

From the Desk of Principal



It is heartening to see that research and writing on varied Aspects of management embedded in Indian environment is growing. We at the MITSOM COLLEGE feel so happy that with our research journal AVANI is part of this movement.

We are grateful to the many authors and institutes that are contributing to our endeavour to promote AVANI research journal on International Business. MIT SOM College upholds and preserves the quest for academic enrichment and interpersonal development. Research area is the core for the curriculum excellence. With the help of research there is development of positive thinking and with this, there is motivation to excel in research field which is very important for self esteem and confidence.

The environment that we treasure at the institute brings forth not only academic and research excellence but also hidden talents in extra-curricular activities. We are committed to transform the individuals into intellectuals by instilling fundamental subject knowledge and life-skills to enable them to face the challenges of tomorrow.

I would like to congratulate the Editor and other team who strived for the grant success of the AVANI research Journal. And we look forward to the continued interest and contributions towards the journal.

Dr. R. M. Chitnis
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ORGANISATIONAL CHANGE AND DEVELOPMENT

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Abstract-

This Paper is about organizational Change and development of industries. Organizational change is an important issue in organizations. It is actually a process in which an organization optimizes performance as it works toward its ideal state. Organizational change occurs as a reaction to an ever-changing environment, a response to a current crisis situation, or is triggered by a leader. Successful organizational change is not merely a process of adjustment, but also requires sufficient managing capabilities.

In this era of competition where privatization, liberalization and globalization held and Industries are modifying and changing their structure, production process, marketing process to make stability in international market .How Indian industries adopted the organizational changes and developed well with number of man power? How it make best goodwill organisation in international market. However, there are many topics to be considered to achieve successful change. Hence, this paper discusses the causes of organizational change, its elements, approaches, process, resistance, management, and finally the possible factors leading to its breakdown.

Keywords:

organizational change, organizational development, causes of organizational change, processes of organizational change, resistance & management of organizational change Based on a five year survey conducted by the world-renowned McKinsey consulting firm (Isern, & Pung, 2007),

out of the 1536 companies that underwent organizational change, only 38% of the company managers claimed that the process succeeded in increasing work performance. Regarding long term health goals (such as increasing ability, better customer relations, supplier relations, positive work culture), only 30% of the managers associated these with organization change. Hence, the goals of organizational change are rather multi-faceted. The most common goal stated by over 50% of the interviewees is “minimizing costs”. Other goals include bettering the firm mergence, crisis intervention, or overcoming competition. Seemingly, successful organizational change is not merely a process of adjustment, but also requires sufficient.

Methodology-

Research Methodology is based on secondary data, various books and websites have been referred together the information.

Introduction -:

Organizational change is the process by which organisation move from their present state to some desired future state to increase their effectiveness organizational change implies the creation of imbalance in the existent pattern or situation. Adjustment among people, technology and structural set up is established when an organisation operates for longtime .people adjust with their job, working condition, colleagues, superiors etc similarly, an organisation establishes relationships in the external environment. Change

require individual and organizations to make new adjustment, complexity and fear of adjustment give rise to resistance and problem of change Why does an organization need organizational change?

What is organizational change? It is a process in which an organization optimizes performance as it works toward becoming its ideal state. Why does an organization need organizational change (Jones, 2004)? From a passive perspective, organizational change occurs as a reaction to an ever-changing environment or as a response to a current crisis situation. On the other hand, a more proactive viewpoint is that it is triggered by a progressive manager. Furthermore, organizational change is especially evident when the organization has just undergone a transfer of executive power (Haveman, Russo & Meyer, 2001). Van de Ven and Poole (1995) proposed that the causes of organization change can be explained by one of the following theories: teleological theory, life-cycle theory, and dialectical theory. The teleological perspective believes that organizational change is an attempt to achieve an ideal state through a continuous process of goal-setting, execution, evaluation, and restructuring. Life-cycle theory claims that the organization is an entity that depending on the external environment, cycles through stages of birth, growth, maturation, and declination. Dialectical theory hypothesizes that the organization is like a multi-cultural society with opposing values. When one particular force dominates over others, a new organizational value and goal is established, resulting in organizational change.

The targets of organizational change

The influential factors of organizational effectiveness are widespread, including factors that are related to external environmental changes and factors which will improve the internal managerial effectiveness. The organization must consider the reasons for change, the external environment, and the internal situation to decide which factors to change. The most common known targets of organizational change include vision, strategy, culture, structure, system, production technology, and leadership style (Yang, Zhuo, & Yu, 2009). Vision includes a firm's organizational core value but one that also adapts accordingly to the external environment. When an organization

undergoes change its core value needs to be determined so that in the process of transformation it can be preserved. Strategy refers to the organization's long term goals and the steps and resources needed to be considered in its decision-making. The strategy change can be divided into the enterprise strategy change (Ex: low cost strategy), the overall strategy change (Ex: multiple-angle management), and the global expansion strategy change. Culture is referring to it members' collective value, norm, and basic assumptions. The change involved is altering the content of this collective value and/or basic assumption. Typically, the explicit culture is more easily manageable or changed than the implicit culture. Structure is an official system of the duty and the authority relations of an organization. Structural change is transforming the organization's vertical disintegration or horizontal differentiation, power allocation, and level of formalization. System is the formal regulations, policies and procedures such as reward system, performance evaluation methods, goals budget system, etc. that are used to operate the organization. Production science and technology is the technology, the knowledge, the ability, the material, the machine, the computer, the tool and other equipments which transforms inputs to outputs. Leadership is the influential force within the organization. Leadership style impacts the group dynamic and also the interaction of its members. The above targets of organizational change will influence each other. For example, the actualization of vision depends on the incorporation of suitable strategy and the organization's culture. Therefore, in the process of organization change, the "systematic viewpoint" has to be taken, so that different change targets can be considered as a whole to achieve the organizational change successfully.

The different types of organizational change

Managers continually face choices about how best to respond to the forces for change. There are several types of change that managers can adopt to help their organizations achieve desired future status. In general, the types of change fall into two broad categories: evolutionary change and revolutionary change. Evolutionary change is gradual, intermittent, and narrowly-focused (George, & Jones, 2007; Miller 1982).

Its main purpose is to make continuous improvement in order to adjust to the environment changes (Weick, & Quinn, 1999). Revolutionary change is rapid, dramatic, and broadly focused. It often happens when the current operation method can no longer fulfill the demand of the external environment and a significant change has to be made in a short period of time to keep the organization work. The most widely known types evolutionary change is socio-technical systems theory, total quality management, and management objectives (George & Jones, 2002; Yang, Zhou, & Yu, 2009). Socio-technical systems theory emphasizes the importance of the social and technological aspects within the organization during the process of change. In other words, it emphasizes the development of the most optimal partnership between members/workers of the organization and the technology. Total quality management is an ongoing and constant effort by all of an organization's functions to find new ways to improve the quality of the organization's good and services (Deming, 1989). Management by objectives specifies the importance of regular meetings between management and its subordinates. The objective is to assess future work goals, evaluate work performance, and discuss challenges and obstacles in an attempt to motivate work efficacy and coherence (Cummings, & Worley, 2001).

There are also three important types of revolutionary change: reengineering, restructuring, and innovation (George, & Jones, 2002). Reengineering involves the fundamental rethinking and radical redesign of business processes to achieve dramatic improvement in critical, contemporary measures of performance such as cost, quality, service, and speed (Hammer & Champy, 1993). When organization experiences a rapid deterioration in performance, manager may try to turn things around by restructuring. For example, an organization tries to simplify its organizational structure by eliminating divisions, departments, or levels in the hierarchy; and downsizing employees to lower operating costs. Innovation is the successful use of skills and resources to create new technologies or new goods and service so that an organization can change and better response to the needs of customers (Jones, 1988).

Why does organizational change fail?

According to Mckinsey investigation (Isern & Pung, 2007), only 38% interviewees think their company's organization change has successfully increased their work performance, and only 30% believe their organization change has achieved the organization's goal of long-term health. It is mainly because there are many factors that will affect the success or failure of organizational change. The 6 most important factors include the insufficient readiness for change, lack of systematic plan for organization change, fast solution expectation, the focus of change activity instead of result, poor management in change process, and mismatch between change plan and organization context (Yang, Zhuo, & Yu, 2009). To achieve successful organizational change, all these factors have to be considered carefully. The following section will explain each of them briefly. Readiness for change refers to the degree of positive acceptance of the necessity of change, and the positive attitude toward the effect of change on self and the organization (Armenakis, Harris, & Mossholder, 1993). The higher the preparation, the higher the acceptance and executive power of the member shall be. The lower the preparation, the higher the resistance to change, and the higher the probability of organization change to fail will be. Another common reason for organizational change to fail is that many organizations do not take the systematic viewpoint to make a holistic plan for organizational change. For example, the attempt to make change through education only, and to overlook other factors that may affect employee's behavior such as organizational system, structure, culture, etc. Moreover, some organization applies the identical changes plans to all departments and individuals without considering their differences. The fast solution expectation is another error organization makes. They often assume introducing a set of organizational changes can solve all the problems, and recruiting an outside consultant can assist on everything. With this expectation, the organization will depend on the consultant too much, and invest too little, and will end the change plan too early if the achievement does not meet their expectation. In addition, when planning the organizational change, members often take the change activity too seriously, but neglect the change goal itself.

Thus, members participate in the activity vigorously, but the achievement is actually very limited. Poor management in change process is another commonly made mistake. Many factors have to be considered and attended to in the unfreezing, moving or freezing stages. Overlook certain factors many lead to total failure of the organizational change. Finally, the match between change plan and organizational context may also play a significant role in the success or failure of organizational change. Organizational change is to establish new pattern of thinking and behavior. When the new pattern conflicts with the old ones, the oversized resistance tends to cause the plan to fail. Therefore, in designing a change plan, the organizational context must be incorporated.

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All The Best – BRICS Bank

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Dr. Joseph Eugene Stiglitz, (born February 9, 1943) is an American Economist and a Professor at Columbia University. He is a recipient of the Nobel Memorial Prize in Economic Sciences (2001) and the John Bates Clark Medal (1979). Dr. Joseph was the Chief Economist of World Bank. He was also the Head of Economic Advisory Committee for Mr. Bill Clinton's administration. He has witnessed how world ruler American economy works? How America controls the working of the financial institutions like World Bank and International Monetary Fund. While providing financial assistance to these institutes what approach America takes for the Developing Countries? On the basis of his experiences, he wrote the world famous book – “Globalisation and Its Discontents.” (Cited by 10760) In this book he has not take any stake in favour or against globalization. But when the developing countries approach the World Bank or the International Monetary Fund, they dictate very adverse terms and conditions to the countries and promote the Open Economy rigidly. His detailed discussion on this to make us to think about the existing status of the developing economy. I have referred this book for the fact that the World Economy is governed by developed countries and hence the developing countries have to beg to them. In this scenario, at least to fight against these financial institutions something should be done. But exactly what was not clear. But the solution comes forward in the form of BRICS Bank. It will start working after two years and the developing countries will enjoy their own financial institution. The world faced recession in 2008. All the BRICS Members except China experienced evil effects of this recession. The world started discussing like now the BRICS has no status due to recession. But China and India having most potential markets for investments and the BRICS group is having the ability to come out from the recession, were proved.

In this adverse situation, the BRICS group survived and after the discussion of two years made the authorized announcement of the BRICS Bank. Hence, this movement got importance in the world economy.

BRICS Bank will neither be the substitute for the World Bank or the International Monetary Fund nor to control the world finances from immediate effect. But if it moves towards the status of major financial institute for the developing countries, then efforts for the economic stability for the developing countries can be made. The major problem of the developing countries is of Infrastructural Development. For that the BRICS Bank will provide the assistance with priority.

Features of the BRICS Bank –

1. Brazil, Russia, India, China and South Africa are the member countries with equal share in capital.
2. The Bank is named as New Development Bank.
3. The Head Quarters will be established at Shanghai, China.
4. At the beginning the member countries will contribute \$ 10 Billion each and the gradually will increase to \$ 100 Billion.
5. The Bank will start its working in 2016 with the capital of \$ 100 Billion.
6. India will be heading the Bank for first Six years. Then Brazil, Russia, South Africa and China will be heading the Bank for Five years each in the sequence.
7. The Bank will provide the financial assistance to the Developing Countries for the Infrastructural Development only.

8. In the expansion programme of the Bank other developing countries can get the membership. But the joint share of the original BRICS members will not fall down less than 55%

Emergency Reserve Fund -

1. The Fund is of \$ 100 Billion and major share is of China (\$ 41 Billion) India, Russia and Brazil are having the share of \$ 18 Billion each. South Africa is having the share of \$ 5 Billion only.

2. If the BRICS countries face the Short Term Liquidity problem, then it will be sorted out with the Reserve Fund. It helps the member economies for maintaining economic stability, even though they have deficit in BOT.

3. It will work as the stabilizer to minimize the evil effects of American Financial Package System on Interest Rate and its impact on value of the domestic currency in the International Market.

4. The Fund is kept with the Foreign Exchange Reserve of each member country only.

5. As per the requirement of the member country, they can use the Fund. China can use half of its share (i.e. \$ 20.5 Billion), India, Brazil and Russia can use the Fund equal to their share (i.e. \$ 18 Billion) But South Africa can use twice of its funds (i.e. \$ 10 Billion)

6. In the expansion programme of the Bank, other developing countries also can get the membership and share in the Reserve Fund. There are certain barriers in the development of the BRICS Bank. One of the major barriers is Indo - China Relationship. Both the countries were interested in having the Head Quarters of the Bank with them. For this reason the authorized announcement of the Bank delayed by two years. At last India agreed to establish the Head Quarters at Shanghai, China. As the share of all the members are equal, but the share of China in Reserve Fund is comparatively more and hence works dominantly. The requirement of Credit and Finances for China is comparatively more. It seems that China will take maximum advantage of the Bank. The dispute between India and China about the borders is not yet dissolved. And China is incurring major expenses on the infrastructural development at and nearby the border. China may use the funds from the BRICS Bank for its political ambition with India. If China refuses the financial assistance for the development of Arunachal Pradesh, where China claimed it as the part of China, then the relationship between both the countries may take a worse turn. Hence the progress of the BRICS Bank totally depends on the relationship between these two member countries.

Advantages to India and other Developing Countries -

1. The most important barrier in the progress of developing countries is of non-availability or poor infrastructural facilities. For that financial requirement is in some Million. BRICS Bank will provide these finances very easily.

2. Due to Reserve Funds, more Foreign Exchange will also be available. Because of the Current Account Deficit, value of Indian Rupee fall down. With the help of Reserve Fund it can be avoided.

3. Other developing countries also can join BRICS Bank. Due to which the dominance of developed countries on World Bank and International Monetary Fund will be released. And finances from these institutions will come in reach of the developing countries.

4. For getting more share for the emerging economies like India, I.M.F. may go for the reforms.

1.

2. America provides the financial package for its economical stability. As and when it withdraws the financial package, it indicates that the economy has achieved the expected financial stability. It increases the interest rate, which encourages the investors to withdraw their funds from other developing countries to invest it in the American economy. It again results in the drain of foreign investment from the developing economy. The same was experienced by India here before. This could be avoided with the Reserve Funds of BRICS Bank.

The Bank requires at least next ten years for working with its full strength. Whether the Bank will provide financial assistance to the member countries and the other developing countries at affordable interest rates to them or not is also the query the economists are also having. The World Bank and I.M.F. are having wide scope. They are having the ability to raise funds at economical rates from the open market. The same ability can BRICS Bank will have in near future? The developing countries are not having very strong financial status and cannot raise the required huge finances from internal market for the Infrastructural Development. Hence, to fulfill their financial requirement at affordable and economical rate can BRICS Bank provide the financial support? Because if the BRICS Bank will satisfies the financial requirements of the developing countries, then only the purpose behind its establishment can be achieved. Otherwise a big question mark on its working will be put. BRICS Bank has challenged the monopoly of Western Developed Countries control on world finances. But all the developing economies are expecting that the BRICS Bank will bear it successfully. All the best to the New Development Bank (BRICS Bank).

INDIA AND INFLATION

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In economics, inflation is a sustained increase in the general price level of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation reflects a reduction in the purchasing power per unit of money – a loss of real value in the medium of exchange and unit of account within the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general price index (normally the consumer price index) over time. The inflation rate in India was recorded at 7.96 percent in July of 2014. Inflation Rate in India averaged 9.49 Percent from 2012 until 2014, reaching an all-time high of 11.16 Percent in November of 2013 and a record low of 7.31 Percent in June of 2014. Inflation Rate in Monetarists believe the most significant factor influencing inflation or deflation is how fast the money supply grows or shrinks. They consider fiscal policy, or government spending and taxation, as ineffective in controlling inflation historically, the wholesale price index (WPI) has been the main measure of inflation in India. However, in 2013, the governor of The Reserve Bank of India Raghuram Rajan had announced that the consumer price index is a better measure of inflation. In India, the most important category in the consumer price index is Food, beverages and tobacco (49.7 percent of total weight). Fuel and light accounts for 9.5 percent; Housing for 9.8 percent; Transport and communication for 7.6 percent; Medical care for 5.7 percent; Clothing, bedding and footwear for 4.7 percent and education for 3.4 percent. These figures are dated Sunday, August 24, 2014. That is not a very high rate considering that many countries, both developed and developing, experienced very high inflation in their modern development history. In fact, more recently in the 1980s and 1990s the world inflation averaged around 17

per cent per annum. In the 2000s there was a sharp all round moderation in global inflation.

Indian annual inflation rate accelerated to 7.96 percent in July of 2014 from 7.31 percent in the previous month driven by higher food prices June. The WPI measures the price of a representative basket of wholesale goods. In India, this basket is composed of three groups: Primary Articles (20.1% of total weight), Fuel and Power (14.9%) and Manufactured Products (65%). Food Articles from the Primary Articles Group account for 14.3% of the total weight.

Reasons for inflation

Demand Factors

It basically occurs in a situation when the aggregate demand in the economy has exceeded the aggregate supply. It could further be described as a situation where too much money chases just few goods. This has generally been seen in India in context with the agrarian society where due to droughts and floods or inadequate methods for the storage of grains leads to lesser or deteriorated output hence increasing the prices for the commodities as the demand remains the same.

Supply Factors

The supply side inflation is a key ingredient for the rising inflation in India. The agricultural scarcity or the damage in transit creates a scarcity causing high inflationary pressures. The energies issues regarding the cost of production often increases the value of the final output produced. These supply driven factors have basically have a [fiscal](#) tool for regulation and moderation. Further, the global level impacts of price rise often impacts [inflation](#) from the supply side of the economy.

Domestic Factors

There is a gap in India for both the output and the real money gap. The supply of money grows rapidly while the supply of goods takes due time which causes increased [inflation](#). Similarly [Hoarding](#) has been a problem of major concern in India where onions prices have shot high in the sky. The other reasons are the gold and silver [commodities](#) and their price hike.

External Factors

The exchange rate determination is an important component for the inflationary pressures that arises in the [India](#). The liberal economic perspective in [India](#) affects the domestic markets. As the prices in [United States Of America](#) rises it impacts [India](#) where the commodities are now imported at a higher price impacting the price rise. Hence, the nominal exchange rate and the import inflation are a measures that depict the competitiveness and challenges for the economy.

Costs of inflation

Inflation, though a nominal variable, imposes real costs on the economy. Let me elaborate.

First, inflation erodes the value of money. India is a moderate inflation country with the 62-year long-term average inflation rate being 6.7 per cent, notwithstanding occasional spikes in inflation. Yet during this period the overall price level has multiplied 45 times. This means that ` 100 now is worth only ` 2.2 at 1950-51 prices. Since price stability is a key objective of monetary policy, Reserve bank is obviously concerned with inflation. Second, high and persistent inflation imposes significant socio-economic costs. Given that the burden of inflation is disproportionately large on the poor, and considering that India has a large informal sector, high inflation by itself can lead to distributional inequality. Therefore, for a welfare-oriented public policy, low inflation becomes a critical element for ensuring a balanced progress.

Third, high inflation distorts economic incentives by diverting resources away from productive investment to speculative activities. Fixed-income earners and pensioners see a decline in their disposable income and standard of living. Inflation reduces households' savings. Consequent fall in

overall investment in the economy reduces its potential growth. With a high inflation of over two years we are already seeing a fall in household savings in financial assets, At the same time households' preference for gold has increased. This is putting additional pressure on our balance of payments.

Fourth, economic agents base their consumption and investment decisions on their current and expected future income as well as their expectations on future inflation rates. Persistent high inflation alters inflationary expectations and apprehension arising from price uncertainty does lead to cut in spending by individuals and slowdown in investment by corporates which hurts economic growth in the long-run.

Finally, as inflation rises beyond a threshold, it has an adverse impact on overall growth. The Reserve Bank's technical assessment suggests that the threshold level of inflation for India is in the range of 4 to 6 per cent. If inflation persists beyond this level, it could lower economic growth over the medium-term.

Finally, as inflation rises beyond a threshold, it has an adverse impact on overall growth. The Reserve Bank's technical assessment suggests that the threshold level of inflation for India is in the range of 4 to 6 per cent. If inflation persists beyond this level, it could lower economic growth over the medium-term.

Conclusion

While trying to unravel the inflation puzzle and provide some explanation why inflation remained entrenched despite output gap being negative, we know that sustained level of high inflation is bad for the economy as it imposes real costs which are borne disproportionately by the different segments of the economy. In order to bring inflation down on an enduring basis and anchor inflation expectations there is a need for policy action on several fronts.

First, it is important to aim for nutritional security not only to harness the demographic dividend stemming from our sizeable young population but also to contain food prices. This will require addressing the supply-demand imbalance in the agricultural sector and modernizing the supply chain.

Second, concerted efforts are required to secure energy security for the country. The bulk of our fossil fuel requirement is met by imports. A necessary step in this direction is market related pricing of petroleum products to economize consumption and reduce the subsidy burden. This should be supplemented by step up in electricity generation so as to minimize fall back option of diesel generation of power.

Third, in a supply constrained economy, potential output is not a reliable gauge for inflation threshold as firms operate below capacity and yet retain the pricing power. Hence, reliability of power supply and availability of necessary industrial raw materials are important for industrial capacity utilization and improvement in productivity. Besides moderating inflation, this will also reduce reliance on imports of products for which domestic capacity exists.

Fourth, it is imperative to maintain exchange rate stability to cushion transmission of international price pressures in commodities, particularly crude oil. This will require management of the current account in our balance of payments with the rest of the world at sustainable levels.

Fifth, fiscal consolidation is important for maintaining both domestic and external balance so that we avoid the risks of twin deficits. As our own

high growth experience of 2003-08 suggests, lower fiscal deficit not only encourages private investment but also helps in maintaining price stability. Finally, while persevering with the steps to increase the depth of the financial market and addressing credit constraints, monetary policy needs to be calibrated to the evolving growth-inflation dynamics so that we move towards our potential growth in a non-inflationary manner. For a country at our stage of development with a vast labour supply, potential growth is not a constant. Only in an environment of price stability, a step up in investment accompanied by productivity improvements could bolster potential growth. Even when the supply side factors dominate the inflationary pressures, given the risks of spillover into a wider inflationary process, there is need for policy response. While monetary policy action addresses the risk of unhinging of inflation expectations, attending to the structural supply constraints becomes important to ensure that these do not become a binding constraint in the long-run, making the task of inflation management more difficult. By ensuring a low and stable inflation, the Reserve Bank could best contribute to social welfare.

BIT COIN – The Future of Virtual Currency

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Objective:

This research article analyses the origin and creation of Bit coin and its current status, around the world, in order to predict its viability/solvability, in future. The article uses PESTLE Method of Analysis, to conclude the findings. Unlike hard currencies, it is neither backed up by a country's economic activity nor issued by a national authority. Market watchers and regulators are at odds over how the bit coin should be handled, but as the currency gains prominence, voices warning against its use are getting louder. Bitcoin's official website said "all that is required for a form of money to hold value is trust and adoption".

Introduction:

Bit coin was introduced in 2008 as a peer-to-peer, electronic cash system by an anonymous group of individuals who used the pseudonym 'Satoshi Nakamoto'. Satoshi can be loosely translated as wisdom or reason, so it's another clue that the name is not real. In essence, Bit coin is a decentralized currency that is created, used and controlled by its users. The Bit coin network is designed to have a finite supply of 21 million Bit coins. The system automatically regulates the generation of Bit coins to ensure a steady growth of the currency with minimal inflation. Cryptocurrency is a form of digital currency used over the internet for trading or payment for services. The currency is finite in number to keep inflation rates low and uses peer-to-peer transfer technology. It is encrypted using cryptography for security and hence cannot be easily counterfeited. It can be transferred from a computer or a smart phone to another anonymously and cannot be tracked. The value of such a currency is usually determined by supply and demand similar to precious metals like gold.

At present, India does not have a centralized Bit coin exchange, but users in India can buy and sell coins through websites such as localbitcoins.com. The community here is believed to be some 50,000-strong, with as many as 23,000 India-based users having an online Bit coin wallet where the digital currency is stored. Tokyo-based Mt. Gox (www.mtgox.com) is the largest Bit coin exchange there is. It's also one of the most reliable places to buy Bit coins. You can create an account and start buying Bit coins using your own currency in a few minutes. The website always displays an exchange rate and can show you a chart with historical exchange rates. At the time of writing, 1BTC is equivalent to USD 880/ or Rs 54,000/ approximately.

Methodology:

The res article will discuss and deliberate on various, parameters, to analyze and evaluate bitcoins. The analysis and evaluation, will help to conclude. The method of PESTLE analysis is used to project the future of bit coins.

Political factors:

Most countries regulate currencies thru their Central banks, who are responsible for monetary system. Most Governments around the world have not openly accepted or rejected bitcoin, as most of them do not yet understand the bit coin ecosystem. Since they do not understand bitcoins, they do not know how to control or regulate the bitcoins. However this challenge, which can be overcome in near future, as more data and information is made available. One of the fears the Governments have is, about future of bitcoins. This is mainly because, nobody knows, whom to blame, if bit coin turns out to be another Ponzi scheme and if gullible retail investors around the world lose large amounts of money and then blame the governments, for not regulating. The Politicians also are worried about Bit coins being used for Money laundering or stashing illegal money in the cyber world, to avoid taxes and/or to finance terrorism/militancy/ethnic wars etc.

Economical factors:

Most Central bankers around the world print currency and thus use the currency to manage all macro-economic parameters. The Bit coin is created thru a process of mining. The maximum amount of BTC has already been capped at 21 Millions, after which the production will be suspended. This augurs well to ensure that BTC will have value, which will entirely be decided by demand and supply, as in case of any regulated currency.

Why do bit coins have value?

Bit coins have value because they are useful as a form of money. Bit coin has the characteristics of money (durability, portability, fungibility, scarcity, divisibility, and recognizability) based on the properties of mathematics rather than relying on physical properties (like gold and silver) or trust in central authorities (like fiat currencies). In short, Bit coin is backed by mathematics. With these attributes, all that is required for a form of money to hold value is trust and adoption. In the case of Bit coin, this can be measured by its growing base of users, merchants, and startups. As with all currency, bit coin's value comes only and directly from people willing to accept them as payment.

What determines bit coin's price?

The price of a bit coin is determined by supply and demand. When demand for bit coins increases, the price increases, and when demand falls, the price falls. There are only a limited number of bit coins in circulation and new bit coins are created at a predictable and decreasing rate, which means that demand must follow this level of inflation to keep the price stable. Because Bit coin is still a relatively small market compared to what it could be, it doesn't take significant amounts of money to move the market price up or down, and thus the price of a bit coin is still very volatile.

However bit coins are created or acquired, as follows:

- As payment for goods or services.
- Purchase bit coins at a [Bit coin exchange](#).
- Exchange bit coins with [someone near you](#).
- Earn bit coins through competitive [mining](#).

Social factors:

Many individuals, who are risk takers and have a very high degree of risk tolerance, have already started using bitcoins. The bit coins have helped them in many innovative ways, which were not earlier possible, with traditional forms of currency or money, as we know it. After all, the digital currency can be transferred directly between smart phones or any other type of computers. However, this also raises concerns that it would be used for criminal or terrorist activities.

Why do people trust Bit coin?

Much of the trust in Bit coin comes from the fact that it requires no trust at all. Bit coin is fully open-source and decentralized. This means that anyone has access to the entire source code at any time. Any developer in the world can therefore verify exactly how Bit coin works. All transactions and bit coins issued into existence can be transparently consulted in real-time by anyone. All payments can be made without reliance on a third party and the whole system is protected by heavily peer-reviewed cryptographic algorithms like those used for online banking. No organization or individual can control Bit coin, and the network remains secure even if not all of its users can be trusted.

Is Bit coin a bubble?

A fast rise in price does not constitute a bubble. An artificial over-valuation that will lead to a sudden downward correction constitutes a bubble. Reasons for changes in sentiment may include a loss of confidence in Bit coin, a large difference between value and price not based on the fundamentals of the Bit coin economy, increased press coverage stimulating speculative demand, fear of uncertainty, and old-fashioned irrational exuberance and greed.

Is Bit coin a Ponzi scheme?

A Ponzi scheme is a fraudulent investment operation that pays returns to its investors from their own money, or the money paid by subsequent investors, instead of from profit earned by the individuals running the business. Ponzi schemes are designed to collapse at the expense of the last investors when there is not enough new participants.

Let us understand the unique advantages of Bit coin:

- Payment freedom - It is possible to send and receive any amount of money instantly anywhere in the world at any time. No bank holidays. No borders. No imposed limits. Bit coin allows its users to be in full control of their money.

- Very low fees - Bit coin payments are currently processed with either no fees or extremely small fees. Users may include fees with transactions to receive priority processing, which results in faster confirmation of transactions by the network. Additionally, merchant processors exist to assist merchants in processing transactions, converting bit coins to fiat currency and depositing funds directly into merchants' bank accounts daily. As these services are based on Bit coin, they can be offered for much lower fees than with PayPal or credit card networks.

- Fewer risks for merchants - Bit coin transactions are secure, irreversible, and do not contain customers' sensitive or personal information. This protects merchants from losses caused by fraud or fraudulent charge backs. Merchants can easily expand to new markets where either credit cards are not available or fraud rates are unacceptably high.

· Security and control - Bit coin users are in full control of their transactions; it is impossible for merchants to force unwanted or unnoticed charges as can happen with other payment methods. Bit coin payments can be made without personal information tied to the transaction. This offers strong protection against identity theft. Bit coin users can also protect their money with backup and encryption.

· Transparent and neutral - All information concerning the Bit coin money supply itself is readily available on the block chain for anybody to verify and use in real-time. No individual or organization can control or manipulate the Bit coin protocol because it is cryptographically secure. This allows the core of Bit coin to be trusted for being completely neutral, transparent and predictable.

What are the disadvantages of Bit coin?

· Degree of acceptance - Many people are still unaware of Bit coin. Every day, more businesses accept bit coins because they want the advantages of doing so, but the list remains small and still needs to grow in order to benefit from network effects.

· Volatility - The total value of bit coins in circulation and the number of businesses using Bit coin are still very small compared to what they could be. Therefore, relatively small events, trades, or business activities can significantly affect the price. In theory, this volatility will decrease as Bit coin markets and the technology matures.

· Ongoing development - Bit coin software is still in beta with many incomplete features in active development. New tools, features, and services are being developed to make Bit coin more secure and accessible to the masses. Some of these are still not ready for everyone. Most Bit coin businesses are new and still offer no insurance. In general, Bit coin is still in the process of maturing.

Security factors:

What happens when bit coins are lost?

· When a user loses his wallet, it has the effect of removing money out of circulation. Lost bit coins still remain in the block chain just like any other bit coins. However, lost bit coins remain dormant forever because there is no way for anybody to find the private key(s) that would allow them to be spent again. Because of the law of supply and demand, when fewer bit coins are available, the ones that are left will be in higher demand and increase in value to

compensate.

Is Bit coin secure?

· The Bit coin technology - the protocol and the cryptography - has a strong security track record, and the Bit coin network is probably the biggest distributed computing project in the world. Bit coin's most common vulnerability is in user error. Bit coin wallet files that store the necessary private keys can be accidentally deleted, lost or stolen. This is pretty similar to physical cash stored in a digital form. Fortunately, users can employ sound [security practices](#) to protect their money or use service providers that offer good levels of security and insurance against theft or loss.

Can the bit coin P2P Network, be hacked?

· The rules of the protocol and the cryptography used for Bit coin are still working years after its inception, which is a good indication that the concept is well designed. However, [security flaws](#) have been found and fixed over time in various software implementations. Like any other form of software, the security of Bit coin software depends on the speed with which problems are found and fixed. The more such issues are discovered, the more Bit coin is gaining maturity. However, when more and more people start using bitcoins, the perception about bit coins will change and this will lead to its wider acceptability.

Technical factors:

Bit coins started as a secure and speedier P2P payment network and thus evolved as an alternate to existing payments systems, such as PayPal, credit cards and many other payment mechanisms. The bit coins are mined by Geeks, who are paid small fees, as remuneration, for their contribution, to keep the bit coins payment network alive and also towards transaction charges, to enable the payment mechanism between the buyer and seller.

Mining is the process of adding transaction records to Bit coin's public ledger of past transactions. This ledger of past transactions is called the [block chain](#) as it is a chain of [blocks](#). The block chain serves to [confirm](#) transactions to the rest of the network as having taken place. Bit coin nodes use the block chain to distinguish legitimate Bit coin transactions from attempts to re-spend coins that have already been spent elsewhere.

Mining is intentionally designed to be resource-intensive and difficult so that the number of blocks found each day by miners remains steady. Individual [blocks](#) must contain a [proof of work](#) to be considered valid. This proof of work is verified by other Bit coin nodes each time they receive a block. Bit coin uses the [hashcash](#) proof-of-work function.

Bit coin mining is so called because it resembles the mining of other commodities: it requires exertion and it slowly makes new currency available at a rate that resembles the rate at which commodities like gold are mined from the ground.

Reward

When a block is discovered, the discoverer may award themselves a certain number of bit coins, which is agreed-upon by everyone in the network. Currently this bounty is 25 bit coins; this value will halve every 210,000 blocks. Additionally, the miner is awarded the fees paid by users sending transactions. The fee is an incentive for the miner to include the transaction in their block. In the future, as the number of new bit coins miners are allowed to create in each block dwindles, the fees will make up a much more important percentage of mining income.

Legal factors:

Is Bit coin legal?

Bit coin has not been made illegal by legislation in any jurisdiction. However, some jurisdictions (such as Argentina) severely restrict or ban all foreign currency. Other jurisdictions (such as Thailand) may limit the licensing of certain entities such as Bit coin exchanges. Regulators from various jurisdictions are taking steps to provide individuals and businesses with rules on how to integrate this new technology with the formal, regulated financial system.

Is Bit coin useful for illegal activities?

Bit coin is money, and money has always been used both for legal and illegal purposes. Cash, credit cards and current banking systems widely surpass Bit coin in terms of their use to finance crime. Bit coin can bring significant innovation in payment systems and the benefits of such innovation are often considered to be far beyond their potential drawbacks.

Can Bit coin be regulated?

It is possible to regulate the use of Bit coin in a

similar way to any other instrument. Just like the dollar, Bit coin can be used for a wide variety of purposes, some of which can be considered legitimate or not as per each jurisdiction's laws. In this regard, Bit coin is no different than any other tool or resource and can be subjected to different regulations in each country. Bit coin use could also be made difficult by restrictive regulations, in which case it is hard to determine what percentage of users would keep using the technology. A government that chooses to ban Bit coin would prevent domestic businesses and markets from developing, shifting innovation to other countries. The challenge for regulators, as always, is to develop efficient solutions while not impairing the growth of new emerging markets and businesses.

Environmental issues with Mining of bit coins:

The process of Mining is very complex and requires/consumes huge amount of Power. This is essential to ensure the security of the P2P Payment system, so that hackers will not be able to steal the valuable customer data or past transaction details. However the power consumption is comparable with traditional payment systems, using Pay pal or Interbank networks, deployed for the current transactions. However, unlike all other existing metal coins or paper currencies, Bit coin, are virtual and hence it will not cause any harm to environment, once it is created.

Isn't Bit coin mining a waste of energy?

Spending energy to secure and operate a payment system is hardly a waste. Like any other payment service, the use of Bit coin entails processing costs. Services necessary for the operation of currently widespread monetary systems, such as banks, credit cards, and armored vehicles, also use a lot of energy. Although unlike Bit coin, their total energy consumption is not transparent and cannot be as easily measured.

Current status of Bit coins around the world:

France's central bank has slapped it down as "highly speculative" and The European Union's banking watchdog also issued a warning to the digital currency's users, telling them: "You should be fully aware and understand their specific characteristics". Further, the convertibility of bit coin is not ensured and an investor could be unable to regain his investment. The central bank noted that if a currency is to be used as a mode of payment, it should meet rules against money laundering, and the it's security platform should be monitored by the Bank of France.

Although Federal Reserve chief Ben Bernanke said such virtual currencies "hold long-term promise". "In the case of Bit coin, this can be measured by its growing base of users, merchants, and startups. As with all currency, bit coin's value comes only and directly from people willing to accept them as payment," it said. Germany decided to legalize it as a currency, so as to be able to tax it, while the Bank of America's Merrill Lynch unit touted it as a significant tool for e-commerce.

Individual investors got interested, hooked by examples such as that of a Norwegian young man, who purchased \$24 worth of bit coins four years ago only to realize that they are now worth the equivalent of \$690,000. China became the biggest market for the currency as investors are attracted to it over the soaring value. But the Chinese central bank has moved to clamp down on it, issuing a stark warning and imposing restrictions on how they are traded in the country.

"Bit coin is a certain virtual commodity, does not possess the same legal status as currency and cannot and should not be circulated and used in the market as such," the People's Bank of China (central bank) said in a statement issued jointly with other financial regulators. Chinese banks and other financial organizations are banned from providing bit coin-related services and products, it said. It called for enhanced control of online trading platforms for bit coins to defend against the possibility of money-laundering, and pointed out investment risks faced by the public. Nevertheless, the head of BTCChina, the country's biggest Bit coin trading platform, said the e-money offers a new investment option for the Chinese -- a nation of savers.

Status of Bit coin in India:

RBI, India's central bank is "watching" Bit coin, the virtual currency that is gaining popularity among Net users, but has no intention of regulating it right now. The [Reserve Bank of India](#), which has its hands full trying to arrest the slump in the value of the [rupee](#), will first seek to understand Bit coins, before seeking to bring it under its purview. "As of now we are watching and learning about the developments in Bit coins but are not regulating it," an RBI spokeswoman wrote in an e-mailed response. In a note published in June, the central bank acknowledged that virtual currencies "pose challenges in the form of regulatory, legal and operational risks." Last week a federal judge in the United States ruled that Bit coins are real money and can be regulated under that country's law while ruling on a case related to ponzi scheme. While the RBI is taking a wait-and-watch attitude, India-based Bit coin users and entrepreneurs, whose number has grown steadily over the past two years, are concerned over the absence of guidelines that govern the use of the virtual currency. They are, however, hopeful that Indian regulator would recognize it as a legitimate currency. "Bit coin is emerging in India and it would benefit the users if RBI could regulate it or take ownership of it". At present, India does not have a centralized Bit coin exchange, but users in India can buy and sell coins through websites such as localbitcoins.com. The community here is believed to be some 50,000-strong, with as many as 23,000 India-based users having an online Bit coin wallet where the digital currency is stored.

Conclusion:

After carefully analyzing the PESTLE factors, it is very difficult to make a judgment, but a virtual currency, which was launched in 2009. The historical data is too small, to make a meaningful inference or to draw a logical conclusion. Let us think of initial days of Credit card Industry in the world. People had lot of interest and apprehension, in the beginning. There were too many cases of Credit cards being stolen by thieves for their shopping spree. There were many merchants, who lost money, as the Banks kept on refusing transactions, on account of charge back or such issues. But in the end, the Credit cards not only survived but flourished beyond anybody's wildest dreams.

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Considering Bit coins, as P2P payment system, will survive and grow in near future. This is more possible, as the new Geek generation, who has better understanding of technology and convenience, will adapt rapidly. Bitcoins also will soon become a status symbol and a fashion statement, to brag about. Once the acceptability of Bitcoins, reaches a critical mass, the Governments and Central Bankers will jump in

to the fray and will create regulatory mechanism. Bit coin is "a global asset class" equal to common investment choices including [gold](#), [shares](#) and real estate. Bitcoin will also be considered as an alternate investment option, for HNIs, who wish to diversify, their asset portfolio and who have high risk tolerance.

Recent Trends in Agriculture Sector

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INTRODUCTION

Sugar industry is one of the most important agro-based industries in India and is

Highly responsible for creating significant impact on rural economy in particular and Country's economy in general. Sugar industry ranks second amongst major agro-based industries in India. As per the Government of India's recent liberalized policy announced on 12th December, 1986 for licensing of additional capacity for sugar industries during 7th five-year plan, there will be only one sugar mill in a circular area of 40 sqkm. Also the new sugar mill is allowed with an installation capacity of 2500 TCD (Tonne Sugar Cane crushed per day) as against the earlier capacity norms of 1250 TCD. Similarly, the existing sugar mills with sugar cane capacity of about 3500 TCD can crush sugar cane to the tune of 5000 TCD with a condition imposed that additional requirement of sugar can be acquired through increased productivity and not by expansion of area for growing sugar cane. The major sugarcane producing states in the tropical areas of India includes Maharashtra, Andhra Pradesh (AP), Tamil Nadu (TN), and Gujarat. In last five years sugarcane yield in these states are almost in the range of 70 to 100 thousand tonnes per ha. Except Maharashtra in the year 2004 and 2005 because there was fungal attack on sugarcane crop Called "White wholly aphid" in 2004 and flood in 2005. Otherwise the sugarcane yields are substantially higher in the tropical states as compared to the sub-tropical regions. Subtropical regions include U.P, Bihar, Punjab and Haryana where the yield is around 40 to 70 thousand tons per ha. This region faces very extreme of weather.

The sugar industry is the second largest agro-based industry next to textiles in India. In India, sugarcane is the key raw material for the production of sugar. The sugar is extracted from two different raw materials i.e. sugarcane and beet; both produce identical refined sugar. Sugarcane is grown in semi-tropical climate and accounts for around two-third of world sugar production. Beet is grown in temperate climate and accounts for the balance one-third of world production. Most of the sugarcane produced in India is a 10-12 month crop planted during January to March. Sugarcane is an important commercial crop in the country occupying about 4.36 million hectares with an annual sugarcane production of 281.6 million ton (2002-03). Sugarcane occupies about 3.0% of the total cultivated area

and it is one of the most important cash crops, contributing about 75% of the gross value of agricultural production in the country. About 50 million farmers depend on sugarcane cultivation for their livelihood and equal number of agricultural labourers earns their living by working in sugarcane farms. Sugarcane is the primary raw material for all major sweeteners produced in the country. It also supports two important cottage industries; viz. Gur (Jaggery) and khandsari industries, which together produce about 10 million ton of sweeteners (gur and khandsari sugar) consuming about 28-35% of the cane produced in the country.

The industry not only generates power for its own requirement but surplus power for export to the grid based on byproduct bagasse. It also produces ethanol, an ecology friendly and renewable energy for blending with petrol. The sugar industry in the country uses only sugarcane as input, hence sugar Companies have been established in large sugarcane growing states like Uttar Pradesh, Maharashtra, Karnataka, Gujarat, Tamil Nadu, and Andhra Pradesh. These six states contribute more than 85% of total sugar production in the country; Uttar Pradesh and Maharashtra together contribute more than 57% of total production. Indian sugar industry has grown horizontally with large number of small sized sugar plants set up throughout the country as opposed to the consolidation of capacity in the rest of the important sugar producing countries, where greater emphasis has been laid on larger capacity of sugar plants.

OBJECTIVE

- 1) Study of sugarcane growing area and methods of it.
- 2) Problems of the Sugar Industry of India.
- 3) To know the Strength of Sugar Industry of India.
- 4) To study the status of Sugar Industry in India.
- 5) To control the sugarcane prices.
- 6) Sugar as the basic need should be made available to common man at the most preferable rate.
- 7) To provide the farmer the possible rate for what they produce.

AIM

Over the past few years, the Indian sugar industry is giving sleepless nights to the common man by increasing the domestic prices to a great extent. The price rise has attained new heights due to supply scarcity. The consumption demand of sugar in India is around 23 m tones while the production is less than 16 m tones a year.

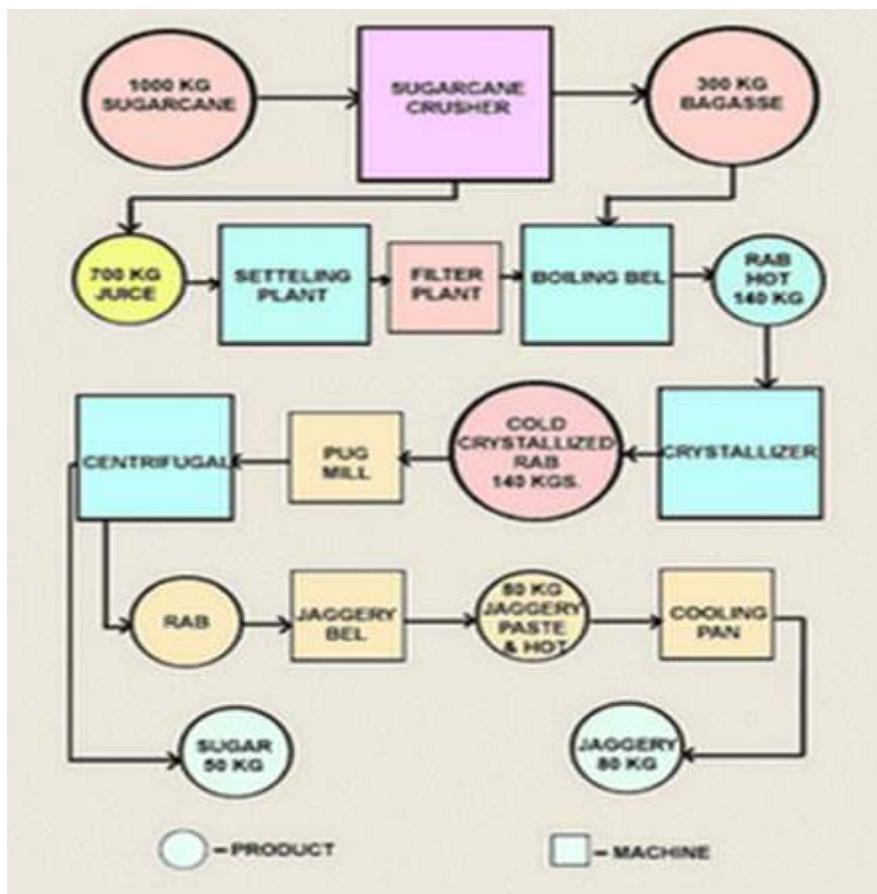
2010 Budget Sugar Industry Expectations are the decontrolling of the sugar industry by the government in terms of costs and tariff allocation, re- establishing sugar trading measures, abolition of release order device, improving productivity by introducing improved technology, revitalization of financially unwell units via disinvestments, tax exemption till another 5 years and promotion of ethanol. The sugar industry expects the administration to include the ethanol schemes under section 80-IA of the IT Act. The industry also expects tax relief as well expansion of the income tax advantages to the ethanol schemes. It also sees the present status of Sugar Industry in India.

SIGNIFICANCE

Sugar might have turned bitter for consumers across the country, but

sugar companies are raking in bumper profits for their promoters and [shareholders](#). With prices almost doubling in a year, 33 sugar companies listed on the [stockexchanges](#) have seen their profits zooming by 2,900 per cent to Rs 901 crore for the quarter ended December 2009 from Rs 30 crores in the same period of last year. If the profits of unlisted sugar companies — especially sugar co-operatives controlled by politicians in states like Maharashtra — are included, the profit figure could double, analysts say. The turnover of 33 sugar companies also surged by 74.60 per cent to Rs 6,443 crore during the quarter. "It was all expected...it was not a surprise at all. The price rise could be the prime factor for this bumper profitability this quarter (October-December 2009). The price went up to Rs 32 per kilo till the end of Oct-Dec quarter from Rs 15 per kilo at the same period of the previous quarter (Oct-Dec 2008). We have seen sugar prices maintaining an upward trend in the last 6-7 months. So I don't think there will be any negative impact on their bottom-line even if the government takes measures to bring down the prices," said Sageraj Bariya, an analyst from Angel Broking. The sugar industry is the second largest agro-based industry next to textiles in India. In India, sugarcane is the key raw material for the production of sugar.

PROCESS OF SUGAR PRODUCTION



STEPS INVOLVED IN PROCESS OF SUGAR PRODUCTION

Sugarcane is a perennial herb belonging to the grass family. Native to tropical and subtropical regions of the world, this tropical grass is 10-24-feet tall, bears long, pointed leaves, and has several stalks. The segmented stalks have a bud at each joint and as the plant matures, small flowers appear.

Ø PLANTING:

Sugarcane cuttings are planted in fields by workers or mechanical planters. In order for the cane to grow, the seeds must be planted in well-drained soil. Typical cane soil is made of a mixture of silt, sand, clay particles and organic matter. Canes are spaced at least 4-feet apart and lined in rows and covered with soil. Fertilizers are applied from the time of planting up until the beginning of the ripening period. Cane fields are also routinely weeded to provide for optimum growth of the cane. Depending on the region where the crop is planted, cane seasons last from 8-22 months.

Ø COLLECTING THE HARVEST:

Mature canes are gathered by a combination of manual and mechanical methods. Canes are cut at ground level, its leaves are removed and the top is trimmed off by cutting off the last mature joint. Cane is then placed into large piles and picked up, tied, and transported to a [sugar](#) factory.

Ø CLEANSING AND GRINDING:

Stalks are thoroughly washed and cut when reaching the sugar mill. After the cleaning process, a machine led by a series of rotating knives, shreds the cane into pieces. This is known as "grinding." During grinding, hot water is sprayed on to the sugarcane to dissolve any remaining hard sugar. The smaller pieces of cane are then spread out on a conveyer belt.

Ø JUICING:

The shredded pieces of sugarcane travel on the conveyer belt through a series of heavy-duty rollers, which extract [juice](#) from the pulp. The pulp that remains or "bagasse" is dried and

used as fuel. The raw juice moves on through the mill to be clarified.

Ø CLARIFYING:

Carbon dioxide and the [milk](#) of a lime are added to the liquid sugar mixture and it is heated to the boiling point, as the process of clarifying begins. As the carbon dioxide travels through the liquid it forms calcium carbonate, which attracts non-sugar debris (fats, gums, and wax) from the juice, and pulls them away from the sugar juice. The juice is then pushed through a series of filters to remove any remaining impurities.

Ø EVAPORATION:

The clear juice which results from the clarifying process is put under a vacuum, where the juice boils at a low temperature and begins to evaporate. It is heated until it forms into a thick, brown syrup.

Ø CRYSTALLIZATION:

By evaporating what little water is left in the sugar syrup, crystallization takes place. Inside a sterilized vacuum pan, pulverized sugar is fed into the pan as the liquid evaporates, causing the formation of crystals. The remaining mixture is a thick mass of large crystals, which is sent to a centrifuge to spin and dry the crystals. The dried product is raw sugar, still inedible.

Ø REFINERY:

Raw sugar is transported to a Cane Sugar Refinery for the removal molasses, minerals and other non-sugars, which still contaminate the sugar. This is known as the purification process. Raw sugar is mixed with a solution of sugar and water to loosen the molasses from the outside of the raw sugar crystals, producing a thick matter known as "magma." Large machines then spin the magma, which separate the molasses from the crystals. Crystals are promptly washed, dissolved and filtered to remove impurities. The golden syrup which is produced is then sent through filters to remove the color and water. What's left is a concentrated, clear syrup, which is again fed into a vacuum pan.

Ø SEPARATION AND PACKAGING:

Once the final evaporation and drying process is done, screens separate the different sized sugar crystals. Large and small crystals are packaged and shipped, labeled as white, refined, sugar.

SUGARFACTS

REFINED white sugar is 99.9-percent sucrose.

WHITE sugar is pure sucrose, containing no preservatives or additives.

METHODOLOGY

The report is based on the findings of mail survey and field visits and the information collected through desk research. Mail survey and field visits were conducted to elicit the views of different categories of respondents such as sugar mills, equipment/know-how suppliers, R & D organizations, experts and manufacturers' associations.

The secondary method for survey was visiting various websites through Internet, News Paper and Television.

PRESENT SCENARIO OF SUGAR INDUSTRY IN INDIA

India is the largest producer of sugar in the world. In terms of sugarcane production, India and Brazil are almost equally placed. In Brazil, out of the total cane available for crushing, 45% goes for sugar production and 55% for the production of ethanol directly from sugarcane juice. This gives the sugar industry in Brazil an additional flexibility to adjust its sugar production keeping in view the sugar price in the international market as nearly 40% of the sugar output is exported. The annual projected growth rate in the area under sugarcane at 1.5% per annum has doubled during the last five years. This is because it is considered to be an assured cash crop with good returns to the farmers vis-a-vis other competing crops. India is currently passing through a glut situation with closing stocks at the end of the year of over 100 lakh tons since 1999-2000. Correspondingly, molasses production has also increased. It is therefore evident that along with sugarcane production, phenomenal growth is also taking place in the production of molasses, the basic raw material for the production of ethanol from sugarcane. Of course, there are also other agro routes available to produce ethanol. According to MPNG, 5% ethanol blends on an all-India basis would require 500 million liters. The current availability of molasses and alcohol would be adequate to meet this requirement after fully meeting the requirement of the chemical industry and potable sectors.

Main Players Balrampur chini mills Ltd, Bajaj Hindustan Ltd Andhra sugars Ltd, Thiru Arooran Sugars Ltd and Dhampur Sugar Ltd.

Over the past few years, the Indian sugar industry is giving sleepless nights to the common man by increasing the domestic prices to a great extent. The price rise has attained new heights due to supply scarcity. The consumption demand of sugar in India is around 23 million tonnes while the production is less than 16 million tonnes a year. The 2012 Budget shows Sugar Industry Expectations are the decontrolling of the sugar industry by the government in terms of costs and tariff allocation, re-establishing sugar trading measures, abolition of release order device, improving productivity by introducing improved technology, revitalization of financially unwell units via disinvestments, tax exemption till another 5 years and promotion of ethanol. The sugar industry expects the administration to include the ethanol schemes under section 80-IA of the IT Act. The industry also

expects tax relief as well expansion of the income tax advantages to the ethanol schemes. Indian sugar industry has entered the strongest up cycle (lowest stock to use ratio) in the history of 50 years after witnessing supply glut in previous two sugar seasons in a row (SS 2006-08). Sugar production reached an all time low of 14.7 million tonnes during SS 2008-09 due to sharp fall in the sugarcane acreage. However, sugar consumption continued to grow at a steady pace. It grew at CAGR of 4% during SS 07-09.

In the Indian Sugar Mill Association, this matter was recently examined and it was concluded that instead of taking up the scheme on a state-wise basis, it would be appropriate to take it up in metropolitan and other cities where environmental pollution is a major concern. The blending should be taken up to 10% and introduced selectively to make a better impact on the environment, as no changes in the engine or carburetor are required, and other countries are already carrying this out successfully.

About half the sugar mills in Maharashtra have shut operations and remaining may end the season by March-end. In the current sugar year that started in October, of 183 registered sugar mills, only 145 mills started crushing of which 70 mills have stopped operations. Of the 132 mills in Uttar Pradesh, the second biggest producer, 68 have already suspended operations. Crushing was delayed in Uttar Pradesh after millers went to court against a hike in minimum cane purchase price, trimming the overall crushing period for many mills. In Karnataka, almost 80 per cent of mills have stopped crushing. Together, the three states - Maharashtra, Uttar Pradesh and Karnataka - produce more than 73 per cent of the estimated domestic output 26.3 million tonnes in 2007-08.

Based on the current data, sugar production is estimated at 15 million-16 million tonnes, while the consumption is estimated at 22.5 million-23 million tonnes. Sugar prices in Delhi have jumped from Rs 1,859 a quintal to Rs 2,260 a quintal in the last two months. It touched a high of Rs 2,315 a quintal before the Government stepped in and imposed stock limits to rein in the runaway prices. "The recent announcement of the Government regarding stock limit etc., we believe is temporary and does not address the fundamental issue of availability. In such a scenario, we believe this will have a short term sentimental impact on the prices," said a sugar company official.

SWOTANALYSIS

Application of SWOT technique as a management tool for strategic decision making is of recent use in agriculture. The technique has been used in Indian Council of Agricultural Research for preparing the perspective plans of different crops. The Perspective Plans 'Vision-2020' of Sugarcane Breeding Institute, Coimbatore and Indian Institute of Sugarcane Research, Lucknow in sugarcane have been prepared by utilizing these SWOT parameters. A concerted effort has been made through this paper in analyzing the sugarcane crop in perspective of its strengths, weaknesses, opportunities and threats in today's scenario of free world trade, higher cost of sugar production, tough global competition, gradual decline in sugar prices at international level and piling sugar stocks. The sound infrastructure, vast genetic diversity, national gene repository in the form of NHG, sugarcane as multi-product crop, widely adaptable nature and the sugar industry as the second largest agro-processing industry have been viewed as possible strengths of sugarcane. The complex genetic make up, lack of quarantine procedures and well define seed cane standards, monoculture cultivation, low seed to producer ratio and low sugar recovery are judged as prevailing weaknesses in the crop. The crop provides opportunities in the form of product diversification, crop diversification, better employment avenues, ever increasing demand for internal sugar consumption and greater avenues for sugar export for the country. Sugarcane diseases and pests as biotic factors, drought, water logging, salinity / alkalinity etc. as a biotic factors, competition from short duration annuals and alternate sweeteners, anti sugar lobby and higher production cost of sugarcane and sugar have been designated as possible threats related to cane cultivation and sugar production. It is concluded that for dealing issues related to sugar cane requires strategic action plans. Identify core competencies, critical success factors and challenges for the, crop/industry/organizations. Conduct internal appraisal and identifies blinkers. Utilize these strengths in making strategic action plans, converting weaknesses into their strengths or how the Impact of these weaknesses can be minimized. Take benefits from opportunities and minimize the consequences of possible threats in making best use of SWOT technique.

STRENGTH

Indian sugar industry is the second largest producer of sugar in the world after Brazil.

The sector has a potential to make the country to be self reliant in this highly sensitive essential commodity of

mass consumption.

Provides direct employment including ancillary activities to near about 0.5 million workers.

It also supports the down stream industries by providing the raw material.

This sector has been the focal point of socioeconomic development of the rural India.

Strong government policies as it come under essential commodity of mass consumption.

WEAKNESS

Most of the sugar factories are more than 30 years old and still using the old technology. Low installed production capacity leads to the decrease in production and losses.

Lack of professionalism

OPPORTUNITY

Ø High value of by-products for downstream industries.

Ø Huge potential to increase the productivity of cane and sugar recovery rate.

Ø Technology up gradation, new advanced technology available for the byproduct utilization.

THREATS

Ø Sugar sector is vulnerable to political interest.

Ø Ground water availability for irrigation.

Ø Quality of soil deteriorates due to overuse of fertilizer and pesticides to increase sugarcane yield.

Ø Unhealthy competition between members of the society.

MAJOR DRAWBACK & LIMITATION

Sugar is the second largest agro-based industry in India. The industry provides employment to about two million skilled and semi-skilled workers besides those who are employed in ancillary activities, mostly from rural areas. Though the industry contributes a lot to the socioeconomic development of the nation, it is plagued with a number of problems such as cyclical fluctuations, high support prices payable to farmers, lack of adequate working capital, partial decontrol and the uncertain export outlook. Despite the problems, the industry has good growth potential due to steady increase in sugar consumption, retail boom and diversification into areas such as power generation and production of ethanol. In addition to this, strong possibilities exist for counter trade, if the Government designs and develops sugar industry-oriented policies. With this background, an attempt has been made to examine the problems and prospects of sugar industry in India.

Sugar Industry is the business which generally operates for 6-7 months, while the overhead expenditure are for 12 months.

A major by-product Carbon dioxide (CO₂) can be recovered from sugar industry which can be used in many ways like making polymers and plastics, fire extinguisher, welding, etc. however very few industry use this technology.

A major limitation is more than 60% of the Sugar Mills in the country are Co-Operative and very few of them possess modern and advanced means of technology and machineries.

Very few companies undertake Bio-Gas plants which can be made from molasses a prominent by-product of sugar industry and this plant are best means renewable energy.

Recovery of CO₂ and generating of bio-gas we can get the carbon which is tradable and huge amount of earning is possible for industries.

Various Co-Operative industries and sugar mills

operating in the country needs to go for modern and advanced means of technology and up gradation of machineries is highly suggested to survive in the market.

Various industries should extract CO₂ from their by-product as it has innumerable uses and can fetch a very good market.

Generally in India very few industries make sulphur free sugar and crystallized sugar and if co-operative sector focuses on these sugars they can get additional market with good rate.

Other few drawback and limitation of sugar industry in India are:-

- Existence of Sick Units.
- Inadequate Production.
- Higher Excise and Other Duties.
- Lower Returns.
- Government Policy
- Other Problems.

ANALYSIS OF DATA

With over 450 sugar mills, India is the largest sugar producer in the world. Over 11 million tons of refined sugar is produced, accounting for 60% of the total sugarcane cultivated. Following is the Indian export statistics for sugarcane that counts to about 811027.5 M. Tonnes in the year 2000-2001.

MAP SHOWING SUGAR PRODUCING AREA OF INDIA



The green area indicates the higher sugar producing states or area of India

The pink area shows the medium sugar producing area of India.

The blue area shows very low sugar producing states of India.

Sugar Production, Consumption, Export and Import in India
India is the largest producer of sugar in the world and produces around 18.5 million tones of white plantation sugar per

annum. Sugar industry is the second largest manufacturing industry in India. About 500 thousand people are directly employed in the sugar industry. Including farmers and their family members, around 45 million people constituting 75% of the rural population of India, depend on sugar industry for their livelihood. The industry contributes about Rs. 16 billion (\$328.5 mn) to the Central and State exchequers. India is also the largest consumer of sugar and consumes around 16 million tones of sugar per annum

Over the years the sugar production fluctuated noticeably. During the years of shortages India turned a net importer. Thus the overall scenario has been that of marginal export of sugar. A High Powered Committee was constituted to study the matter and after examining the matter in depth, it recommended total liberalization of the sugar sector to ensure steady and stable growth in production. Government of India has accepted this recommendation and steps are being taken in this direction.

VARIOUS BY-PRODUCT OF SUGAR INDUSTRY Sugar has many functional properties in addition to its nutritive value. It can be produced either in the liquid or crystallized form for both domestic and industrial uses. This publication describes the sugar industry, with particular regard to the production of various categories of sugar and alcohol, processing and utilization of by-products, and the manufacture of pulp and paper. With the diminishing demand for and cost of sugar, diversification towards value-added products can offer opportunities for improving the economics of sugar production.

Sugar mills produce many by-products of the sugar extraction process, including bagasse, filter mud, and molasses. A typical sugarcane complex with a capacity of 3,000 tons per day can produce 345 tons of sugar, 6,000 liters of alcohol, 3 tons of yeast, 15 tons of potash fertilizer, 25 tons of pulp, 15 tons of wax, 150 tons of press-mud fertilizer and 750 kilowatts of power from bagasse.

Molasses

Molasses is the final effluent obtained in the preparation of sugar by repeated crystallization. It is the end product of a refining process carried out to yield sugar. Sucrose and invert sugars constitute a major portion (40-60%) of molasses.

The yield of molasses in terms of cane processed and sugar produced displays considerable variation, caused mainly by differences in the soluble non-sugar content of the juice and in the sugar recovery procedure of the factory. The yield of molasses per ton

of sugarcane varies from 3.5 to 4.5 percent.

Molasses is mainly used to manufacture ethyl alcohol (ethanol), yeast and cattle feed. Ethanol is in turn used to produce portable liquor and downstream value added chemicals such as acetone, acetic acid, butanol, acetic anhydride etc. Some of the alcohol-based chemicals, such as acetic acid and acetone, face stiff competition from production through the petrochemical route.

The government controls the export of molasses through export licenses issued every quarter. Molasses and alcohol-based industries were decontrolled in 1993 and are being controlled by respective state government polices.

About 70 percent of molasses produced is consumed by industrial alcohol manufacturers, and the remaining 30 percent is consumed by the portable alcohol sector.

SUGAR BEET PULP

Sugar beet pulp is used almost entirely for animal feed, mixed with molasses in loose or pellet form. Because of the higher nitrogen content of sugar beets, nitrogen (in the form of urea) need not be added, as it must when sugarcane bagasse is used for animal feed. Other uses for beet pulp are as edible fiber, for addition of soluble fiber to baked goods and processed foods, and for inclusion in paper manufacture.

BAGASSE

Feed use for bagasse is relatively minor. The major use is as fuel for the cane factory, where one ton of dry bagasse is equivalent in energy value to two barrels of fuel oil. Freshly produced bagasse contains about 50 percent moisture and becomes drier on storage.

Bagasse is also widely used as filler for paper, fibreboard, and particleboard—especially in areas where wood is in short supply. Paper quality ranges from kraft-process brown paper through newsprint to glossy white.

Bagasse is a fibrous residue of cane stalk that is obtained after crushing and extraction of juice. It consists of water, fiber and relatively small quantities of soluble solids. The composition of bagasse varies based on the variety of sugarcane, maturity of cane, method of harvesting and the efficiency of the sugar mill.

ETHANOL

Ethanol is a generic name for Ethyl Alcohol which is a product of sugarcane molasses and juice, prepared by fermentation and distillation processes. It is a volatile, flammable and colourless liquid, widely used as a solvent of substances intended for human contact or consumption, including fragrances, flavoring, colouring and medicines. When blended, as an additive with fuel for motor vehicles, it is known as Motor Fuel Grade Alcohol or Power Alcohol. It can be blended with petrol in varying quantities up to any extent depending upon the technology of the engine. Up to 15% blend no modifications are required in the engines.

Usage of ethanol-blended gasoline began in the late 1970s. Environmentally, the use of ethanol blends has assisted in reducing carbon monoxide emissions. In the United States, one out of every eight gallons of gasoline sold contains ethanol. Most of this ethanol is purchased as blends of 10% ethanol and 90% gasoline, known as E10, and is used as an octane enhancer to improve air quality.

CONCLUSION

Sugar is one of the oldest commodities in the world and traces its origin in 4th century AD in India and China. In those days sugar was manufactured only from sugarcane. But both countries lost their initiatives to the European, American and Oceanic countries as the 18th century witnessed the development of new technology to manufacture sugar from sugarbeet.

INDIA IS LACKING DUE TO ITS POLICY, METHODS AND LACK OF KNOWLEDGE FOR THIS ONLY GOVERNMENT CAN MAKE A BIG CHANGE

INDIA INCLUDES SUGAR AS AN ESSENTIAL COMMODITY AND IT HAS BECOME MORE LIBERAL IN THIS SECTOR

INDIA HAS THE POTENTIAL TO BECOME THE WORLD'S BIGGEST EXPORTER BY REMOVING THE MISSING LEADS.

SUGGESTION FOR MODIFICATION

The suggestions include availability of proper quality seed, activating the defunct minor and medium irrigation projects, infrastructural and credit linkage at the district level and control of diversion of sugarcane for jaggery through license. "We have suggested for extending all support required to improve the yield for farmers and help in recovery of the industry". As sugarcane is a seasonal crop and can be only grown between October to March the Farmers should also produce jowar as another crop because the crop period for jowar is only 90 days and it has huge benefits. From jowar the best quality of ENA (Extra Natural Alcohol) can be manufactured which has a very good export market throughout the world for wine and liquor manufacturing. Jowar juice also ethanol can be manufactured which is grain based and one of the best products used as liquor used in Foreign Industry. Thus it is highly suggested that jowar cultivation may be done for the remaining balance and alternative crop as it does not require more water and fertilizer for the cultivation.

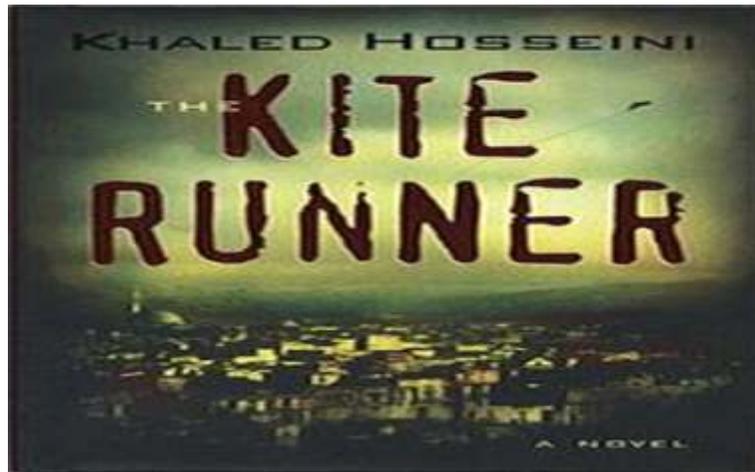
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The Kite Runnerz

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Ms. Samya
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About the book...

Khaled Hosseini born March 4, 1965, is an Afghan-born American novelist and physician. He is a citizen of the United States where he has lived since he was fifteen years old. His 2003 Debut Novel, *The Kite Runner*, was an international bestseller. His second, *A Thousand Splendid Suns* was released on May 22, 2007. Hosseini was born in Kabul, Afghanistan in 1965. In 1970 Hosseini and his family moved to Iran where his father worked for the Embassy of Afghanistan in Tehran. In 1973,

Amir, a well-to-do Pashtun boy, and Hassan, a Hazara and the son of Amir's father's servant, Ali, spend their days in a peaceful Kabul, kite fighting and roaming the streets. Amir's father (who is generally referred to as Baba, throughout the book) loves both the boys, but seems critical of Amir for not being manly enough. However, he has a kind father figure in the form of Rahim Khan, Baba's friend. Hassan is a successful "kite runner" for Amir, knowing where the kite will land without even watching it. One triumphant day, Amir wins the local tournament, and finally Baba's praise. Hassan goes to run the last cut kite, a great trophy, for Amir saying "For you, a thousand times over." Unfortunately, Hassan runs into Assef and his two henchmen. Hassan refuses to give up Amir's kite, so Assef exacts his revenge, assaulting and raping him. Wondering why Hassan is taking so long, Amir searches for Hassan and hides when he hears Assef's voice. He witnesses the rape but is too scared to help him. Afterwards, for some time Hassan and Amir keep a distance from each other. Amir reacts indifferently because he feels ashamed, and is frustrated by Hassan's saint-like behavior. Already jealous of Baba's love for Hassan, he worries if Baba knew how bravely Hassan defended Amir's kite, and

how cowardly Amir acted, that Baba's love for Hassan would grow even more.

Five years later, the Russians invade Afghanistan; Amir and Baba escape to Peshawar, Pakistan and then to Fremont, California, where Amir and Baba, who lived in luxury in an expansive mansion in Afghanistan, settle in a run-down apartment and Baba begins work at a gas station. Amir eventually takes classes at a local community college to develop his writing skills. Every Sunday, Baba and Amir make extra money selling used goods at a flea market in San Jose. There, Amir meets fellow refugee Soraya Taheri and her family; Soraya's father, who was a high-ranking officer in Afghanistan, has contempt of Amir's literary aspiration. Baba is diagnosed with terminal oat cell carcinoma but is still capable of granting Amir one last favor: he asks Soraya's father's permission for Amir to marry her. He agrees and the two marry. Shortly thereafter Baba dies. Amir and Soraya learn that they cannot have children.

Amir embarks on a successful career as a novelist. Fifteen years after his wedding, Amir receives a call from Rahim Khan, who is dying from an illness. Rahim Khan asks Amir to come to Pakistan. He enigmatically tells Amir "there is a way to be good again." Amir goes. Will Rahim Khan be able to help Amir out of the guilt? Will Amir get a last chance to correct his mistake and return the favour of Hassan? Will Hassan and Amir become closer than ever?

REVIEWS

"A gripping read and a haunting story of love, loss and betrayal. Guaranteed to move even the hardest heart" - Independent
 "Shattering....devastating and inspiring." - Observer