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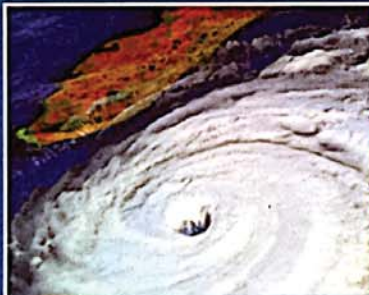
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समस्या, आव्हाने व उपाय

प्राचार्य डॉ. संभाजी देसाई



GLOBAL ENVIRONMENT
ISSUES, CHALLENGES AND SOLUTIONS

प्राचार्य डॉ. संभाजी देसाई

एम. ए., एम. फील., एम. एस. डब्ल्यू., पी. एच. डी.
पंकज महाविद्यालय, चोपडा, जि. जळगाव.

माजी कुलसचिव

उत्तर महाराष्ट्र विद्यापीठ, जळगाव
शिवाजी विद्यापीठ, कोल्हापूर

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अभ्यास मंडळ सदस्य

उत्तर महाराष्ट्र विद्यापीठ, जळगाव
राष्ट्रसंत तुकडोजी महाराज नागपूर विद्यापीठ, नागपूर
सोलापूर विद्यापीठ, सोलापूर
पी. एच. डी. मार्गदर्शक

उत्तर महाराष्ट्र विद्यापीठ, जळगाव

शिवाजी विद्यापीठ, कोल्हापूर

सोलापूर विद्यापीठ, सोलापूर

प्रकाशन व सहभाग

विविध आंतरराष्ट्रीय स्तरावर शोधनिबंध
प्रकाशित तसेच आंतरराष्ट्रीय, राष्ट्रीय
चर्चासत्रांमध्ये सहभाग.

उत्तर महाराष्ट्र विद्यापीठ, जळगाव;
शिवाजी विद्यापीठ, कोल्हापूर;
सोलापूर विद्यापीठ, सोलापूर यांच्या
अभ्यासक्रम पुनर्रचना उपसमिती, प्राश्निक मंडळ,
परीक्षक समिती अशा विविध समित्यांवर काम
करण्याचा अनुभव.

पर्यावरण म्हणजे आपल्या सभोवतालची परिस्थिती असे सामान्यपणे म्हटले जाते. आपल्या सभोवतालचे वृक्ष, पक्षी, प्राणी, मानव, पाणी, हवा, डोंगर इत्यादी घटक या सर्वांचे एकत्रीत स्वरूप म्हणजे पर्यावरण होय. पर्यावरणाच्या असमतोलमुळे त्याचा मानवी आरोग्यावर मोठ्या प्रमाणात परिणाम होत आहे. त्याचबरोबर सजिव सृष्टीलाही धोका निर्माण झाला आहे. पर्यावरणाचा हव्यासापोटी केलेला वापर मानवाच्याच जीवावर उठलेला आहे. शिकारी ते शेतकरी अशा क्रमाने मानवाचा विकास होत गेला. जीवन अधिकाधिक सुखी व समृद्ध करण्यासाठी आधुनिक कौशल्यांचा वापर करायला सुरुवात केली. त्यातूनच मानवी उत्क्रांती व विकास याचा इतिहास घडत गेला. वाढत्या लोकसंख्येच्या वाढत्या गरजा भागवण्यासाठी मानवाने औद्योगिक क्रांतीचा आधार घेतला आणि निसर्गाचे मूळ रुपच बदलायला लागले. नैसर्गिक साधनसंपत्तीचा बेसुमार वापरामुळे मानवी हव्यासापोटी पर्यावरणाचा मोठ्या प्रमाणात न्हास होऊ लागला. याचाच परिणाम सजीवसृष्टीवर होण्यास सुरुवात झाली. या सर्व समस्यांचा शोध घेण्यासाठी या राष्ट्रीय परिषदेचे आयोजन केले आहे.

जागतिक समस्यांच्या गुंतागुंतीचे स्वरूप समाजापुढे यावे तसेच निसर्गाविषयीची संवेदनशीलता आणि वैज्ञानिक दृष्टीकोन यांच्या समन्वय साधणारे लेख या पुस्तकात आहेत. पर्यावरणाची आजवरची वाटचाल, विविध प्रश्न आणि सर्वसामान्य माणसाची भूमिका याचा वेध घेणारे हे पुस्तक उत्तम संदर्भग्रंथ ठरू शकेल.



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मुख्य संपादक

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प्रशांत पब्लिकेशन्स

जागतिक पर्यावरण : समस्या, आव्हाने व उपाय
Global Environment : Issues, Challenges and Solutions

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या पुस्तकातील सर्व शोधनिबंध लेखकाची मौखिक परवानगी ग्राह्य धरूनच हे शोधनिबंध एकत्रित करण्यात आलेले असून, शोध निबंधातील मते ही प्रत्येकाची वैयक्तिक मते असून त्या मतांशी संपादक किंवा प्रकाशक सहमत असतीलच असे नाही.

या पुस्तकाचे सर्व अधिकार अबाधित असून या पुस्तकातील कोणताही मजकूर, तक्ता किंवा तत्सम संकल्पना यांची कोणत्याही प्रकारे नक्कल करणे किंवा यांत्रिकी साधनांनी फोटो कॉपी, रेकॉर्डिंग करणे कायद्याने गुन्हा असून असे आढळून आल्यास तात्काळ कारवाई करण्यात येईल.

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Sea Level Rise Along Indian Coast

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Introduction

Global sea level rise induced due to climate change is estimated to be 1-3 mm/year (Pielke et al. 2007). The sea level continues to rise over next century even if the global temperatures are leveled off (Meehl et al. 2005). By 2100, the rise is predicted to be about 18 to 59 cm (IPCC 2007). Recent new model allowing accurate construction of sea levels over past 2000 years suggest that, disappearance of ice sheets, warming water, melting of glaciers could lift sea level to about 1.5 m by end of the century (Strohecker 2008).

About 40 million Indian lives will be at risk by 2050 due to rise in sea level and the coastal cities like Mumbai and Kolkata will face maximum exposure due to rapid urbanization and economic growth (UN report, 2016). Seven out of ten most vulnerable countries worldwide are in Asia Pacific region and India tops the chart of them. India and China will face submergence of land inhabited by 200 million people. The megacities like Mumbai and Howrah district in Calcutta may have disastrous effects due to submerging of land and displacing half of its population if there is 4°C rise in temperature by 2100, (Climate Central, 2015). Mumbai could face loss and damages worth Rs.35,00,000 crores because of climate change by 2050. It registered a mean temperature rise of 1.62°C between 1901 and 2007. At present the sea level around the city is rising by 2.4 mm every year (NEERI 2010). Sundarbans which are home to 13 million impoverished Indians and Bangladeshis show rise in sea level more than twice the rate as global mean and much of delta could be submerged in about two decades. Over last three decades, more than one million people have been rendered homeless due to erosion in the Brahmaputra river basin. Estimates of eco-region inundation range from 19 to 59 percent in this region (TERI 2014).

The direct impact of sea level rise on coastal zones will accelerate erosion and shoreline retreat due to increased wave strength (Pirazzoli 1996; Pye and Blott 2006). There will be frequent intensified cyclonic activity and associated storm surges affecting the coastal zones due to increased sea-surface temperature (Unnikrishnan et al. 2006; Wu et al. 2002). The saltwater will intrude into coastal groundwater aquifers, cause inundation of wetlands and estuaries and threaten historic resources and infrastructure (Pendleton et al. 2004).

Indian Ocean sea level on rise

Since 2003, the northern Indian Ocean has seen twice as fast sea level rise compared to global average. This is in contrast to very little sea level rise during previous decade. There were changes in the movement of heat across the equator in Indian ocean due to wind blowing over ocean surface, this led to suppression of sea level rise during 1990s and early 2000s, but now the

winds are amplifying rise in sea level by increasing the amount of ocean heat brought into the region, (P. R. Thompson et al, 2016). The suppression of sea level rise occurs due to net cooling effect on the ocean. This happens when trade winds in the Indian Ocean are weaker north of equator compared to the south, so the warmer water at the ocean surface is driven out of the Northern Hemisphere, and colder, deep water is moved in. This is what happened early, but recently due to reversal of the above process, the building up of heat in northern Indian Ocean has led to enhancement in the rate of sea level rise (fig. 1).

Sea level rise in the past

The scientists (N. H Hashimi, R. Nigam, R. R. Nair, G. Rajagopalan, 1995) at the National Institute of Oceanography generated sea level variation curve for the west coast of India of last 14,500 years B.P. They used the indicator features of the coastline like sea caves, notches, wave cut terraces, and also sedimentological characteristics that could be seen on timescale. They compiled all the dates ranging from 1,500 to 14,500 years B.P. of past shore line indicator features available between 21°N to 14°N latitude, and plotted against depth from which the dated material was recovered. Based on the supporting evidences and geological reasoning, the sea level curve was drawn. The curve (fig.2) shows, about 14,500 years before, the sea level was 100m lower B.P. along the west coast of India. It rose with a rate of 10m/1,000 years to 80m depth around 12,500 years B.P. The sea level remained unchanged for about 2,500 years, and then rose with a high rate of 20m/1000 years from 10,000 to 7,000 years B.P. It remained similar to the current level after 7,000 years B.P. The discovery of 7,500 BC old Neolithic settlements from Gulf of Khambat from a seawater depth of 30-40 m further led to its validity and potential application.

Recent rise in sea level

There was a period of earth warming from ~1900 to 1940, after which it slightly cooled from ~1400 to 1965-1970 and then warmed markedly ~1970 onwards (Hansen et al. 2001; Trenberth et al 2007). The change in the mean sea level, which is a global phenomenon can be analyzed by the data recorded by tide gauges located at various ports in different parts of world. In India, the tide gauge stations are located at Okha, Veraval, Mumbai, Mangalore, Kochi, Chennai, Vishakhapatnam, Kolkatta, etc. Mumbai station has a record of 100 years. The mean sea level rise at selected stations (fig.3) showed upward trend for Mumbai (0.78 mm/year), Kochi (1.14 mm/year) and Vishakhapatnam (0.75 mm/year). The estimate for Chennai (-0.65mm/year) showed downward trend, this might have been due to insufficient data before 1960 and the rates of vertical land movements was not considered. (Unnikrishnan et al, 2006).

Factors responsible for rise in sea level

These can be summarized in three categories (a) Factors related to changes in volume of sea water contained in ocean basins: Thermal expansion of sea water; Growth / decay of land based glaciers and ice caps; Growth / decay of ice sheets, such as West Antarctica Ice Sheet (WAIS) and Greenland Ice Sheet (GIS); Terrestrial water storage i.e. dam reservoirs, lakes and depletion of

groundwater.(b) Factors related to change in shape and size of ocean basins: Tectonic movement including ground subsidence / uplift associated with earthquakes; Ground subsidence / uplift due to compaction of the ground, pumping up of ground water, etc; Isostatic adjustment of land mass, especially Glacier Isostatic Adjustment (GIA); Sediment inflow from land. (c) Factors causing local / temporal changes in sea level: Changes in atmospheric pressure; Tide, tsunami, storm surges and waves; Changes in ocean currents; Natural inter-annual variations, such as Pacific Decadal Oscillation (PDO).

Global warming and its consequences

There is constant rise in temperature of 0.6°C during past three decade at a rate of 0.2°C per decade as greenhouse gases became dominant (Hansen et al. 2006; Rosenzweig et al. 2008; Wood. 2008; IPCC 2007). The impact of greenhouse gases has led to the ramifications of global warming in physical and biological world (Rosenzweig et al. 2008; Zwiers and Hegerl. 2008). The rapid retreat of Arctic ice sheet will lead to two- third decrease in polar bear population by end of the century (Courtland 2008). The climate warming has resulted in upward shift in species optimum elevation averaging 29 m per decade comparing the altitudinal distribution of 171 forest species between 1905 and 1985, and 1986 and 2005 along elevation range up to 2600 m above sea level (Lenoir et al. 2008). Global warming has created public health problems like spread of malaria in Africa, respiratory diseases and metabolic disorders due to poor quality of air (Hoyle 2008). Increase in food prices as demand for supplies is aggravated by drought in food producing regions (Parry et al. 2008).

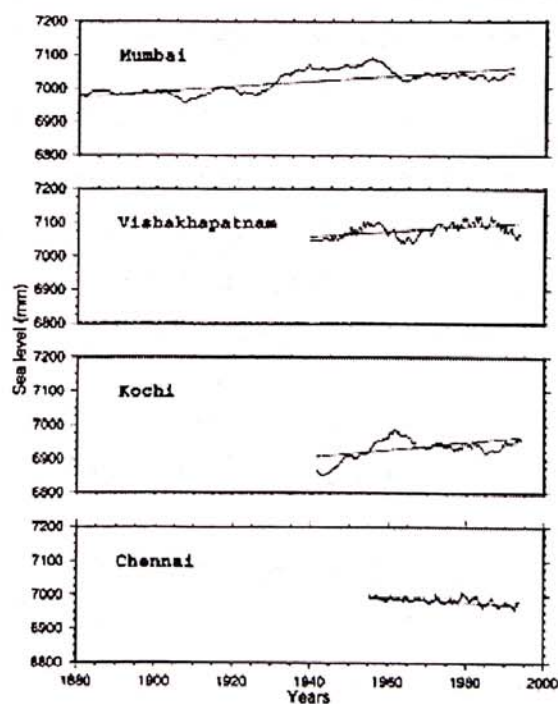


Figure 3:(Mean sea level rise at selected tide gauge stations, Current Science, Vol. 90, No. 3, 10 February 2006)

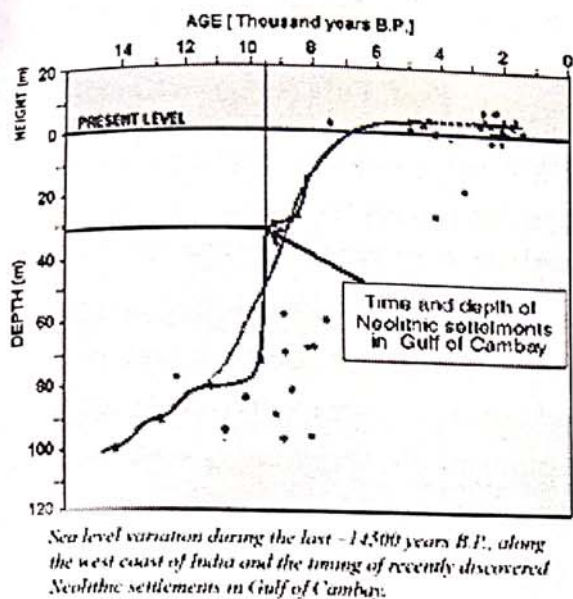


Figure 2: Jr I. Geo.Soc. of India Vol.46, Aug.1995, pp. 160.

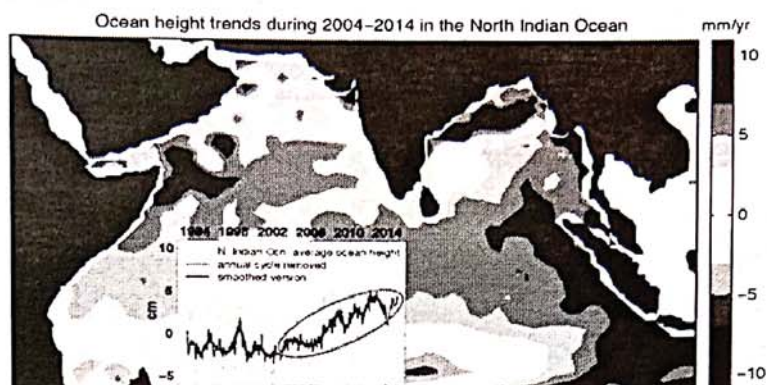


Figure 1: (Darker red indicates faster rate of rise; Credit: University of Hawaii at Manoa)

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चर्चासत्रांमध्ये सहभाग.

उत्तर महाराष्ट्र विद्यापीठ, जळगाव;

शिवाजी विद्यापीठ, कोल्हापूर;

सोलापूर विद्यापीठ, सोलापूर यांच्या

अभ्यासक्रम पुनर्रचना उपसमिती, प्राशनिक मंडळ,

परीक्षक समिती अशा विविध समित्यांवर काम

करण्याचा अनुभव.

पर्यावरण म्हणजे आपल्या सभोवतालची परिस्थिती असे सामान्यपणे म्हटले जाते. आपल्या सभोवतालचे वृक्ष, पक्षी, प्राणी, मानव, पाणी, हवा, डोंगर इत्यादी घटक या सर्वांचे एकत्रीत स्वरूप म्हणजे पर्यावरण होय. पर्यावरणाच्या असमतोलमुळे त्याचा मानवी आरोग्यावर मोठ्या प्रमाणात परिणाम होत आहे. त्याचबरोबर सजिव सृष्टीलाही धोका निर्माण झाला आहे. पर्यावरणाचा हव्यासापोटी केलेला वापर मानवाच्याच जीवावर उठलेला आहे. शिकारी ते शेतकरी अशा क्रमाने मानवाचा विकास होत गेला. जीवन अधिकाधिक सुखी व समृद्ध करण्यासाठी आधुनिक कौशल्यांचा वापर करायला सुरुवात केली. त्यातूनच मानवी उत्क्रांती व विकास याचा इतिहास घडत गेला. वाढत्या लोकसंख्येच्या वाढत्या गरजा भागवण्यासाठी मानवाने औद्योगिक क्रांतीचा आधार घेतला आणि निसर्गाचे मूळ रुपच बदलायला लागले. नैसर्गिक साधनसंपत्तीचा बेसुमार वापरामुळे मानवी हव्यासापोटी पर्यावरणाचा मोठ्या प्रमाणात न्हास होऊ लागला. याचाच परिणाम सजीवसृष्टीवर होण्यास सुरुवात झाली. या सर्व समस्यांचा शोध घेण्यासाठी या राष्ट्रीय परिषदेचे आयोजन केले आहे.

जागतिक समस्यांच्या गुंतागुंतीचे स्वरूप समाजापुढे यावे तसेच निसर्गाविषयीची संवेदनशीलता आणि वैज्ञानिक दृष्टीकोन यांच्या समन्वय साधणारे लेख या पुस्तकात आहेत. पर्यावरणाची आजवरची वाटचाल, विविध प्रश्न आणि सर्वसामान्य माणसाची भूमिका याचा वेध घेणारे हे पुस्तक उत्तम संदर्भग्रंथ ठरू शकेल.



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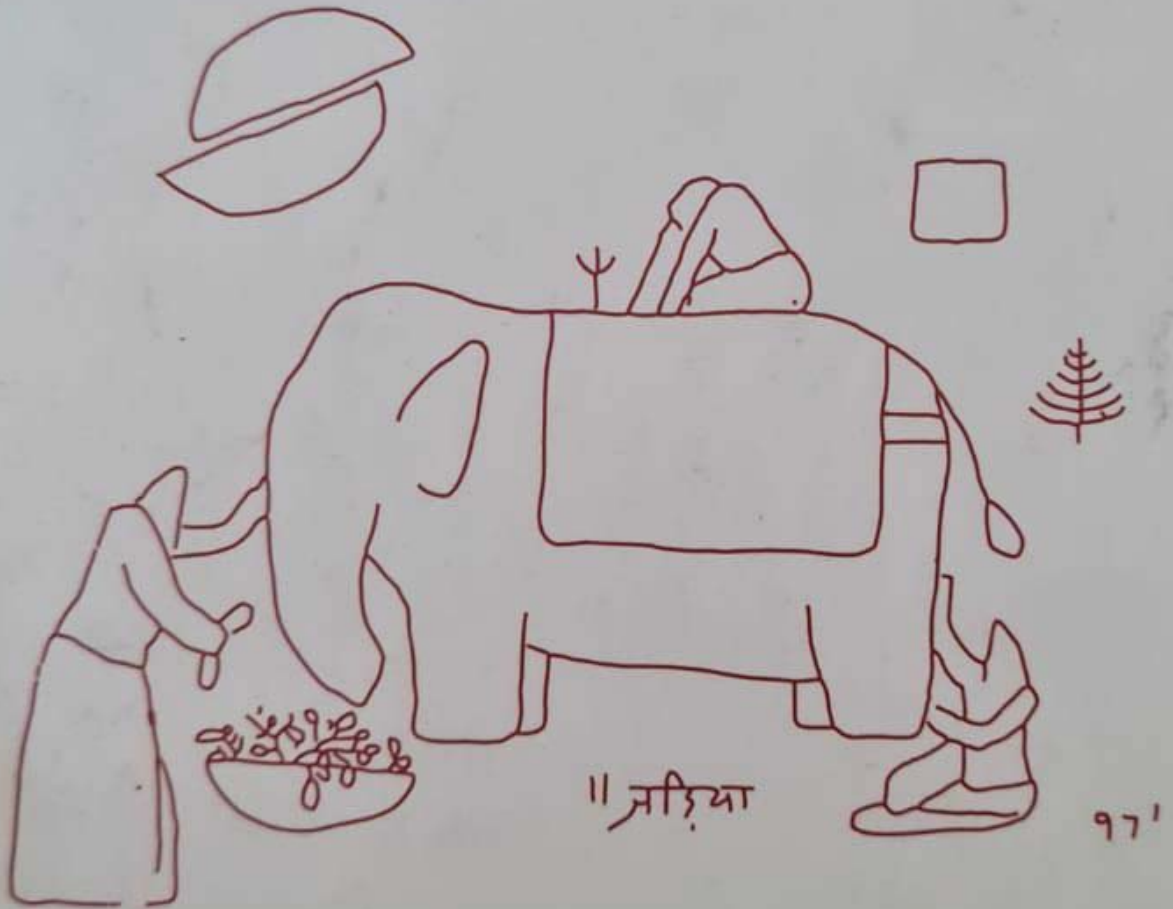
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समीचीन

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17

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(साहित्य-समाज-संस्कृति और राजनीति के खुले मंच की अर्द्ध वार्षिक-अव्यावसायिक पत्रिका)

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Challenges in Human Resource Management in Banks

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ABSTRACT

The banking industry in India has a huge canvas of history, which covers the traditional banking practices from the time of Britishers to the reforms period, nationalization to privatization of banks and now increasing numbers of foreign banks in India. Therefore, Banking in India has been through a long journey. Banking industry in India has also achieved a new height with the changing times. The use of technology has brought a revolution in the working style of the banks. Nevertheless, the fundamental aspects of banking i.e. trust and the confidence of the people on the institution remain the same. The majority of the banks are still successful in keeping with the confidence of the shareholders as well as other stakeholders. However, with the changing dynamics of banking business brings new kind of risk exposure.

This paper analyses the challenges faced by the Indian banks and the solutions to the problems.

Keywords: Banking, Retention, Economic Reforms, Financial Inclusion, Challenges

Introduction

In recent time, we have witnessed that the World Economy is passing through some intricate circumstances as bankruptcy of banking & financial institutions, debt crisis in major economies of the world and euro zone crisis. The scenario has become very uncertain causing recession in major economies like US and Europe. This poses some serious questions about the survival, growth and maintaining the sustainable development.

However, amidst all this turmoil India's Banking Industry has been amongst the few to maintain resilience. The

tempo of development for the Indian banking industry has been remarkable over the past decade. It is evident from the higher pace of credit expansion, expanding profitability and productivity similar to banks in developed markets, lower incidence of non-performing assets and focus on financial inclusion have contributed to making Indian banking vibrant and strong. Indian banks have begun to revise their growth approach and re-evaluate the prospects on hand to keep the economy rolling.

The main challenges faced by Banks in our country are the role played by financial instrumentation in different



phases of business cycle, the emerging compulsions of the new prudential norms and benchmarking the Indian financial system against international standards and best practices. There is a need for introduction of new technology, skill building and intellectual capital formation.

Objectives of the Study

1. Challenges Faced By Indian Banking Industry
2. To find the solution to the challenges faced.

Challenges faced by Indian Banking Industry

Developing countries like India, still has a huge number of people who do not have access to banking services due to scattered and fragmented locations. Since, foreign banks are playing in Indian market, the number of services offered has increased and banks have laid emphasis on meeting the customer expectations. Now, the existing situation has created various challenges and opportunity for Indian Commercial Banks. In order to encounter the general scenario of banking industry we need to understand the challenges of banking industry of India.

1. Rural Market

Banking in India is generally fairly mature in terms of supply, product range and reach, even though reach in rural India still remains a challenge for the private sector and foreign banks. In terms of quality of assets and capital adequacy, Indian banks are considered to have clean, strong and transparent balance sheets relative to other banks in comparable economies in its region. Consequently, we have seen some examples of inorganic growth strategy adopted by some nationalized and private sector banks to face upcoming challenges in banking industry of India.

2. Management of Risks

The growing competition increases the competitiveness among banks. But, existing global banking scenario is seriously posing threats for Indian banking industry. We

have already witnessed the bankruptcy of some foreign banks.

According to Shrieves (1992), there is a positive association between changes in risk and capital. Research studied the large sample of banks and results reveal that regulation was partially effective during the period covered. Moreover, it was concluded that changes in bank capital over the period studied was risk-based

3. Growth of Banking

It was found in the study of Goyal and Joshi (2011a) that small and local banks face difficulty in bearing the impact of global economy therefore, they need support and it is one of the reasons for merger. Some private banks used mergers as a strategic tool for expanding their horizons. There is huge potential in rural markets of India, which is not yet explored by the major banks. Therefore ICICI Bank Ltd. has used mergers as their expansion strategy in rural market. They are successful in making their presence in rural India. It strengthens their network across geographical boundary, improves customer base and market share.

4. Market Discipline and Transparency

According to Fernando (2011) transparency and disclosure norms as part of internationally accepted corporate governance practices are assuming greater importance in the emerging environment. Banks are expected to be more responsive and accountable to the investors. Banks have to disclose in their balance sheets a plethora of information on the maturity profiles of assets and liabilities, lending to sensitive sectors, movements in NPAs, capital, provisions, shareholdings of the government, value of investment in India and abroad, operating and profitability indicators the total investments made in the equity share, units of mutual funds, bonds, debentures, aggregate advances against shares and so on.

5. Human Resource Management

Gelade and Ivery (2003) examined relationships between human resource management (HRM), work climate, and organizational performance in the branch network of a retail bank. Significant correlations were found between

Challenges in Human Resource Management in banks

work climate, human resource practices, and business performance. The results showed that the correlations between climate and performance cannot be explained by their common dependence on HRM factors, and that the data are consistent with a mediation model in which the effects of HRM practices on business performance are partially mediated by work climate.

6. Global Banking

It is practically and fundamentally impossible for any nation to exclude itself from world economy. Therefore, for sustainable development, one has to adopt integration process in the form of liberalization and globalization as India spread the red carpet for foreign firms in 1991. The impact of globalization becomes challenges for the domestic enterprises as they are bound to compete with global players. If we look at the Indian Banking Industry, then we find that there are 36 foreign banks operating in India, which becomes a major challenge for Nationalized and private sector banks.

7. Financial Inclusion

Financial inclusion has become a necessity in today's business environment. Whatever is produced by business houses, that has to be under the check from various perspectives like environmental concerns, corporate governance, social and ethical issues. Apart from it to bridge the gap between rich and poor, the poor people of the country should be given proper attention to improve their economic condition. The study suggested that this requires new regulatory procedures and de-politicization of the financial system.

8. Employees' Retention

The banking industry has transformed rapidly in the last ten years, shifting from transactional and customer service-oriented to an increasingly aggressive environment, where competition for revenue is on top priority. Long-time banking employees are becoming disenchanted with the industry and are often resistant to perform up to new expectations. The diminishing employee morale results in decreased revenue. Due to the intrinsically close ties between staff and clients, losing those employees completely can mean the loss of

valuable customer relationships. The retail banking industry is concerned about employee retention from all levels: from tellers to executives to customer service representatives because competition is always moving in to hire them away. The competition to retain key employees is intense. Top-level executives and HR departments spend large amounts of time, effort, and money trying to figure out how to keep their people from leaving.

9. Customer Retention

Levesque and McDougall (1996) investigated the major determinants of customer satisfaction and future intentions in the retail bank sector. They identified the determinants which include service quality dimensions (e.g. getting it right the first time), service features (e.g. competitive interest rates), service problems, service recovery and products used. It was found, in particular, that service problems and the bank's service recovery ability have a major impact on customer satisfaction and intentions to switch.

10. Environmental Concerns

It is quite clear from the recently formed Copenhagen Climate Council (CCC) that there is a severe need for environmental awareness among all the countries of the world. CCC published Thought Leadership Series on Climate Change which is a collection of inspirational, concise and clearly argued pieces from some of the world's most renowned thinkers and business leaders on climate change. The objective of the pieces is to assist in enhancing the public and political awareness of the actions that could have a significant impact on global emissions growth and to disseminate the message that it is time to act. The Thought Leadership Series was aimed at explaining and spreading awareness of the key elements in the business and policy response to the climate problem. The rationale for the Thought Leadership Series was to change the focus of people.

Meeting HR Challenges

The banking sector has been growing at a very fast pace in India not only in the terms of its size but also in terms



of the services being provided. With banks reaching the remote areas in the country one can anticipate positive things like financial aid to farmers and increased financial awareness. However, with the increase in size and activities of banks, the number of banks in private sectors has also increased thereby posing challenges like cost-efficiency, technological advancement, and credibility related issues. The task before the HR is to develop strategies that help banks in gaining competitive advantage and encourage innovation in its products and services.

Managing Human Resource

Considering the above HR challenges which our Indian banking industry is facing, we can manage the human resources by proper Planning like —

- Hiring the right person for the right job
- Retaining and Developing
- Managing people/ conducting exit interviews

Hiring the Right person for the Right Job

In assessing whether the “right person” has been selected for the “right job”, the most prominent theoretical concept that emerges is the concept of “fit”. Different writers emphasize different types of fit. Sekiguchi (2004: 179) in a review of literature on person-environment fit discusses two types of fit that emerge as the most prominent types of fit: person-job fit and person-organization fit. In pursuing person-job fit, companies seek to match the job holder’s knowledge, skills and abilities to the requirements of the job. Companies can ascertain person-organization fit by focusing on how well the individual fits with the culture or values of the company and the individual’s capacity to work well with other company employees. Banks will have to plan for the following:

- A steady, carefully calibrated recruitment programme,
- As rapid technological changes transform business – continuous skill up-gradation.
- A new generation of the workforce will be working alongside an older generation as a team. Banking,

in my opinion is a team work and this new situation will require cultural adjustments and therefore, change management.

Retaining and Developing Employees

We may be able to get the most suited people for our work but then the challenge is to retain these people and to develop them. There are several dimensions to this issue such as training/ re-skilling of employees, performance measurement, promotion policy, transfer policy, talent management, communication, etc. few are mentioned below:

Training and Development

With drastic growth of banks it calls for efficient and well trained staff members to handle/deal with the consumer needs. Banks are shaping up as financial hub for their clients to grow in size and well recognized in the world market. To pull consumers banks are offering traditional with advance services like SMS banking, ATM, internet banking, priority banking, demat. So we can say that it caters to the need of the bottom to the highest class of society providing something to everyone. Universal banks have become modern day’s supermarket extending almost every facility of banking under one roof.

Performance Management

Banking service is one sector where a great degree of attention is being paid to performance appraisal system. Several of the nationalised banks have changed their performance appraisal system or are in the process of changing them. In most of the banks that follows the traditional system, their officers are being assessed on the following characteristics:

- General Intelligence
- Job Knowledge
- Initiative and resourcefulness
- Supervision
- Business Capacity
- Ability to assess sound

Challenges in Human Resource Management in banks

Several of the banks also have self-appraisal as a part of performance appraisal, although mostly such self-appraisal is more of a communication of achievements. A fair, transparent and objective mechanism for performance management is a must for all banks because an effective Performance Management System is the key to talent management and succession planning.

Conclusion

To conclude, Organizations all over are rushing to implement the latest ideas on management, sometimes to the point of overuse. The major challenge now for banks as well as any other organization is therefore how to develop their social architecture that generates intellectual capital as the quintessential driver of change. Developing the individual or human capacity is an integral element of building capacity and, in fact, capacity building initiatives are now increasingly becoming almost an index of institutional quality. Taking the banking industry to the heights of excellence, especially in the face of the a foreboding-detailed emerging realities, will require a combination of new technologies, better processes of credit and risk appraisal, treasury management, product diversification, internal control and external regulations and, not the least, human resources. Over the years, it has been observed that clouds of trepidation and drops of growth are two important phenomena of market, which frequently changes in different sets of conditions. The pre and post liberalization era has witnessed various environmental changes which directly affect the aforesaid phenomena. It is evident that post liberalization era has spread new colors of growth in India, but simultaneously it has also posed some challenges.

Suggestions

As per the above discussion, we can say that the biggest challenge for banking industry is to serve the mass market of India. Companies have shifted their focus from product to customer. The better we understand our customers, the more successful we will be in meeting their needs. In order to mitigate above mentioned

challenges Indian banks must cut their cost of their services. Another aspect to encounter the challenges is product differentiation. Apart from traditional banking services, Indian banks must adopt some product innovation so that they can compete in gamut of competition. Technology up gradation is an inevitable aspect to face challenges.

The level of consumer awareness is significantly higher as compared to previous years. Now-a-days they need internet banking, mobile banking and ATM services. Expansion of branch size in order to increase market share is another tool to combat competitors. Therefore, Indian nationalized and private sector banks must spread their wings towards global markets as some of them have already done it. Indian banks are trustworthy brands in Indian market; therefore, these banks must utilize their brand equity as it is a valuable asset for them. With liberalisation of activities within the banking sector, for example, more emphasis on consumer and house finance and personal loans, etc. Banking has turned itself into a more market based business where banks have expanded their reach more to customer's door step in a big way making banking more practical. This has further highlighted the need for proper development of man power to run bank efficiently.

Smart banks have realized this need and have taken steps to keep their workforce motivated through proper encouragement like man of the month award, repeat get-together, conferences, sports events, dinners, company sponsored travel, reunions, etc.

In spite of all these facilitations there still exist several lacunas in the HRM practices in banking industry. Some of the suggestions are given as follows:

- There should be a balanced compromise between organizational need and individual need.
- While there must be rewards for performance, non-performance must be punished/ reprimanded. Promotions must be only on merit.
- There must be uniform, impartial and balanced "employee performance review system." This system in fact needs a total review.



- Enthusiastic and pleasant behaviour of staff to the customer is necessary.
 - There must be a clearly defined system of succession planning and career growth planning in banks.
 - In order to become HRD conscious, the Public Sector Banks should allow independent functioning of HRD section, where the top person should be himself a good successful banker, a real HRD person free from any biases.
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Buddhist Philosophy: A Practical Interpretation of Self Quest

Abstract:

Among the greatest teacher's of the world Gautama Sakhyamuni alone has the glory of having rightly judged the intrinsic power of man's capacity to work out his salvation, without any extraneous aid. He distinctly tells us that everyone must bear the burden of his own sins, that every man must be a fabricator of his liberation. He does not profess to bring a revelation from a supernatural source. He did not doubt the capacity of man's understanding of truth and never had the recourse of exorcism.

He based all his reasoning on the fact of man's existence and developed his practical philosophy by the observation and the minute study of human nature. His aim was to rescue mankind from the fetters of passion and avarice, to convince them of an ideal higher than mere worldly good. Though exalted and adored, he never arrogated to himself divinity.

The starting point for Buddhism is not dogma or belief in the supernatural, but the fact of the existence of sorrow and suffering, not merely the sorrow and suffering of the poor and the wretched, but also of those that live in the lap of luxury. Its goal is not heaven or a union with God or Brahman, but to find a refuge for man from the miseries of the world in the safe heaven of an intellectual and ethical life through self-conquest and self-culture. The Buddhist is not concerned with the nature of the world as with its practical interpretation.

Buddhism never contested the prerogative of reason to be the ultimate criterion truth. Buddha wants every man to doubt, inquire and be honestly convinced before following the way. 'One

must not accept my dharma', says the master 'from reverence, but first try it as gold is tried by fire'. The Buddha does not claim superiority by virtue of any transcendental peculiarity of his nature, surpassing everything terrestrial.

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This paper shall discuss, as to how the basic concepts of Buddhism made the man realize their potential and believe in achieving their prowess through rightful methods of self-control. It is interesting to see, a tangible way in which religion manifests its actual influence upon civilization is an art.

The main glory of Buddhism is that it has always ministered to the satisfaction of aesthetic aspirations. Buddhism put in the place of authority, it discarded metaphysical speculation to make room for the practical realities of life. In his unbounded love for all beings, Sakhyamuni stands unparalleled. And it is not a poetic fancy, but a profound philosophic truth that makes him the best teacher, in helping his disciples in the self quest.

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Buddhist Philosophy: A Practical Interpretation of Self Quest

Full Paper:

Introduction:

Man is seen in various facets of his personality – as full of passionate desire, hate, and lust as well as strenuous, concentrated, compassionate, joyous, alive, poised and serene. It is interesting to study that time and again, in all the spheres of the world, the study of the human mind has witnessed its own version and philosophy. Apart from the human anatomy mentioned in Ayurveda and Charaksamihita, we also find Buddha tried to reason out the composition of the human mind and its application in attaining salvation. In fact, Buddhist philosophy studies not only the mind and its concomitants but behaviour as a whole, with the mind as a predominant factor of reference. Early Buddhism sought to bring man to an awareness of himself, that, one is free and that life, its path and its outcome are in one's own hands. It sought to increase the psychological vitality of both men and women to a newer experience of the passage of time, and a deeper sense of relaxed participation in the present moment. All of experience is consequently permanent at the very moment of its occurrence and life ceases to be a course between birth and death and becomes a fully realized experience of change in which every state is as valid and as necessary as others.

Early Buddhism insisted that life consisted of moving from one stage which had been achieved, to a higher one, there had to be constant progression which would culminate in *arahantship* and *Nibbana*. A striking feature of early Buddhism and even of later versions is its stress on the volunteering participation of the individual. Buddhism was for every man, but every man had to know himself through himself- the belief system of Buddhism provided props to help him in this process.

He was of vital importance, not the rules which were subservient to him. It is a gentle religion where equality, justice and peace reign supreme. The level of unmonitored penance was the most important part of its practice. To depend on others for salvation was not encouraged, but it tried to teach how to depend on oneself. The very attitude of dependence on others means surrendering one's intelligence and efforts. Buddhism gives credit to man's intelligence and his efforts for his achievements rather than to supernatural beings. It strongly advocated that true religion means faith in the good of man rather than faith in unknown forces. In that respect, Buddhism is not merely a religion, but a noble method to gain peace and eternal salvation through living a respectable way of life. The Buddha taught that what man needs is knowledge and not mere superstitious beliefs, knowledge of the cosmic nature and its relationship to the law of cause and effect.

When we consider human freedom, it is very difficult to find out whether a man is really free to do anything according to his own wishes. Man is bound by many conditions both external and internal. A well-directed mind can pierce ignorance. It is the only religion which states that a human being has the power to help and free himself. In the later stages of his development, he is not at the mercy of any external force or agency which he must constantly please by worshipping or offering sacrifices.

Complexities of Human mind:

Human personality is a compound of body and soul. The Buddha says that man creates everything; his grief's, perils and misfortune are all our own creations. We spring from no other source than our own imperfections of heart and mind. We are the results of our good and bad actions committed in the past under the influence of greed and delusion. And since we ourselves brought them into being, it is within our power to overcome bad effects and cultivate good natures.

As Prof Charles Richet says 'human past experiences arises first and principally from all the sensations which come to us, sensations of our internal organs, sensations of the world outside, the consciousness of our efforts and of muscular movement'. The personality of man is as little absolutely permanent as are other things. Its apparent permanence consists in the slowness of its changes and in the fact of its continuity. Buddha had the genius to establish a working system not intended for all, but for those who realized that there were true worth and potential in every individual and this could be achieved in here and now if one was truly motivated to do so.

His teachings exhibited that our mind is a sum of mental processes and intellect, feeling and will are subdivisions of mind, special groups of the processes contained in the sum. Buddhism believes that human being is the composition of five skandhas namely: *Rupa*

represents the totality of sensations and ideas pertaining to one's body, *Vedana*, the momentary states, *Vignana* the thoughts, *Samjna*, the conceptions and abstractions and *Samskara*, the dispositions, inclinations and volitions. Each of these skandhas is a group of psychical processes. From the body, the nervous system is first isolated as the seat of psychical activity. In the nervous system again the brain is chosen as the part best suited to be the organ of the mind and finally to preserve the supposed psychical activity. Some small gland such as pineal gland is chosen as the seat of the soul.

Understanding atman:

Modern psychology considers the substantial soul, atman as an out birth of that sort of ratiocination whose guiding principle is: Whatever you are ignorant of is the explanation of what you know. The assumption of a soul, independent of the body, might be difficult to disprove, as in experience we always find a residuum of unexplained facts. A man's personality or self is his soul which enters in the body at birth and quits it at death, the soul it is said forms the invisible immaterial ego, which knows itself as '*I*', remains the same amidst all that is changeable. It is the recipient of knowledge through the gateway of five sources, sight, hearing, smell, taste and touch. Without a soul, there could be no immortality and without immortality, life would not be worth living. The denial of a separate self, an atman does not obliterate the personality of a man but liberates the individual from an error that is liable to stunt his intellectual and ethical development and hinder his attainment of perfection. The *Dharma* removes from life the vanity of self, which is the result of an erroneous belief in the existence of atman and karma as separate entities. As what constitutes a man's personality are his own deeds and aspirations, he that holds his person dear should keep himself free from wickedness.

Consciousness:

The early Buddhists were primarily interested in the cultivation of the mind and this they sought to achieve through a detailed analysis of the nature of consciousness. In the ultimate analysis, it is an attempt to teach a man to be aware of his conscious and to control it for the achievement of certain goals. To formulate and describe all the facts of experience, all that psychology need limit is the existence of a stream of conscious processes, each substantially different from, but cognitive of the rest and appropriative of each other's contents. There is not the smallest reason for supposing the existence of an experiencing self altogether outside this series. The unity which constitutes conscious selfhood needs for its growth no absolutely permanent elements. The nucleus of '*me*' is always the bodily existence felt to be present at the time. Whatever remembered past feelings resemble this present feeling are deemed to belong to the same me with it. This '*me*' is an empirical aggregate of things objectively known.

The primary and fundamental question of all philosophy and religion is this: What is the world? What am 'I'? It has been answered by the immense majority of scholars that 'I am body and soul', therefore the soul to consist of these functions and declaring the body to be only an inessential addition to this same soul. A higher definition of our essence will nowhere in the world be found outside the realm of the Buddha. Even in the Upanishads, which in their grandeur come nearest to the doctrine of the Buddha, our essence is defined as 'being, bliss and thought.

Fortunately, the relation between our 'I' and our faculty of cognition is such, that in every case this indispensable criterion may be obtained. As *Asvaghosha* says in his *Sraddhotpada Sutra* 'all false doctrines invariably arise out of atman conception. If we were liberated from it, the existence of false doctrines would be impossible'. He, who knows the nature of his self and understands how his senses act, finds no room for the 'I' nor even any ground for its supposition. The world holds to the idea of 'I' and from this arises false apprehension. Both have fallen into a grievous error. For if the 'I' be perishable the fruit people strive for will perish too and then deliverance will be without merit.

Cogito ergo sum – I think, therefore I exist: say Descartes and his followers. The expression I think is merely the expression of my existence. By it, I know that I am, to what I am and therefore not that I am a thinking soul or spirit. What is given is not one's self-consciousness, but merely one's consciousness.

Emotions and Desires:

Generally, in dealing with emotions three main categories of data are recognized: verbal, physiological and overt behaviour, the early Buddhist examined both the overt emotional behaviour and emotional experience. They helped illuminate the theme of emotion as energy, which should be discharged or released by certain modes if the proper balance in the individual is to be maintained. The situations giving rise to emotional reactions change the course of emotional development, i.e. emotional responses can be modified by learning. Emotions can impart an impetus to behaviour and give it direction towards certain goals. A person who controls his anger like a swift speeding chariot, when it is aroused is called a charioteer.

Similarly while discussing *tanha*, the source of desire is mental preoccupation – man desires because his mind is attached to things, another name for passion is *tanha*. A man who has no desire in this world or the next is called a Brahman. He attains *Nibbana*, who has no desire for name and form, does not grieve for what is no more, thus he does not decay in this world. It is an evil desire which has to be suppressed, in order for the man of true worth to grow and

come to fruition. Desire in the right sense served as motivating force and in its scope embraced all aspects of life. Buddhism faces the phenomenon of desire as frankly and as critically as other systems and perhaps even more so, and this is because it is essentially psychological and does not start from the external universe as its first or final cause, but with the heart of man.

The Buddha's approach to the problems of suffering is not imaginary, speculative or metaphysical, but essentially empirical. Separateness is due to the overwhelming preponderance of sensory experience, undue attention to individual physical needs, sensations and centripetal reflexes growing from them. Each man seems to himself to exist in space because he measures all distances and directions from his own body and to this also referred to the subjective consciousness from which all desires originate. To expand the consciousness away from individuality means spiritual growth whereas contraction towards it means spiritual deterioration. Each man carries with himself the limitations of his own universe and he can make it large or small.

Conclusion:

The Buddha was of the people, by the people and for the people – he understood their joys and sorrows, he could be one with them and he sought to do this through his teachings and his own life. The Buddha had given due weightage to his social milieu and this was one of the main reasons for his great success. The man could become more and the supreme authority for this move lay within him. This was the touchstone, so to speak, of the new mandate; this was its essence and its power. Thus the teaching for the many, for the pious, is more positive, less austere, more human, more suited to those who have not turned their back on the world that they know, on life as they know.

The timelessness of the above classification is very advantageous. The Buddhist built their superstructure of consciousness, the paths leading to self-transcendence on the solid foundation of morality. Life is one, though in a million forms and the suffering and joy of each are that of all and this is the constant theme of a century after a century which mankind as a whole ignores. Buddhism is essentially something to do with, not something to believe in.

The Buddha never claimed any divinity; he was the enlightened one, the most compassionate, wise and the holy one who ever lived in this world. The teaching of Buddha is in great virtues and good qualities, to get more inspiration and guidance for themselves and to develop the confidence to follow. There is none as godless as the Buddha and yet none so godlike. In the Buddha is embodied all the great virtues, sacredness, wisdom and enlightenment. Those who understand his teachings easily see the real nature of the Buddha they maintain in their minds is more real than the image they see on the altar, which is merely a symbolic representation.

Knowledge destroys faith and faith destroys itself when a mysterious belief is examined under the daylight of reason. Confidence cannot be obtained by faith since it places less emphasis on reason, but only by understanding. Referring to the unintelligible and blind nature of faith, Voltaire said, 'faith is to believe in something which your reason tells you cannot be true, for if your reason approved of it, there could be no question of blind faith'.

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AVKASH JADHAV¹

**SIGNIFICANCE OF THE FACTORY ACT OF 1881: THE WORKING CLASS MOVEMENT
IN BOMBAY IN THE LATE 19TH CENTURY AND THE EARLY 20TH CENTURY**

Abstract

The development of Industrial Revolution had pushed many European nations on the threshold of Industrial Development. The ripple effect of their socio – economic changes even engulfed the newly acquired colonies around the world. As the idea of industrial revolution filtered down from England to India, it also brought with it the stages of evolution of industries and some add on features as well. The inauguration of Industries in India, under the patronage of British and native entrepreneurs also opened up the issues of rights and exploitation of workers. The plentiful and cheap supply of labor encouraged experiments in new crops largely through European initiative and capital. So instead of witnessing the industrial revolution on her own soil, India served as a colonial appendage of metropolitan England, quickening the process of Industrial revolution in the master country and at the same time suffering a forced disintegration of her own traditional economic order. Development of capitalism in India was therefore a very torturous and much belated process. Unlike Europe where the artisans and craftsmen when they changed their traditional skills to adapting into modern industries, they were able to retain their age old skill where as in India the traditional handicrafts and cottage industries became victims of textile industries. The already miserable landless peasants were now forced to migrate to newly developed towns in search of employment, due to which they suffered at both the ends, by losing out on their skills and also finding it difficult to adjust in the new areas of employment. The characteristic which distinguishes the modern period in world history from all past periods is the fact of economic growth. Whenever this enlargement of the productive horizon of the ordinary man appeared it involved a distinctive transformation of the economy concerned. A pre-dominantly family based system of economic organization began to give way to a predominantly industrial system in which the representative unit of production was necessarily larger than the family. Industrial revolution tore up by the roots of social relationships and institution, it destroyed the old life of the village and created the problem of the new factory town. India as such was a complex society in mid 19 th century. Given the widespread impression that industrial development was impossible because of implacable British hostility to Indian competition the career of the cotton mill industry seems particularly paradoxical. In order to understand the evolution, processing and passing of the Factory Act, 1881, it is indeed important to also trace points from where it must have percolated from. The Factory Act of 1881 cannot be studied as an isolated case. The commission of 1875 was deputed on the lines of Short Time Committee of 1830's in England. The members of the commission tried to maintain balance by interviewing and recording testimonials from different strata associated with the factory system. It included workers,

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foremen, managers, medical practioner's, surgeons and health officers, engineers and also child laborers. The purpose of the commission was to investigate; working hours and provisions of meal breaks and holidays; employment of children and the provision of safety measures in the factories. This research paper will highlight the plight of workers in the mills of Bombay. The attempt is made to describe the struggle the workers had to go through while working and earning their livelihood, at the cost of breaking from the social fabric of rural India. The archival sources are used to explain various stages of the working class movement in Bombay close to 19 th century and the beginning of 20 th century.

Keywords: Factory act of 1881, working class movement in Bombay

JEL code: N00, N15, N35

Introduction

The development of Industrial Revolution had pushed many European nations on the threshold of Industrial Development. The ripple effect of their socio – economic changes even engulfed the newly acquired colonies around the world. As the idea of industrial revolution filtered down from England to India, it also brought with it, the stages of evolution of industries and some unwanted add on features as well. The inauguration of the Industries in India, under the patronage of the British and the native entrepreneurs also opened up the debatable issues about the rights and exploitation of industrial workers. The plentiful and cheap supply of labour encouraged experiments in new crops largely through European initiative and capital¹. So instead of witnessing the industrial revolution on her own soil, India served as a colonial appendage of metropolitan England, quickening the process of Industrial revolution in the master country and at the same time suffering a forced disintegration of her own traditional economic order. The development of capitalism in India was therefore a very torturous and much belated process². Unlike Europe, where the artisans and craftsmen, when they changed their traditional skills to adapting into modern industries, they were able to retain their age old skill where as in India the traditional handicrafts and cottage industries became victims of textile industries. The already miserable landless peasants were now forced to migrate to newly developed towns in search of employment, due to which they suffered at both the ends, by losing out on their skills and also finding it difficult to adjust in the new areas of employment. This characteristic which distinguishes the modern period in the world history from all past periods is the fact of economic growth. Whenever this enlargement of the productive horizon of the ordinary man appeared, it involved a distinctive transformation of the economy concerned. A pre-dominantly family based system of economic organization began to give way to a predominantly industrial system in which the representative unit of production was necessarily larger than the family³. Industrial revolution tore up by the roots of social relationships and institution; it destroyed the old life of the village and created the problem of the new factory town⁴. India as such was a complex society in mid 19th century, given the widespread impression that industrial development was impossible because of implacable British hostility to Indian competition, the career of the cotton mill industry seems particularly paradoxical⁵. As early as 1836 a group Ten Indians and Fifteen European merchants organized the first Bombay Chamber⁶. The first successful entrepreneur was C.N. Davar, a merchant from Bombay, he floated a spinning company with a capital of Rs. 5, 00,000 , contributed by

50 of the city's leading traders. The company started its production in February, 1856⁷. Although it opened up new avenues of employment, but it also isolated the labour from sharing the profit of the produce. They now merely became one of the components in this newly mechanized society. The new work required a skilled and trained workforce. The efficiency and physical constraints were neglected, as they were subjected to rigorous discipline of performance. The emergence of the Indian working class had two fronts to combat, one the existing colonial rule and the second one was the newly emerged capitalist's class of both the natives and the Europeans. When the British recruited workers from among the ruined craftsman and the poorest strata in the villages, they fixed wages conforming to their rural standards, which were much below the cost of labour⁸. They not only suffered in their monetary gains, but were forced to work more than 12 hours a day, sometimes without any weekly leave. The first of its kind strike, called by around 1200 labourer's happened in the month of April – May – 1862 in Calcutta. The labourer's of Howrah Railway Station (as it was reported in Somprakash : the Bengali weekly published from Calcutta) demanded that their working hours are more in comparison to that of the workers from the Railways Locomotive Department. They warned that the railway company should fulfill the prayer of workers; otherwise they won't get any man⁹. This was perhaps the beginning of a more aggressive labour movement. However the development of large scale factories in India can be associated primarily to three major areas of production i.e. jute, iron & steel. The dynamics of development and its fruitful impact on a particular section became more and more evident. The greed of capitalist class was reducing the workers to inhumane conditions and alienating them from the post – production process. The working hours were stretched beyond their endurance and the wages barely afford to them a descent living. It slowly appeared that there was no difference in the operation and existence of man and the machine. It is quite difficult to trace the stage of transformation when man virtually became the machine. The gradual exploitation of labour was the major source of profit. The figures of profits sometimes were synonymous to the intensity of the exploitation of the workers.

The experience of the working class movements in England taught the progressive natives, that mere economic demands or development should not be in focus, it should also cover the improvement of the social conditions of the workers. Sorabjee Shapoorjee Bengalee (henceforth SSB) along with few enlightened representatives of the native workers, proposed some interference and monitoring on the working conditions in India. He believed that the strength and reactions of socialists approach only will sail the reforms in factory system. He did not wanted, that the reform should become practical politics, the way it happened in Britain. The decade from 1870-1880 was the seeding time to experiment the six decades of factory reforms of Britain, in India. The leadership and initiative of SSB served only to clarify the movements of forces and to mobilize like minded opinion for factory legislation. It will be however seen that after SSB introduced his first draft on 18th April 1878, there were comparisons drawn with the conditions of industrial workers in Great Britain and the industrial workers in India.

THE BOMBAY FACTORY COMMISSION (1875); There was a strong diversity in the nature of work among the working class in India. The classification of their work exposed them to a diverse series of problems. However they all had some common key issues to voice their protest on. They were working in various fields such as plantations, mines, the newly introduced railway department and finally in the factories. The exploitation of labour was practiced from the inception of generating workforce in the industries. What is more interesting g to investigate is how the issues and manifestation of just two to three percent of working class, amidst a huge population reached the stage of a Legislative Act. The process of passing of the Factory Act of 1881 in India, also demands raising of some

unconventional questions. Was the condition of labourer's and workers in India indeed so severe that within three decades a strong movement was launched in their favour? Where as on the other hand the farmers and landless labourer's had more severe issues of unjust taxation policy of the British government. How strongly the Marxists ideology would have advocated the rights of workers? If it is compared to the socialistic approach of the reformer, Did the British government anticipate the filtering of class war struggle in India? And so was the passing of 1881 Act, pacified the leaders and reformers for the time being. How is that, the mill owners and leaders in Great Britain made hue and cry over the working conditions in the Indian factories? It was their support, based on the lives of making the labour force expensive, so it would impact their Indian competitors. Is it also the case that by the end of the 19th century there were very few European factory owners in India ? So they in any ways didn't lose much on the contrary had a reason to control the native industrialist's class, after passing the legislation on regulating the factories as the native industries growing stronger as speculated earlier? Did they pose any threat to the market and existence of the industries in Great Britain? Was the passing of the Act mere to stabilize their British economy and to regulate the industrial growth of the natives? It can be concluded that the mill owners in Great Britain must have envied the freedom and free hand of the mill owners in India. The working class situation in India prior to 1875, was more favorable to the factory owners as they could arbitrarily apply their rules and regulation regarding working hours, wages, holidays and on employment of women and children, this advantage to the factory owners in India, must have become the rallying point of all mobilization in Britain to favour the Factory Act 1881. Another debatable theory could be, that the House of Common and the British government in India didn't wanted to begin the series of struggle for the anti imperialist and the anti capitalist in India parallel. However on a fair note, it should be acknowledged that, the British government at least didn't brutally suppress the demand for legislation on factory system in India. They allowed an open atmosphere of discussion and debate so as to engage the natives in the deliberation and consciousness among the workers. Lord Salisbury of England, once in agreement with Lord Lytton (1876-1880) felt that the "good government might keep the masses loyal to the British administration, but they were mostly inert and to expect active political support from them as a consequence and recognition of good government was an optimistic dream. Good government avoids one of the causes of hate, but it does not inspire hope"¹⁰. This paper will study the formative stages of the Factory Act of 1881, the intention and initiative of the British government; the attitude of the mill owners towards the Act. The perseverance of SSB, in formulating it into legislation and finally the process of factory movement in India. The number of people engaged in the cotton industry (urban) and combined with factory hands was 7,380,278 as per the census of 1891¹¹. The extension of textile industry in Bombay was about 15.82%, as compared to 6.71% in Madras as per the census of 1891¹². There are some indicators as to show how the textile industry had grown in Bombay in three decades. In order to take the account of the regulation and the working condition, a Commission was appointed by the Governor of Bombay in Council to inquire into the conditions of the operative in the Bombay factories. The origin of the commission was rightly pointed out by Honorable Mr. B.W. Colvin in 1879 which was discussing the bill of 1881, in the Council of the Governor General. "Attention had first been drawn to the question of factory labour in India by certain remarks which were made a few years ago in a report as the administration of the cotton Department in Bombay. It was said in that report that, 'the poorer classes derived great benefit from the mills, but that the advantage carried with it corresponding and serious disadvantages. The hours of labour, it was observed were not limited by any government regulation the working day was undoubtedly long, the nature of the work was fatiguing , whilst women and children were largely employed, and generally without any periodically returning

day for rest like Sunday'. Those remarks had attracted attention and had led to the correspondence, the result of which had been the appointment of commission by the Bombay government with the instruction to investigate and report upon the subject¹³. Similarly the background of this commission was echoed during Council debate in March 1881 by Honorable Mr. C. Grant. He referred to the debate which took place in the House of Lords in 1875 on the motion of Lord Shaftsbury. It would appear that attention had been first drawn to the subject in report upon factories by Mr. Redgrave and very possibly Miss. Carpenters mission to India had something to do with the agitation which arose on the subject. She, no doubt discovered that some of the factories in India were open to the objections which had been brought against the unrestricted employment of children in English factories. The result was that a commission of inquiry sat in Bombay and took great deal of evidence and discovered the existence of some abuses¹⁴. The commission of 1875 was deputed on the lines of Short Time Committee of 1830's in England. The members of the commission tried to maintain balance by interviewing and recording testimonials from different strata associated with the factory system. It included workers, foremen, managers, medical practioners, surgeons and health officers, engineers and also child labourers. The purpose of the commission was to investigate; working hours and provisions of meal breaks and holidays; employment of children and the provision of safety measures in the factories.

The nine member commission finally decided to conclude a report based on their findings. However, one thing that prevented them from giving a fair report was, that seven out of nine member were representatives of the mill owners. It was not surprising that they conveniently gave a version, which was not in favour of any legislation. The biggest drawback of the submitted report was that the member of the commission themselves were not unanimous in their recommendations, but the official members and medical officer advised the enactment of simple law regulating the hours of employment of children and requiring that, machinery should be properly fenced. They were further of opinion that the Act should be passed by the Government of India.¹⁵. The report of the commission didn't give any strong suggestive remarks and the issue of reforming the existing working conditions of workers got temporarily shelved, due to the larger picture displayed by the members of the commission.

As in the past the unsuccessful attempts towards forwarding an appeal for legislative interference had happened in 1872-73 due to the efforts of major Moore, Inspector- in Chief of the Bombay Cotton Department. He was seconded by Mr. A.J. Balfour, but their exercise didn't gain much of British government's attention in India their efforts however, were taken up by lord Shaftsbury in the House of Lords on the 30th July, 1875 and which eventually geared up some developments in Bombay. This entire exercise made one thing clear that in order to introduce a strong legislation in India the debate should be also be introduced in the British parliament.

The draft requested by the British government to define the set up of factory, it proposed 6 days working, prohibition of employment of children below 8 years; for young person between 8 to 14 years it should not be more than 9 hours in a day, for women 10 hours and adult male 11 hours and compulsory rest of 1 hour. It also called for the certification of age from Government certified Surgeon and if any employer appoints any child under eight years of age, he should be liable for fine of Rs. 10 for each case. It also made provision for penalty , if the employer didn't adhere to working hours and weekly breaks¹⁶.

Fortunately for SSB, the question was very warmly taken up by the London Times and it got the attention of Lord Shaftsbury¹⁷. The efforts of SSB finally saw the light of dawn in Lord Shaftsbury, who not only

assured to take up the issue, but be consistent even if no one else takes it up. The movement which was successfully suppressed in India gained momentum in Britain what else he could ask for, especially when the draft finally broke the stereotypical official process of getting passed in the local council and after many upheavals would go to the British parliament. Perhaps this was one of those rarest moments in the colonial history of 19th century of India, when a draft despite its rejection at home, still goes on to get not only discussed but supported in the House of Lords. Lord Shaftsbury as per his promise introduced the draft in the House of Lords on the 4th April, 1879 with following statement " That an humble address be presented to Her Majesty praying that graciously instruct the Viceroy of India to take into immediate consideration the necessity of passing a law for regulating the labour of women and children in the mills and factories throughout her dominions in India¹⁸. This statement of Lord Shaftsbury elevated the hope of the natives and SSB, for the inevitable reconsideration of his draft back in India. Lord Shaftsbury further applauded the role of SSB by stating "The prime mover of this movement, the life and soul of the movement is a wealthy native, a Parsee a most respected gentleman, and himself a member of council. He was furnished me with abundant information, he has given me his opinions and he states , I doubt not, most truly ,that the mill owners, even while many of them admit that the hours of labour are too many, will resist all measures of remedy, but that the people will hail them with delight¹⁹. In fact in the due course Viscount Cranbrook (Lord Salisbury), Secretary of State for India after initial apprehension stated" let the proposed Bill of Mr. Sorabjee be considered fairly and fully, as it undoubtedly deserves I am happy to say that Government of Bombay regards it, as to which it can give its assent²⁰. The Bill finally reached its expected platform of discussion i.e Governor General's Council on the 7th November, 1879. What makes this entire process interesting was the commitment and earnest zeal of SSB in getting the Bill first for discussion and then finally culminating it into an Act of 1881.

The Act before completing its final cycle went through a heavy series of opposition and the promotion from November 1879 to March 1881. The tenure of 16 months helped the draft to evolve into bill and finally into a form of legislation.. The Bombay Millowners Association (BMA) covered a special meeting under the Presidentship of Dinshaw Maneckjee Petit. Amidst the opposition to the Bill one of the member, Mr. Hector put forward his comments supporting the Bill. He argued that 'exhausting labour is not economical labour'. He listed the number of holidays in England to 10 per year, compared to 15 holidays in India throughout the year. He further added that, but in England these 10 holidays were added to 52 Sundays and 26 days for half Saturdays making 88days in all, which was a common practice in the mills. He strongly proposed that 'the system on which we are now working is a most irrational system and trust that, it will speedily be put to an end. A few mild regulation system, will do the industry no harm on the contrary benefit it'²¹. When the proposed Bill was put to vote Mr. Hector was the only one in favour of it against all fourteen members present. The Bill also received the support, with some suggestion from Sir James Fergusson, Governor of Bombay in his minutes dated 16th September, 1880 "it is not surprising, if employers here object to any such restrictions, as they have always done so in England, yet they have been obliged to admit that their profits have not been diminished thereby and it has been fully proved that the physique of the Factory population has sensibly improved during the forty or fifty years that effective factory legislation has been in force²². The situation in India in this one year showed a clear dichotomy. It came to situation as E.P. Thompson rightly classified 'the industrious classes touched at one pole, the mill owners, who were illiterate or those whose literacy amounted to little more than the ability to spell out few words or write the names. At the other pole there were men

of considerable intellectual attainment²³. The Bill unsurprisingly got dented from the section that was non Liberal and had ruled out the success of the Act before its implementation.

The affluent, influential and positional strong members of society were upset with Sorabjee's support for the Bill while addressing a special meeting to discuss the Factory Bill, its Deputy Chairman Bombay Mill Owners Association Hon. Morarjee Gokuldas questioned, on Sorabjee's integrity and his lack of vision in raising relevant questions! It is all very well to talk of the miseries of the mill hands, but men who overflow with sympathy for these beings carefully avoid saying anything on the great question. Which every day assumes a serious shape. How are the labouring classes to be saved from begging²⁴? Similarly the Bill was denounced for application in Bengal by the member of British Indian Association in their memorial dated 10th March, 1880, Mr. Kristodas Pal, Secretary of the Association further argued that the condition of workers in Bengal was much better than the workers in Bombay, so how can the government implement a bill on a more generalized term. The memorialists felt that the extension of the proposed Factory Bill is a great misfortune to it²⁵. It was indeed quite surprising that Bengal as a province had pioneered many reforms was now trying to isolate itself from the Bill. The opposition to the Bill even came from Mr. Mackenzie Secretary to the however west of Bengal, when he wrote in report "This love of legislation for legislation sake and without any reference to the wants of society, is one of the greatest evils of Indian administration in the present day²⁶.

With all its phases of ups and down; suggestions and opposition, to the original draft of Sorabjee Bengallee and to the Report of the Select Committee, the Bill was received the assent of the Governor General on the 15th March, 1881 and The Factory Act of 1881 was passed. However its, application was to be enforced only from 15th July, 1881²⁷. Though many hailed the passing of the Act as an imposition and unrequited regulation, but there were others who felt that the Act succumbed to the pressure from the strong and influential members of the society.

However the Act of 1881 defined the term 'Factory' and it got most of the working areas under its control. The issue of employing young children in factories was taken care by adding a clause on the age of employment should be above 7 years and not more than 9 hours in one day, with one meal break of one hour. It also suggested 4 compulsory holidays for them in a month, to be announced in the beginning of the month. It upheld the suggestion of certifying the age of young children through government certified surgeon as demanded by Sorabjee Bengallee in clause 12 to 14. The provision was made for an inspector of factories. (Sorabji's draft clause 18-19) was also included. The Act of 1881 in its introductory stage should be commended, because the way it was passed through its initial resistance, there was absolutely no way that, it would have seen the daylight. The Act of 1881, did compromise on the amount of five to only Rs.200/- compared to Rs.1000/- suggested by Sorabjee. It otherwise at its entry level covered two important areas which needed equal attention. It included strict guidelines for the facing of machinery and hazardous areas in the factory premises under section 12. It also made provision for recording and reporting of industrial accidents to the local authorities. It can be sharply argued that the Factory Act of 1881, failed to meet its intentions and purpose, but it should not be ruled out that this was the beginning of a long drawn struggle. Sorabjee should certainly get the credit of raising one of the important and humanitarian questions, which he pursued with zeal²⁸. The passing of 1881 Act was a clearly articulated movement. The leadership and firmness of Sorabjee Bengallee only served to clarify the movement of forces and now he was able to distinctly identify how to re handle them. The persistency of Sorabjee made his policy clear to his supporters that they must convince and not coerce. The passing of the Act

1881, gave Sorabjee a clear vision to reframe his draft of 1878 again and with his experience he came to know how rigorous his new task would be. The deficiency in the Factory Act of 1881, as claimed by some, gave Sorabjee a reason to modify his approach and preparation for a complete makeover in the Factory reforms. His experiment on the lives of European socialism, gained him equal support from the Europeans as well. Sorabjee meticulously moved his second movement to motion, on the issue of working hours; consideration for women workers and rising the age of young employers.

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Appendix A

STATEMENT OF OBJECTS AND REASONS FOR FACTORY LEGISLATION

The want has long been felt of a Factory Act for the protection of the working -classes, and especially women and children, in the cotton Mills and other Factories throughout this Presidency. Most of the manufacturing countries of Europe have their factory legislation, and although it is not proposed at present that elaborate legislative measures on the subject, on the model of European legislation, should be introduced into India, it is desirable and necessary for the health and well being of our patient labouring population that some limit should be fixed by law regarding their hours of work, and to procure for them by the same means a day of rest once in a wee. At present the boon of closing our cotton Mills on Sundays is granted to the employees at the caprice or according to the interest of the employers. Generally there Mills are closed one Sunday in a fortnight, but from the necessity of cleaning the machinery the hands have also to work for few hours of the day. With this slight exception, and with the exception of about fourteen holidays in the year. The hands are kept constantly at work from sunrise to sunset, resting for from twenty minutes to half an hour in the middle of the day for their meals. The hours of work vary according to seasons of the year, from about eleven hours in the cold season to thirteen hours in longer days of the hot months.

It is proposed in the Bill that the hours of work be limited for male adults to eleven hours, for female adult to ten hours, and for children or young person of both sexes above the age of 8 years and under 14

years to nine hours per day, out of which they shall all be entitled to one hour of rest fro meals. It is likewise proposed to prohibit altogether the employment of children under the age of 8 years.

This very moderate measure of law, it is expected, although not so favorable as similar laws in force in Great Britain, will considerably benefit the people for whose good it is intended. Apart from the considerations of the health and the alleviation of hardship and cruelty to children of tender years, the measure, it is hoped, will lessen in some degree the brutalizing ignorance which is the effect of the mode of life to which the factory hands are subjected.

Provision has been made in the Bill to empower the Governor in Council to increase at his discretion the hours of work of adult males, and to permit certain other exemptions regarding the application of the law. This power provides fro all necessary cases where exemption is needed, including the working of Cotton Presses and other Factories, which require extra hours of work at certain periods of the year.

(sd.) SORABJEE SHAPOORJEE BENGALLEE. BOMABY, 18TH APRIL 1878.

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of Raigad District, Maharashtra

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Dr. Kalpit Mhatre



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Preface

The present book is intended as a popular guide focusing on the information of medicinal plants, their identification, classification, nomenclature, and uses. The book, designed primarily for an Indian readership, includes descriptions of medicinal plant species along with their traditional uses.

The history of herbal medicines is as old as human civilization. Many of the documents revealed that the plants have been used medicinally in India, Egypt, China and Greece long before the beginning of the Christian era. Indians have worked meticulously on medicinal properties of plants they came across. A huge portion of Indian population still uses the Indian system of medicine known as *Ayurveda*. The ancient work in *Ayurveda* includes *CharakaSamhita* and *SushrutaSamhita*. *Charak* made fifty groups of ten herbs each of which according to him, would suffice ordinary physicians need. Similarly, *Sushruta* arranged 760 herbs in 7 sets based on their common properties.

In India, a total of 15,000 plant species has been recorded so far of which about 2,000 are known to have medicinal properties and some of them are used even in home-remedies in the rural and remote areas of the country.

Raigad district in the Maharashtra state due to its varied physiographic, climatic and edaphic conditions reflected a rich and varied flora of the medicinal plants. These plants are regularly used by local inhabitants as well as tribal people in their day to day life for their medicinal purpose.

In the present book, the authors have tried to compile the traditional knowledge about the medicinal plants in a classical manner. In the introduction part, a brief account on the location, physiography, climate, geology and soil, forest vegetation and tribal community is given. The information of species includes latest and valid botanical name, followed by references to the previous literature and common name, brief characteristics of plant species, flowering and fruiting period, areference to the illustration, locality or distribution in the district, GPS coordinates and exsiccata. In the end, a brief note on medicinal uses or ethnobotany is given.

The layman rarely uses the botanical names instead he uses popular common or vernacular names. One of the purposes of this book is to popularize and supply standard meaningful common or vernacular names which can be used throughout the area covered by this work and outside.

The book is full of original observations taken or recorded by authors during their extensive field work from 2009 to 2014. We hope that the students of post-graduate and doctorate in botany, pharmacy or bio-medicines, as well as, personnel engaged in plant-based industries shall be benefited by our efforts

Authors wish to thank Former Principal Dr. Frazer Mascarenhas, s.j., Principal Dr. Agnelo Menezes and the management of St. Xavier's College for their constant support and encouragement for this work. We express our gratitude towards the Director and the Staff of the Blatter Herbarium, Mr. Rajdeo Singh and Ms. Sweedle Cerejo-Shivkar for the constant support and

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This work is the Ph.D. work undertaken during the project entitled - 'Digitized Inventory of Medicinal Plant Resources of Maharashtra - Mumbai, Thane and Raigad'. The Junior author Dr. Kalpit Mhatre in the capacity of project fellow worked on this project and was responsible for Raigad district. Hence, authors are grateful to the authorities of Rajiv Gandhi Science and Technology Commission, Government of Maharashtra and the coordinating nodal agency Agharkar Research Institute, Pune for funding this project.

Without the permission and cooperation of Principal Chief Conservator of the Forest - Nagpur (for Mumbai, Thane and Raigad), Conservator of Forest, Thane (For Phansad Wild-life Sanctuary) and Deputy Conservator of Forest (Territorial), Roha (For Roha forest division) it was not possible to carry out this field work. We are indebted to these officials for their help.

07/11/2015

Mumbai

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Foreword

Anthropology is the study of humans, past and present. To understand the full sweep and complexity of cultures across all of human history, anthropology draws and builds upon knowledge from both, the social and biological sciences. As a student of anthropology, I can visualize the potential in the Traditional Medicine systems of India, especially for the rural areas. Even with my limited experience of rural India, especially during my doctoral fieldwork in the tribal areas of Dhule District, I am aware of people reaping the benefits of this age-old naturally-available medicine and I have also personally used and propagated it.

Every Indian household is familiar with grandma's prescriptions and follows them very religiously. India being a country of diverse cultures and a storehouse of natural wealth in terms of plants and herbs, traditional medicine practices are varied. At times, many of these medicinal plants are known only to the local medicine men or 'Bhagats' and there is a need for a scientific effort to record this information for future generations. This recording also helps in protecting and conserving these species which are so crucial to the health of humankind.

I am extremely happy to note that the authors of this book have made an attempt to use the best scientific knowledge in recording information on these plant species. They have compiled facts on the traditional knowledge of medicinal plants in a classical manner. In the introduction, a brief account of the location, physiography, climate, geology and soil, forest vegetation and tribal community is given. The information on the species includes the latest and currently valid botanical name, followed by references to the previous literature and commonly used name, brief characteristics of the plant species, the flowering and fruiting period, references to the illustration, locality or distribution in the district and the GPS coordinates. At the end a brief note on the medicinal uses or ethno-botany is given. Some of the usages of these plants have perhaps been recorded for the first time and this is a great contribution to science.

The present book deals with as many as 454 ethno-medicinal plants belonging to 113 families found just in the Raigad District of Maharashtra. Out of the 454 species, 171 are revealed to be herbs, 91 shrubs, 7 undershrubs, 48 climbers, 134 trees and 3 epiphytes – recording the wide variety of plant material available. The Herbal remedies for 50 diseases and 32 miscellaneous uses of ethno-medicinal plants are also recorded.

I am sure that this book will be very useful to the pharma industry and to scientists and students who are interested in exploring this area. But it will also have valuable applications for the lay person who has become aware of natural remedies and who wants to preserve the natural environment for their children. I record my grateful appreciation for the work these authors have done through St. Xavier's College.

Dr. Frazer Mascarenhas, S.J.
Former Principal, St. Xavier's College
Mumbai

CHAPTER - I

INTRODUCTION

a) Location and Physiography:

Raigad district in the state of Maharashtra lies between $17^{\circ}51'$ - $19^{\circ}80'$ N latitude and $72^{\circ}51'$ - $73^{\circ}40'$ E longitude. It covers an area of 7162 sq. km. The district is bounded on the west by Arabian sea, *Thane* district lies to the north, *Pune* district to the east, *Ratnagiri* district to the south while *Satara* district shares a boundary in south-east. *Raigad* district forms an important part of the traditional *Konkan* region. There are several hill ranges stretching out from the main *Sahyadri* range which runs almost parallel to the west coast. On the north-east boundary of the district, the *Sahyadri* range is crossed by several passes or *ghats*. Interesting forest vegetation is reflected due to varied physiological, geological, edaphic and climatic conditions.

A number of rivers and streams originate in the *Sahyadri* and flow towards the Arabian sea. The major rivers in the district are *Ulhas*, *Patalganga* and *Amba* in the northern part, *Kundalika* in central part and *Savitri* and *Kal* in the southern part. River *Ulhas* flows 21 km in the district and enters in the region of *Thane* district. The district has 240 km long sea coast and has *Bagmandala*, *Dighi* (*Shreevardhan*), *Revdanda* and *Revas* (*Alibag*), *Mora* and *Nhava-Sheva* (*Uran*) ports. *Nhava-Sheva* is the most advanced port in India.

b) Geology and Soil:

Raigad district consist of dark coloured volcanic lava flows and laterites. On plateau, basalt lava forms dominant 'Basaltic composition'. Next to that is a little softer, purple to grayish, usually showing rounded or elongated or tubular cavities and geode with infillings of secondary mineral occupying the portion of slopes and valleys.

Soil in the district is *Murum*, grayish to dirty green in colour which on decomposition gives reddish-brown to black soil. Rice soil and coastal alluvial soils are also present.

c) Climate:

Alibag and *Bhira* are two places in the district having regional observatories of India Meteorological Department. Summer season is from March to May followed by south-west monsoon from June to October and November to February is cold season. The average annual rainfall of the district is 3110 mm (2010). The maximum temperature recorded is 35.7°C in the month of April and minimum temperature recorded is 12°C in the month of January. April and May are the hottest months while December and January are coldest months.

d) Forests:

Varied physiographical, geological, climatic and edaphic conditions are reflected in diverse vegetation types. A total of 2864 sq. km. area in the district is under forests. Forests in

the district are classified by Champion and Seth (1968) as:

1. Tropical semi-evergreen to evergreen forests.
2. Tropical moist deciduous forests.
3. Tropical dry deciduous forests
4. Littoral and Swamp forest : a) Riparian b) Mangrove

Tropical semi-evergreen to evergreen forest type is mainly found in hilly regions and Ghats, particularly in Matheran (Karjat taluka), Kankeshwar (Alibag taluka), Mirya Dongar (Pen taluka), Varandha Ghat (Mahad taluka) and Phansad Wildlife Sanctuary (Murud taluka). Tropical moist deciduous forests cover the major part of the district and are usually found on hill slopes, plains and valleys. Tropical dry deciduous forests are found in Roha taluka. Riparian vegetation is found along river banks and lakes, while mangrove forest is found along muddy seashores and creeks.

1. Tropical semi-evergreen to evergreen forests:

This type of forest is mainly found on high altitude above 550 m in hilly regions of Karjat (Matheran), Alibag (Kankeshwar), Pen (Mirya Dongar), Mahad (Varandha Ghat) and Khopoli (part of Bor Ghat). The vegetation of this forest is divided into three layers viz. plateau forests or top layer, middle layer below the plateau and ground layer or undergrowth.

The plateau forest or top layer is composed of semi-evergreen to evergreen trees such as *Garcinia indica* (Thouars) Choisy, *Mammea suringa* (Buch.-Ham. ex Roxb.) Kosterm., *Litsea glutinosa* (Lour.) C. B. Rob., *Polalthia fragrans* (Dalzell) Hook.f. & Thoms., *Actinodaphne angustifolia* Nees and *Caralia brachiata* (Lour.) Merr., climbers such as *Ancistrocladus heyneanus* Wall. ex J. Graham, *Getonia floribunda* Roxb. and shrubs such as *Ixora nigricans* R. Br. ex Wight & Arn. and *Pavetta crassicaulis* Bremek. are recorded. Middle layer below the plateau is composed of trees such as *Careya arborea* Roxb., *Dillenia pentagyna* Roxb., *Syzygium cumini* (L.) Skeels, *Lagerstroemia lanceolata* Wall., *Mangifera indica* L., *Catunaregum spinosa* (Thunb.) Tiruveng., *Haldinia cordifolia* (Roxb.) Ridsdale, *Hymenodictyon orixense* (Roxb.) Mabberley, *Meyna spinosa* Roxb. ex Link., *Mitragyna parvifolia* (Roxb.) Korth., *Madhuca longifolia* (L.) J. F. Macbr. var. *latifolia* (Roxb.) A. Chev, *Mimusops elengi* L., *Alstonia scholaris* (L.) R. Br., *Tabernaemontana alternifolia* L., *Holarrhena pubescens* Wall., *Wrightia tinctoria* R. Br., *Cordia dichotoma* Forst. f., *Oroxylum indicum* (L.) Vent, *Stereospermum tetragonum* DC., *Gmelina arborea* Roxb., *Bridelia retusa* (L.) Juss., *Falconeria insignis* Royle, *Phyllanthus emblica* L., *Ficus benghalensis* L. and *Ficus racemosa* L., *Holoptelea intergrifolia* Planch. Ground layer or undergrowth is composed of climbers, lianas, shrubs such as *Clematis hedysarifolia* DC., *Ampelocissus latifolia* (Roxb.) Planch, *Diplocyclos palmatus* (L.) C. Jeffrey, *Trichosanthes tricuspidata* Lour., *Cryptostegia grandiflora* R. Br. ex Lindl., *Butea superba* Roxb. ex Willd., *Entada rheedei* Spreng., *Anamirta cocculus* (L.) Wight & Arn., *Trichosanthes cucumerina* L., *Cuscuta reflexa* Roxb., *Argyreia nervosa* (Burm. f.) Boj., *Piper nigrum* L. Herbs such as *Acalypha indica* L., *Euphorbia hirta* L., *Cleome gynandra* L., *Cleome viscosa* L., *Urena lobata* L., *Corchorus capsularis* L., *Biophytum sensitivum* (L.) DC., *Impatiens*

Sida rhombifolia L., Sp. Pl. 684, 1753; Cooke, Fl. Pres Bombay 1: 93, 1901; Almeida, Fl. Maharashtra 1: 126, 1996. *Sida rhombifolia* L. ssp. *rhombifolia* Borss, Blumea 14: 195, 1966; Singh *et al.*, Fl. Maharashtra State 1: 327, 2000; Kothari & Moorthy, Fl. Raigad District 32, 1993. (Photoplate No. 33)

“Chikana”

Shrubs; branches with stellate hairs. Stem slender, hairy. Leaves obovate or truncate, retuse at apex, cuneate at base, elliptic-oblong, margins crenate. Flowers reddish-yellow, solitary, axillary. Sepals acute. Petals larger than sepals. Seeds smooth.

Commonly found along road sides, field bunds and as an undergrowth in moist deciduous forests.

- Fl & Fr. : September to October.
 Illustration : Maheshwari, Illus. Fl. Delhi f. 24, 1966; Bross. (l.c.)
 Distribution : Throughout the district.
 GPS coordinates : 18°31'29.83"N and 73°15'54.70"E
 Exsiccata : KGM – 158, 284, 320 (BLAT)

Ethnobotany :

Root is applied in treatment of rheumatism, for this purpose, it is chopped and soaked in water for 24 hours. Then a paste of ginger and *Eucalyptus* oil is added and the same is applied on joints. Leaves are used in scorpion sting.

Thespesia Solander ex Correa (nom. cons.)

Thespesia populnea (L.) Sol. ex Correa, Ann. Mus. 9: 290, t. 25, f. 1, 1807; Wight, Icon t. 8, 1839; Graham, Cat. Bombay Pl. 15, 1839; Dalz. & Gibs., Bombay Fl. 18, 1861; Cooke, Fl. Pres. Bombay 1: 114, 1901; Kothari & Moorthy, Fl. Raigad District 26, 1993; Almeida, Fl. Maharashtra 1: 127, 1990. Singh *et al.*, Fl. Maharashtra State 1: 330, 2000. *Hibiscus populanea* L., Sp. Pl. 696, 1753. (Photoplate No. 35)

“Bhendi”

Trees. Leaves broadly ovate, cordate at base, acuminate at apex, margins entire, glabrous, nerves prominent, often with a glandular pore in one or more of the intercostal spaces below. Stipules deciduous. Sepals truncate. Petals yellow with purple base. Capsules globose, surrounded by persistent calyx. Seeds ovoid.

Commonly found in cultivated fields as well as in moist deciduous forests.

- Fl. & Fr. : Throughout the year.
 Illustration : Wight, Ic. t. 8, 1838; Matthew, Illus. Fl. Tamilnadu Carnatic 2: t. 69, 1982.
 Distribution : Throughout the district.
 GPS coordinates : 18°31'21.67"N and 73°17'16.27"E
 Exsiccata : KGM – 247, 382 (BLAT)

Sida rhombifolia L., Sp. Pl. 684, 1753; Cooke, Fl. Pres Bombay 1: 93, 1901; Almeida, Fl. Maharashtra 1: 126, 1996. *Sida rhombifolia* L. ssp. *rhombifolia* Borss, Blumea 14: 195, 1966; Singh *et al.*, Fl. Maharashtra State 1: 327, 2000; Kothari & Moorthy, Fl. Raigad District 32, 1993. (Photoplate No. 33)

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Distribution : Throughout the district.
GPS coordinates : 18°31'21.67"N and 73°17'16.27"E
Exsiccata : KGM – 247, 382 (BLAT)

Commonly cultivated, flowers are sold in local market by tribal people. It is used as a substitute for *Pavetta crassicaulis* Bremek.

Mussaenda frondosa L.

Commonly cultivated. Paste of leaves and bracts is used in boils and burns.

Mussaenda glabrata (Hook.f.) Hutch. ex Gamble

Commonly cultivated. Paste made from leaves and bark is used in boils and burns.

ASTERACEAE Dumort. (nom. alt.)

COMPOSITAE A. L. Jussieu. (nom. cons.)

- | | |
|--|---------------------|
| 1. Female florets apetalous..... | <i>Xanthium</i> |
| 1. Female florets petalous..... | 2. |
| 2. Leaf margins dentate or spiny..... | <i>Tricholepis</i> |
| 2. Leaf margins not as above..... | 3. |
| 3. Heads 1-5 flowered..... | <i>Elephantopus</i> |
| 3. Heads more than 5- flowered..... | 4. |
| 4. Leaves alternate..... | 5. |
| 5. Florets pink or purple..... | <i>Cynthillium</i> |
| 5. Florets yellow..... | <i>Carthamus</i> |
| 4. Leaves opposite..... | 6. |
| 6. Pappus absent..... | <i>Acmella</i> |
| 6. Pappus present..... | 7. |
| 7. Achenes curved..... | <i>Chromolaena</i> |
| 7. Achenes not as above..... | 8. |
| 8. Heads homogamous..... | <i>Ageratum</i> |
| 8. Heads heterogamous..... | 9. |
| 9. Heads globose..... | 10. |
| 10. Florets pink or purple..... | <i>Sphaeranthus</i> |
| 10. Florets yellowish to purple..... | <i>Cyathocline</i> |
| 9. Heads companulate..... | 11. |
| 11. Female florets minutely toothed..... | <i>Blumea</i> |
| 11. Female florets not as above..... | 12. |
| 12. Heads subsessile..... | <i>Synedrella</i> |
| 12. Heads stalked..... | 13. |
| 13. Leaf blade pinnatifid..... | 14. |
| 14. Pappus present..... | <i>Senecio</i> |
| 14. Pappus absent..... | <i>Parthenium</i> |
| 13. Leaf blade entire..... | 15. |
| 15. Rays yellow..... | <i>Tridax</i> |
| 15. Rays not yellow..... | 16. |
| 16. Leaves alternate..... | <i>Caesulia</i> |
| 16. Leaves opposite..... | <i>Eclipta</i> |

Ipomoea Jacq.

1. Plants of aquatic or marshy habitat.....2.
2. Flowers in dichasial cymes, more than 5.....*I. carnea*
2. Flowers 1-5, cymose.....*I. aquatica*
1. Plants of terrestrial habitat.....3.
3. Leaves entire, rarely 3-lobed.....4.
4. Sepals distinctly awned.....*I. hederifolia*
4. Sepals not awned.....*I. nil*
3. Leaves lobed.....5.
5. Leaves 2-3 lobed.....*I. pes-caprae*
5. Leaves palmately 3-9 lobed.....*I. obscura*

Ipomoea aquatica Forsk., Fl. Aegypt. – Arab. 44, 1775; Cooke, Fl. Pres. Bombay 2: 346, 1905; Kothari & Moorthy, Fl. Raigad District 261, 1993; Almeida, Fl. Maharashtra 3B: 319, 2001; Singh *et al.*, Fl. Maharashtra State 2: 456, 2001. *Ipomoea reptans* Graham, Cat. Bombay Pl. 130, 1839; Dalz. & Gibs., Bombay Fl. 164, 1861.

“Nalichi Bhaji”

Aquatic herbs. Leaves elliptic-oblong or subdeltoid, acute, glabrous, base cordate or hastate with rounded or acute lobes, truncate. Flowers axillary, solitary or in few flowered cymes. Capsules ovoid. Seeds minutely pubescent.

Common in wet places and along the margins of waterlogged areas.

- Fl. & Fr.** : September to June.
Illustration : Maheshwari, Illus. Fl. Delhi f. 139, 1966.
Distribution : Throughout the district.
GPS coordinates : 18°31'25.20"N and 73°9'12.10"E
Exsiccata : KGM – 627, 694 (BLAT)

Ethnobotany:

Leaves are used as vegetable by tribal people.

Ipomoea carnea Jacq., Eneum. Syst. Pl. 13, 1770. *Ipomoea carnea* Jacq. ssp. *fistulosa* (Mart. ex Choisy) Austin in *Taxon* 26: 237, 1977; Kothari & Moorthy, Fl. Raigad District 260, 1993; Almeida, Fl. Maharashtra 3B: 322, 2001; Singh *et al.*, Fl. Maharashtra State 2: 456, 2001. *Ipomoea fistulosa* Mart. ex Choisy in DC. Prodr. 9: 349, 1845. *Ipomoea crassicaulis* (Benth.) Robinson, Proc. Amar. Acad. Sci. 51: 530, 1916. *Ipomoea carnea* Jacq. Enum. Pl. Carib. 13, 1760; Cooke, Fl. Pres. Bombay 2: 229, 1905. (Photoplate No. 20)

“Besharam”

Stragling shrubs with milky sap. Leaves ovate or ovate-lanceolate, long acuminate, cordate at the base, entire. Flowers rose or light-mauve in axillary cymes. Capsules glabrous. Seeds silky.

Common near wet places and wasteland.

0.5.3: Any rack or shelf

0.5.4: Any provision for stocking

0.5.5: Cots or hanging:

0.5.5.1: Frame

0.5.5.2: Legs

0.6: Boat building:

0.6.1: Hull

0.6.2: Masts and spans

0.6.3: Oars

0.6.4: Dugouts

0.7: Toys and carving**0.8: Bridges****0.9: Musical instruments****0.10: Other minor articles not listed above****1. Food:****1.1: Normal human diet:**

Local name	Botanical name	Quantity consumed	How consumed	When consumed	Source Grown/wild	Cost now/procured	How preserved

1.1.1: Cereals**1.1.2: Pulses****1.1.3: Vegetables:**

1.1.3.1: Leafy

1.1.3.2: Roots and Tubers

1.1.3.3: Other vegetables

1.1.4: Oils and Fats**1.1.5: Fruits****1.1.6: Condiments**

1.1.7: Milk

1.1.8: Eggs, Fish etc.

1.1.9: Sweets

1.1.10: Taboos

1.2: Special diet:**1.2.1: For sick:**

1.2.1.1: Solid foods

1.2.1.2: Liquid diet

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(Q)

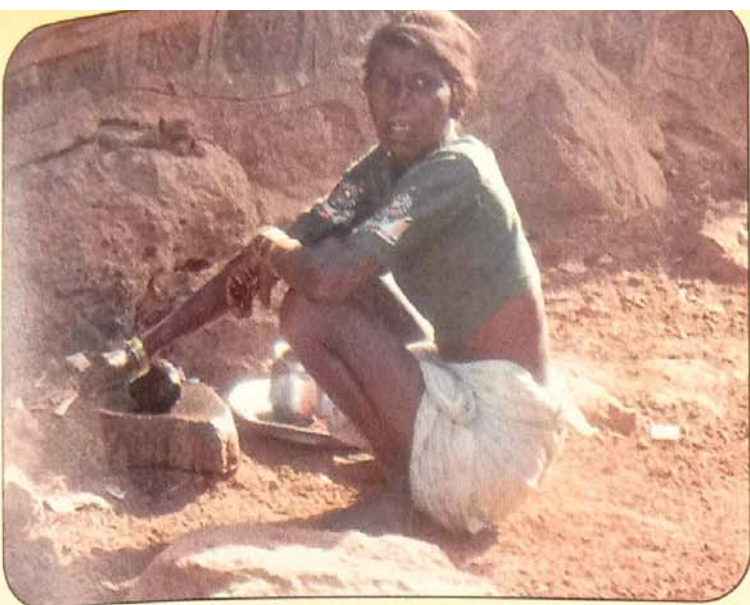
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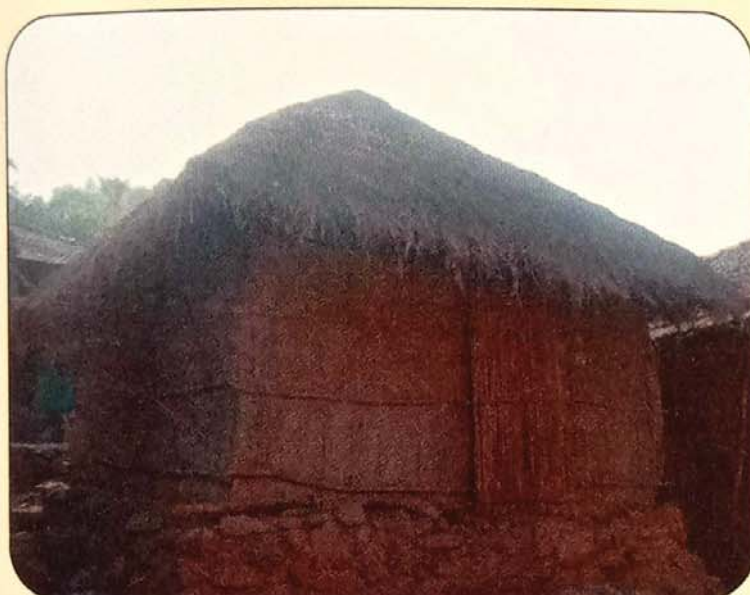
Saccharum officinarum L. ("Uns") 244
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A Katkari woman preparing herbal medicine



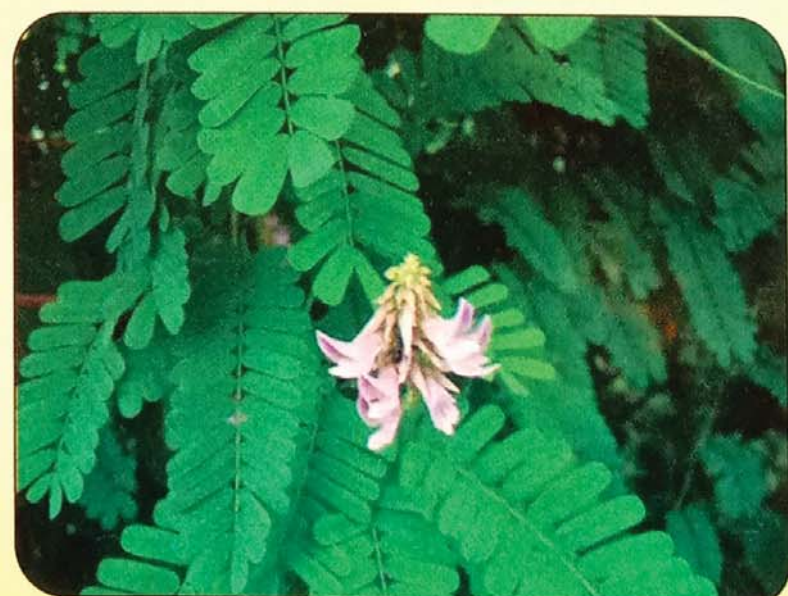
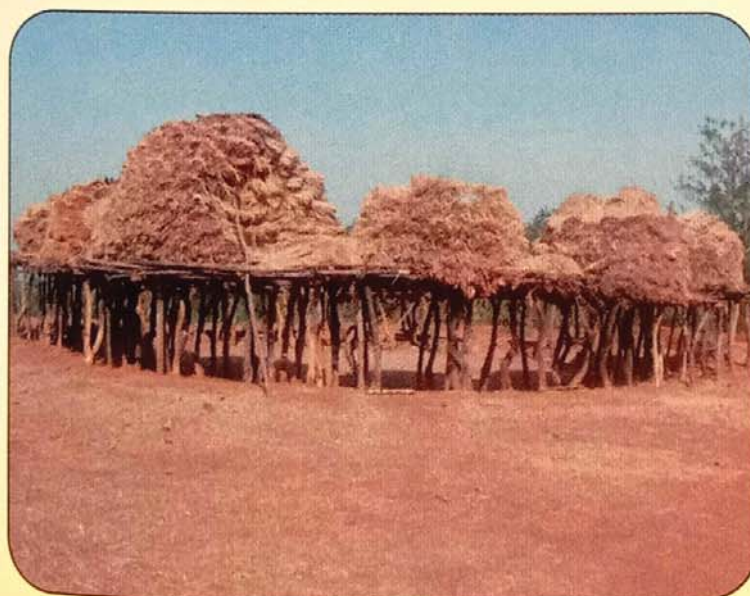
A Thakar family



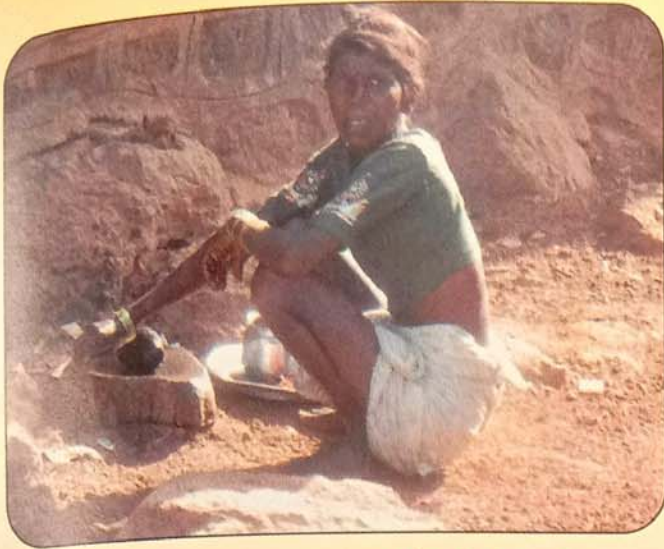
A typical house of the Thakar tribe



A Typical storage of Firewood



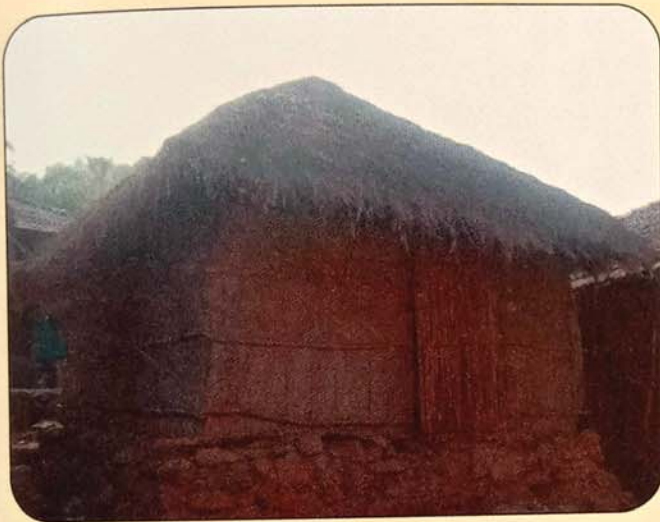
Photoplate 01



A Katkari woman preparing herbal medicine



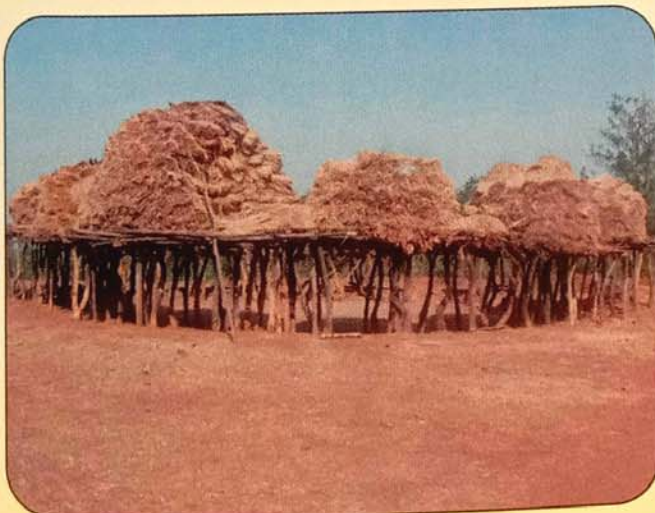
A Thakar family



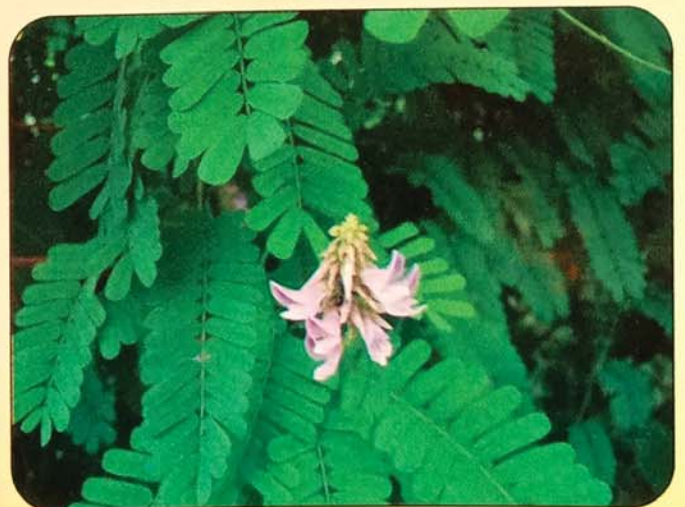
A typical house of the Thakar tribe



A Typical storage of Firewood



Typical storage of Rice straw



Abrus precatorius L.

Photoplate 21



Ipomoea nil (L.) Roth



Ipomoea obscura



Ixora brachiata Roxb.



Ixora coccinea L.



Jasminum malabaricum Wight



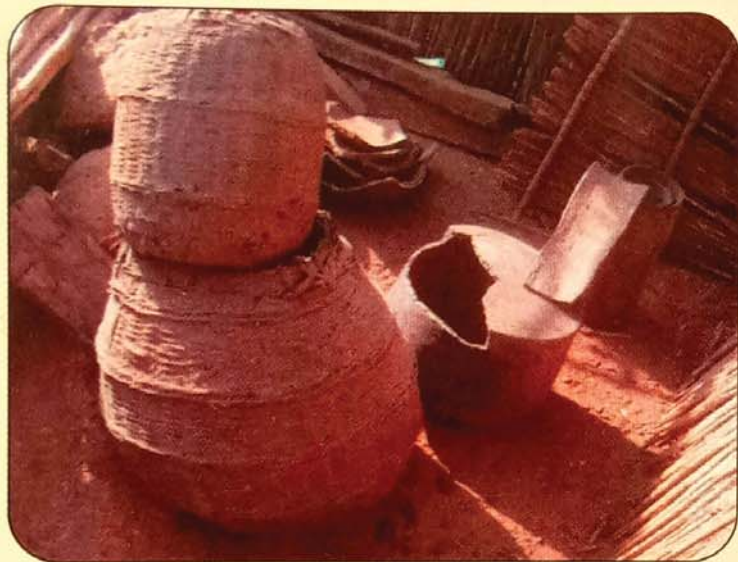
Justicia adhatoda L.



Sterculia urens Roxb.



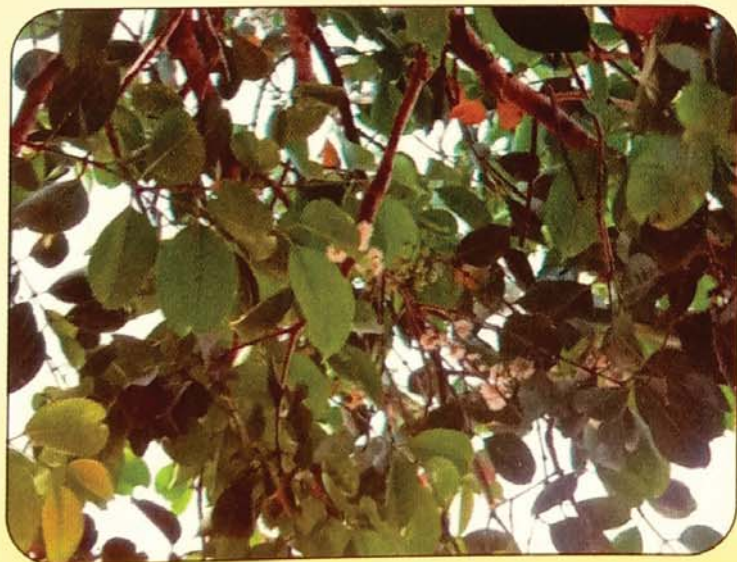
A Storage Container known as Kanaga



Storage Containers for Rice



Synedrella nodiflora (L.) Gaertn.



Syzygium cumini (L.) Skeels



Tabernaemontana alternifolia L.

About the Book

This book is intended to be a popular guide on medicinal plants - their identification, classification, nomenclature, and their uses. Designed primarily for Indian scholars, this book focuses on the medicinal flora found in the Raigad district of Maharashtra. It combines the traditional uses and descriptions of medicinal plant species that are used regularly by the local inhabitants and the tribal communities. Raigad district with its varied physiographic, climatic and edaphic conditions reflects a wide assortment of rich medicinal plants. In the present book, the authors have attempted to compile traditional knowledge surrounding medicinal plants in a classical manner. A layperson rarely uses the botanical names of plants, instead s/he uses the popular or vernacular names. One of the purposes of this book is to popularize and supply standard, meaningful and common or vernacular names for the medicinal plants. Therefore, this book is accessible to readers from diverse disciplines. The authors have recorded their original observations made during the extensive field work in the area from 2009 to 2014. This contribution will be a useful resource for postgraduate and doctoral scholars of Botany, Pharmacy, Bio-medicines etc. Additionally, personnel engaged in plant-based industries will also find the information in this book very valuable.



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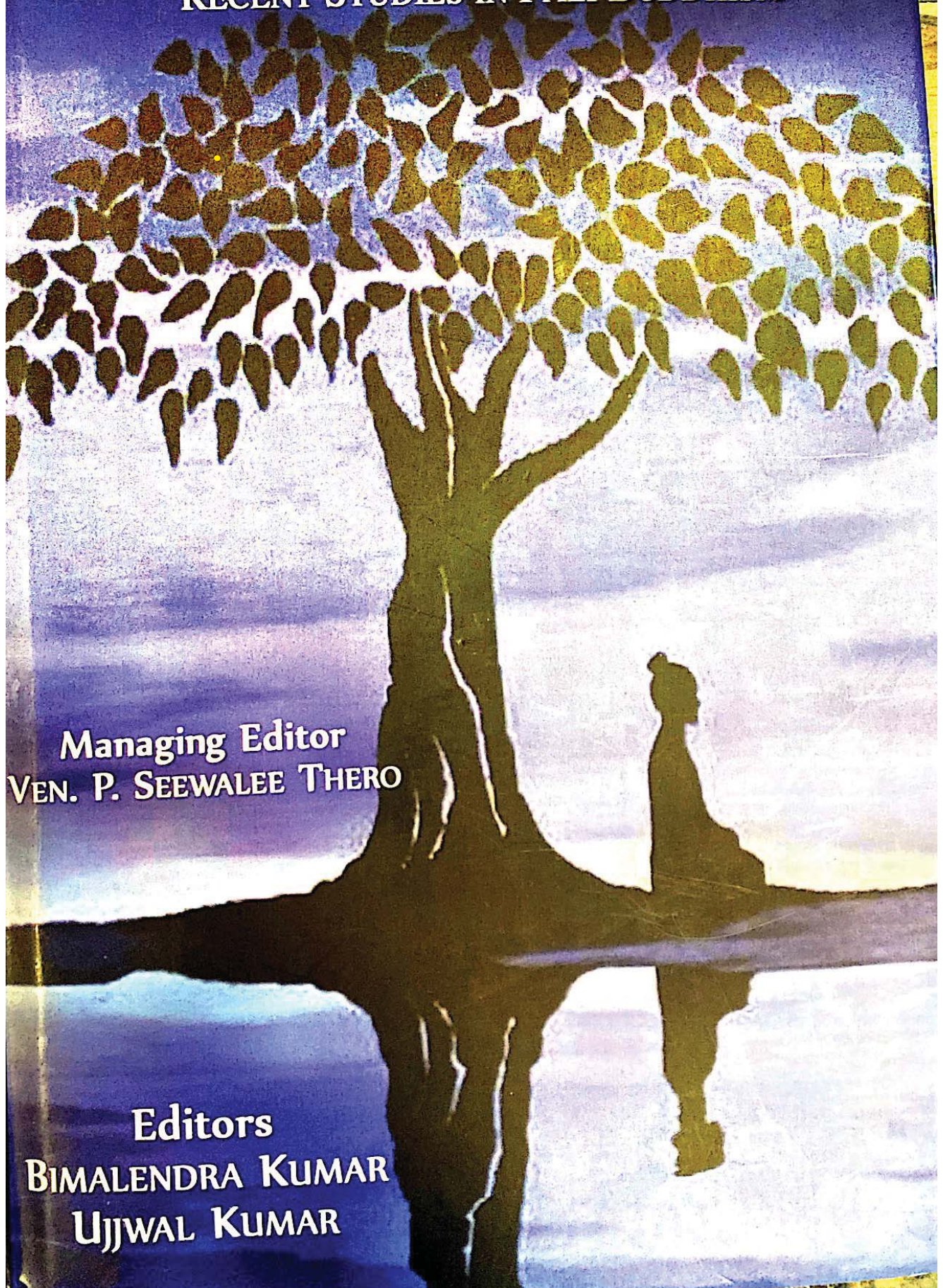
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About the Book

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Application of Attha for Gahapati-s: A Study of the Practical Approach of the Buddha

Radha KUMAR*

Society represents a group of individuals who are together for common purposes or to pursue common ideologies. Individuals join together so that they can benefit from each other at a social, economic and intellectual level. Additionally, there is a feeling of security and comfort in each other's company. This synergy brings about cooperation and collaboration among the people. The holistic approach when analyzed would mean that when decisions are taken, it has to be studied/viewed by the impact it has on the entire society and events that shape the ethos of living. This creates a balanced, democratic and a stable development that helps in fully enhancing the creativity of the members of society. This approach will motivate members to further ponder upon the all round welfare of the society rather than pursue an individualistic view. The Gautama's *dhammā* exemplifies this holistic ideology. Another important aspect of the social set up of society during the time of the Buddha was the role and the importance played by the householders, known as the *gahapati*. The uniqueness of the teachings of the Buddha was his integration of the householders in the course of his lectures and not separating them from the tenets of what he taught.

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A study of the *suttā*-s of the Sutta Piṭaka captures the easy manner and style with which the Buddha intermingles, interacts and interfaces with the members of society. It can be discerned from the *suttā*-s how the Gautama made his thought process relevant to the conditions they lived in. The Buddha was a reformer who could easily mingle and interact with the masses. He comprehended their day to day issues and advised them in a pragmatic way on how they could come out the sense object contact and attachment, which was centric to his theory of causation of *dukkha*. It is also documented how the Buddha in the course of his interactions, faced all situations with a calm demeanor, even very hostile ones. He needed to establish a thought which was within the bounds of pure religion and to put an end to all superstitions and skepticism.

One can perceive on reading the *suttā*-s that in order to interact with the *gahapati*-s and *gahapatin*-s, the *suttā*-s have references as to how the Buddha addresses the common people and advised them on all aspects of social, political and economic issues. The Buddha addressed all their issues too, with infinite sensitivity, displaying tremendous practicality (HORNER 2000: I.85).

The Buddha knew that family or *kāla* was the basic factor on which the edifice of the entire society was built. So, for a peaceful state the basic unit on which the *rāṣṭra* is constructed which was *kāla*, also had to maintain a poignant attitude (HORNER 2000: I.113-14). The family members of the *kāla* had to maintain peace and calm. The Buddha, analyzed this practically and says in *Mahādukkhakkhandā-sutta* (The Great Discourse on the Mass of Suffering) of *Majjhima-nikāya* (I.86), "[It is because of the] sensual pleasures as the cause, sensual pleasures as the basis, the cause being simply sensual pleasures, king's dispute with kings, noble's dispute with nobles, and Brahman's dispute with Brahmins and householders dispute with householders.... Those, who enter into quarrel, contention, dispute and attack one other with

their hands, with stones, with sticks and weapons. They also wound each other with battle and arrows and are hurled with knives and swords" (tr. NĀṆAMOLI 1995: 181). This is caused due to the anguish of the senses. The squabbles then lead to wars and physical abuse.

The Buddha also spells out what is it that creates *adhamma* for a householder. It is when,

- He craves unduly for possessions that does not belong to him.
- He follows a path that only ensures immense gratification of the sense pleasures.
- He lies, when he takes the responsibility of being a witness before a council company, his relations, a guild or a royal family
- He is an intentional liar either for his own sake or for that of another or for the sake of some material gain or other.
- He is a slanderer when he hears something at one place and misinterprets it elsewhere, this way he sows seeds of discord
- He is of a very harsh speech, abusive of others, indulges in frivolous chatter, speaks at the wrong time or does not speak according to facts or goal or dhamma
- He covets the property of others and does not follow ethics (HORNER 2000: I.343).

Nevertheless, the uniqueness of Tathāgatha's teaching was that he brought the central thought of the *cattāriyayasaccāni*, to influence the social life, by interacting with the policy makers in a manner that they create a situation that policies are generally guides to action. So it is interesting to study the

The *Aggaññā-sutta*, *Mahāsuddāsan-sutta*, *Cakkavattisihanāda-sutta* has details about polity, hierarchy and the importance of policy formulation that was based on an egalitarian idea enumerated by the Buddha himself. The Buddha in his analysis presupposed a “contractual relation which had come to be the ultimate basis of the state” (BARUA 2003: 186).

While, in the *Aggaññā-sutta* there is a clear explanation for the birth of the state, which had its very genesis due to the consensus of the people to prevent lawlessness with a contract, the *Mahāsudassana-sutta* has detailed documentation of the features of a welfare state and the *Cakkavattisihanāda-sutta*, highlights the features of just administration which annihilates poverty and unemployment.

The Buddha chooses a small town like Kusinārā, and not great cities like Champā, Rajagriha, Sāvatti, Sāketa, Kosāmbi and Banārāsa for his *Mahapārinibbana*, to draw attention to a famous king Mahāsudassana, who set an example by formulating policies keeping the doctrine of overall development in view. In the *Cakkavattisihanāda-sutta*, it was the duty of the king to ensure an apt distribution of wealth so that poverty which was the cause of all strife and problems including violence, stealing, murder, lying and immoral practices, will be destroyed.

To study the impact that the Buddha had on the policy makers who were the kings, one can study the interactions between King Pasenedi and the Buddha. King Pasenadi from Kosala, took Buddha’s holistic views in policy formulation. In the *Sagāthā-vagga*, of the *Kosala-sutta*, there are very elaborate documentations of the Buddha’s role in influencing the king to rethink on various aspects of the administration and polity. The areas that were covered had a definitive role in the shaping the course of the society by formulating practical policies.

To analyze, the situation today, taking the views of Richard LAYARD in his book Happiness, the reason why we work is because; work provides not only income but also extra meaning to life. Unemployment not only reduces income but also reduces happiness by reducing self respect and social relationships directly. The polices should increase happiness which enhances personal freedom and space. Our goals, should also, follow the golden mean as Richard LAYARD says, “if our goals are too low we get bored and if they are too high we get frustrated. The secret is to have goals that are stretching enough but not too stretching” (LAYARD 2011: 74). In his chapter, a better world the writer says, “We should monitor the development of happiness in our countries as closely as we monitor the development of income. We should rethink our attitude on many standard issues like the work life balance” (LAYARD 2011: 232).

To conclude, policies are formulated by the Governments with an agenda to annihilate poverty, disparity, unemployment, provide education. This agenda was very similar in Ancient India too, but the Buddha gave equal importance to sensitivity and overall understanding of the challenges that a human being has at the emotional, physical and psychological level which has an impact on the policy making and policy makers at large. They have to be non partisan and not be guided purely by profit motive. While restlessness, dissatisfaction of the human spirit is a good motivator, but in excess can cause a partisan and a very selfish society. The *Majjhimāpaṭipadā* of the Buddha, is a good practice, a golden mean, to see that, this is controlled.

But the pragmatic thinker that the Buddha was, he took cognizance of, the ideas of activities of the body- *kāyānupasanā*, feelings of the body-*vedanupassanā*, activities of the Mind- *cittānupassanā* and Mental objects-*dhammānupānā*. The Tathāgatha did not deny the cravings which leads

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