Competition between countries is supposed to drive prices down. In many cases this is not working because countries manipulate their currency to get a price advantage.

4. It also provides poor countries, through infusions of foreign capital and technology, with the chance to develop economically and by spreading prosperity, creates the conditions in which democracy and respect for human rights may flourish. This is an ethereal goal which hasn't been achieved in most countries.
5. According to supporters globalization and democracy should go hand in hand. It should be pure business with no colonialist designs.
6. There is now a worldwide market for companies and consumers who have access to products of different countries.
7. Gradually there is a world power that is being created instead of compartmentalized power sectors. Politics is merging and decisions that are being taken are actually beneficial for people all over the world. This is simply a romanticized view of what is actually happening.
8. There is more influx of information between two countries, which do not have anything in common between them.
9. There is cultural intermingling and each country is learning more about other cultures.
10. Since we share financial interests, corporations and governments are trying to sort out ecological problems for each other. They are talking more than trying.
11. Socially we have become more open and tolerant towards each other and people who live in the other part of the world are not considered aliens.
12. Most people see speedy travel, mass communications and quick dissemination of information through the Internet as benefits of globalization.e
13. Labor can move from country to country to market their skills. True, but this can cause problems with the existing labor and downward pressure on wages.
14. Sharing technology with developing nations will help them progress. True for small countries but stealing our technologies and IP have become a big problem with our larger competitors like China.
15. Transnational companies investing in installing plants in other countries provide employment for the people in those countries often getting them out of poverty.
16. Globalization has given countries the ability to agree to free trade agreements like NAFTA, South Korea Korus, and The TPP. True but these agreements have cost the US many jobs and always increase our trade deficit.

3.1.3 Disadvantage

- The general complaint about globalization is that it has made the rich richer while making the non-rich poorer. "It is wonderful for managers, owners and investors, but hell on workers and nature."
- Globalization is supposed to be about free trade where all barriers are eliminated but there are still many barriers. For instance161 countries have value added taxes (VATs) on imports which are as high as 21.6% in Europe. The US does not have VAT.

- The biggest problem for developed countries is that jobs are lost and transferred to lower cost countries. "According to conservative estimates by Robert Scott of the Economic Policy Institute, granting China most favored nation status drained away 3.2 million jobs, including 2.4 million manufacturing jobs. He pegs the net losses due to our trade deficit with Japan ($78.3 billion in 2013) at 896,000 jobs, as well as an additional 682,900 jobs from the Mexico – U.S. trade – deficit run-up from 1994 through 2010."
- Workers in developed countries like the US face pay-cut demands from employers who threaten to export jobs. This has created a culture of fear for many middle class workers who have little leverage in this global game.
- Large multinational corporations have the ability to exploit tax havens in other countries to avoid paying taxes.
- Multinational corporations are accused of social injustice, unfair working conditions (including slave labor wages, living and working conditions), as well as lack of concern for environment, mismanagement of natural resources, and ecological damage.
- Multinational corporations, which were previously restricted to commercial activities, are increasingly influencing political decisions. Many think there is a threat of corporations ruling the world because they are gaining power, due to globalization.
- Building products overseas in countries like China puts our technologies at risk of being copied or stolen, which is in fact happening rapidly.
- The anti-globalists also claim that globalization is not working for the majority of the world. "During the most recent period of rapid growth in global trade and investment, 1960 to 1998, inequality worsened both internationally and within countries. The UN Development Program reports that the richest 20 percent of the world's population consume 86 percent of the world's resources while the poorest 80 percent consume just 14 percent."
- Some experts think that globalization is also leading to the incursion of communicable diseases. Deadly diseases like HIV/AIDS are being spread by travelers to the remotest corners of the globe.
- Globalization has led to exploitation of labor. Prisoners and child workers are used to work in inhumane conditions. Safety standards are ignored to produce cheap goods. There is also an increase in human trafficking.
- Social welfare schemes or "safety nets" are under great pressure in developed countries because of deficits, job losses, and other economic ramifications of globalization.

Globalization is an economic tsunami that is sweeping the planet. We can't stop it but there are many things we can do to slow it down and make it more equitable.

3.2. MULTINATIONAL CORPORATIONS

Organisations who have established business in more than one country, are called multinational corporation. The headquarters are in the home country and the business is extended in many host countries. The Western organizations doing business in the less-economically developed (developing, and overpopulated) countries gain the advantage of inexpensive labor, availability

of natural resources, conducive-tax atmosphere, and virgin market for the products. At the same time, the developing countries are also benefited by fresh job opportunities, jobs with higher remuneration and challenges, transfer of technology, and several social benefits by the wealth developed. But this happens invariably with some social and cultural disturbance. Loss of jobs for the home country, and loss or exploitation of natural resources, political instability for the host countries are some of the threats of globalization.

3.2.1. Features of Multinational Corporations (MNCs)

Following are the salient features of MNCs:

(*i*) **Huge Assets and Turnover :** Because of operations on a global basis, MNCs have huge physical and financial assets. This also results in huge turnover (sales) of MNCs. In fact, in terms of assets and turnover, many MNCs are bigger than national economies of several countries.

(*ii*) **International Operations through a Network of Branches:** MNCs have production and marketing operations in several countries; operating through a network of branches, subsidiaries and affiliates in host countries.

(*iii*) **Unity of Control:** MNCs are characterized by unity of control. MNCs control business activities of their branches in foreign countries through head office located in the home country. Managements of branches operate within the policy framework of the parent corporation.

(iv) **Mighty Economic Power:** MNCs are powerful economic entities. They keep on adding to their economic power through constant mergers and acquisitions of companies, in host countries.

(*v*) **Advanced and Sophisticated Technology:** Generally, a MNC has at its command advanced and sophisticated technology. It employs capital intensive technology in manufacturing and marketing.

(*vi*) **Professional Management:** A MNC employs professionally trained managers to handle huge funds, advanced technology and international business operations.

(*vii*) **Aggressive Advertising and Marketing:** MNCs spend huge sums of money on advertising and marketing to secure international business. This is, perhaps, the biggest strategy of success of MNCs. Because of this strategy, they are able to sell whatever products/services, they produce/generate.

(*viii*) **Better Quality of Products:** A MNC has to compete on the world level. It, therefore, has to pay special attention to the quality of its products.

3.2.2 Advantages of Multinational Corporations

1. Cheaper Labor : One of the advantages of multinational corporations is the opportunity to operate in countries where labor is not as expensive. This is one of the perks that smaller companies do not enjoy. Multinationals can set up their offices in several countries where demand for their services and products are high while cheaper labor is available.

2. Broader Market Base : By opening establishments or offices in several countries, multinationals increase their chances of reaching out to customers on a global scale, a benefit

which other companies limited to regional offices and establishments do not have. The access to more customers gives them more opportunities to develop and cater their products and services that will fit the needs of potential customers.

3. Tax Cuts : Multinationals can enjoy lower taxes in other countries for exports and imports, an advantage that owners of international corporations can take at any given day. And although not all countries can have lower tariffs, there are those that give tax cuts to investors to attract more international companies to do business in these countries.

4. Job Creation : When international companies set up branches in other countries, employees and members of the team are locals. That said, more people are given employment opportunities especially in developing countries.

3.2.3 Disadvantages of Multinational Corporations

1. Potential Abuse of Workers : Multinational companies often invest in developing countries where they can take advantage of cheaper labor. Some multinational corporations prefer to put up branches in these parts of the world where there are no stringent policies in labor and where people need jobs because these multinationals can demand for cheaper labor and lesser healthcare benefits.

2. Threat to Local Businesses : Another disadvantage of multinationals in other countries is their ability to dominate the marker. These giant corporations can dominate the industries they are in because they have better products and they can afford to even offer them at lower prices since they have the financial resources to buy in bulk. This can eat up all the other small businesses offering the same goods and services. Chances are, local businesses will suffer and worse, close down.

3. Loss of Jobs : With more companies transferring offices and centering operations in other countries, jobs for the people living in developed countries are threatened. Take the case of multinationals that create offices in developing countries for their technical operations and manufacturing. The jobs given to the locals of the host country should be the jobs enjoyed by the people where the head office is located.

Multinational corporations have both advantages and disadvantages since it creates jobs but can also end up in the exploitation of workers, among other things. And since they are most likely to stay, it's best to create policies to make globalization equitable.

3.3. INTERNATIONAL TRADE

Exchange of goods or services across national jurisdictions. Inbound trade is defined as imports and outbound trade is defined as exports. Subject to the regulatory oversight and taxation of the involved nations, namely through customs.

First introduced by David Ricardo in 1817, comparative advantage exists when a country has a 'margin of superiority' in the supply of a good or service i.e., where the marginal cost of production is lower. Countries will generally specialise in and export products which use intensively the factors inputs which they are most abundantly endowed. If each country specializes, total output can be increased leading to better allocative efficiency and welfare. Because production costs are lower, providing that a good price can be found from buyers,

specialisation should focus on goods and services that provide the best value. In many countries, comparative advantage is shifting towards specialising in producing and exporting high-value and high-technology manufactured goods and high-knowledge services

As supported by conventional economic theory, trade promotes economic efficiency by providing a wider variety of goods, often at lower costs, notably because of specialization, economies of scale and the related comparative advantages. The main theoretical foundations of international trade include:

- **Mercantilism.** A trade system where a nation tried to impose a positive trade balance (more exports than imports, particularly value-wise) on other nations to favor the accumulation of wealth. This system was prevalent during the colonial era and often undertaken by charter companies receiving a monopoly on trade. Mercantilism represents the antithesis of free trade since trade relations are controlled and aligned to benefit one partner at the expense of the other. Still, mercantilism established the foundations of a global trading system, albeit an unequal one.
- **Neomercantilism.** A more recent trade system, which like mercantilism leans on establishing a positive trade balance to meet economic development goals. Export-oriented strategies can be considered a form of neomercantilism, particularly if a government establish an incentive and subsidy system (e.g. free trade zones), which confers additional advantages to the factors of production. Neomercantilism can also be a response by some governments to the competitive and disruptive consequences of free trade, particularly if the trade partners are engaged in neomercantilist strategies. The outcome is tariff and non-tariff measures regulating trade and protecting national commercial sectors that are perceived to be subject to unfair competition. Therefore, neomercantilist strategies can be controversial and subject to contention.
- **Absolute advantages.** Based on a nation (or a firm) able to produce more effectively in an economic sector while using less resources (e.g. capital, labor) than any other potential competitors. It therefore has an absolute advantage. Global efficiency can thus be improved with trade as a nation can focus on its absolute advantages, trade its surplus and import what it lacks. The drawback of this perspective is that in theory nations having no absolute advantages should not be involved in trade since they may have little to gain from it. Absolute advantages tend to be an enduring characteristic, particularly for resources.
- **Comparative advantages.** Even if a nation (or a firm) has absolute advantages over a wide array of economic sectors, it can focus on the sectors it has the highest comparative advantages (the difference of its production costs and those of its competitors) and import goods in sectors it has less comparative advantages. The comparative productivity increases the total production level since that even if a nation (or a firm) has no absolute advantages, it can focus on sectors where the total productivity gains are the most significant. Comparative advantages tend to be a temporary characteristic, that can change with the evolution of labor costs.
- **Factor endowments.** Expands the comparative advantages perspective by underlining that trade is related to the factors endowments of a nation. The most basic endowments are capital, land and labor. A nation will export goods to which it has notable factor endowments and imports goods in which it has scarce factor endowments. As such,

nations that have low cost labor available will focus in labor intensive activities while nations having high capital endowments will focus in capital intensive activities. Factor endowments can be improved through capital and human resources investments.

3.3.1. Features of International Trade

The following are the distinguishing features of international trade:

1. Immobility of Factors: The degree of immobility of factors like labour and capital is generally greater between countries than within a country. Immigration laws, citizenship, qualifications, etc. often restrict the international mobility of labour.

International capital flows are prohibited or severely limited by different governments. Consequently, the economic significance of such mobility of factors tends to equality within but not between countries. For instance, wages may be equal in Mumbai and Pune but not in Bombay and London.

According to Harrod, it thus follows that domestic trade consists largely of exchange of goods between producers who enjoy similar standards of life, whereas international trade consists of exchange of goods between producers enjoying widely differing standards. Evidently, the principles which determine the course and nature of internal and international trade are bound to be different in some respects at least.

In this context, it may be pointed out that the price of a commodity in the country where it is produced tends to equal its cost of production.

The reason is that if in an industry the price is higher than its cost, resources will flow into it from other industries, output will increase and the price will fall until it is equal to the cost of production. Conversely, resources will flow out of the industry, output will decline, the price will go up and ultimately equal the cost of production.

But, as among different countries, resources are comparatively immobile; hence, there is no automatic influence equalising price and costs. Therefore, there may be permanent difference between the cost of production of a commodity.

In one country and the price obtained in a different country for it. For instance, the price of tea in India must, in the long run, be equal to its cost of production in India. But in the U.K., the price of Indian tea may be permanently higher than its cost of production in India. In this way, international trade differs from home trade.

2. Heterogeneous Markets: In the international economy, world markets lack homogeneity on account of differences in climate, language, preferences, habit, customs, weights and measures, etc. The behaviour of international buyers in each case would, therefore, be different.

3. Different National Groups: International trade takes place between differently cohered groups. The socio-economic environment differs greatly among different nations.

4. Different Political Units: International trade is a phenomenon which occurs amongst different political units.

5. Different National Policies and Government Intervention: Economic and political policies differ from one country to another. Policies pertaining to trade, commerce, export and import, taxation, etc., also differ widely among countries though they are more or less uniform within the country. Tariff policy, import quota system, subsidies and other controls

adopted by governments interfere with the course of normal trade between one country and another.

6. Different Currencies: Another notable feature of international trade is that it involves the use of different types of currencies. So, each country has its own policy in regard to exchange rates and foreign exchange.

3.3.2. Advantages of International Trade

Meeting our needs : Trade is always balanced if it is fair. If 2 people trade baseball cards and one gives another 6 cards, they should get 6 back.

Many businesses can create a surplus inventory of goods and services. Canadian farmers produce more food than Canadians can eat, Canadian manufacturers make more products than Canadians use, and Canadian service providers can provide service to other countries.

Canadians cannot produce fruits like bananas and oranges, and some products we cannot make. These products are imported. Both trading partners get something they need by trading something they don't need.

Job Creation : Unlike the battering that used to go on between trading partners, now businesses receive money from selling their products or services to foreign businesses. When foreign businesses buy Canadian products it creates jobs for Canadians. Exports are very important to Canadians they create one out of three Canadian jobs. 40 percent of what Canadians produce is exported. 1 billion exports means 6000 jobs for Canadians. When trade is balanced businesses remain profitable and may grow.

Attracting Investment : Investment follows trade. Many foreign companies will invest in an office, factory, or distribution warehouse to simplify their trade and reduce cost. This investment also creates more jobs. It also attracts international investors.

New Technology and Materials : New technology promotes competitiveness and profitability. If a business could create a machine that works better, faster, or cheaper (or all three), then the business will have produced a more competitive product for national and international markets. The biotechnology industry in Canada is second only to the U.S.

Diverse Products and Services : A century ago, Oranges were considered a rare treat; parents put them in stockings for children. Now, we can buy oranges by the crate at local grocery stores thanks to better preservation and trading technologies. Foreign trade turns the world into a giant market, delivering food, fashions, etc.

New services such as banking, travel, and consultation are also available now. Business competition is no longer on a city scale; instead, businesses compete against worldwide businesses. The result is better quality goods, lower prices, and functional design.

3.3.3. Disadvantages of International Trade

The Global market has made it easy to buy and sell international goods. While this has benefits, it also presents a problem. Such trade can cause countries to be prosperous for a short time, but leads to economic exploitation, loss of cultural identity, and even physical harm.

Support of Non-Democratic Systems: Great hardship can be caused when people make poor decisions about land use or surplus production for export and do not take the general population's welfare into consideration. For example: Landowners in Nicaragua and El Salvador want farmers to grow coffee beans because it is a very profitable cash crop, however, the farmers would like to use the land to grow more food for their families. The farmer's wishes are ignored because they do not actually own the land.

Cultural Identity Issues : Culture is a major export in the world. It displays and promotes values and lifestyles worldwide. The "culture consumer" in other countries is sometimes overwhelmed by American ideas. Products also carry cultural ideas and messages. There are values of the culture the make the product. For example: Coca-Cola, McDonalds, Nike, and Microsoft all sell products that symbolize American values and symbolize and reflect American corporate culture.

Social Welfare Issues: Maintaining safety standards, minimum wages, worker's compensation and Health benefits are all social welfare issues that cost business money. If a running shoe is made in a country where these issues are not met than the shoe can be sold for less in Canada. The down side to this is that substandard safety conditions cause death and injury in the workplace.

Environmental Issues: In Canada, businesses are urged by the government and environmental groups through laws and regulations to keep our air, land and water clean. This is a costly process so businesses decide to move their operations to countries; i.e. Mexico, where it is less regulated.

Political Issues: Precious commodities such as gold, diamond, oil or farmland are so important for countries to have control that wars have been started and as a result people are killed. Trade of these items has caused political alliances that do not help the people in the trading nation but only the powerful corporations that control the commodity.

3.3.4. Ethical Issues

Political, legal, economic, and cultural norms vary from nation to nation, various ethical issues rise with them. A normal practice may be ethical in one country but unethical in another. Multinational managers need to be sensitive to these varying differences and able to choose an ethical action accordingly.

In an international business, the most important ethical issues involve employment practices, human rights, environmental norms, corruption, and the moral obligation of international corporations.

Employment Practices and Ethics

Ethical issues may be related to employment practices in many nations. The conditions in a host country may be much inferior to those in a multinational's home nation. Many may suggest that pay and work conditions need to be similar across nations, but no one actually cares about the quantum of this divergence.

12-hour workdays, minimal pay, and indifference in protecting workers from toxic chemicals are common in some developing nations. Is it fine for a multinational to fall prey to the same practice when they chose such developing nations as their host countries? The answers to

these questions may seem to be easy, but in practice, they really create huge dilemmas.

Human Rights

Basic human rights are still denied in many nations. Freedom of speech, association, assembly, movement, freedom from political repression, etc. are not universally accepted.

South Africa during the days of white rule and apartheid is an example. It lasted till 1994. The system practiced denial of basic political rights to the majority non-white population of South Africa, segregation between whites and nonwhites was prevalent, some occupations were exclusively reserved for whites, etc. Despite the odious nature of this system, Western businesses operated in South Africa. This unequal consideration depending on ethnicity was questioned right from 1980s. It is still a major ethical issue in international business.

Environmental Pollution

When environmental regulation in the host nation is much inferior to those in the home nation, ethical issues may arise. Many nations have firm regulations regarding the emission of pollutants, the dumping and use of toxic materials, and so on. Developing nations may not be so strict, and according to critics, it results in much increased levels of pollution from the operations of multinationals in host nations.

Is it fine for multinational firms to pollute the developing host nations? It does not seem to be ethical. What is the appropriate and morally correct thing to do in such circumstances? Should MNCs be allowed to pollute the host countries for their economic advantage, or the MNCs should make sure that foreign subsidiaries follow the same standards as set in their home countries? These issues are not old; they are still very much contemporary.

Corruption

Corruption is an issue in every society in history, and it continues to be so even today. Corrupt government officials are everywhere. International businesses often seem to gain and have gained financial and business advantages by bribing those officials, which is clearly unethical.

Corruption in Japan

In the 1970s, Carl Kotchian, an American business executive who served as the president of Lockheed Corporation, paid $12.5 million to Japanese agents and government officials to sell Lockheed's TriStar jet to All Nippon Airways. After the case was discovered, U.S. officials charged Lockheed with falsification of its records and tax violations.

The revelations created a scandal in Japan as well. The ministers who took the bribe were charged, and one committed suicide. It even led to the jailing of Japan's prime minister. The Japanese government fell in disgrace, and the Japanese citizens were outraged. Kotchian had, without doubt, engaged in unethical behavior.

Moral Obligations: Some of the modern philosophers argue that the power of MNCs brings with it the social responsibility to give resources back to the societies. The idea of Social Responsibility arises due to the philosophy that business people should consider the social consequences of their actions.

They should also care that decisions should have both meaningful and ethical economic and social consequences. Social responsibility can be supported because it is the correct and appropriate way for a business to behave. Businesses, particularly the large and very successful ones, need to recognize their social and moral obligations and give resources and donations back to the societies.

3.4. BUSINESS ETHICS

3.4.1. Corporate Governance

Corporate Governance refers to the way a corporation is governed. It is the technique by which companies are directed and managed. It means carrying the business as per the stakeholders' desires. It is actually conducted by the board of Directors and the concerned committees for the company's stakeholder's benefit. It is all about balancing individual and societal goals, as well as, economic and social goals.

Corporate governance is the set of processes, customs, policies, laws, and institutions affecting the way a corporation (or company) is directed, administered or controlled. Corporate governance also includes the relationships among the many stakeholders involved and the goals for which the corporation is governed. In contemporary business corporations, the main external stakeholder groups are shareholders, debt holders, trade creditors, suppliers, customers and communities affected by the corporation's activities. Internal stakeholders are the board of directors, executives, and other employees.

There are many different models of corporate governance around the world. These differ according to the variety of capitalism in which they are embedded. The Anglo-American "model" tends to emphasize the interests of shareholders. The coordinated or multi-stakeholder model associated with Continental Europe and Japan also recognizes the interests of workers, managers, suppliers, customers, and the community.

Corporate Governance is the interaction between various participants (shareholders, board of directors, and company's management) in shaping corporation's performance and the way it is proceeding towards. The relationship between the owners and the managers in an organization must be healthy and there should be no conflict between the two. The owners must see that individual's actual performance is according to the standard performance. These dimensions of corporate governance should not be overlooked.

Corporate Governance deals with the manner the providers of finance guarantee themselves of getting a fair return on their investment. Corporate Governance clearly distinguishes between the owners and the managers. The managers are the deciding authority. In modern corporations, the functions/ tasks of owners and managers should be clearly defined, rather, harmonizing.

Corporate Governance deals with determining ways to take effective strategic decisions. It gives ultimate authority and complete responsibility to the Board of Directors. In today's market- oriented economy, the need for corporate governance arises. Also, efficiency as well as globalization are significant factors urging corporate governance. Corporate Governance is essential to develop added value to the stakeholders.

Corporate Governance ensures transparency which ensures strong and balanced e development. This also ensures that the interests of all shareholders (majority a minority shareholders) are safeguarded. It ensures that all shareholders fully exerc rights and that the organization fully recognizes their rights.

Corporate Governance has a broad scope. It includes both social and institutional Corporate Governance encourages a trustworthy, moral, as well as ethical environm

3.4.1.1. *Benefits of Corporate Governance*

1. Good corporate governance ensures corporate success and economic growth
2. Strong corporate governance maintains investors' confidence, as a result of company can raise capital efficiently and effectively.
3. It lowers the capital cost.
4. There is a positive impact on the share price.
5. It provides proper inducement to the owners as well as managers to achieve obje that are in interests of the shareholders and the organization.
6. Good corporate governance also minimizes wastages, corruption, risks mismanagement.
7. It helps in brand formation and development.
8. It ensures organization in managed in a manner that fits the best interests of all

3.4.1.2. *Codes and guidelines*

Corporate governance principles and codes have been developed in different coun and issued from stock exchanges, corporations, institutional investors, or associations (insti of directors and managers with the support of governments and international organizati As a rule, compliance with these governance recommendations is not mandated by although the codes linked to stock exchange listing requirements may have a coercive ef For example, companies quoted on the London, Toronto and Australian Stock Excha formally need not follow the recommendations of their respective codes. However, must disclose whether they follow the recommendations in those documents and, not, they should provide explanations concerning divergent practices. Such disclo requirements exert a significant pressure on listed companies for compliance.

3.4.1.3. *Principles of corporate governance*

Rights and equitable treatment of shareholders: Organizations should respect the ri of shareholders and help shareholders to exercise those rights. They can help shareho exercise their rights by effectively communicating information that is understandable accessible and encouraging shareholders to participate in general meetings.

Interests of other stakeholders: Organizations should recognize that they have and other obligations to all legitimate stakeholders.

Role and responsibilities of the board: The board needs a range of skills and understand to be able to deal with various business issues and have the ability to review and challe management performance. It needs to be of sufficient size and have an appropriate lev

commitment to fulfill its responsibilities and duties. There are issues about the appropriate mix of executive and non-executive directors.

Integrity and ethical behavior: Ethical and responsible decision making is not only important for public relations, but it is also a necessary element in risk management and avoiding lawsuits. Organizations should develop a code of conduct for their directors and executives that promotes ethical and responsible decision making. It is important to understand, though, that reliance by a company on the integrity and ethics of individuals is bound to eventual failure. Because of this, many organizations establish Compliance and Ethics Programs to minimize the risk that the firm steps outside of ethical and legal boundaries.

Disclosure and transparency: Organizations should clarify and make publicly known the roles and responsibilities of board and management to provide shareholders with a level of accountability. They should also implement procedures to independently verify and safeguard the integrity of the company's financial reporting. Disclosure of material matters concerning the organization should be timely and balanced to ensure that all investors have access to clear, factual information.

Mechanisms and controls: Corporate governance mechanisms and controls are designed to reduce the inefficiencies that arise from moral hazard and adverse selection. For example, to monitor managers' behavior, an independent third party (the external auditor) attests the accuracy of information provided by management to investors. An ideal control system should regulate both motivation and ability.

3.4.1.4. *Ethical Issues in Corporate Governance*

Major issues in corporate governance reports have included the role of board, the quality of financial reporting and auditing, directors' remuneration, risk management and corporate social responsibility. In order to clear the above statement I need to expand on these issues in later articles but for now let's examine the major areas that have been affected by the corporate governance.

Duties of Directors : The corporate governance reports have aimed to build on the directors' duties as defined in statutory and case law duties of directors. These include the fiduciary duties to act in the best interests of the company, use their powers for a purpose, avoid conflicts of interest and exercise a duty of care.

Composition and Balance of the Board : A feature of many corporate governance scandals has been boards dominated by a single senior executive or small 'cabinet of kitchen' with other member of board who are working just as a robot toy. It is possible that a single person may bypass the board directions to meet his own personal interests. The report on the UK Guinness case suggested that the Earnest Saunders' chief executive paid himself a reward of £3 million without the consent of other directors.

In the case where the organization is not dominated by a single person, there may be other problem in the composition of board of directors. The organization may be run by a minority group revolve around CEO or CFO and recruitment and appointments may be done by personal recommendations rather than formal system. So in order to run a smooth business a board must be balanced in sense of talents, skills, and competence from numerous specialisms related to the organization's situation and also in terms of age (in order to ensure that senior directors are bringing on newer ones to assist in the planning of succession).

Remuneration and Reward of Directors : Directors being paid excessive bonuses and salaries have been identified as significant corporate abuses for a large number of years. It is, however, unavoidable that the corporate governance codes have been targeted this significant issue.

Reliability of Financial Reporting and External Auditors : Financial reporting and auditing issue are seen more critical to corporate governance by the investors because of their main consideration in ensuring management accountability. It is the reason that they have been must debated and the focus of serious litigation. Whilst considering the corporate governance debate only on reporting and accounting issues is insufficient, the greater regulation of practices such as off-balance sheet financing has directed to greater transparency and a reduction in risks faced by investors.

The necessary questioning may not be carried out by external auditor from senior management because the auditors may have threat of losing audit assignment. In the same way internal auditor may not ask an alien question to senior member because their employment matters are determined by the CFO. But generally the external auditors become the reason of corporate collapse, for instance in the case of Barlow Clowes that was poorly focused and planned audit failed to determine the illegal usage of monies from clients.

Board's Responsibility for Risk Management and Internal Control : If the board does not arrange the regular meetings in order to consider the organizational activities systematically show that the board is not meeting their responsibilities. But this thing also occurred sometime when the board is not provided by full information to properly oversight on business activities. All this mess results in the poor system that may unable to report and measure the risks associated with business.

Shareholders' Rights and Responsibilities : Shareholders' role and rights is subject of particular importance. They should be informed about all those information that are material to them because these information may influence their amount of investment. They should also be given the right to vote on policies affecting the governance of organization.

Corporate Social Responsibility and Business Ethics : The lack of mutual decision and sense of responsibility for businesses and stakeholders has unavoidably turned out the business ethics and social responsibility a significant part of corporate governance debate.

3.4.1.5. *Case Study : Corporate Governance TATA Group of Companies*

For the Tatas, customer satisfaction, employee welfare, and returns to shareholders all go hand in hand. They maintain higher standards of Corporate Social Responsibility. Tata Code of Conduct, Tata Business Excellence Model, Global Reporting Initiatives, core values practiced by the group, all talk volumes about the business excellence with high standards followed by the Tata Group. Corporate governance is a way of life at the Tata Group.

Tata Group has always been a subject of curiosity and interest for a student of management. Tata Group comprises 96 operating companies in seven diverse business sectors: information systems and communications; engineering; materials; services; energy; consumer products; and chemicals. The Tata Group is one of India's largest and most respected business conglomerates, with revenues in 2005-06 of $21.9 billion (₹ 967,229 million), the equivalent of about 2.8 per cent of the country's GDP, and a market capitalization of $49.2 billion. Tata

companies together employ some 202,712 people. The Group's 28 publicly listed enterprises among them stand out names such as Tata Steel,Tata Consultancy Services, Tata Motors and Tata Tea - have a combined market capitalization that is the highest among Indian business houses in the private sector, and a shareholder base of over 2 million. The Tata Group has operations in more than 54 countries across six continents.

Five Core Values: Tata group has always been a value-driven organization. Let us discuss in brief the five core values underpinning the Tata way of business:

- **Integrity:** Tata believe that they must conduct the business with honesty and transparency. Everything they do must stand the test of public scrutiny.
- **Understanding:** Tata believe in showing care, respect, compassion and humanity for its colleagues and customers around the world and always work for the benefit of the communities they serve.
- **Excellence:** Tata make a conscious effort to achieve the highest possible standards in the day-to-day work and in the quality of the goods and services they provide.
- **Unity:** Tata believe that they must work cohesively with the customers and partners around the world, building strong relationships based on tolerance, understanding and mutual cooperation.
- **Responsibility:** Tata continue to be responsible, sensitive to the countries, communities and environment in which they work, always ensuring that what comes from the people goes back to the people many times over.

Corporate Governance in Practice

For any organization to ensure that corporate governance penetrates deep into all its branches, it important to break the 'viciouscircle' and create a 'virtuous circle', wherein there is greater accountability and responsibility towards all the stakeholders. One Senior Manager at Tata Sons says that "Don't wait for the law to change. It is not mere compliance to the law, but to excel in value. Tatas do not merely believe in lip-service. We believe in adoption through conviction, practice and respect."

Tata initiated various labour welfare laws, like the establishment of Welfare Department was introduced in 1917 and enforced by law in 1948 or Maternity Benefit was introduced in 1928 and enforced by law in 1946.

The shareholders form the topmost rung, followed by the Board of the Directors and then the Management. The Board of Directors do not believe in interference in the day-to-day working of the companies, but practice complete oversight. The responsibility of the Board of Directors is 'Balancing the needs and requirement' which includes, Directional, Operational and Structural overview of the companies.

Management Structure

There are two decision-making bodies that define and direct the business endeavors of the Tata Group. These are called the Group Executive Office and the Group Corporate Centre.

Group Executive Office: The Group Executive Office (GEO) defines and reviews the business activities of the Tata Group and is involved in implementing programmes in corporate governance, human resources, the environment, etc. The chief objective of the GEO is to

make the Tata Group more synergistic; it does this by strengthening the relationship between the Group and its companies. The GEO assesses what unique value a company adds to a particular business sector and conversely, what unique value the Group can bring to that company. Besides Group chairman Ratan Tata, the GEO comprises R. Gopalakrishnan, Ishaat Hussain, Kishor Chaukar, Arun Gandhi and Alan Rosling.

Group Corporate Centre: The mandate of the Group Corporate Centre (GCC) is to guide the future strategy and direction of the Tata Group and to work in close coordination with the Group Executive Office. The GCC comprises Ratan Tata, N.A. Soonawala, J.J. Irani, R.K. Krishna Kumar, R. Gopalakrishnan, Ishaat Hussain, Kishor Chaukar, Arun Gandhi and Alan Rosling. GCC is the apex body that reviews group operations once every month.

Tata Code of Conduct: All the Tata companies have formally adopted Tata code of conduct (TCOC). TCOC has 25 clauses which lay down the code of conduct for the employees. Any proven violation from the TCOC is viewed seriously. At Tata Steel, one of the employees was dismissed from the company for violation of the code of conduct. The news was widely publicized though the name of the employee was not revealed.

TCOC is implemented extensively and seriously at Tata is amply supported by the fact that, one of the executives at Tata Steel stated, "I received an honorarium of ₹ 2000 for delivering a lecture in one of the prestigious management institute. I proactively asked the ethics counselor whether I could accept such payment. I did not want to violate the code of conduct even by mistake. I strongly believe in the ethics of the company."

The booklet of TCOC is given to each employee of the Tata group. There is an ethics counselor in every Tata company. The 'chief executive officer' of a Tata company is also its 'chief ethics officer'. Violations of TCOC can be brought to the attention of Ethics Counselors, by raising concerns. Concerns received are addressed and corrective actions are taken and communicated.

Global Reporting Initiative : GRI was a project of the UN Environment Programme. GRI is now a permanent independent organization. It emphasizes on TBL i.e., Triple Bottom Line approach : financial, social and environmental.

The Tata Group is a signatory to the Global Compact issued by the Secretary General of the United Nations in 1999. Tata has a person designated to help Tata companies prepare these TBL reports. Tata Steel is one of the first companies in India to adopt triple bottom line performance reporting in its Corporate Sustainability Report.

Corporate Social Responsibility : Tata believe that CSR is not an externalized activity nor is it mere philanthropy. It is an internal process critical to the success of the corporation.JamshedIrani, Director, Tata Sons Ltd, says, "The Tata credo is that 'give back to the people what you have earned from them'. So from the very inception, Jamshetji Tata and his family have been following this principle." Moreover he says that for any business to sustain in the long run they have to look beyond business. Ages ago when Corporate Social Responsibility was either the government, or charitable organizations headache, the Tatas aggressively worked for the upliftment of the community.

Corporate governance is now the focus area of all business entities. Tatas are a stalwart and the exemplary performance of Tata Group in the field of corporate governance, with strong code of ethics and excellence in performance is worth being appreciated. It is rightly

said about Tatas 'Good governance has taken root in and spread to all branches of the Tata Group and there is nothing amorphous about that.' Tatas have already set high standards for corporate governance which shall be revered, appreciated and followed by the generations to come.

3.4.1.6. *Case Study: Stakeholder Engagement Kallog's*

The Kellogg Company is the world's leading producer of cereals. For more than 100 years, Kellogg's has been a leader in health and nutrition through providing consumers with a wide variety of food products. Kellogg's market leading position and reputation is built on its commitment to ethical business practices and its values-based culture.

Stakeholders are individuals, groups and organizations that have an interest in the decisions a company makes and the products that it produces.They also, depending on their power, affect how businesses perform. Kellogg's products are manufactured in 18 countries and are sold in more than 180 countries. This means Kellogg's has to manage its relationships with a variety of stakeholders around the world.

Kellogg's long-term business plans, known as strategies, focus on engaging with its stakeholders to ensure their needs are being met. For Kellogg's, this means ensuring the highest ethical standards and sustainable business practices. Kellogg's has a Global Code of Ethics governing how it deals with stakeholders across the world. A sustainable business is one which focuses on minimizing any negative impact to the environment to ensure future generations can prosper.

Kellogg's vision and core purpose outline what the company wants to achieve. They guide the organization's decision making processes to help meet the expectations of its stakeholders.

Interacting with Stakeholders

Stakeholder engagement, building two-way relationships with its stakeholders, is a key aim for Kellogg's. Two-way relationships help build trust between Kellogg's and its stakeholders. Each stakeholder group has different needs. Engaging with each group individually helps Kellogg's ensure these needs are met. As with any business, its owners are a major stakeholder group.

However, Kellogg's does not focus on pleasing shareholders at the expense of other stakeholders. Kellogg's uses a variety of strategies to maintain positive relationships with its stakeholders. For example, Kellogg's commitment to its stakeholders and ethical practices is demonstrated through its Corporate Social Responsibility (CSR) initiatives. CSR focuses on improving the lives of communities in which the organization operates. Kellogg's has identified four pillars to its Corporate Responsibility strategy:

- *Marketplace ambition* : meeting the needs of customers. Selling them safe, high quality products whilst engaging in ethical and responsible marketing.
- *Environment ambition* : using scarce resources carefully whilst also reducing environmental impacts and supporting sustainable agriculture.
- *Community ambition* : contributing to the communities in which the company operates concentrating on nutrition and physical fitness.

- *Workplace ambition* : supporting a talented and diverse workforce which values diversity and inclusion, abiding by best practice labor standards.

Kellogg's focuses its CSR activity on initiatives that benefit stakeholders across these pillars. For example, Kellogg's Breakfasts for Better Days campaign communicates important information about the benefits of starting the day with a healthy breakfast. It engages stakeholders across three of these pillars - customers, suppliers that provide the ingredients so Kellogg's can guarantee the nutritional content of its products and also the communities in which it operates where the campaign's messages are communicated. A key part of the campaign is Kellogg's support for school breakfast clubs to ensure that every child in the UK gets a good start to the day.

An important part of managing the needs of stakeholders is understanding that different stakeholder groups can sometimes have conflicting interests. It is therefore essential for Kellogg's to consider how it can best balance different stakeholder aspirations.

Market Research

Market research adds value to businesses like Kellogg's by identifying consumers' needs. It helps Kellogg's to plan ahead, for example, looking at what products or extensions it should develop and for whom. It focuses the business on the needs of its consumers. An organization that does this can improve its competitive advantage.

In an established market, such as breakfast cereals, there is little room to increase the overall sales in the market. Kellogg's is therefore always looking for ways to strengthen its own portfolio..

For example, to develop a new Crunchy Nut brand extension, Kellogg's commissioned primary research. This is research gathered firsthand to answer questions that are specific to the project.

Creating Business Objectives

Having set an aim, managers make plans which include the right actions. These ensure that the aim is met. For an aim to be successful, it must be supported by specific business objectives that can be measured. Each of the objectives set for Kellogg was designed to contribute to a specified aim.

Kellogg's objectives were to:

- encourage and support physical activity among all sectors of the population
- use resources to sponsor activities and run physical activity focused community programs for its consumers and the public in general
- increase the association between Kellogg and physical activity
- use the cereal packs to communicate the 'balance' message to consumers
- introduce food labeling that would enable consumers to make decisions about the right balance of food.

Strategy

Having created an aim and set objectives, Kellogg put in place a process of planning to develop a strategy and a series of actions. These were designed to meet the stated aim and

range of business objectives. In the area of food labeling, Kellogg introduced the Kellogg's GDAs to its packaging, showing the recommended Guideline Daily Amounts. These GDAs allow consumers to understand what amount of the recommended daily levels of nutrients is in a serving of Kellogg's food. Working with a group of other major manufacturers, Kellogg introduced a new format in May 2006, with GDAs clearly identified on brand products and packages. These GDAs have been adopted by other manufacturers and retailers such as TESCO.

Advertising the Kellogg's brands

When Kellogg's Corn Flakes were launched in the UK in the early 1920's the company faced a formidable task of persuading a skeptical nation, accustomed to porridge and bacon and eggs, to try a brand new breakfast food. What followed was one of the most remarkable marketing achievements of the 20th Century. Kellogg used a team of dedicated salesmen who employed armies of casual laborers and Boy Scouts to cover the country, to knock on doors and literally give away millions of sample packets of Corn Flakes and Rice Krispies. The free samples encouraged consumers to buy the products and within ten years Kellogg's had revolutionized the eating habits of a nation.

Packaging

The packaging of Kellogg's breakfast cereals is also a key element of the marketing mix. The packaging has to provide a representation of the brand identity and appeal to the target market. It also has to have space for nutritional information and any promotional offers. Kellogg's has to deal with the problem that the purchasers of cereal, usually adults and often female, are not always the consumers, often children. The packaging has to appeal to both groups.

Communicating with Consumers

The completed new designs were further tested on consumers using sophisticated computerized eye tracking tests to see if the packs stood out on the supermarket shelves. More extensive market research was carried out to gauge the reactions of consumers. Finally, it was necessary to communicate with consumers about the new packaging and the new image was flagged on the old packs for two months before the launch. The top section of the back panels was used to display the new designs to enable the consumers to become familiar with them. The new designs were also featured in a direct mail campaign to Kellogg's consumers as the packs went into market.

3.4.1.7. *Case Study : Corporate Governanace Satyam*

SATYAM COMPUTER CONSULTANCY LIMITED was established on June 24, 1987. The founder of such organization was Mr. Ramalinga Raju. Chief executive officer at the time of the scam was Mr. Ram Mynampati and chief financial officer of such was Mr. Valdamani Srinivas. Non-executive directors were Krishna Palepu and Vinod. K. Dham. Satyam Computer Consultancy Limited has its headquarter at Hyderabad.

The case examines the corporate governance issues at the India based IT services company, Satyam Computer Services Limited (Satyam). In mid-December 2008, Satyam announced acquisition of two companies - Maytas Properties and Maytas Infrastructure owned by the family members of Satyam's founder and Chairman Ramalinga Raju (Raju). It planned to

acquire 100% and 50% stakes in Maytas property and infra for S1.6B. Due to adverse reaction from institutional investors and the stock markets, the deal was withdrawn within 12 hours. Questions were raised on the corporate governance practices of Satyam with analysts and investors questioning the company's board on the reasons for giving consent for the acquisition as it was a related party transaction.

After the deal was aborted, four of the prominent independent directors resigned from the board of the company. In early January 2009, Raju revealed that the revenue and profit figures of Satyam had been inflated for past several years. The following were the inflated figures:

- Inflated cash and bank balance ₹ 5040cr
- Non existent accrued interest ₹ 376cr
- Understated liability of ₹ 1230cr
- Overstated Debtor position of ₹ 490cr
- Inflated staff by 12000 (Actual were 40000)
- Revenue of ₹ 2700 cr (Actual were ₹ 2112cr)
- Operating margin to be 6494 cr (Actual were 61cr)

INDIA'S LARGEST FRAUD- ₹ 7800crore(now estimated as 14000 crore)

As per the definition of corporate governance discussed above. A good corporate governance is one where a firm commits and adopts ethical practices across its entire value chain and in all of its dealing with a wide group of stakeholders encompassing employee, customer, vendors, regulators and shareholders in both good and bad times.

Corporate governance includes various parties:

1. shareholders
2. employees
3. management
4. bankers
5. government

Governance issue at Satyam arose because of non-fulfillment of obligation of the company towards the various stakeholders. It proved a poor relationship with all the stakeholders.

It is well known that a shareholder has a right to get information from the organization, such information could be with respect to the merger and acquisition. Shareholders expect transparent dealing in an organization. They even have right to get the financial reporting and records.

In the case of satyam, the above obligations were never fulfilled. The acquiuisition of maytas infrastructure and properties were announced, without the consent of shareholders. They were even provided with false inflated financial reports. The shareholders were cheated.

It is well known that the collapse of any organization's reputation has a diect impact on the employee's job. As per the case, employees were shown with a inflated figure. The excess of employees in the organization were kept under VIRTUAL POOL who received just 60% of their salaries and several were removed.

The entire scam had its impact on management. Questions were raised over the credibility of management.

Any organization has its obligation towards the Government by means of timely payment of taxes and abiding by the rules and laws framed up by the Government. As per the case with satyam , the company did not pay advance tax for the financial year 2009. As per the rule, the advance tax is to be paid 4 times a year; such was not fulfilled by them.

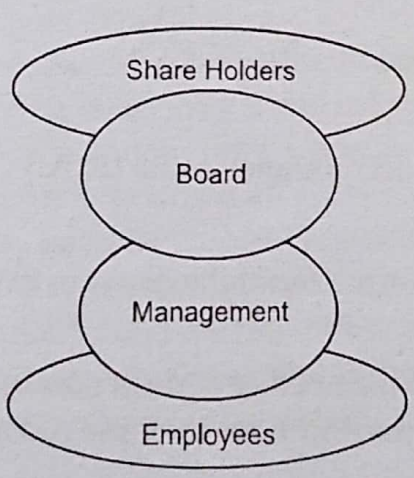
Finally the satyam computer consultancy limited didn't have good relationship iwt bak too. SCS was blacklisted by world Bank over charges of Bribery. It was declared ineligible for contracts to providing:

1. Improper benefit to bankstaff.
2. Failing to maintain documentation to support fees.

The revelation further deepened concerns about poor corporate governance practices at the company. The case describes the corporate governance structure at Satyam, its code of conduct, roles and responsibilities of different committees under the board, whistle blower policy etc. It highlights the role played by the independent directors of Satyam in approving the Maytas deal and discusses their limitations.

Conclsion:

As earlier stated that corporate governance consist of four parties. In case c satyam fraud, board is unable to fulfill its role and responsibilities.



Now we discuss the responsibilities that should be followed ethically by board and what is actually did.

Ethical Responsibilities:

- governing the organization by establishing broad policies and objectives;
- selecting, appointing, supporting and reviewing the performance of the chief executive;
- ensuring the availability of adequate financial resources;
- approving annual budgets;
- accounting to the stakeholders for the organization's performance.

Actual scenario:

- Despite the shareholders not being taken into confidence, the directors went ahead with the management's decision.

- The government too is equally guilty in not having managed to save the shareholders, the employees and some clients of the company from losing heavily.
- Simple manipulation of revenues and earnings. **To show superior performance.**
- Raising fictitious bills for services that were never rendered.
- To increase the Cash and bank balance correspondingly.
- Operating profits were artificially boosted from the actual ₹ 61 crore to ₹ 649 crore.

Its financial statements for years were totally false, cooked up and...

- Never had ₹ 5064 crores (US$ 1.05 Billion) shown as cash for several years.
- Its liability was understated by $ 1.23 Billions.
- The Debtors were overstated by 400 million plus.
- The interest accrued and receivable by 376 Millions never existed.

So when the case came in light following are the actions that has been taken:

- Nasscum sets up panel to avoid satyam like case in future-formed a corporate Governance and ethics committee, chaired by N.R. Narayana Murthy (chairman and chief mentor of Infosys.)
- Hinduja Global chalks out 100 day plan for satyam.
- 8 Year ban on satyam to be reviewed.
- Govt. orders CBI to probe fraud (concerned about 52000 employees' - agencies (3 months time to probe) :
  - Serious fraud investigation office (SFIO)
  - Market regulation SEBI,
  - Institute of chartered accountancy India (ICAI)
  - Andhra police

The Sebi had in December given a clean chit to Satyam in the probe on violation of corporate governance law.

The government has realized the need of code of conduct and whistleblower policy, now we will discuss what is these terms and how they played an important role.

3.4.2. Finance

Ethics are important in every industry, but nowhere as much as the financial industry, which connects all the people and businesses in an economy. Small and large financial businesses alike must behave ethically, for their own benefit, for their customers' benefit, and for the benefit of the economy as a whole. Organizations that provide financial services cannot afford to have its employees leave their morals on the front door when they step inside. Finance usually depends on a very high level of ethics.

Trust is essential in finance, but finance ethics is about far more than trust. Finance consists of an array of activities that involve the handling of financial assets – usually those of other people. Not only does the welfare of everyone depend on the safeguarding and deployment of these assets, but billions of financial transactions take place each day with a high level of

integrity. With this large volume of financial activities, there are ample opportunities for some people to gain at other's expense. Simply put, finance concerns other people's money (OPM) and OPM invites misconduct. Individuals in the financial services industry, such as stockbrokers, bankers, financial advisers, mutual fund and pension managers, and insurance agents, have a responsibility to the customers and clients they serve. Financial managers in corporations, government, and other organizations have an obligation to manage the financial assets of these institutions well. It is important that everyone else involved in finance, in whatever role, conduct themselves with the utmost attention to ethics.

Markets break down without trust. If financial markets are full of rogue traders, individuals will start to disengage from it, thereby reducing the capacity to find investments and hence reducing the economic growth. A market with strong ethics is more inclusive which helps it to be more liquid and offer cheaper financial options.

Financial market participants often have economic freedom, and often with good reason, but the successful financial exchanges in the world are more famous for trust than the degree of their freedom. Trust is important and if it cannot be achieved by laws alone, how important is it to have agreements and moral codes that are beyond the law, especially when the law is often the way to codify the ethical behaviors?

3.4.2.1. *Ethics in Finance*

Ethics is the study of human behavior which is right or wrong. In general, ethics means doing right things to others, being honest to others, being fair and justice to others. Even ethics in finance is a compartment to general ethics. Ethics are very important to maintain constancy in social life, where people work together with one another. In the process of social development we should not be conscious of ourselves but also conscious to take care of others. Ethics in finance is one of the main things which everyone has to follow from the small, medium and big level company because all most all the country depend up on the financial background of the country because without financial component no business canrun for a long time. The assumption of modern financial-economic theory runs counter to the ideas of honesty, devotion, dependability and loyalty. Ethics in finance may vary from different industries to different industries but everyone is liable to-do their work at utmost good faith. Peoples who involved in finance activity have to serve both their company and their customers at utmost good faith.

3.4.2.2. *Code of Ethics in Finance*

1. Act with honesty and integrity, avoiding real or clear conflicts of interest in personal and professional relationships.
2. To provide information which is full, fair, accurate, complete, objective, relevant, timely and understandable, including in and for reports and documents that the Company files with, or submits to, the other public communications made by the Company.
3. Act in accordance with all applicable laws, rules and regulations of governments, and other appropriate private and public regulatory agencies.
4. Act in good faith, responsibly, with due care, competence and carefulness, without misrepresenting material facts or allowing my independent judgment to besubordinated.

5. Respect the confidentiality of information acquired in the course of business except when authorized or otherwise legally obligated to disclose the information. It should not be used for personal advantage.
6. To promote ethical behavior among our associates.
7. Adhere to and promote this Code of Ethics.

3.4.2.3. *An Ethical Framework*

The simplest ethical guide for finance professionals should have three objectives?

- The first is to have higher ethical standards and a more inclusive financial system.
- The second, we should be more conscious of moral choices, but morals should not be imposed upon people in suffocating ways.
- The third objective is to keep things simple.

We often see financial market participants hesitate a moment before deciding whether to go ahead with a transaction. It is when they assess whether the transaction makes sense, feels odd or is avoidable. In that moment, people tend to ask whether they know the individuals involved in the transaction and whether a similar transaction was made earlier.

None of the two is very exacting ethical standard. We can offer these market participants some more questions, and after that it is up to them and their companies how they behave. However, that behavior should not be so ruinous that it affects the marketplace or the economy.

The key questions to ask while preparing a transaction is ? Have you ever faced a situation when you have put someone at an advantage over others?

Getting a loan from a client leading to its bankruptcy when one buys up the company's assets cheaper is not illegal, but it is unethical. Similarly, driving products out of market and making it hard to find is not always illegal, but it is unethical.

3.4.2.4. *Ethics in Finance in Different Fields*

People trained in finance may enter in to different fields and in different line of work in which they will identify different ethical values followed in different line of work. These eight general values remain the same but there will be a small variation in ethical dilemmas. The situation of a stockbroker is different from that of a mutual fund manager, a market regulator or a corporate financial officer. People in finance involved in lot of activities which depend not only in handling of financial asset but also involved in using of those asset and taking care of it. Everyday billions of financial transaction takes place with a high level of integrity. However, there are several opportunities in finance for some people to gain at others' expenses. Finance simply concern with other people's money and other people's money invites misconduct. Some of the professionals in the financial service whom are bound to serve their clients are as follows they are stockbrokers, bankers, financial advisers, mutual fund, pension manager and insurance agents. Financial manager in corporations, government, and other organizations have to take care of their employers and manage their asset as well. In finance everyone is trusted to carry certain duties from financial analyst to market regulators. Ethics in finance is not only a concerned for an individual in a particular occupation or profession but also for financial market and financial institution. Finance is a main function of every business enterprises and many non-profit organizations and governmental units.

Corporate financial manager are responsible for making a decision likeinvest capital to the planning of merger and acquisitions. While in other hand Public finance is concerned mostly with raising and disbursing fund for governmental purposes.

3.4.2.5. *Ethics Importance in the Financial Industry*

The financial industry is at the center of the economy. It enables the flow of capital between savers and companies, and it sets the rates at which investors and lenders exchange money. Ethical problems within the financial industry can have disastrous consequences for all other areas of the economy.

Compliance: Governments at the state and federal level step in occasionally to ensure the financial industry is behaving ethically. Companies and individuals in the financial industry must comply with ethical regulations or face severe consequences, which can include jail time. Some professions within the financial industry also have specific codes of ethics. For example, certified public accountants undergo training and exams concerning the formal code of ethics with which they must comply.

Individual Businesses: Ethics are also important on the level of individual businesses within the financial industry. An accountant, for example, has to develop client relationships based on trust and respect. She needs to put client desires and needs first when looking after their financial resources, and they in return must trust that their money is safe in her hands. Even a hint of unethical behavior can destroy such relationships and doom the business.

Considerations: Businesses in the financial industry should be transparent with their customers, revealing all relevant information to ensure that all parties understand contracts. They should keep client information confidential, not using any privileged information for personal gain. As much as possible, they should self-regulate, ensuring that their employees comply with relevant laws and professional codes of ethics. In short, financial businesses should do all they can to behave in a fair and just manner, not just because the law requires it, but because individual companies and the public benefit from participating in an honest system.

3.4.2.6. *Ethical Violations*

- **Insider trading** : Insider trading is the trading of a corporations stock or other securities (e.g. bonds or stock options) by individuals with potential access to non-public information about the company. Such a trade is motivated by the possibility of generating extraordinary gain with the help of nonpublic information (information not yet made public). It gives the trader an unfair advantage over other traders in the same security.
- **Stakeholder interest v/s stockholder interest :** Shareholders hold shares in the company that is they own part of it. Stakeholders have an interest in the company but do not ownit (unless they are shareholders). Often the aims and objectives of the stakeholders are not the same as shareholders and they come into conflict.The conflict often arises because while shareholders want short-term profits, the other stakeholders' desires tend to cost money and reduce profits. The owners often have to balance their own wishes against those of the other stakeholders or risk losing their ability to generate

future profits (e.g., the workers may go on strike or the customersrefuse to buy the company's products).

- **Campaign financing : Campaign finance** refers to all **funds** raised to promote candidates, political parties, or policy initiatives and referenda. Political parties, charitable organizations, and political action committees (in the United States) are vehicles used in aggregating **funds** to keep **campaigns** alive.

3.4.2.7. *Unethical Behaviour*

Examples of unethical temptations :

- Make exaggerated claims to counter exaggerated claims of a competitor.
- Offer a customer an unauthorized 'gift' in return for their business.
- Conceal information from a customer in order to get their business and to meet your sales' goals.
- Put non-business-related expenses on your expense account.
- Divulging confidential information about one customer to another in order to facilitate a sale.

Ways to prevent unethical behaviour

Here are seven practices to help prevent unethical actions in any organization:

- **Create Policies and Practices:** Organizations must research, develop, and document policies and processes around defining, identifying, and reporting ethics violations. These policies should be articulated in the employee handbook and protections should be put in place for those who raise ethical issues. However, having a policy is not enough. You must practice what you preach.
- **Hire Right:** Selecting quality people from day one can make a huge difference in the ethics of your organization. Some organizations scour background checks, purchase screening tools, or use behavior-based interview questions, which may ask candidates to describe a situation when they acted ethically even when it was against social or cultural norms.
- **Develop People's Understanding:** Most HR professionals will tell you that training people to act "ethically" will not have much of an impact, but developing a process for reporting ethics violations and building staff understanding about ethics expectations is important.
- **Put Controls in Place:** Risk management professionals will tell you that even with all the proper policies and processes in place and a staff that understands them, it is also wise to perform regular audits to help reduce opportunities to act unethically, incent individuals who may act unethically to reconsider, help catch issues that have occurred by accident, and mitigate risk all around.
- **Build a Culture of Transparency, Openness, and Communication:** Cultural management work is difficult. To ensure true success when it comes to organization ethics, people must see and hear what is going on as well as feel comfortable to stand up and speak out if they see something occur that is not right.

- **Leadership Must Walk the Talk:** Leaders can talk about the importance of policies and processes, incentives, communication, and openness all day, but if they turn around and act unethically, it can be like throwing a large stone into the pond of ethics tranquility. The same goes for promoting staff who have behaved unethically. It doesn't take long for staff at all levels of an organization to recognize a leader who talks the talk, but doesn't walk the walk when it comes to ethics. This can breed suspicion and destroy trust.

3.4.3. Accounting

Accounting, or accountancy, is the measurement, processing and communication of financial information about economic entities. Accounting, which has been called the "language of business", measures the results of an organization's economic activities and conveys this information to a variety of users including investors, creditors, management, and regulators. Practitioners of accounting are known as accountants.

Accounting can be divided into several fields including financial accounting, management accounting, auditing, and tax accounting. Financial accounting focuses on the reporting of an organization's financial information, including the preparation of financial statements, to external users of the information, such as investors, regulators and suppliers; and management accounting focuses on the measurement, analysis and reporting of information for internal use by management. The recording of financial transactions, so that summaries of the financials may be presented in financial reports, is known as bookkeeping, of which double-entry bookkeeping is the most common system.

Financial accounting: Financial accounting focuses on the reporting of an organization's financial information to external users of the information, such as investors, regulators and suppliers. It measures and records business transactions and prepares financial statements for the external users in accordance with generally accepted accounting principles (GAAP). GAAP, in turn, arises from the wide agreement between accounting theory and practice, and change over time to meet the needs of decision-makers. Financial accounting produces past-oriented reports-for example the financial statements prepared in 2006 reports on performance in 2005-on an annual or quarterly basis, generally about the organization as a whole.

Management accounting: Management accounting focuses on the measurement, analysis and reporting of information that can help managers in making decisions to fulfil the goals of an organization. In management accounting, internal measures and reports are based on cost-benefit analysis, and are not required to follow GAAP. Management accounting produces future-oriented reports-for example the budget for 2006 is prepared in 2005-and the time span of reports varies widely. Such reports may include both financial and nonfinancial information, and may, for example, focus on specific products and departments.

3.4.3.1. *Ethics in Accounting*

"Accountants and the accountancy profession exist as a means of public service; the distinction which separates a profession from a mere means of livelihood is that the profession is accountable to standards of the public interest, and beyond the compensation paid by clients." -Robert H. Montgomery Accounting ethics is primarily a field of applied ethics, the study of moral values and judgments as they apply to accountancy. It is an example of

professional ethics. Accounting ethics were first introduced by Luca Pacioli, and later expanded by government groups, professional organizations, and independent companies. Ethics are taught in accounting courses at higher education institutions as well as by companies training accountants and auditors. Due to range of accounting services and recent corporate collapses, attention has been drawn to ethical standards accepted within the accounting profession. These collapses have resulted in a widespread disregard for the reputation of the accounting profession. To combat the criticism and prevent fraudulent accounting, various accounting organizations and governments have developed regulations and remedies for improved ethics among the accounting profession.

3.4.3.2. *Need of Ethics in Accounting*

Accounting ethics has been deemed difficult to control as accountants and auditors must consider the interest of the public (which relies on the information gathered in audits) while ensuring that they remained employed by the company they are auditing. They must consider how to best apply accounting standards even when faced with issues that could cause a company to face a significant loss or even be discontinued. Due to several accounting scandals within the profession, critics of accountants have stated that when asked by a client "what does two plus two equal?" the accountant would be likely to respond "what would you like it to be?". This thought process along with other criticisms of the profession's issues with conflict of interest, have led to various increased standards of professionalism while stressing ethics in the work environment. The role of accountants is critical to society. Accountants serve as financial reporters and intermediaries in the capital markets and owe their primary obligation to the public interest. The information they provide is crucial in aiding managers, investors and others in making critical economic decisions. Accordingly, ethical improprieties by accountants can be detrimental to society, resulting in distrust by the public and disruption of efficient capital market operations. "Every company in the country is fiddling its profits. Every set of published accounts is based on books which have been gently cooked or completely roasted.

3.4.3.3. *The Role of Ethics in Accounting*

It is extremely important for accounting professionals to be ethical in their practices due to the very nature of their profession. The nature of accountants' work puts them in a special position of trust in relation to their clients, employers and general public, who rely on their professional judgment and guidance in making decisions. These decisions in turn affect the resource allocation process of an economy. The accountants are relied upon because of their professional statues and ethical standards. Thus, the key to maintaining confidence of clients and the public is professional and ethical conduct Ensuring highest ethical standards is important to a 'public accountant' (one who renders professional services such as assurance and taxation service to clients for a fee) as well as to an 'accountant in business' (one who is employed in a private or public sector organisation for a salary). Both 'public accountants' and 'accountants in business' are in a fiduciary relationship, former with the client and latter with the employer. In such a relationship, they have the responsibility to ensure that their duties are performed in conformity with the ethical values of honesty, integrity, objectivity, due care, confidentiality, and the commitment to the public interest before one's own The 'Framework for International Education Standards for Professional Accountants' (2009) published by International Accounting

Education Standards Board (IAESB) of IFAC identifies that the overall objective of accounting education should be to develop competent professional accountants, who possess the necessary (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes. In this respect, the International Education Standard (IES) 4-Professional Values, Ethics and Attitudes of IAESB recommends that a programme of professional accounting education should provide potential professional accountants with a framework of professional values, ethics and attitudes to exercise professional judgment and act in an ethical manner that is in the best interest of society and the profession.

3.4.3.4. *Ethical Behaviour in Accounting*

Dilemmas help to illuminate the nature of ethical theories. Contemporary ethical theories provide ultimate principles that can be used to solve a dilemma, we give priority to what is good for all the people affected over considerations of fairness, we adopt the stance of theorists called utiliuiruins. For utilitarians, the ultimate justifying reason for an action is that the action brings about more good for more people than it docs harm. If, on the other hand, we give considerations of fairness priority over the consequences of the action, we adopt the attitude of theorists called deontologists. who believe that actions themselves arc ethical in spile of their consequences. For deontologists, the end docs not justify the means Finally, if we consider only what is good for ourselves and give self-interested concerns priority over what is good for others and what is fair, we adopt the position of theorists called egoists. It may be a bit strange to talk of an "ethical" theory that gives priority to self-interest . but there are a few defenders of egoism, so we will look at it briefly later. To conclude then, an ethical theory espouses a principle that provides the overriding justifying reason to pursue any course of action.

Both egoism and utilitarianism determine whether an action is ethically acceptable according to the action's consequences Egoism gives priority to the reason, "It benefits me." When there is a conflict between something good for me and society, or a conflict between something good for me and its fairness, egoism recommends the self-serving action. Thus, egoist theory maintains that an individual should always act in his or her own best interest. As we mentioned, egoism has its advocates, even though it may seem paradoxical for an ethical theory to give primacy to self-interest.

Utilitarianism gives priority to concern for everybody's good, including the individual's, which is factored into the total overall good. If self-interest conflicts with the overall good, self-interest is set aside. Thus, utilitarianism recommends actions that bring about the greatest good for the greatest number of people.

Finally, the theory that gives precedence to the issues of fairness, rights, and commitment, and advocates doing the right thing – no matter what the consequences to self and others – is called deontological theory. Under this theory the end does not justify the means.

3.4.3.5. *Standards of Ethical Conduct for IMA*

The standards of ethical conduct for IMA members are published in SMA (Statement on Management Accounting) 1C.

Competence

Members have a responsibility to:

- Maintain an appropriate level of professional competence by ongoing development of their knowledge and skills.
- Perform their professional duties in accordance with relevant laws, regulations, and technical standards.
- Prepare complete and clear reports and recommendations after appropriate analyses of relevant and reliable information.

Confidentiality

Members have a responsibility to:

- Refrain from disclosing confidential information acquired in the course of their work except when authorized, unless legally obligated to do so.
- Inform subordinates as appropriate regarding the confidentiality of information acquired in the course of their work and monitor their activities to assure the maintenance of that confidentiality.
- Refrain from using or appearing to use confidential information acquired in the course of their work for unethical or illegal advantage either personally or through third parties.

Integrity

Members have a responsibility to:

- Avoid actual or apparent conflicts of interest and advise all appropriate parties of any potential conflict.
- Refrain from engaging in any activity that would prejudice their ability to carry out their duties ethically.
- Refuse any gift, favor, or hospitality that would influence or would appear to influence their actions.
- Refrain from either actively or passively subverting the attainment of the organization's legitimate and ethical objectives.
- Recognize and communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.
- Communicate unfavorable as well as favorable information and professional judgments or opinions.
- Refrain from engaging in or supporting any activity that would discredit the profession.

Objectivity

Members have a responsibility to:

- Communicate information fairly and objectively.
- Disclose fully all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, comments, and recommendations presented.

3.4.3.6. FEI Code of Ethics

FEI's mission includes significant efforts to promote ethical conduct in the practice of financial management throughout the world. Senior financial officers hold an important and elevated role in corporate governance. While members of the management team, they are uniquely capable and empowered to ensure that all stakeholders' interests are appropriately balanced, protected and preserved. This Code provides principles to which members are expected to adhere and advocate. They embody rules regarding individual and peer responsibilities, as well as responsibilities to employers, the public, and other stakeholders. Violations of FEI's Code of Ethics may subject the member to censure, suspension or expulsion under procedural rules adopted by FEI's Board of Directors.

All members of FEI will:

1. Act with honesty and integrity, avoiding actual or apparent conflicts of interest in personal and professional relationships.
2. Provide constituents with information that is accurate, complete, objective, relevant, timely and understandable.
3. Comply with applicable rules and regulations of federal, state, provincial, and local governments, and other appropriate private and public regulatory agencies.
4. Act in good faith, responsibly, with due care, competence and diligence, without mis-representing material facts or allowing one's independent judgment to be subordinated.
5. Respect the confidentiality of information acquired in the course of one's work except when authorized or otherwise legally obligated to disclose. Confidential information acquired in the course of one's work will not be used for personal advantage.
6. Share knowledge and maintain skills important and relevant to constituents' needs.
7. Proactively promote ethical behavior as a responsible partner among peers, in the work environment and the community.
8. Achieve responsible use of and control over all assets and resources employed or entrusted.
9. Report known or suspected violations of this Code in accordance with the FEI Rules of Procedure.
10. Be accountable for adhering to this Code.

3.4.4. Business and Ethics do not go Together

"Ethics is knowing the difference between what you have a right to do and what is right to do". It is true that morals and values differs for an individual, concerns come in our professional lives. When people at work pressurize you to things, often we ignore our ethics.

For:

- In today's situation with immense pressure and competition, business and ethics can't go together.
- A couple of times because we follow ethics, it hinders us from succeeding because it squanders time.

- Ethics are usually bound and nurtured by religion, family values etc. Such forms cannot work well in business where you are expected to be professional and practical.
- A businessman should know how to handle pressure, stress and competition and not how to be ethical.
- We all want to make quick money. In today's market, being ethical takes a toll on you.
- Ethics unlike a balance sheet don't have visibility. People today judge you based on money and not ethics.

Against:

- Ethics makes you stronger and independent. People cant deceive you easily.
- Not following ethics makes you a selfish person.
- There is nothing wrong in making profit. But, making profit by unethical means could cost a lot of people harm, mentally.
- Customer's perspective is to link with a company with ethics and values. They know that will never be forged.
- Being ethical in business creates a sense of responsibility towards society.

Morals and values are extremely individualistic. It's incorrect to say that you cant succeed if you are ethical in business. You will probably take some more time to succeed. You cant force someone to follow ethics.

3.4.5. Intellectual Property Right (IPR)

3.4.5.1. Intellectual Property (IP)

Intellectual property is different from physical property. The "thing" that one has a right to is an idea rather than something physical like a car. A company might own the patent to a vehicle's design without being able to claim a property right to each individual car of that type. This seems sensible, but it doesn't match the sort of property claim that we're used to talking about. When I claim a property right to my car, it means you can't use it. What does it mean to say that you can't use my idea? In most cases, this means that one cannot use an idea that someone else has a copyright to in a way that creates profits. To do so would deprive the copyright holder of something they are due.

There are at least two ways in which intellectual property is fundamentally different to physical property.

1. Intellectual property is fundamentally social. IP is essentially an idea, and ideas are only useful when they are expressed in some way. Think about music, for example. If I were to have an idea which I turned into a song, then that idea is only useful to me when I make that song public. I have to perform it before anyone can appreciate it or enjoy it or pay me for it. Patented designs are like this as well. The idea is only as good as it is useful.
2. The second difference is that intellectual goods are infinitely sharable. The difference between an idea and a car is that an unlimited number of people may possess and use an idea at the same time, while only a small number may possess and use a car at

the same time. When one of us puts an idea out into the world, it can be held by any number of people without being less available to the originator. When I give you my car, I no longer have a car. When I give you an idea, we can each have it in exactly the same quantity and quality.

Intellectual property is especially vulnerable to theft and misattribution because, unlike my car, someone might be able to take credit for my ideas and inventions without my knowledge. I will notice that my car is missing because it is a physical object, and when I need to drive somewhere I will be alarmed that it is missing. Not so, my ideas. Even if I am not harmed by the misattribution of my ideas, it seems appropriate to protect them from theft.

3.4.5.2. *Types/Tools of IPR*

Intellectual Property Rights are legal rights, which result from intellectual activity in industrial, scientific, literary and artistic fields. These rights Safeguard creators and other producers of intellectual goods and services by granting them certain time-limited rights to control their use. Protected IP rights like other property can be a matter of trade, which can be owned, sold or bought. These are intangible and non- exhausted consumption.

Patent

A patent is an exclusive right granted for an invention, which is a product or a process that provides a new way of doing something, or offers a new technical solution to a problem. It provides protection for the invention to the owner of the patent. The protection is granted for a limited period, i.e 20 years. Patent protection means that the invention cannot be commercially made, used, distributed or sold without the patent owner's consent. A patent owner has the right to decide who may - or may not - use the patented invention for the period in which the invention is protected. The patent owner may give permission to, or license, other parties to use the invention on mutually agreed terms. The owner may also sell the right to the invention to someone else, who will then become the new owner of the patent. Once a patent expires, the protection ends, and an invention enters the public domain, that is the owner no longer holds exclusive rights to the invention, which becomes available to commercial exploitation by others.

All patent owners are obliged, in return for patent protection, to publicly disclose information on their invention in order to enrich the total body of technical knowledge in the world. Such an ever-increasing body of public knowledge promotes further creativity and innovation in others. In this way, patents provide not only protection for the owner but valuable information and inspiration for future generations of researchers and inventors.

Trademarks

A trademark is a distinctive sign that identifies certain goods or services as those produced or provided by a specific person or enterprise. It may be one or a combination of words, letters, and numerals. They may consist of drawings, symbols, three- dimensional signs such as the shape and packaging of goods, audible signs such as music or vocal sounds, fragrances, or colours used as distinguishing features. It provides protection to the owner of the mark by ensuring the exclusive right to use it to identify goods or services, or to authorize another to use it in return for payment. It helps consumers identify and purchase a product or service because its nature and quality, indicated by its unique trademark, meets their needs.

Copyrights and Related Rights

Copyright is a legal term describing rights given to creators for their literary and artistic works. The kinds of works covered by copyright include: literary works such as novels, poems, plays, reference works, newspapers and computer programs; databases; films, musical compositions, and choreography; artistic works such as paintings, drawings, photographs and sculpture; architecture; and advertisements, maps and technical drawings. Copyright subsists in a work by virtue of creation; hence it's not mandatory to register. However, registering a copyright provides evidence that copyright subsists in the work and creator is the owner of the work. Creators often sell the rights to their works to individuals or companies best able to market the works in return for payment. These payments are often made dependent on the actual use of the work, and are then referred to as royalties. These economic rights have a time limit, (other than photographs) is for life of author plus sixty years after creator's death.

Geographical Indications (GI)

GI are signs used on goods that have a specific geographical origin and possess qualities or a reputation that are due to that place of origin. Agricultural products typically have qualities that derive from their place of production and are influenced by specific local factors, such as climate and soil. They may also highlight specific qualities of a product, which are due to human factors that can be found in the place of origin of the products, such as specific manufacturing skills and traditions.

A geographical indication points to a specific place or region of production that determines the characteristic qualities of the product that originates therein. It is important that the product derives its qualities and reputation from that place. Place of origin may be a village or town, a region or a country.

It is an exclusive right given to a particular community hence the benefits of its registration are shared by the all members of the community. Recently the GIs of goods like Chanderi Sarees, Kullu Shawls, Wet Grinders etc have been registered.

Industrial Designs

Industrial designs refer to creative activity, which result in the ornamental or formal appearance of a product, and design right refers to a novel or original design that is accorded to the proprietor of a validly registered design. Industrial designs are an element of intellectual property. Under the TRIPS Agreement, minimum standards of protection of industrial designs have been provided for. As a developing country, India has already amended its national legislation to provide for these minimal standards.

The essential purpose of design law it to promote and protect the design element of industrial production. It is also intended to promote innovative activity in the field of industries. The existing legislation on industrial designs in India is contained in the New Designs Act, 2000 and this Act will serve its purpose well in the rapid changes in technology and international developments. India has also achieved a mature status in the field of industrial designs and in view of globalization of the economy, the present legislation is aligned with the changed technical and commercial scenario and made to conform to international trends in design administration.

Trade Secrets

It may be confidential business information that provides an enterprise a competitive edge may be considered a trade secret. Usually these are manufacturing or industrial secrets and commercial secrets. These include sales methods, distribution methods, consumer profiles, advertising strategies, lists of suppliers and clients, and manufacturing processes. Contrary to patents, trade secrets are protected without registration.

A trade secret can be protected for an unlimited period of time but a substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring the information. Considering the vast availability of traditional knowledge in the country the protection under this will be very crucial in reaping benefits from such type of knowledge. The Trades secret, traditional knowledge are also interlinked / associated with the geographical indications.

Layout Design for Integrated Circuits

Semiconductor Integrated Circuit means a product having transistors and other circuitry elements, which are inseparably formed on a semiconductor material or an insulating material or inside the semiconductor material and designed to perform an electronic circuitry function.

The aim of the Semiconductor Integrated Circuits Layout-Design Act 2000 is to provide protection of Intellectual Property Right (IPR) in the area of Semiconductor Integrated Circuit Layout Designs and for matters connected therewith or incidental thereto. The main focus of SICLD Act is to provide for routes and mechanism for protection of IPR in Chip Layout Designs created and matters related to it.

Protection of New Plant Variety

The objective of this act is to recognize the role of farmers as cultivators and conservers and the contribution of traditional, rural and tribal communities to the country's agro biodiversity by rewarding them for their contribution and to stimulate investment for R & D for the development new plant varieties to facilitate the growth of the seed industry.

The Plant Variety Protection and Farmers Rights act 2001 was enacted in India to protect the New Plant Variety; the act has come into force on 30.10.2005 through Authority. Initially 12 crop species have been identified for regt. i.e. Rice, Wheat, Maize, Sorghum, Pearl millet, Chickpea, Green gram, Black gram, Lentil, Kidney bean etc. India has opted for sui- generic system instead of patents for protecting new plant variety. Department Agriculture and Cooperation is the administrative ministry looking after its registration and other matters.

3.5. CORPORATE SOCIAL RESPONSIBILITY (CSR)

3.5.1. Definition

The voluntary compliance of social and ecological responsibility of companies is called Corporate Social Responsibility (CSR).The Term Corporate Social Responsibility is imprecise and its application differs.CSR can not only refer to the compliance of human right standards, labor and social security arrangements, but also to the fight against climate change,sustainable management of natural resources and consumer protection.The World Business Council for

sustainable development has described CSR asthe business contribution to sustainable economic development. Building on a base of compliance with legislation and regulations. CSR typically includes "Corporate governance and ethics".

3.5.2. Concept

The concept of Corporate Social Responsibility was first mentioned 1953 in the publication "Social Responsibilities of the Businessman by William J. Bowen. However, the term CSR became only popular in the 1990s, when the German Betapharm, a generic pharmaceutical company decided to implement CSR. The generic market is characterized by an interchangeability of products. In 1997 a halt in sales growth led the company to the realization that in the generic drugs market companies could not differentiate on price or quality. This was the prelude for the company to adopt CSR as an expression of the company's values and as a part of its corporate strategies. By using strategic and social commitment for families with chronically ill children children, Betapharm took a strategic advantage.

Corporate social responsibility is basically a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment. Corporate social responsibility is represented by the contributions undertaken by companies to society through its business activities and its social investment. This is also to connect the Concept of sustainable development to the company's level. Over the last years an increasing number of companies worldwide started promoting their Corporate Social Responsibility strategies because the customers, the public and the investors expect them to act sustainable as well as responsible. In most cases CSR is a result of a variety of social, environmental and economic pressures.

3.5.3. ISO

ISO 26000:2010 is intended to assist organizations in contributing to sustainable development. It is intended to encourage them to go beyond legal compliance, recognizing that compliance with law is a fundamental duty of any organization and an essential part of their social responsibility. It is intended to promote common understanding in the field of social responsibility, and to complement other instruments and initiatives for social responsibility, not to replace them.

In applying ISO 26000:2010, it is advisable that an organization take into consideration societal, environmental, legal, cultural, political and organizational diversity, as well as differences in economic conditions, while being consistent with international norms of behaviour.

ISO 26000:2010 is not a management system standard. It is not intended or appropriate for certification purposes or regulatory or contractual use. Any offer to certify, or claims to be certified, to ISO 26000 would be a misrepresentation of the intent and purpose and a misuse of ISO 26000:2010. As ISO 26000:2010 does not contain requirements, any such certification would not be a demonstration of conformity with ISO 26000:2010.

ISO 26000:2010 is intended to provide organizations with guidance concerning social responsibility and can be used as part of public policy activities. However, for the purposes of the Marrakech Agreement establishing the World Trade Organization (WTO), it is not intended to be interpreted as an "international standard", "guideline" or "recommendation", nor is it intended to provide a basis for any presumption or finding that a measure is consistent

with WTO obligations. Further, it is not intended to provide a basis for legal actions, complaints, defences or other claims in any international, domestic or other proceeding, nor is it intended to be cited as evidence of the evolution of customary international law.

ISO 26000:2010 is not intended to prevent the development of national standards that are more specific, more demanding, or of a different type.

3.5.4. CSR as a Business Strategy for Sustainable Development

When CSR is adopted as a business strategy for sustainable development, it goes to improve corporate performance. It offers manifold benefits to corporations both internally and externally. Externally, it creates a positive image and goodwill among the public and earns a special respect amongst peers, customers, government agencies, investors and media, all of which go a long way in promoting long-term shareholder value and sustainable development. Internally, it cultivates a sense of loyalty and trust amongst employees in organizational ethics. More significantly, it serves as a soothing diversion from the mundane workplace routine and gives workers a feeling of satisfaction and a meaning to their lives. Companies like Infosys, Wipro, Satyam, Tata Steel, Dr Reddy's Lab and Polaris, for instance, find ways and means of getting their employees interested in CSR activities. There are reasons to believe that such employee involvement has reduced attrition rates in these organizations. It is because of all these positive factors that organizations involve themselves in socially responsible investing (SRI). SRI is gaining importance because of two factors: (*i*) Socially responsible companies offer long term value and (*ii*) evaluating a company's social impact on top of its financial performance provides an additional hedge against risk. For instance, a Chennai-based automotive parts manufacturing company faced a severe risk at its new plant in Punc when a posse of thugs barged into the plant and demanded ₹ 2.5 million as ransom when several locals who were the beneficiaries of the company's CSR unit came to the rescue of the company and offered to guard it against the extortionists in future. Many MNCs which have socio-political problems in emerging markets in which they operate, find socially responsible investing as one of the means to blunt the adverse sentiments against them and as a strategy to ensure their sustainable development. Most critics of CSR arc against it because they look at it separately from business strategy. CSR is an outcome for business models, which goes beyond just financial viability. Cost of helping communities to develop becomes cost of the business—like materials or labour. Billions of poor people have a potential to become part of the market, if helped. Before looking upon the poor as a potential market, the future business models must build sensitivities and capabilities to reach out to the poor.

Business persons fail to appreciate the fact that CSR is a key constituent of business strategy, as to many of them it is pure philanthropy and 'do good' activity unconnected with their business. Sound strategy provides business with a source of competitive advantage. "For any competitive advantage to be sustainable, the strategy must be acceptable to the wider environment in which the firm competes." Lack of CSR or its improper execution is bound to threaten the competitive advantage a corporate may hold in an industry. Besides there are certain costs associated with being a socially irresponsible organization. Nike suffered significant damage to its brand and sales when it was brought to light that the company had poor labour standards in its supply chain. On the other hand, Nike gained its brand and sales once it started improving its labour standards down the line and publicized its efforts

to comply with them. Nowadays, Greenpeace and other activist groups highlight socially irresponsible corporate behaviour that leads sometimes to voluntary corrective action on the pan of the companies themselves, and at other times invites government action as we have seen in several instances of public interest.

Practitioners of CSR stress the fact that it is a cost-effective way to gain competitive advantage. Corporations in their effort to engage in strategic CSR aim to match business objectives with the needs of the community. For instance, in the rain-starved Wada taluk of Thane district of Maharashtra where its bottling plant is located. Coca Cola has been harvesting rain water since 2003 to recharge groundwater and has been supplying water to people in summer, in addition to instituting water supply schemes in some villages. All these CSR efforts of the company have been integrated with its business strategy and have helped it to earn the goodwill of village folks, apart from reducing absenteeism at the workplace. An IT company for instance could help educate school or college students in its neighbourhood, who could become their potential employees. Likewise, a BPO can create its future workforce by providing vocational and so a skills training to the children in neighbouring communities. This symbiosis between corporations and the surrounding communities will go a long way in integrating CSR and business strategy for mutual benefit.

3.5.5. Case Study: Corporate Social Responsibility Infosys Foundation

"It is better to light a candle than remain in darkness". The Infosys Foundation starts with this humble, but thought-provoking philosophy. The foundation came into being with the objective of supporting the underprivileged in society. It began its activities in Karnataka in 1996. Today, the activities have been extended to Tamil Nadu, Andhra Pradesh, Maharashtra, Orissa and Punjab. The foundation primarily aims at improving the health, education and basic facilities, benefiting a large number of individuals and institutions.

In a short span of time, the foundation has successfully implemented projects in the following areas:

- **Health Care:** It has constructed many hospitals, wards in hospitals, donated costly equipment, distributed medicines for free and introduced various schemes to benefit those in need.
- **Social Rehabilitation and Rural Upliftment:** The foundation has constructed orphanages, girls' hostels and shelters, and undertaken various initiatives to aid the lesser privileged.
- **Learning and Education:** The foundation has undertaken 'A Library for Every School', one of the largest rural education programmes in the country. It provides financial support to promising students from economically weaker sections. It has constructed science centres and labs in rural schools, and in some cases, entire schools for the benefit of rural children.
- **Arts and Culture:** The foundation has coordinated a project to donate cassettes and players among rural schools in Karnataka to bring back life into the dying arts, puppet shows to enliven the theatre art, and encourages artistes to perform and also benefit financially.

Infosys Technologies contributed Rs 50 million to the Prime Minister's National Relief nd to assist the victims of the giant tsunami that ravaged South and Southeast Asia in the st week of December 2004. The company also actively supported its employees' efforts ross group companies globally, to make monetary and material contributions towards aid perations.

Infosys also instituted in 1999 the Infosys Fellowship Programme to foster excellence in ducation and offered funds at the five IITs and three IIMs for PhD programmes in computer cience, management, law and accounting. Under this programme, the company grants 900,000 per fellowship for the entire duration of the PhD programme.

3.6. ENVIRONMENTAL ETHICS

3.6.1. Eco-system

An ecosystem is a system formed by the interactions of a variety of individual organisms with each other and with their physical environment. Ecosystems are nearly self-contained so that the exchange of nutrients within the system is much greater than exchange with other system.

An ecosystem, thus, is not entirely a biological entity. Any complete description of an ecosystem must include the physical environment as well as the biological components and the interactions between the two. Ecosystems are of diverse types-mostly natural, but there are a few which are man-made or modified by man's activity.

3.6.1.1 Components of Eco-System

(I) Abiotic components : The Abiotic components include the Sun rays, Hydrogen, Carbon, Nitrogen, Oxygen, Sulphur, Phosphorus and other elements and various meals are essential for existence of life. The organic compounds like Proteins, Carbohydrates and other biological compounds, which are presented in the biomass and released to the environment. Climate includes Light, Heat, and Temperature, Wind, Humidity, Rainfall, Snow fall etc., and their daily and seasonal fluctuations. The soil includes its composition, structure and properties.

(II) Biotic components: Include all living organisms present in the environment system and from nutrition point of view it is divided into two classes :

(*i*) Autotrophic components

(*ii*) Heterotrophic components

The autotrophic components include all green plants which fix the radiant energy of sun and prepare food from inorganic substances.

The heterotrophic components include non-green plants and all animals which take food from autotrophy.

Biotic Bomponents

The biotic components of an ecosystem can be described as - (*i*) producers, (*ii*) consumers and (*iii*) decomposers or reducers and transformers.

(*i*) **Producers:** Producers are Autotrophs in which auto means self and trophs means nourishing. The green plants prepare food by using radiant energy and transform them to chemical energy. Plants not only prepare food for themselves, but also they from source of energy for the non-producers too.

(*ii*) **Consumers:** (Heterotroph) - the living components which consume food synthesized by the producers are consumers.

The consumers that feed directly on green plants are primary consumers and they graze grasses such as goat, cow, rabbit etc. The second type of consumers are flesh eating animals such as crow, dog, eat, snake etc. There are some other flesh eating animals which prey upon other flesh eating animals such as lion, tiger etc.

The other types of consumers are parasites, scavengers and saprobes. The parasitic plants and animals utilize the living tissues' of different plants and animals. The scavengers and saprobes utilize dead animals and plants as their food.

(*iii*) **Decomposers and transformers:** Decomposers and transformers are the living components of the ecosystem and they are fungi and bacteria. Decomposers attack the dead remains of producers and consumers and degrade the complex organic substances into simpler compounds. The simple organic matters are then attacked by another kind of bacteria, transformers, which changes these organic compounds into the inorganic forms that are suitable for re-use by, producers or green plants. The decomposers and transformers play very important role in maintaining the dynamic nature of ecosystems.

3.6.1.2. Functions of Ecosystem

The ecosystem plays the following functions such as- (1) Biodiversity (2) Productivity (primary and secondary) (3) food chains and food web (4) Energy flow (5) Material cycling (6) Balance of nature (7) succession and evolution of ecosystem.

(1) Biodiversity: Biodiversity include taxonomical, ecological, genetic, biochemical diversities. It is a renewable resource for man and provides food, fodder, fiber, raw-materials that main requires for everyday living. Now-a-day biodiversity is declining due to habit clearance, pollution, biological invasions and changes brought into the biosphere due to many other reasons.

(2) Productivity: The rate of food production over unit time on a unit area basis is called primary productivity. The total amounts solar energy converted to chemical energy by green plants is called gross primary production (GPP). Maximum GPP occurs in a forest. The net quantity of energy transferred and stored in somatic and reproductive tissues of heterotrophy over period of time is known as secondary productivity and it depends on the amount of primary production in the ecosystem.

(3) Food chain and food webs: The sequence of organisms which feed on one other from a food chain and each level is termed as a strophic level. Apart from food, toxic substances can also move from a plant to man, either directly or through herbivores and carnivores and carnivores, a food chain signifies feeding relationship in nature passage of nutrients from one organisms to another and flow of energy in ecosystem, the biodiversity, food chains are interwoven to from a food web and these food webs help different organism to survive and reproduce in nature and thus maintain biodiversity.

(4) Energy flow in ecosystem: The solar energy is the source of energy for biological world and it is converted into chemical energy by the plants and stores as food. This food energy, from the plants food-chains and food-webs. During this process a lot of energy dissipates as heat energy into the environment. Thus an organism sitting at the top of the food chain gets less energy.

(5) Material cycling: The biotic components are necessary for the growth and development and the elements move in a cyclic manner from Abiotic to biotic and back to Abiotic components of ecosystem. The cycling materials include Water cycle, Gaseous cycle and Sedimentary cycle. The Gaseous cycles are Carbon, Nitrogen arid Oxygen and Sedimentary cycle. The Gaseous cycles are Carbone, Nitrogen arid Oxygen and Sedimentary cycle are Phosphorous and Sulphur.

Thus in any ecosystem we have the following functional components.

(*i*) Inorganic constituents (air, water and mineral salts)

(*ii*) Organisms (plants, animals, and microbes)

(*iii*) Energy input which enters from outside (the sun).

These three interact and for men environmental system. Inorganic constituents are synthesized into organic structures by the green plants (primary producers) through photosynthesis and solar energy is utilized in the process. Green plants become the source of energy for renewals (herbivores) which is turn become source of energy for the flash eating animals (carnivores). Animals of all types grow and add organic matter to their body weight and their source of energy to complex organic compound takes as food. They are known as secondary reduces. All the living organisms whether plants or animals are all ecosystem have a definite life span after which they die. The dead organic remains of plants and animals provide food for saprophytic microbes such as bacteria, fungi and many other animals. The saprobes ultimately decompose the organic structure and break the complex molecules and liberate the inorganic components into their environment .these organisms are known as decomposers. During the process of decomposition of organism are known as decomposers.

During the process of decomposition of organic molecule the energy which kept the organic components bound together in the form of organic molecules gets lacerated and dissipated into the environment as neat energy. Thus in an ecosystem energy from the sun, input is fixed by plants and transferred to animals components. Nutrients are withdrawn from the substrate deposited in the tissues of the plants and animals cycled from one feeding group to another released by decomposition to the soil, water, air and then recycled. The ecosystem operating in different habitats such as deserts, forests grassland and seas are interring dependent of one another. The energy and nutrients of one may find their way into another so that ultimately all parts of the earth are interrelated, each comprising a part of the total system that keeps the biosphere functioning.

Thus the principal steps in the operation of ecosystem are as follows:

(*i*) Reception of radiant energy of sun.

(*ii*) Manufacture of organic materials from inorganic ones by products

(*iii*) Consumption of producers by consumers and further elaboration of consumed materials.

(*iv*) After the death of producers and consumers, complex organic compounds are degraded and finally converted by decomposers and converters into such form as are suitable for reutilization by producers.

The principal steps in the operation of ecosystem not only involve the production, growth, death of living components but also they influence the Abiotic aspects of habitat.

So, there is transfer of both energy and nutrients from producers to consumers and from decomposers and transformers levels.

3.6.2. Ozone Depletion

Ozone layer depletion is one of the most serious problems faced by our planet earth. It is also one of the prime reasons which are leading to global warming. Ozone is a colourless gas which is found in the stratosphere of our upper atmosphere. The layer of ozone gas is what which protects us from the harmful ultraviolet radiations of the sun. The ozone layer absorbs these harmful radiations and thus prevents these rays from entering the earth's atmosphere. Ultraviolet radiations are high energy electromagnetic waves emitted by the sun which enters the earth's atmosphere can lead to various environmental issues including global warming and also a number of health related issues for all living organisms.

3.6.2.1. Causes of Ozone Layer Depletion

The main things that lead to destruction of the ozone gas in the ozone layer. Low temperatures, increase in the level of chlorine and bromine gases in the upper stratosphere are some of the reasons that leads to ozone layer depletion. But the one and the most important reason for ozone layer depletion is the production and emission of chlorofluorocarbons (CFCs). This is what which leads to almost 80 percent of the total ozone layer depletion.

There are many other substances that lead to ozone layer depletion such as hydro-chlorofluorocarbons (HCFCs) and volatile organic compounds (VOCs). Such substances are found in vehicular emissions, by-products of industrial processes, aerosols and refrigerants. All these ozone depleting substances remain stable in the lower atmospheric region, but as they reach the stratosphere, they get exposed to the ultra violet rays. This leads to their breakdown and releasing of free chlorine atoms which reacts with the ozone gas, thus leading to the depletion of the ozone layer.

3.6.2.2. Effects of Ozone Layer Depletion

Let us see a few possible effects of the ozone layer depletion on the earth's environment and also on the plants and animals. The depletion of ozone layer allows entering of UV rays from sun into the earth's atmosphere which is associated with a number of health related and environmental issues. Let us see its major impacts on human beings

Skin Cancer: exposure to UV rays from sun can lead to increased risk for developing of several types of skin cancers. Malignant melanoma, basal and squamous cell carcinoma are the most common cancers caused by exposure to UV rays.

Eye Damage: UV rays are harmful for our eyes too. Direct exposure to UV rays can lead to Cataract problems, and also Photokeratitis or snow blindness.

Damage to Immune system: our immune system is also highly vulnerable to UV rays. Increased exposure to UV rays can lead to weakening of the response of immune system and even impairment of the immune system in extreme cases.

Aging of skin: exposure to UV rays can lead to acceleration of the aging process of your skin. This will result in you looking older than what you actually are. It can also lead to photo allergy that result in outbreak of rashes in fair skinned people.

3.6.2.3. *Method of Bring Down Ozone Layer Depletion*

Ozone layer depletion is not something that affects any specific country or region. The whole world is vulnerable to its after effects. That makes it important for each and every one of us to take actions to reduce ozone layer depletion. International agreements such as Montreal protocol in 1987 have helped in reducing and controlling industrial emission of Chlofluorocarbons. More and more of such international agreements between countries is necessary to bring down ozone layer depletion. At individual level each and everyone also can contribute towards reducing ozone layer depletion. Buying and using recycled products, saving of energy, using of public transport can do a lot in combating ozone layer depletion. The most important thing that we can do is spreading awareness. Our individual efforts will go a long way in saving the earth's blanket and keep our planet earth liveable for us and our future generations.

3.6.3. Environmental Pollution

Environmental Pollution can be defined as any undesirable change in physical, chemical, or biological characteristics of any component of the environment i.e., air, water, soil which can cause harmful effects on various forms of life or property. The term pollution can be defined as influence of any substance causing nuisance, harmful effects, and uneasiness to the organisms. Any substance causing Nuisance or harmful effects or uneasiness to the organisms, then that particular substance may be called as the pollutant.

Sources and Causes

The sources and causes of environmental pollution includes the following:

- **Industrial activities:** The industries all over the world that brought prosperity and affluence, made inroads in the biosphere and disturbed the ecological balances. The pall of smoke, the swirling gases, industrial effluents and the fall-out of scientific experiments became constant health hazards, polluting and contaminating both air and water. The improper disposal of industrial wastes are the sources of soil and water pollution. Chemical waste resulting from industry can pollute lakes, rivers and seas and soil too as well as releasing fumes.
- **Dumping solid waste:** Household and commercial waste pollutes the environment when not disposed of properly.
- **Vehicles:** The smoke emitted by vehicles using petrol and diesel and the cooking coal also pollutes the environment. The multiplication of vehicles, emitting black smoke that, being free and unfettered, spreads out and mixes with the air we breathe. The harmful smoke of these vehicles causes air pollution. Further, the sounds produced by these vehicles producescauses noise-pollution.
- **Rapid urbanization and industrialization:** The urbanization and the rapid growth of industrialization are causing through environmental pollution the greatest harm

to the plant life, which in turn causing harm to the animal kingdom and the human lives.

- **Population overgrowth:** Due to the increase in population, particularly in developing countries, there has been surge in demand for basic food, occupation and shelter. The world has witnessed massive deforestation to expand absorb the growing population and their demands.
- **Combustion of fossil fuels:** The combustion of fossil fuels pollutes the air, the soil and the water with noxious gases such as CO_2 and CO.
- **Agricultural waste:** Fertilizers and pesticides used in agriculture are key causes of environmental pollution.

Effect

Environmental pollution has negatively affected the life of both human-beings and animals. Almost all of our gains in the fields of industrial progress, science and technology had so far been realized at the cost of our health. Even our flora and fauna were found to be threatened with extinction.

The environmental pollution is not caused by the fall-out from nuclear tests or industries alone. The smoke left behind the automobiles and other vehicular traffic, the increasing use of synthetic detergents, nitrogen fertilizers and insecticides contaminate both air and water.

- The water we drink the vegetables are all contaminated today. As a result of this contamination our world is afflicted with a quite a number of incurable diseases.
- Environmental pollution affects water sources which mean that there is less fresh water available for drinking, washing, cooking and irrigating crops.
- Nothing in this world is immune, no life is safe and the future of this world is bleak.
- The factories are mostly built in populated areas and the smoke-emitting vehicles ply through the congested areas. Besides causing immense disturbances, there are increasing case of pulmonary tuberculosis and thrombosis and various sorts of brain and heart complications.
- Air-pollution may cause severe lungs-diseases, asthma, brain-disorder diseases, etc.
- Soil-pollution may have negative effect on farm output ratio. It can also contaminate the ground water.
- Noise-pollution have negative effects on hearing or auditory sense organs. It can also cause deafness, tiredness, and mental losses.
- The heat generated by industries and vehicles causes thermal pollution by raising the environmental temperature of the nearby areas.
- Many scientists believe that we are living in an era of mass extinction, due to human made environmental pollution.

Solution

The following attempts can be made to solve the problem of environmental pollution.

- The Government can at least see that future factories are set up at a distant place, an industrial complex far away from the township.

- Researcher may find out how to avoid harmful smoke from running vehicles.
- Deforestation should be stopped and Forestry should be developed.
- Discharge of Factory wastes in rivers should be banned so as to make the river-water free from pollution.
- Recycle the sewage or in all events it can be disposed of in such a way as to prevent it from polluting the environment.
- Reducing the amount that we buy, reusing and repairing items wherever possible, and recycling as much as we can will all help to reduce the amount of waste dumped in the environment. When we do need to throw away waste we should do so responsibly.
- Organic farming could be one solution for reducing environmental pollution levels.

3.7. COMPUTER ETHICS

3.7.1. Cyber Crimes

Computer crimes are called by different names, like cyber crime, e-crime or electronic crime. It refers to any crime in which computer and a network are used to perform crime, but the computers may or may not play an important role in the commission of the crime. Cyber crimes are dangerous actions committed from or against a computer or network, which are different from most global crimes in some ways. They are simple to learn how to commit; they require less resource compared to the potential damages they cause; cyber crime can be committal without being physically present; and they are most of the time not clearly illegal. In cyber crime, problems of confidentiality are also there, where private and confidential information can be lost or intercepted.

Computer crime includes a large range of potentially illegal actions. However, cyber crimes can be categorized into either of the following categories:

- Crimes that are aimed for computer networks or devices directly.
- Crimes assisted by computer networks or devices, where the primary target of crime is free of the computer network or device.

3.7.1.1. *Types of Cyber Crimes*

There could be numerous types of the cyber crimes which a user can commit knowingly or unknowingly. These crimes could cause the person to spend some of his lifetime behind bars in addition to paying some amount as penalty. In this section, we describe some of the common cyber crimes.

Spam : Spam, or the unnecessary sending of useless bulk e-mail for commercial reasons, is unlawful. As applied to e-mail, exact anti-spam laws are comparatively new, however, restrictions on unwanted electronic communications have survived in some forms for some time.

Fraud : Computer frauds are any dishonest distortion of information proposed to let another to do or refrain from performing anything which causes loss of information. Computer fraud involves activities like modification or deleting stored data; modifying or mistreating

present system tools or software packages, or modifying or writing code for falsified purposes. Typically, the frauds those are associated with the money-related activities can cause monetary harm to an individual or to the organization.

Obscene or Offensive Content : The matter of websites and other e-communications can be offensive, insulting, rude or violent for different reasons. In some of the instances these contents even can be illegal. A lot of jurisdictions put limits on particular speech and forbid racist or inflammatory matter that tends to motivate crimes. The degree to which this information is unlawful differs significantly between countries, and even inside a nation. This is a sensitive area in which the courts can be involved in deciding between various groups with well-established beliefs.

Drug Trafficking : Drug traffickers are gradually growing by taking advantage of the Internet to market their illegal materials through encoded e-mails and other Internet technologies. The sudden boom in Internet drug trades could also be due to lack of face-to-face communication. These virtual exchanges permit more faceless individuals to comfortably acquire illegal drugs. The consequences that are associated with drug trades are severely reduced and the filtering process that comes with physical communication fades away. Additionally, traditional drug recipes were carefully kept away from the public but with the latest computer technology, this information is now easily made available to anyone who has access to computer.

Cyber Stacking : Cyber stalking involves pursuing a person's movements across the Internet by placing messages on the notice boards frequented by the victim, going to the chat-rooms visited frequently by the victim, frequently bombarding the vietim by sending spam e-mails, etc.

Generally, the harasser aims to cause emotional suffering and has no rightful purpose for his communications.

Unauthorized Access and Hacking : Unauthorized access indicates some kind of access without the acquiescence of either the legal owner or the person who is in charge of computer systems or computer networks. Every act committed in the direction of breaking into a computer or network is hacking. Hackers write or simply use ready-made computer programmes to attack the target computer or network with an intention to destroy. Some hackers hack either for personal monetary gains, or for fun.

Pornography : The exact meaning of the word 'pornography' is 'describing or showing sexual acts in order to cause sexual excitement through books, films, etc.' This form of cyber crime includes pornographic websites, pornographic matter produced by computers and use of the Internet to download and transfer pornographic videos, photos, writings, etc. Pornography encourages the magnetism of adultery, prostitution and fantasies that can result in dangerous immoral behaviour.

Software Piracy : Software piracy means distribution of the unauthorized, copied or duplicate software without prior concern of the developer associated to the organization. Generally, the software is licensed as per the amount of users in a particular organization. For instance, the license can be only of single user, cooperate user or student licenses. Now, obtaining a single user license and utilizing it on multiple systems is believed to be piracy or handing out the replica of the licensed software to further someone is also considered to be piracy.

Software distribution is difficult to control and due to this, organizations are facing a multi-million dollar deficit. The word piracy also comprises illegal distribution of songs or videos.

3.7.1.2. *Dealing with Cyber Crimes*

Cyber law is the branch of law that deals with legal issues related to cyber crimes. It is needed so that people can perform various activities using the cyber infrastructure without any fear, and cyber criminals can be suitably punished. It has a major impact on e-commerce activities and digital economy of a country. Hence, every country needs to formulate an IT Act to provide the framework for cyber laws. Government of India has also enacted the Information Technology Act 2000 (IT Act 2000), which defines the cyber laws for dealing with cyber crimes in India. The IT Act 2000 has many positive provisions for the use of information technology in our day-to-day business and activities. These include the following:

1. Organizations can create, retain, maintain and produce official records in digital form.
2. Government departments can issue government notifications on the web, thus making e-governance official.
3. Individuals/organizations can submit any form/application/document with any office/agency in electronic form asprescribed by the government (sucy as e-filing of income tax returns.
4. Organizations can carry out e-commerce activities legally using cyber infrastructure.

3.7.2. Data Stealing

Data-stealing malware is a web threat that divest victims of personal and proprietary information with the intent of monetizing stolen data through direct use or underground distribution. Content security threats that fall under this umbrella include keyloggers, screen scrapers, spy ware, adware. backdoors, and bots. The term does not refer to activities such as spam, phishing, DNS poisoning, SEO abuse, etc. However, when these threats result in file download or direct installation, as most hybrid attacks do, files that act as agents to proxy information will fall into the data-stealing malware category.

Characteristics of Data-Stealing Extortionware or Malware

Data-stealing malware does not leave traces of the event :

- The malware is typically stored in a cache that is routinely flushed
- The malware may be installed via a drive-by-download process
- The website hosting the malware as well as the malware is generally temporary or rogue, frequently changes and extends its functions
- It is difficult for antivirus software to detect final payload attributes due to the combination(s) of malware components
- The malware uses multiple file encryption levels that thwarts Intrusion Detection Systems (IDS) after successful installation
- There are no perceivable network anomalies
- The malware hides in web traffic

- The malware is steal their in terms of traffic and resource use so it actually thwarts disk encryption

Examples of data-stealing Extortionware or Malware

- *Bancos*, an info stealer that waits for the user to access banking websites then spoofs pages of the bank website to steal sensitive information.
- *Gator*, spyware that covertly monitors web-surfing habits, uploads data to a server for analysis then serves targeted pop-up ads.
- *LegMir*, spyware that steals personal information such as account names and passwords related to online games.
- *Ohost*, a Trojan that modifies the Hosts file to point to a different DNS server when banking sites are accessed then opens a spoofed login page to steal login credentials for those financial institutions.

3.7.3. Hacking

Hacking is unauthorized use of computer and network resources. **Computer Hacking** is a practice of peeping into the extreme technical details of any computer application, program, or the whole system in order to extend its capabilities or alter its functionalities. People who rightly follow this practice of hacking are termed as *'hackers'*. A hacker's vision towards solving any technical problem is undoubtedly beyond the perception of any normal computer expert. The open-source coding has been very beneficial for hackers to test and invent out of their passion for programming.

This practice can either be ethical or unethical. The activity where one breaks into the system but do not violate its security and credentials is called **Ethical Hacking**. Ethical hackers aim to bring into the administrator's notice, vulnerabilities and voids in the system thereby, improvising the robustness and security. They are purely tech-geeks with immaculate programming skills and hands-on knowledge on both computer hardware and software. On the other hand, there are people who can though break into systems, get access to secured accounts but their actions are usually unauthorized while they make a backdoor entry into your system. These people (often misinterpreted as hackers) are called as **'crackers'**. They try and crack passwords, security codes, etc., using various hacking softwares which are already available. Such softwares are meant to break the code using millions of trials programmed into it by other hackers.

Footprinting

The systematic footprinting of an organization enables attackers to create a complete profile of an organization's security posture like system architecture, network blocks and IP addresses exposed on the Internet. Hackers gain reconnaissance of the target following a sequence of steps as:

1. **Open Source Footprinting:** The first step a hacker takes is to visit the website of a potential target. He then looks for contact information of the administrators which may help in guessing the password or in Social Engineering.
2. **Network Enumeration:** This is the next step in gaining information where the hacker tries to identify the domain names and the network blocks of the target network.

3. **Scanning:** Once the network block is known, the next step is to spy for active IP addresses on the target network. The Internet Control Message Protocol (ICMP) is a good alternative for identifying active IP addresses.
4. **Stack Fingerprinting:** Once the hosts and port have been mapped by scanning the target network, the final footprinting step can be performed. This step is called stack fingerprinting. This is the process of determining the operating system and different version of services running on target hosts.

There are different ways a hacker can attack a system in order to gain access which may be:

- A backdoor program entry.
- Through unauthorized executable files called viruses and worms

3.7.4. Embezzlement

Embezzlement, also known as **employee theft** is the act of wrongfully appropriating funds that have been entrusted into your care but which are owned by someone else.

The most *common embezzlement* is by employees, but others with fiduciary responsibility can also be charged with embezzlement.

Embezzlement is a specific type of *fraud*, which is defined as "knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment."

Accounting embezzlement is the manipulation of accounting records to hide theft of funds.

Embezzlement can be prosecuted as criminal fraud or civil fraud. In the case of civil fraud, the employer can bring the lawsuit against the employee.

Factors in Embezzlement

In order for a charge of embezzlement to be supported, four factors must be present and must be proven.

- There must be a **fiduciary relationship** between the two parties; that is, there must be a relationship of trust, a responsibility for taking care of the responsibility (money or property, for example), and a reliance by one party on the other.
- The *defendant* must have **acquired the property through the relationship**, rather than in some other manner. This is sometimes difficult to prove, particularly in the case of embezzlement of cash from a bar, for example.
- The defendant must have **taken ownership** of the property or transferred the property to someone else (called conveyance).
- The defendant's actions were **intentional**. This is also sometimes difficult to prove. How do you prove intent?

Penalties for Embezzlement

- The penalties depend upon the amount stolen. If convicted, the embezzler may receive a fine, may be required to do restitution (give back the money). In some cases a prison sentence as well.

Examples of Types of Embezzlement

There is an unlimited number of ways that a person could commit the crime of embezzlement. By going over the six main types, a better understanding of the crime can be achieved by looking at examples of each of the types.

- **Siphoning:** This is accomplished by the people that we see working on the front line in stores or restaurants. They devise a way to pocketing money from the register without creating discrepancies between what the computer shows and what the drawer shows. They do not enter the item into the computer part of the register, but need to keep track of how much money they get after their shift is over.
- **Check Kiting:** In this practice, the criminal makes a series of deposits and withdrawals between several banks. The checks grow in value gradually, drawing and withdrawing money from the other banks with money that is not real. This takes advantage of "float" which is the amount of time it takes for deposited checks to clear their home banks. A person that handles the bill paying function at a corporation would be able to do this crime. He could use the company checkbook to get the scam started and progress it until the banks realize what is happening.
- **Lapping:** This type is found in the part of the business that accepts incoming payments from customers or vendors. A person working in this capacity for a church, for example, could use bank deposits for several companies and change the allocation of the funds to cover up their own personal taking of certain cash payments from certain customers. This accumulation of funds obtained while in a trusted position of fiduciary responsibility would quality as a money laundering crime.
- **Payroll:** Using the company payroll in order to illegally take money is another type of embezzlement. A large scale corporation will often have a manager and possible an entire department just involved in the calculation and completion of the payroll duties within that company. If that manager decided to try to steal some money through this crime, he would add some of his family members that are not employed with the company, maybe his wife and/or kids, and have them drawing income against the company. At home, then, he would be able to cash each of the checks himself, increasing his level of income.
- **Kickbacks:** Any people involved in purchasing activities in any organization could be prospective embezzlers through kickbacks. This involves a vendor, from whom the company purchases materials in their course of business, agrees to give that employee money, directly to them, if they continue to buy a certain product from that vendor. Often times these situations involve inflated prices, since the vendor agent is possibly trying to make some personal profit as well.
- **Overtime:** Another way that people can commit embezzlement is through the falsification of overtime records. An hourly-paid manager for the local branch office of the bank could do this. If he punched in his card at the beginning of his shift, and then left at the end of his regular shift, say eight hours later, without punching his card out. Suppose he comes back in two hours later, pretending to have forgotten his wallet, and secretly punches his card out then. If the manager is continuing to do this over time, he is guilty of embezzlement by falsifying his overtime records.

How Does a Business Protect Itself from Embezzlement?

To start your work on protecting your business, pay attention to two factors involved in embezzlement:

- Focus on employees who have fiduciary responsibilities, like those in your payroll department, accounts receivable, accounts payable, and those who reconcile bank statements. These are the people most likely to embezzle.
- Focus on cash transactions. Require that all cash transactions be recorded, as much as possible.