From Editor’s Desk

Dear Esteemed Reader,

It is indeed my privilege to welcome you to explore and publish in our journal, Madhav Research and Review: A multidisciplinary International Journal, with a view to strengthen the research work at the global level.

The main purpose behind the publication of MRR is aiding, coordinating and promoting research and development in the rural areas with an intention to publish research articles, review articles and short communications, focusing on original work and thought. We are dedicated to promoting research activities and innovative procedures which help academic fraternity in updating knowledge, upgrading the skills and developing a research temperament.

Emphasizing on the promotion of multidisciplinary articles of thought provoking nature, we extend our boundaries right from humanities, social sciences, commerce, management, engineering, medical sciences to basic and applied sciences. There is a great need to explore innovative ideas. We enthusiastically welcome researchers and innovative thinkers to join us on a journey to reach to new heights.

We also welcome readers’ valuable comments/criticisms to make our expressions more authentic and logical.

The articles received undergo thorough screening and proper editing by the review panel so that proper academic standard is maintained.

I conclude with a note of heartfelt gratitude to the eminent members of advisory board and the review panel, members of the editorial board, technical team, esteemed authors and the well wishers, who have directly or indirectly contributed to this issue.

Best wishes.

Sincerely

Dr. Mukesh Kumar Mahawar
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Title of Paper: ………………………………………………………………………………………………

We agree and declare that:

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- It will not be submitted anywhere else during the pendency of the publication of the issue.
- There is proper acknowledgement of sources wherever tables, graphs, figures, sketches and printed material to used in the text or paper.
- The paper shall be revised/modified on the basis of the referral comments within four weeks of the communication from the editorial board of the journal.
- We alone are responsible for the correctness of events, information and data cited in the paper.
- We authorize the editorial board MRR-A multidisciplinary international journal to carryout formatting, copy editing and minor grammatical correction.
- We agree to abide by the decision of the editorial board in acceptance or non-acceptance of the paper.

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1: …………………………………  
2: …………………………………  
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Promoting Innovation in View of Green Entrepreneurship: A Move Towards Sustainability

Dr. Sant Kumar
Lecturer, Dayanand College Ajmer

Abstract
The World is on track for increasing green house gas emissions by 70% by 2050 and temperature increases by 4-6 °C by the end of the century. The environment and the economy can no longer be considered in isolation. Green Entrepreneurship is gaining momentum across global economies, as a way to pursue sustainable development. Prevention of environmental degradation, biodiversity loss and unsustainable natural resource use are the key drivers for moving towards better tomorrow. The transition towards the green growth economy is highly demanding in particular on manufacturing firms, including SMEs, as they account for a large part of the World’s consumption of resources and generation of waste. Developing countries are participating in the transition towards sustainable economic patterns. The main barriers to green growth and eco-innovation are to be essentially identified. When the financial and economic crisis has been increasing, green entrepreneurial growth prevails for a substantial transformation of consumption behavior, industrial structures and technologies. This research article suggests promoting innovation based growth for environmentally and socially sustainable businesses. International co-ordination will be critical for ensuring the overall effectiveness of business policies, for avoiding green protectionism and fears of competitiveness losses. Finally, it can be concluded that new green entrepreneurial skills are needed not just for innovation and competitiveness but also pertaining with global common cause of climate change and carbon credit policies and regulations. Ultimately, developing economies with strength of inventive spirit will move towards truly sustainable tomorrow.

Keywords: financial, consumption, manufacturing

1. Introduction
Entrepreneurship is about building new things, works for innovations and makes life easier. It focuses to establish link between societal concerns & business. The increasing trend to focus on societal movement and sustainable business practices contributes to accelerate transition to sustainable way of living. It integrates ethical vision which increasingly serves as an inspiration as well as a standard by which businesses are to be assessed. Society demands more energy, more clean water and cleaner atmosphere. Corporate have to take responsibility to drive this journey of progress. SMEs are important for green growth as key players of eco-innovation in emerging green businesses. The focus of recent green oriented policies, such as renewable energy production, smart metering, building refurbishment, cleaner cars, wind and solar battery installation is needed. Young industries are specifically vital for radical green innovations, as they often exploit technological advancements, which have been neglected by oldest abolished industries. Corporate reporting plays a key role to demonstrate balanced growth of organization’s economic, environmental and social performance.

The unending process of globalization and liberalization of market and economy has expanded opportunities and compulsions of introducing new ideas of leadership and management. The proliferation of ideas of business strategies in globalised World, urges need of expanding socio-environ concerns of business. Socially Responsible business is gaining a positive reputation in the eyes of the public. A business possessing strong moral values and cultures may enjoy a different brand value with their employees. The twin forces of globalization and technological advancement has chest rated a whole new wave of changes across emerging World Economy, well aware society and fast changing business. In the wake of recent financial crisis, it is argued that the traditional paradigm of business is not most appropriate to handle the challenges of sustained global business growth. Moral issues are re defined in terms of value, trust & integrity to move closer towards fulfilling societal development in the globalized business era. Business has to innovate at every step, setting up system to audit its suppliers on the social and environmental aspect of the products, developing new product ranges with less harmful environmental effects and creating partnerships between societal groups & business. To do better business, industries have developed a system for grading its suppliers on social and environmental criteria and develop management tools to help local needs while satisfying the business needs. Attitudinal CSR is also a vital aspect of practicing better business. Societal help through different eco concerns is essential. Green Entrepreneurship
Green Entrepreneurship combines environmental friendly practices with high growth business models that can be spread rapidly. Energy efficiency and clean development mechanism are the fastest growing green Entrepreneurial sectors.

The green economy develops into the mainstream of business practices. There are several fields in which more understanding of ecopreneurship is needed. Identifying the factors that act as the barriers and triggers to environmental entrepreneurship development of the main branch of advance research studies. The transition towards sustainable green economy has become a major challenge for developing countries. The solution lies among this transition to face the recent financial & natural resources crisis and to recover the odd situations timely. It is agreed fact that Industries should follow the environmental regulations. Still, beyond Compliance with regulations industries have additional 'Environmental Social Responsibilities'. At global pace customers prefer to do business only with business having a distinct environmental friendly image business. Developing Countries are in transformation stage by changing their corporate values, mission and policy by incorporating integrity, application of innovative technologies, sustained growth and effective environmental practices. The study analyzed the role of developing countries enterprises to facilitate the growing Indian Economy by adoption of ‘Green technologies’.

There is a relation between technological advancement and productivity. To face challenges in global trading system, weapon soft new eras are to move with:

- Efficiency
- Equity
- Legitimacy

2. Developing Economies’ -- Industrial Growth: India at a Glance

The index of Indian industrial production (IIP) registered a 6.3% growth in April, 2011 (Based on year 2004-05) as a gain to previous year April, 2010 rates of 13% (CSO). Manufacturing sector growth rate stood at 6.9% against 14.4% in 2010. While mining and electricity production was up 2.2% (9.2%) and 6.4% (6.5%) respectively. This major short fall in IIP is due to RBI’s rate hikes. Indian Industrial Sector mainly comprises Large Scale Enterprises (LSE) and Small and Medium Enterprises (SME). In view of sustainable entrepreneurial study, comparison of both business sectors is essential to study their impact on environment. Small and Medium Sized Enterprises (SMEs) have been considered vital for important share of economic activity. Although entrepreneurship can take place in both small and large firms, SMEs represent an exceptional vehicle for entrepreneurial activities: most of the start-up activity comes from SMEs; they are an important source of innovation, new products and services; and are a key element for regional development and social cohesion. Within this framework, research from both the Economics and Management disciplines has focused on investigating the effect of the entrepreneur’s characteristics on firm performance. Table 01 presents comparative study of LSE & SME entrepreneurial sectors--

<table>
<thead>
<tr>
<th>Points</th>
<th>LSE</th>
<th>SME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Visionary Power</td>
<td>More Power</td>
<td>Less Power</td>
</tr>
<tr>
<td>2. Response of Stakeholders</td>
<td>More positive response from media, NGOs</td>
<td>Less Positive response from different stakeholders</td>
</tr>
<tr>
<td></td>
<td>and Government</td>
<td></td>
</tr>
<tr>
<td>3. Leadership</td>
<td>Playing strong leadership role in environmental protection</td>
<td>Playing weak leadership role in environmental protection</td>
</tr>
<tr>
<td>4. Resource</td>
<td>Have more financial resources</td>
<td>Have less financial Resources to survive in market</td>
</tr>
<tr>
<td></td>
<td>To survive in market</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bargaining Power</td>
<td>Have more bargaining power</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Political Support</td>
<td>More politically active and have more linkage with policy makers</td>
</tr>
<tr>
<td>7</td>
<td>Follow up of Regulations</td>
<td>Stronger follow-up of environmental regulations</td>
</tr>
<tr>
<td>8</td>
<td>Knowledge Awareness</td>
<td>Have more Knowledge and awareness regarding environmental issues</td>
</tr>
</tbody>
</table>

**Figure 01: SSI in India and Waste Water Discharge**

![Figure 01: SSI in India and Waste Water Discharge](image)

**Source:** Moorthy, Janakiraman., & Jose, P.D., Corporate Environment Management : Imperatives for India

Interpretation (Figure-01)–It depicts the sector wise environmental degradation generated by small scale enterprises in India, seriously dealt by government. Major sectors are- engineering i.e. 54% and paper & board mills that account for 28%. Overall, small scale industries in India generate 3900 million liters of waste water per day. Hence, small enterprises need more powerful environmental protection mechanism.

3. **Promoting Innovation**

The Innovative entrepreneurial practices can guide policy makers, managers and entrepreneurs to the realization of potential- The potential of Sustainable World. Innovation is a driving force of welfare and contributes to increasing the living standard of societies. Stabilizing macro policies and efficient markets will still be decisive for economic development, but will no longer be sufficient to ensure societal welfare. To meet threatening of global competitive challenges, green innovations are needed in area of entrepreneurship. The OECD/Euro stat (1999) proposed a definition of the environmental industry following an output approach on the basis of specific criteria- “The environmental goods and services industry consists of activities which produce goods and services to measure, prevent, limit and minimize environmental damage to water, air and soil, as well as problems related to waste, noise and ecosystems. This includes cleaner technologies, products and services that reduce environmental risk and minimize pollution and resource use.” Industrial innovative process is different from science and technology. It comprises issues of creations, active participation, collaborative attitude of higher managerial level and coordination with environmental conditions.

4. **Review of literature**

Johnson (1994) established the concept of balancing ecology, economic and social factors that are included in the industry value system and included in the business planning resulting in profits through ecologically sound products, processes and services. In a complex relationship between population, economy, industry and
ecology, managing the environmental responsibility is a prime issue in developing countries like India. Environmental Performance Indicators have been studied by Mitra, Dhar and Agarwal (2008) in view of selected industries in India. There is an empirical literature available focusing on environment and economic growth, which indicates the strong positive relationship between profitability and green business. An inverted U-shaped relationship between economic growth and environment has been investigated called as ‘Environmental Kuznets Curve (EKC).’ The EKC indicates that as GDP per capita increases, there is an increase in demand for ‘Environmental Quality’ and more stringent environmental regulations and enforcement offset on degradation is experienced with economic growth. Paul Srivastva (1995) explained the benefits of ecological sustainability, “Corporation too stands to benefit by moving towards ecological sustainability. They could benefit by reducing costs through ecological efficiencies, capturing emerging green markets, gaining first mover advantage in their industries, ensuring long terms profitability, establishing better community relations and improving their image.” Reversa (2010) explained consumer’s perception for companies having green reputation by granting eco labels or environmental certifications. Voluntary initiatives can distinguish firms with superior environmental performance. Green consumers can differentiate the most environmentally proactive firms from the least proactive.” Costanza (1992), “It seeks an attentive form of ecologically sustainable economic growth, using energy conservations, resource generation and environmental preservation and minimization of wastes. If goals of sustainability are to be achieved, corporations must be reformed, redesigned and restructured to minimize their negative ecological impacts.” Recently, input for innovation strategies has been presented by OECD research studies. (www.newnatureofinnovation.org). “Rio Earth Summit was a signal to the World that after decades of pitting environmental quality against economic growth, policy makers are finally becoming aware of the crucial and potentially possible link between the two.” (Serageldin, 1993). Industries consume 37% of the World’s energy, 90% of World’s SO2 and 50% of toxic chemicals. Therefore, local impacts of industrial production process is on check, contrary, remedial concerns is a sensitive issue. Figure 02 depicts the stages of development during different ages. Green Entrepreneurial Development is a gradual shift from Stone Age–Golden Age–Space Age–Garbage and after that, ultimately, development moves towards ‘Green Age’.

Figure-02: Green Entrepreneurial Development: Move of Ages

5. Objectives
- To promote the innovations in view of green entrepreneurship.
- To demonstrate business acumen by developing sustainable, economically viable Entrepreneurial growth plan.

6. Research Methodology
Relevant literature is deeply reviewed on oriental societal development, philosophy of welfare to propose this new concept, its antecedents and consequences in Industries of developing countries. Industrial practices were analyzed through analysis of annual reports and sustainability Reports. Public view with respect to ‘Role of Industries about greening the products’ is also checked. Drawing upon research for promoting innovations in view of green entrepreneurship, after exploitation framework, it was found how industrial pollution worsened our eco-system. Hence, it is essential to conduct deep studies to check the present practices of industrial practices and to suggest them proper ‘innovative strategies’ to solve this global cause. The primary aim of this research study is to analyze the current entrepreneurial
environ-sustainability scenario. Most importantly, innovative concerns in view of greening the industries are chosen for this empirical study.

7. Challenges for Business
In today’s global competitive business environment, business has to face numerous challenges to survive. Some of them are as follows

**Market Challenges**
- Lack of purchasing power
- Technological incompetence
- Information unevenness & knowledge gaps
- Insufficient R&D & know-how transfer

**Organizational Challenges**
- Cultural, attitudinal & social factors
- Organizational structures & incentives
- Lack of admittance to low cost finance

**Challenges of Economic Instruments**
- Lack of understanding
- Legal system leaning to command & control
- Recent industrial structures

**Challenges of Clean Technology Adoption**
- Information draught
- Low threat bearing capacities
- Operational difficulties
- Financial constraints

Development pattern has undergone drastic changes in recent era. Cost of ecological degradation is more than 6% of Most of the areas in developing countries are still entrepreneurs to reduce environmental footprint, to operate business in a socially responsible way and also to help customers by addressing about underdeveloped due to wrong priorities. Loss of forest cover, rising arms expenditure, depletion of natural resources, pollution, worsening unemployment are resultant of wrong policies and negligence of traditional values and cultural heritage. ‘Market economies focus, on money’s worth and also stress on ‘profits’. Large scale use of environmentally harmful fertilizers and pesticides, excessive use of water, extensive deforestation, wide spread reclamation of wet lands, mammoth sized mechanized dairies and slaughter houses as well as the round-they use of mechanized boars and specialized fishing nets that have all been us here din by the shift towards a market economy.

‘Economics can help us efficiently to allocate resources towards conservation. Three steps must be taken in this connection to identify the desirable ends, to identify the scarce resources and then third step has to be followed that is how to allocate the resources. “Conservation of natural resources is a trans disciplinary issue. Drivers of environmental degradation are economic in nature. All economic production is based on transformation of raw materials provided by nature……There are a number of emerging trans disciplines such as ecological economies and environmental management. Strategic Model Strategies should be framed by environmental challenges via- innovative green products and eco-technology. Strategic model for ‘Green Entrepreneurship ’is here by suggested—

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**Strategic model for ‘Green Entrepreneurship’**

Creating Innovative Ideas

Active Participation in Change Process
Integrated Facts with Sharing Personal Experiences

Tracing Creative Ways to Spread Awareness
Emphasizing the practical instead of Theory

Make a ‘Green Support Team’
Strong Technology Base

Responsive Preparation – Proposal, Future plan Framework, Previous Experiences of Success & Failures

Healthy Mix Business Growth Pattern – Transportation, Marketing, Safety, Security, Production Services

Brand Value – Quality, Innovation, Reliability, Earning Customers Loyalty
Significant Global Foot Print – CDM Practices, Carbon Credits, Mitigation of GHG

8. Recommendations for Green Business Growth Strategic Plan

Following recommendations will prove fruitful for greening the entrepreneurial process---
Microconsumers, micro producers and micro investors are interconnected in digitalized world. Interdisciplinary skills have to be developed. Inter collaborative Techniques has to be initiated. Government being in resourceful position has to play vital role in entrepreneurial innovation process. ‘Public Private Partnership’ can give best results. New creative production technologies have to be designed. Innovative ideas will help in high quality eco production. Adopting more transparent approach, Entrepreneurs will move towards ‘Corporate Social Responsibility’ ‘Aware Consumer Entrepreneur Collaborative Approach’ will nurture new innovative business ideas. The role of information and communication technologies in entrepreneurial resource management is vital. Sustainable development research projects have to be promoted. Market can be enriched with new researches in area of eco production. Eco Production is preferred to increase business profits. Government has to be more sensitive towards providing different facilities to entrepreneurs in view of loans, subsidies and tax incentives. Concluding RemarksCommitment for sustainable business is a step to ensure a healthy, safe & sustainable future for our planet. Supportive Funding Mechanism has to be initiated by governments in developing countries to promote advanced researches in area of green entrepreneurship. It is confirmed after this study that green entrepreneurship is a forward thinking for business sustainability in global competitive era. Marching towards sustained business practices in 21st century, there is increasing common consensus among different stakeholders for integration of environmental and innovative are into existing business practices. It is urgent need to build ‘Ecopreneurship Environ conscious society’. Based on finding of this study, it confirms that entrepreneurs should formulate an effective policy as a part of their green strategic planning programme by engaging all stakeholders. Proper dissemination of information’s through advanced information and communication technologies on CSR and business policy, accountability, ethical functioning, management of natural resources, efficient use of energy, adoption of clean development mechanism, environmental impact assessment, proper budget allocation on greening the business will definitely improve the brand image and will prove a strong forward step achieving targets of inclusive growth and sustainable development.Seen as crucial agents, or champions, driving the sustainability transformation process.” To sum up, message for budding Entrepreneurs – “Time span is very less, we have to secure future for our children and children’s of children. ‘Profit Greed’ of business may be a major cause for environmental damage. So, wake up and take a bold green step towards ‘Sustainable Growth’ of Global economy.”  

9. References
1) Acemoglu, Daron and James A Robinson, 2006,Economic Origins of Dictatorship
2) Applications, Island Press, Washington D.C. 
8) http://www.wbesd.Org
Integrated Water Resources Management with Special Reference to Water Security in Rajasthan, India

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Delhi World Public School, Ajmer

Abstract

Fresh water is a valuable natural resource for living organisms, which is being continuously depleted. Water Security means regular access and equity to safe potable water for drinking, sanitation and hygiene thereby leading to an acceptable physical and social well being. Integrated water resources management (IWRM) practices are needed to create sustainable water security. IWRM is a conceptual stakeholder participatory framework that could manage and develop the water resources in a sustainable and balanced way. It is based on the principles of social equity, economic efficiency and environmental sustainability. IWRM has been globally accepted as the water management doctrine for the 21st century. This paper presents a critical review of IWRM approach and highlights the challenges related to Rajasthan. This state is considered to be most crucial due to the insufficient water resources. State receives an average annual rainfall of 575 mm. The surface water availability in the state is 16.05 billion cubic meter (BCM). Total annual replenish able ground water of the state is 11.94 BCM out of which the natural discharge is 1.11 BCM during non-monsoon period and net annual ground water availability is 10.83BCM. Agriculture dependency on ground water is 70-90 %. The per capita water availability for the state is 640 cubic meters which is very low according to international standard of 1000 cubic meter. Water security would lead to efficient water supply system, use of water saving techniques and improved irrigation practices. Special attention is required for rainwater harvesting and conservation techniques and re-use of waste water. Conclusions are drawn and recommendations made based on the current status of water resources of Rajasthan.

Keywords: water resources management (IWRM), Water Security, Fresh water, Rainwater harvesting

1. Introduction:

Integrated water resources management (IWRM) has been globally accepted as the water management doctrine for the 21st century. IWRM is “a process which promotes the coordinated development and management of water, land and related resources in order to maximize social welfare and economic development in an equitable manner without compromising the sustainability of vital ecosystems and the environment” (GWP, 2000). Sustainability of water resource supports to complete social objectives into future without decreasing hydrological and environmental integrity (Davis, 2004). There are certain IWRM studies in other regions of the world (Ferreyra, and Beard, 2007; Grigg, 2008; Ako et al., 2010), however they are usually concentrated on public participation. IWRM approach for the semi-arid regions is considered to be very important due to the inadequate availability of water resources (Singh et al., 2002). Davis (2004) has conducted a study of Chile and found that water quality degradation, increased water user conflicts, recognition of economic inefficiencies and public good issues makes it necessary that a more integrated and watershed based approach to water resource management is adopted.

The agricultural sector is an important consumer to water. Primary agriculture plays a vital role in the food security. Morison et al. (2007) examined that agriculture accounts for 80–90% of all freshwater used by humans, and most of that is in agriculture production at global level. Gao et al. (2014) revealed that agriculture has a greater preference for water saving than other sectors. Improving the water transportation method could lead to 62.1% of the total water savings for the agriculture sector. (2014) applied multi-objective optimization method to investigate the reduction of freshwater consumption and the total water supply cost. By applying water conservation techniques in Tianjin, China they showed that the local freshwater use could be reduced by 21.5% and the average water costs also decreased by 12.7%. Grigg (2008) defined seven key elements for integration in IWRM such as policy sectors, water sectors, government units, organizational levels and functions of management, geographic units, phases of management and disciplines & professions. Ako (2010) examined the institutional framework for IWRM in Cameroon and concluded that reforms such as public participation at local levels, esteem of water as both a social and an economic entity, putting the exploitation of mathematical models
within hydrological basins will improve IWRM in Cameroon.

**WATER RESOURCES OF INDIA**

The important rivers of India and their approximate water potentials are given below:

<table>
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<tr>
<th>Sl. no.</th>
<th>River basin</th>
<th>Water potential (M ha/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>West flowing rivers like Narbada and Tapi</td>
<td>30.06</td>
</tr>
<tr>
<td>2.</td>
<td>East flowing rivers like Mahanadi, Godavari, Krishna, Cauvery and Penner</td>
<td>55.06</td>
</tr>
<tr>
<td>3.</td>
<td>The Ganges and its tributaries</td>
<td>55.01</td>
</tr>
<tr>
<td>4.</td>
<td>Indus and its tributaries</td>
<td>7.96</td>
</tr>
<tr>
<td>5.</td>
<td>The River Brahmaputra</td>
<td>88.07</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>188.14</strong></td>
</tr>
</tbody>
</table>

2. National Water Resources Scenario:

India occupies 17% of the world’s population but only 2.45% of the world’s geographical area and 4% of the world’s water resources. India also has about 20% of the world’s total livestock population which is 500 million. The rainfall is the primary source of fresh water or ground water recharge which is highly uneven over space and time during monsoon season. The total utilizable water resources of the country are assessed as 1086 km³. A brief description of surface and groundwater water resources of India is given in Table 1. India’s demand for water is outstripping its supply. The total water available in live storage of 91 reservoirs in the country being monitored by Central water commission (CWC) was 91.073 Billion Cubic Meters (BCM) as on Aug.2015. This is 58% of the total live storage capacity of these reservoirs and 92% of average availability during last 10 years (CWC, 2015). The annual potential natural groundwater recharge from rainfall in India is about 342.43 km³, which is 8.56% of total annual rainfall of the country.

3. Rajasthan State Water Resource Scenario

Rajasthan is the largest state of India covering an area of 34.2 million ha with 66% desert, amounting to 10.4% of the total geographical area of the country, 68 million inhabitants that forms 6.57% of India’s total population (census 2011). As per the 19th livestock census of 2012, there are 57.73 million livestock. The primary source of livelihood comprises livestock and agriculture which places huge demand on the water resources in the driest state of the country. More than 70% of live stoke population is dependent on agriculture and its related different activities. To support agriculture, livestock and all other water-dependent activities, the state water resources comprise just 1% share of India.
State receives average annual rainfall of 575 mm. There are wide variations in the average rainfall throughout the Rajasthan with the average rainfall ranging from less than 100 mm to over 400 mm in the western Rajasthan whereas in eastern Rajasthan the rainfall ranges from 220 mm to 1020 mm. (Teri, 2011). The yearly total rainfall is highly variable all over the state. It is most erratic in the western half, with frequent spells of drought as shown in table 2, punctuated occasionally with heavy downpours in some years. The average relative humidity in Rajasthan varies from 60%-65%. The per capita water availability for the state is 640 cubic meters which is very low according to international standard of 1000 cubic meter as shown in figure 1. It is also continuous decreasing. Due to rapid growth of population, the scarcity of water will increase leading to further decrease in per capita water availability in the state. Continuous depletion of ground water is bringing Rajasthan in absolute scarcity category as shown in figure 2. Block wise analysis of development status of ground water when categorized into safe to over exploited stages indicate that 13.33% fall into safe category, 9.05% into semi-critical, 14.46% into critical, 50.40% into over-exploited, 11.66% into over exploited (notified) and remaining 1.10% into saline category. Overuse of ground water resources is critically affecting the availability of drinking water security in such blocks. Part of the state water security aspects such as ground water conservation and recharge practices needs special considerations and should be dealt in consultation with all stakeholders. Total Annual Replenish able groundwater resource of the state has been estimated as 11.94 (BCM). Keeping provision for natural discharge of 1.11 BCM during non-monsoon period, net annual groundwater availability in the state has been assessed as 10.83 BCM. Total annual groundwater withdrawal for all uses has been assessed to be 14.84 BCM with the major usage being that for irrigation at 13.13 BCM (88.48%) of total groundwater withdrawal. Overall stage of groundwater development of the state has been estimated as 137% (CGWB 2015).

4. Security approaches For Rajasthan

Water Security means regular access and equity to safe potable water for drinking, sanitation and hygiene thereby leading to an acceptable, physical, and social wellbeing. Water security is truly a basic human need in every sense. Water is not only inherently required for sustaining human life, it also serves as a vital link with all other ecosystems and any threat to water security is bound to adversely impact the other ecosystems. The trends of water scarcity and water use in the Rajasthan have prompted the administrators, researchers, planners and intellectuals to ponder over the problem which may become very acute for the people of the twenty-first century.

The problem of water crisis cannot be solved without stakeholder’s participation (Grigg, 2008) and efforts should be made to get every citizen involved at the different water conservation schemes. Access to water for productive and domestic uses (industry, agriculture and other economic activities) has a direct impact on food security and society social and economic capital. 4.1 Water Requirements of State Estimating water requirements is one of the prime importance for any planning effort to water security. Domestic Water requirement is typically made from groundwater, dams, canals, lakes, ponds, rivers, rooftop rain water harvesting and also treated waste water. Public Health Engineering Department (PHED) has established norms for rural water supply of 100 liters per capita per day (lpcd) in Drought Development Programme (DDP) blocks of Rajasthan, 70 lpcd in non-DDP blocks, 135 lpcd in towns having a population of more than 20,000 and 100 lpcd in towns having a population of less than 20,000 (Water Supply and Demand by district 2014). State water plan has projected that the
agricultural water requirement will be about 100 BCM, which obviously is not available from existing sources (Vision 2045, 2015). More than 80% of rural families keep livestock in their households. According to information from the Deputy Director, Animal Husbandry Department, Udaipur, the daily water consumption by different animals is as follows cows 65 lpcd, buffaloes 65 lpcd, sheep 6 lpcd, goats 5 lpcd, horses 60 lpcd, Asses 60 lpcd, Camels 65 lpcd, Elephants 150 lpcd and Poultry 0.25 lpcd. The present industrial water requirements have been estimated at 11.22 m3 per ha per day of industrial area developed.

4.1 Drought Management: During the last century i.e. (1901-2002) it has been observed that frequency of drought ranges between 40% to 54% over the state. Table 2 shows the frequency and intensity of drought in various districts of Rajasthan. The drought experienced in recent years has brought on an environmental and socio-economic crisis in semi-arid areas. The impact of droughts on groundwater depletion was very sparkling in the hard rock regions of Udaipur, Rajsamand, Dungarpur, Bhilwara, Chittorgarh, Ajmer, Sirohi and Pali districts, as there are limited aquifer thickness available in such areas. In these districts, nearly 60 blocks have recently moved into the semi-critical, critical and overexploited stages. Also losses may extended to perennial trees, plantations, orchards and could also lead to depletion in fertility of livestock (Kumar et al., 2005). Drought management is very necessary step for water security and must be taken at technical, administrative, and political levels to encourage people participation in the drought management for optimum utilization of the available water resource. Proper drought management requires that all the rivers of India must be inter-linked and efforts must be made for drought control in arid region of Rajasthan.

Table 2: Frequency and intensity of droughts in districts of Rajasthan during 1901-2002

<table>
<thead>
<tr>
<th>District</th>
<th>Number of years with droughts of different intensity</th>
<th>% of all drought years in the period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Region</td>
<td>Very Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Barmer</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Jaisalmer</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Bikaner</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Srí Ganganagar</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Churu</td>
<td>8</td>
<td>11</td>
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<tr>
<td>Nagaur</td>
<td>2</td>
<td>17</td>
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<tr>
<td>Jodhpur</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Pali</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Jalore</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>NE Region</td>
<td>Very Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Sikar</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Jhunjhunu</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Alwar</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Jaipur</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Ajmer</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Tonk</td>
<td>6</td>
<td>16</td>
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<td>Swai Madhopur</td>
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<td>11</td>
</tr>
<tr>
<td>Bharatpur</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Southern Region</td>
<td>Very Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Bhilwara</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Chittorgarh</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Udaipur</td>
<td>10</td>
<td>12</td>
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<tr>
<td>Sirsi</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Banswara</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Dungarpur</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Bundi</td>
<td>9</td>
<td>16</td>
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<td>Kota</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Jhalawar</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>All Rajasthan</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

(Source: Rathore, 2005)
Rain Water Harvesting (RWH) is one of the prime source of fresh water and groundwater recharge especially in arid regions. Rajasthan has very rich tradition of water harvesting for drinking and livestock water requirement and for recharging groundwater purposes. Some structures are still in existence after long years. During rainy season, the people in the villages used to collect the rainwater in the vessels and use the same for household purposes including drinking as well as livestock and agricultural purposes. Rainwater harvesting is being necessary for water security purpose at present time due to increasing water demand day by day not only for agriculture, but also for industrial and household purposes.

The accumulation and deposition of rainwater for reuse before it reaches the aquifer, has been made mandatory in state owned building of plot sizes more than 300 m2 by the Central Ground Water Board of India. Khandelwal et al. (2014) estimated that if 50% of the resident houses and commercial building are taken up for rainwater harvesting, then 100% drinking water requirement could be met from RWH. This rainwater can also be stored in a pit to percolate downward through a recharge tube well. All newly constructed government buildings are to have rooftop rainwater harvesting structures. This must be strictly enforced and incentives must be created to encourage masses for the construction of domestic rooftop rainwater harvesting structures.

4.4 River inter linking

River inter linking will eliminate the periodical problem of droughts and floods and also provide water security.

Presently country is affected by drought flood drought syndrome as nearly 1/3 area of country is drought prone and some part of the country under Brahmaputra and Ganga river plain is flood prone. In the country a lot of damage occurs due to flood, whereas simultaneously other area may be facing critical shortage of water.

Floods are a recurring feature in the country, particularly in Brahmaputra and Ganga rivers, which has almost 60 per cent of the river flows of our country. Flood damages, which were Rs. 52 crores in 1953, have gone up to Rs. 5,846 crores in 1998 with annual average being Rs. 1,343 crores affecting the States of Assam, Bihar, West Bengal and Uttar Pradesh along with untold human sufferings. And another side, large areas in the States of Rajasthan, Maharashtra, Andhra Pradesh, Gujarat, Karnataka and Tamil Nadu are facing droughts. As much as 85% of drought prone area falls in these States (NDWA, 2015).

The state has eight major river basins but Mahi and Chambal are only perennial rivers that receive water from catchments stationed outside the state. Water resources data simulated for each basin suggest that the internal surface water resources in the state during normal rainfall years could be better utilized only if there could be river interlinking (Narain, 2005). The transfer of surplus waters of Ravi, Beas and Sutlej to Rajasthan right upto Jaisalmer and Barmer through Indira Gandhi Nahar Pariyojana (IGNP) has provided power benefits, eliminated drought conditions, transformed desert waste land into an agricultural productive area by bringing irrigation and vegetation to about 2 million hectare area. Contribution in agricultural production due to implementation of the project is worth Rs. 1,750 crores annually (NDWA, 2015). Canal water is also
available for domestic water requirements. The western part of Rajasthan and Indian military receive water from this canal. This project has miraculously changed the living standard and socio-economic conditions of the people in the area. The greater water availability with strong stakeholder’s participation could prompt a preference for growing water-intensive cash crops. According to Kongre and Goyal (2013) The transportation of water through canals from the reservoirs and other revers are necessary for food security and water security and to meet other water demands.

Some adverse impact of river inter linking found by Goyal and Arora (2012) in Part I of IGNP area falling in Hanumangarh and Sriganganagar districts of Rajasthan, which is facing severe problems of waterlogging and salinity. They concluded that groundwater modeling is very useful tool for future predictions of groundwater levels for various proposed strategies to reduce waterlogging and salinity. Martin (2003) also warned that river inter linking without looking at the ecological impact may be very harmful for environment.

5. Conclusions and Summary:

Inadequate water security is a very real problem in today’s time for Rajasthan state, and this will only aggravate under future uncertainties. The Rajasthan state still has significant potential for conserving and harvesting water if an integrated water resources management approach is adopted judiciously, and proper policies and investment actions are implemented using recent technologies. Many deficiencies exist in the present system, including inefficiencies, lack of stakeholder participation, and unsustainable water use practices.

Participation of the stakeholders is essential in the process of water conservation and it is essential to educate masses so that they accept that water is a limited resource. A permanent effort needs to be made to support a very huge level of unity and cooperation among present and future water users. Some aspect for water security and integrated water resource management are Water security planning and implementation should be strictly follow at village, district and State levels. Financial and technical support for maintenance of pipelines and supply of safe drinking water Knowledge should be shared and networking with agencies across the world working on the same subject. Creation of recharge zones for rainwater harvesting Disaster management plan (floods and drought) Education, Information and communication should be increase (Water concern) Effective monitoring and cost-benefit evaluation (structures and plants) Recycling and reuse of wastewater for irrigation uses Incentives for Recycling, Reuse and Reduce Inter linking and cleaning of major rivers Promotion of drip and sprinkler irrigation systems in water stressed areas

6. References:


उच्च शिक्षा से महिला सशक्तीकरण

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सारांश –
शिक्षा का स्वरूप बनने से ज्ञानवान, कोशिश नियुक्त एवं सेवाभावी विद्यार्थियों का निर्माण किया जा सकता है। इस प्रकार के विद्यार्थी राष्ट्रीय एवं सामाजिक आवश्यकताओं की पूर्ति हेतु अपना योगदान दे सकते हैं एवं समयकालों के समाधान में भी अपनी भूमिका का निर्वाह करने में सक्षम हो सकते हैं। आज भारतीय महिलाओं ने शिक्षा प्राप्त कर अपने स्तर पर हर क्षेत्र में सक्रियता हासिल की है। अगर हम महिला शिक्षा के विभिन्न में बात करें तो पुरुषों की अपेक्षा, महिलाओं में अशिक्षा का स्तर व्याप्त है किन्तु हम अपने जीवन के इतिहास में ज्ञान जीतने और निर्माण करने के लिए उत्साहित हैं। हम समाचार पत्रों एवं दी.वी. चैनलों में अक्षर पढ़ते व सुनते हैं – रेड बोर्ड एवं सीवीएसई बोर्ड परिषद में बेटियों ने बाजी मारी, आईआईटी परिषद में छात्र प्रथम। आरएस, आईएस, आईपीएस में प्रथम स्थान पर किया बेटियों ने कराया। इस प्रकार वर्तमान दौर में महिलाएं अपने प्रयास एवं प्रयत्न में पीछे नहीं हैं, किन्तु आवश्यकता है उन्हें सही राह एवं उच्च शिक्षा के अवसर प्रदान कर सशक्त बनाने की।

भौगोलिक पत्र –
'महिला' यह शब्द सुनते ही प्रत्येक नागरिक के मन में एक अच्छी छवि उपर्युक्त लगती है। भारतीय महिला' का तात्पर्य एक अच्छी बैठी, एक अच्छी बनन, एक अच्छी बढ़, एक अच्छी माँ, एक अच्छी पत्नी आदि स्रोतों के विभिन्न रूपों से लगाया जा सकता है। स्वतंत्रता प्राप्ति के 72 वर्ष पूर्व होने के बाद भी आज भी हम महिलाओं को समानान्तर: इनी रूपों में देखते हैं। इस बात में कई संदेह नहीं है कि आजादी के इतने वर्षों में भारत में महिला वर्ग में बढ़ी तेजी से परिवर्तन हुआ है। आजादी से पूर्व भारत में महिलाओं का जीवन कृपा मंडुक्ता की तरह केवल पर चार दिवसीय तक ही समीक्षा थी। उन्हें घर से बाहर निकलकर खेलने-कूदने, पढ़ने-लिखने, नौकरी-व्यवसाय करने, पुरुषों की तरह बाहर निकलकर स्वतंत्र घृणा के आदि को अनुमति नहीं थी। भारतीय संविधान में महिला एवं पुरुष दोनों को समानता के अधिकार दिये गये हैं, किन्तु अशिक्षा एवं घरेलू तथा भारतीय धार्मिक परंपराओं के कारण महिलाएं उन समस्त अधिकारों का सम्पूर्ण उपयोग नहीं कर पाई है, जिनका उपयोग उन्हें करना चाहिए था।

सशक्तीकरण की जब भी बात की जाती है, तो सिफर राजनीतिक एवं आध्यात्मिक सशक्तीकरण पर ही चर्चा होती है शिक्षा सशक्तीकरण पर विचार भी नहीं। ऐतिहासिक रूप से महिलाओं को दुसरे दर्जा का नागरिक माना जाता रहा है। उन्हें सिफर पुरुषों से ही नहीं बल्कि जातीय सरंचना में भी सबसे पीछे रखा गया है। अब सरकार द्वारा महिलाओं को पुरुष के समान जीवन में कामना अधिकार मिल चुके हैं। फिर भी इन परिस्थितियों में उन्हें राजनीतिक एवं आध्यात्मिक रूप से सशक्त करने की बात व्यक्त नहीं मानती है। महिलाओं को जब तक उच्च शिक्षा देकर सशक्त नहीं बनाया जायेगा, तब-तक वह अपने काम की अधिकार का सम्पूर्ण उपयोग नहीं कर सकता है।
पायेगी। जिससे कई प्राचीन ताकतें सामाजिक यथार्थितवाद का बदला देने।
महिलाओं को सशक्तीकरण का प्रतीक माना जाता है परंतु, स्त्री यहाँ दोसरी पीढ़ा भोगती है। कामकाजी स्त्री को दोहरे समाज से तालाबंद विवाह पड़ता है। पर-परिवार के साथ उसका कार्यक्षेत्र भी उसके समय नई चुनौतियाँ खड़ी करता है। ये चुनौतियाँ उसके मनोमौखिक से टकराती हैं, संघर्ष करती हैं और इससे मानसिक कुंडा और अवसाद जन्म लेते हैं।
शायद स्त्री के लिए घर-बाहर हर कहीं किसी ने संघर्ष का ही सृजन किया है। इसलिए आज भी वह मृदु नहीं, उस जनकी की तलाश में जहाँ वह उम्रुता साँस ले सके और उसकी सींसों पर कोई बंधन न हो। शिक्षा साशक्तीकरण से शुरू हुआ महिलाओं का यह सफर आज बहुत आगे तक निकल चुका है। आयुश्य का काल की महिलाएं सभी जगह पुरुष वर्ल्ड को चुनौती देने लगी है। शिक्षा शक्ति समय महिलाओं की महत्वकांका को चुनौती देना अब आसान नहीं है।
अनपढ़ या कम पढ़ी-लिखी और पढ़ी-लिखी और तुलना इन दोनों की तुलना में देखा जाये तो अनपढ़ और महिलाओं में बदलास करने की क्षमता व्याप्त होती है। क्योंकि यह पूरी तरह से पुरुष पर ही निर्मल रहती है। स्वयं को पुरुष की दासी मानना और अपने धर्म का पालन करना बस यही उसके जीवन का लक्ष्य होता है। इसके विपरीत पढ़ी-लिखी महिला चाहें, वह नींवि-पेशा करने वाली हो या गृहस्थी चलाने वाली, उसमें तर्क-वितर्क करने की क्षमता होती है। वह बात की गहराई में जाकर सच को जानने का प्रयास करती है। भव्यता और मान्यताओं को दरकार करने की यथार्थ में जीती है। कई बार बालात के रूप में जाते हैं कि उसका यथार्थ में जीवन पुरुष के अहम को चोट पहुँचाता है, जिससे पारिवारिक तनाव उत्पन्न होता है और पून-फिरक और उसके ही तनाव, कुंडा का शिकार होना पड़ता है।
महिलाओं से जुड़ी विभिन्न समस्याओं का प्रमुख कारण पुरुष की कमजोर मानसिकता ही है।
कहने का तालमूल यह है कि — "हम आज महिला सशक्तीकरण की बात कर रहे हैं, सच तो यह है कि महिला हर तरफ सशक्त है, होनार है, योग्य है, मगर उसकी सशक्तता की समझ पुरुष मानसिकता में नहीं। अगर विश्लेषण किया जाये तो पुरुष हर मोरिय पर महिला के सामने कमजोर है, यही बतह है, वह सशक्त क्षमता को होतोहत होता गोद-धमकी के बल पर भाग चलता है।"2 शिक्षा प्राप्त कर महिलाएं एक कुशल गुरुहिनी से लेकर एक सफल व्यवसायी की भूमिका बेहतर बनी से मिमा नहीं है। नारी और इस महिलाओं तो स्वयं को पुरुषों से बेहतर साधन करने का एक भी अवसर गँवाना नहीं चाहती। भारतीय महिलाएं शिक्षा प्राप्त कर हर शेष में आगे बढ़ने के अवध प्रयास कर रही हैं, किंतु हमारी मानसी सोच या हमारी प्रमाणता में बाकी है।
जब कोई महिला शिक्षा के क्षेत्र में आगे बढ़ना चाहती है, अल्पसमय बनाना चाहती है, तो सबसे पहले उसके परिवार वालों को आपत्ति होती है। इसी तरह को हिंदी सिनेमा में भी कई बार दिखाया गया है। समकालीन सुपरहिट फिल्म 'बक दे इण्डिया' महिला शिक्षा का ही एक उदाहरण है।3 आज महिलाएं उच्च शिक्षा के क्षेत्र में अपनी विश्विश्व पहचान बना रही हैं तथा स्वयं को गौरवान्वित भी महसूस कर रही हैं। वे पहले से अधिक स्वतंत्र एवं मुखर हो गई हैं। सबसे महत्वपूर्ण बात यह है कि बदलते दौर में धीरे-धीरे अब महिलाओं को शिक्षा सशक्तीकरण के संबंध में पुरुष सहमति भी प्राप्त होने लगी है। यह सशक्तीकरण स्त्री-पुरुष सम्बंधों में एक बहुत ही बड़ी परिवर्तन की शुुआत है। रिसर्चों में शिक्षा एवं वैकाशिक क्रांति के अनुरूप समायोजन ने उसके अंतर्गत को विसर्जन दिया है। आज तक धर की चार दीवारों में केंद्र रहकर कुप मूर्तिका की तरह अपना जीवन जीने वाली महिलाएं धर से बाहर निकलकर सबसे विवाहाधीन व्यापारिक के साथ उच्च शिक्षा प्राप्त करने लगी है।
समय के बदलते दौर में अब लड़कियों भी उच्च
शिक्षा प्राप्त हेतु अपनी विशेष रूढ़ि दिखा रही है। विज्ञान, वाणिज्य, व्यापार, अंतरिक्ष, खेल, राजनीति आदि विषय क्षेत्रों में भारतीय महिलाओं के लिए अधिकतम स्थापित कर दिए हैं। जिस तरह सरदार पटेल को 'लोह पुरुष' कहा जाता है, उसी तरह प्राणमयों ईंद्रा गांधी ने समृद्धि विश्व में ‘भारतीय नारी' होने का गीर्जा प्राप्त किया। सीमांत्र के क्षेत्र में ऐसवार्षिक राय, सुरजमता सेन ने सिफर भारत में ही नहीं समृद्धि विश्व में सम्पन्न प्राप्त किया। संगीत की उद्योगी ने लाता मंगलकर की साक्षात्कार सरस्वती होने का दर्जा दिया गया। किरण बेंटी, वीकी उपा, कल्याणा बाबाला जैसी अनेक महिलाओं ने सिद्ध किया है कि वे भी किसी से कम नहीं हैं।

उच्च शिक्षा में विशेष रूढ़ि रखने वाली महिलाएं आज कॉर्सप्रोटी दुनिया में आना वरिष्ठ कैस्ट्रकर विश्व की कई बड़ी-बड़ी कंपनियों की अवधि, संचालक तथा मुख्यालय बनकर अपनी प्रतिभा दिखा रही है। जिसमें – भारतीय मूल की सोहनी नीलकण्ठी ‘अकारा फाउंडेशन’ तथा ‘प्रथम मुक्ति’ चला रही है। दुरुष मूल ‘इंफोसेस फाउंडेशन’ की मुख्यालय है।

यदि कोई भी आपने कोई धारण किया है कि ‘विज्ञान’ की मुख्य वर्गीकरण में विशेष दिखाया जा सकता है। तो ये कंपनियों को देखकर ये दिखाया है कि वे ये धारण करने वाले अपने उच्च शिक्षा कंपनियों के लिए बड़ी संयोजन कर दिया है। जिसमें – राजस्थान मूल की अवैध संस्था वालकर भास्कर सर्वाधिकारी है, जो जमी ही 10 मीटर एयर वालकर कंपनी दुनिया की जनरल 1 निर्माणें नाम गई हैं तथा वर्ष 2019 में आईसीएसएफ वर्ल्ड कप में गोल्ड मैडल जीतकर विश्वमें अपना नाम रोशन किया है।

अब वर्ष 2020 के टाइम ऐल्पिक्स में पदक जीतने के लिए कड़ी मेहनत भी कर रही है। "पीसीएल एंट्राइज" के फाउंडर विवाद नामक की बेटी रोशनी नाडर कंपनी की कार्यकर्ता निदेशक व सीईओ का पद संभाल रही है, जिसने वर्ष 2017 में फोर्स्वर्ल्ड की 100 सबसे शाक्तिशाली महिलाओं की सूचि में 51 वां स्थान प्राप्त किया। मैरी टेसिस बांस 'जनरल मोटर्स' कंपनी की अध्यक्ष व सीईओ है, जो एक प्रमुख वाहन निर्माता कंपनी की पहली महिला सीईओ है। ईंद्रा कृष्णमूर्ति गूड 'पेशिको' कंपनी की सीईओ है, जिसका नाम दुनिया के सबसे प्रभावशाली लीडर्स में समायोजित किया गया है। मिनी रोमेटी 'आईबीएम' की चेयरपर्सन, प्रेसीडेंट और मुख्य कार्यकारी अधिकारी है। फॉर्मुला, टाइम, फोर्स्वर्ल्ड आदि कई प्रतिष्ठित पत्रिकाएं उन्हें दुनिया की सबसे शाक्तिशाली और प्रभावशाली महिलाओं की श्रेणी में शामिल कर चुकी है। शैलिंग लैंडर्स अमरीकन टेकनोलॉजी एजेंट्जुएटिव, एकेटविस्ट और लेखक है। साथ ही फैसलक की वींफो अंडरटिंग ऑफिसर भी है।

आज भारतीय युवतियों आधारित सेवा और भारतीय साधारणकर सेवा में भी अपनी सेवाएं दे रही है। उच्च शिक्षा के इस दौर में इतनी कम उम्र में भी ये बेटियों उच्च स्तर की कंपनियों के उच्च पदों पर कार्य कर रही है। उच्च शिक्षा से प्रत्यय तथा अप्रत्यय रूप से सुधकर कंपनियाँ बनाने वाली युवतियों आज विभिन्न मल्टीसेटरल कंपनियों में भी अपनी पहुँच बनाये हुए हैं।

वर्तमान में ऐसी कंपनियों की संख्या भी तेजी से बढ़ रही है, जो निष्क्रिय शिक्षित महिलाओं को 'वर्कफोर्स' का इस्तेमाल बनाने के लिए तैयार है। ये कंपनियाँ एक इंटरनेटमेंट वर्कफोर्स तैयार करने में लगी हैं। इसके लिए कंपनियों फिजिकल इंस्ट्रक्टर तैयार कर निष्क्रिय शिक्षित महिला एमपलोजी की कंपनियों में लाए हैं। इसके अतिरिक्त इसे कंपनियाँ अपनी एच.एच. पॉलिसी में भी बदलाव कर रही है। आज वर्कशेडूल पर इस तरह की व्यवस्था की जा रही है कि निष्क्रिय शिक्षित
हिला एमप्लोइज के साथ किसी भी प्रकार का मेलेदार न हो।

यह अनुमान लगाया जा रहा है कि वर्ष 2025 तक ग्लोबल वर्कफोर्स का 70-80 प्रतिशत हिस्सा पूर्व रूप से युवाओं का होगा, जिसमें जितनी भारतीय युवाओं की होगी उतनी ही महिलाओं की भी होगी। युवा पीढ़ी चाहती है कि वह तेजी से तरक्की करे, आगे बढ़े। शिक्षा की दुनिया में युवाओं की संख्या तेजी से बढ़ने के कारण अभी भी महिलाएं स्वयं में बदलाव कर रही है। इसलिए वर्ष 2000 के बाद कंपनियों में जॉब करने वाले उच्च शिक्षित युवाओं की ध्यान में रखना नीतियों बनाने जा रहे हैं। इसके अतिरिक्त, इंडिया गैंडी दिल्ली तक नीति भाषा शिक्षा विश्वविद्यालय में शामिल किया गया है, जो महिला शिक्षा का एक अध्याय संस्थान है। यह दिल्ली सरकार द्वारा स्थापित किया गया है इस संस्थान में बीजेक, एमटेक, पीएचडी आदि कोर्सों के साथ भी उपलब्ध है।

यह आसफ ओ राजस्थान सरकार द्वारा बालिका शिक्षा हेतु किये जा रहे विशेष प्रयासों के अन्तर्गत विश्वविद्यालय, महाविद्यालय एवं विश्वविद्यालय में बालिकाओं की शिक्षण स्तर में छुट प्रदान की गई है। जिससे गरीबी एवं आश्ंसित बालिकाओं को उच्च शिक्षा प्राप्त में किसी भी प्रकार की युवाओं का समाना नहीं करना पड़ेगा तथा उच्च शिक्षा प्राप्त में किसी भी प्रकार का व्यवहार नहीं होगा।

विभिन्न सरकारी योजनाओं द्वारा बेहतरी की शिक्षा में शारीरिक अभ्यास का आगे आने दिये बिना ही उच्च शिक्षा के क्षेत्र में आगे बढ़ने के समय साक्षात्रिक जीवन बिना ही उच्च शिक्षा के तथा भारत सरकार के एनएचएफडीसी विभाग द्वारा दी जाने वाली छात्रसंख्या के अन्तर्गत प्रतिवर्ष कुल 2500 विवाहितियों में से 30 प्रतिशत लड़कियों को छात्रावृत्ति दी जाती है। यह छात्रावृत्ति उनके भरण-पोषण, पुरस्कार, शैक्षणिक आदि हेतु दी जाती है। इस प्रकार सरकार द्वारा महिला शिक्षा को बढ़ावा देने हेतु विशेष प्रयास किये जा रहे हैं।

सरकार महिला शिक्षा के लिए नयी-नयी योजनाएं बना रही हैं। बहुत से नए बालिकाओं को अभिभावकों से भारतीय शिक्षा का समाना करने के लिए तैयार ही हैं। उच्च शिक्षा प्राप्त कर महिलाओं ने सामाजिक एवं आर्थिक स्थिति में सुधार हेतु विचार करना प्रारंभ कर दिया।

निर्मित रूप से स्वतंत्रता प्राप्ति के इतने वर्षों में भारतीय महिलाएं उच्च शिक्षा के क्षेत्र में आगे बढ़ी हैं। उन्होंने कई उपलब्धियों भी हासिल की हैं, किंतु आगामी समय में प्रेस्स करने से पहले हमें जानते हैं उन्हें आवश्यक बनाने की, जिसके लिए आवश्यकता है, विचार परिवर्तन की, सामाजिक संकुलणों से मुक्त पाने की। अब अगर महिलाएँ यह सोचती है कि वह रूपों से ज्यादा युवाओं का समाना करती है, तो वह सही भी हो सकती है। हालांकि औरतों को कभी भी अपनी परिस्थितियों को अपने रास्तों की स्तर काटनी नहीं बनाने देना चाहिए। यह उस पर निर्माण करता है कि वह किसी तरह से उन युवाओं का समाना करने और उच्च शिक्षा प्राप्त कर जीवन में आगे बढ़े तथा सफलता प्राप्त करें। महिला शिक्षा के हिमायती कुछ विचारगत महिलाओं की व्यवस्था जीवनसारी के पक्ष में हैं। महिलाओं की उच्च शिक्षा में अनेक
समस्याएं आती रहेंगी परन्तु इन समस्याओं से समझौता कर लेना अथवा उनसे डर कर भाग जाना समस्या का हल कदापि नहीं हो सकता है।

शोध पत्र के अंत में अगर यह कहा जाये की ‘महिला सशक्त है’, तो अतिशयोक्ति न होगी। क्योंकि समाज की अनेक बातें सफल करती हैं कि ‘महिला चट्टान से मजबूत और सागर की तरह दरियादिल है।’ अतः महिलाओं के संदर्भ में यह संभावना ही का सकती है कि ‘महिलाएं अपना आसमान स्वयं तलाश लेंगी, अगर उसके लिए वातावरण अनुकूल हो।’

संदर्भ सूची –
1. बन्द पत्रों के विरुद्ध – मृणाल पाष्ण्डे, शामा शार्मा, पृ. सं. – 72
2. वही, पृ. सं. – 178
3. आलेख—भारतीय महिला: तेजी से बढ़ते कदम (http://www.webdunia Hindi.com)
4. आलेख—महिला सशक्तीकरण: कहाँ बदलें हालाल (http://www.webdunia Hindi.com)
5. मी नेक्स्ट, राजस्थान पत्रिका, दिसंबर—III, 2014, पृष्ठ—1
6. मी नेक्स्ट, राजस्थान पत्रिका, मई—IV, 2015, पृष्ठ—1
7. मी नेक्स्ट, राजस्थान पत्रिका, मई—II, 2019, पृष्ठ—1
8. मी नेक्स्ट, राजस्थान पत्रिका, मई—IV, 2015, पृष्ठ—2
9. मी नेक्स्ट, राजस्थान पत्रिका, अक्टूबर—II, 2015, पृष्ठ—1
10. आलेख—भारत में महिलाएं (http://hi.wikipedia.org)
11. आलेख—उच्च शिक्षा की दशा एवं दिशा (bharatiya Shiksha)
"Perspectives of Transgender- A Current Trend of India in Social Aspect"

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Abstract

The rights of trans people are protected by a range of international and regional mechanisms. Yet, punitive national laws, policies and practices targeting transgender people, including complex procedures for changing identification documents, strip transgender people of their rights and limit access to justice. This results in gross violations of human rights on the part of state perpetrators and society at large. Transgender people's experience globally is that of extreme social exclusion that translates into increased vulnerability to HIV, other diseases, including mental health conditions, limited access to education and employment, and loss of opportunities for economic and social advancement. In addition, hatred and aggression towards a group of individuals who do not conform to social norms around gender manifest in frequent episodes of extreme violence towards transgender people. This violence often goes unpunished.

Keywords: education, embellished, commenting, exclusion

1. Introduction

Going through the plays of Mahesh Dattani during my post-graduation, I felt drawn to themes undertaken by Dattani in his plays. Mahesh Dattani, born in Bangalore on 7th August 1958 is one of the best playwrights the country has ever produced. He is the first Indian English dramatist to be awarded the Sahitya Akademi Award. Dattani has a very strong passion for art. He formed Playpen, his own theatre group in 1984 and began to look for Indian plays in English, not the usual western commercial text that were generally performed. He has directed many plays for them, ranging from classical Greek to contemporary works. He has written more than fifteen plays. Over a career spanning 30 years, he has written radio plays for BBC and the film script of ‘Ek Alag Mausam’. The international Herald Tribune praised him as “One of India’s best and most serious contemporary playwrights in English”. The entire dramatic bulk of Dattani can be classified into three categories namely Stage Plays, Radio Plays, and Screen Plays.

The scenario of Indian English drama began to change with the advent of Mahesh Dattani in the arena of dramatic writing. He is the most potent and original dramatic voice in the contemporary Indian English dramatic world. His innovation and experiments both with themes and technique of dramatic structure and presentation have enriched and embellished the tradition of Indian drama. Commenting on his plays, Mc Rae calls Dattani “the voice of India” and observes: “They are the plays of today, sometimes as actual as to cause controversy, but at the same time they are the plays which embody many of the classic concerns for world drama” (CP: 46).

He is the first Indian dramatist who originally writes his plays in English. He has succeeded in making Indian English drama popular both at national and international level. Many writers have exposed these maladies in their works. They show the society with its hidden disgusting face. Mahesh Dattani is one of the writers who brought this harsh reality in front of the laity. His works symbolize the abuses and ill behaviour of the society with that isolated section which was abominated from ancient time.

Dattani is a man who always wrote something that has been a problem since many decades and one of those problems is the problem of transgender. We always claim that we are a part of a humane that is calm and receptive that why these transgender are kept on the margin of the society? Why they are thought to be different from us? Why they are seen with a disgrace? All these questions have been raised by the only man and that is Mahesh Dattani.

Dattani has shown us the extreme of torture and mental harassment of a transgender through the help of his character named Kamala and Anarkali in his play Seven Steps around the Fire. This is the play that exactly reveals the realism of our so called civilized society.

Asha Kuthari Chaudhari and Angelie Multani have rightly pinpoint the issue of alternate sexualities in Dattani’s plays. Chaudhari notes how in Dattani's
plays the traditional Indian middle class family is "constructed and deconstructed" (25) and how the issues in the plays which “make his audience sit up and listen” (134) are “veiled or masked, ……behind facades that need to be penetrated” (25). She takes up nearly all of Dattani’s written till 2005 and judges them in terms of their settings, their forms and the typical Dattani stylistics including stagecraft and dialogues; her’s is also first comprehensive hint at the “marginalize” issues regarding alternate sexualities in Dattani’s plays. Though she does not meticulously discuss the creation of heteropatriarchal discourses as dealt with in Dattani’s plays her hints provoke a comprehensive study of the plays regarding the playwright’s preoccupations with the marginalized and their discussions with the norm. Anthologizing critical writings on Dattani from such diverse fields as dramaturgy, gender theory, feminist theory, postcolonial theory, and space and nationhood, Multani’s Mahesh Dattani’s Plays: Critical Perspectives critiques the dramatist from several angles. The essay by Michael Walling, who has produced on stage some works of the dramatist, finds in Dattani’s work that characters resort to gender performance as a mode of being. Or, in other words, Walling touches upon how characters sacrifice their sexual identity to live a discussed existence within a heterosexual atmosphere. In this regard, he describes on the use of symbol of the mask in Dattani’s plays, particularly in Bravely Fought the Queen. The mask here is a façade of complacency and heterosexuality hiding the essential sexual identity, or often, desires (Everyone 67-75). Gouri Mehta’s essay traces the political context of Dattani’s writing, drawing upon theories of postcolonialism and placing Dattani in the second phase of postcolonial writings. G.J.V. Prasad, in Multani’s book, evokes the ideas of nation and partition and traces how these two concepts have their influence on the partition of the twins. He takes the dysfunctional Patel family as the microcosm of the modern Indian urban society, with the attitudes of patriarchy, chauvinism, class and normality and other hegemonic values which wreak havoc on the future of society, state and the self.

A critical endeavour in this thesis has been made to highlight Dattani’s crusade of making the invisible visible in both his precept and practice. His plays hold up a mirror to them through a language that is specifically urban and through theatrical elements comprehensible to the urban English speaking Indians. He is an iconoclast writing, to borrow the Shavian term, “Unpleasant Plays.” In his plays the margin forms the centre and the background figures are fore grounded. Even, his texts have ample suggestions of marginalized. The plays which this thesis is going to discuss—Seven Steps Around the Fire, Tara, Dance Like a Man, On a Muggy Night in Mumbai, Do the Needful and Night Queen—in general create a marriage-centred heterocentric milieu based on the male/female, good/bad, normal/abnormal, hetero/homo binaries. As such, there are distinct divisions in the plays between two sorts of milieu: the heterosexual and the homosexual. Other plays like Where there is a Will discusses the evil effects of patriarchy marginalize its victims; The Final Solutions discusses how one community tries to exercise its hegemony over the other and marginalize it and how then the retaliations disturb the routine course of life. There are distinct divisions between two sorts of characters: those belonging to the hegemonic order responsible for the creation of the discourse of marginalized and those subalterns who are marginalized and who need to undertake different sorts of negotiations not only with the hegemonic power structure but also with one’s own choice of sexuality or gender.

The hegemonic power in plays like Tara and Dance Like a Man has the sanctified mission of dissociating the male and the female from within the psyche, so that one’s gender becomes a given, a sort of imposition, under the spell of which one is compelled to “do” or “perform” a gender role which society determines for the subject. In the former, Mr. Patel and Dr. Thakkar, and in the latter it is Amritlal round whom this axis of power revolves. On the other hand, it is Chandan in the former and Jairaj in the latter who are gradually “taught” to behave like men. In both these plays, the spirit of androgyny is made to dissociate into the male and the female selves and is thus marginalized. Seven Steps Around the Fire, a radio play, has been generally critiqued in terms of a feminist approach. Uma, the female lead, has been foregrounded and has been shown as putting resistance against the oppressive forces of patriarchy represented by not only Subbu’s father, the evil politician, but also her husband. The critiques on the play have delved far into the discourse of female suppression and the commoditization of the female body. Less importance has been attached with the hijras’ negotiations with the dominant discourse of normativity. Referring to the ancient times in the history of India and the ancient myths connected with the hijras, Dattani positions the hijras in the play in the present time and shows their luminal existence in the borderlines of society from where they can occasionally sneak into the normative mainstream to “do” the performances or patterns of behaviour society has set for them. Dattani shows how their very inclusion into the mainstream entails a form of exclusion. Allowed entry into the auspices of a marriage ceremony to perform and
bless the bride and the groom, the hijras themselves are disallowed marriage.

2. Conclusion:-

The main object of Dattani's play *Seven Steps Around the Fire* is to think over our conduct towards the eunuchs because they are also human beings as we are. They need our help to bring them within the main stream of our society and love to bring out of the era of terror and screams. Indian government has also taken the step towards their uplift and has made a commission for them. This commission will look after the grievances and solve the problem of eunuchs but the need is that we should give them space in our society and adopt them in the main stream and made them feel that yes they are also human beings and have all the rights to live a respectable life.

3. References

अलका सरावगी के कहानी संग्रह 'कहानी की तलाश' में व्यक्त सामाजिक चित्तन

डॉ. विदुशी आमेटा
सहायक आचार्य एवं विभागाध्यक्ष, हिंदी-विभाग, मध्यविश्वविद्यालय, पिण्डवाड़ा, सिरोही (राज.)
आभा त्रिपाठी
शोध छात्रा, हिंदी-विभाग, मध्यविश्वविद्यालय, पिण्डवाड़ा, सिरोही (राज.)

सारांश
भारतीय सित्रियों ने सामाजिक सिद्धांतों और विशेषताओं के बीच रहकर, उनमें घुटने-छटपटते हुए भी साहित्य को जो सफल, सार्थक, मधुर-मार्मिक स्पर्श दिए हैं, उनके महत्व को झुलाया नहीं जा सकता। न जाने किसी सहित्य की गुलामी के बाद कठिन प्रेरणा का यह तिलसम दूध, किन्तु पूर्ण तरह आज भी नहीं। यदापि कथा लेखकों के सारावगी ने नारी को अपनी असिद्धता की पहचान कराने के लिए भरसक प्रयास किया। अलका सरावगी ने अपने कहानी संग्रह 'कहानी की तलाश' में के मध्यसे सामाजिक जीवन में औसतों की समाज में स्थिति, समाज में उसका महत्व, उसकी व्याघ्य, पारिवारिक जीवन, वैन-जीवन में उसका मुक्त और दमित रूप, उसकी कूटा व तनाव, उसकी शिक्षा तथा आधुनिक परिवेश में वित्तित और तिरस्कृत नारी असिद्धता का विश्लेषण करते हुए औसतों की मनोदशा, उसकी सामाजिक एवं राजनैतिक समस्याओं को उजागर किया गया है।

कुंजी शब्द : सामाजिक, चित्तन, कहानी की तलाश में।

शिक्षित समाज में आज रसी पुरूष के मिथ्या मिमांसन एवं अहम के आपने गिन्नि गिन्नि हुई दिख रही है। पुरूष की ब्रुसरायें, वर्जनारे, विलासिता अज भी उसका व्यक्तित्व को कूचित कर रही है। स्वर्ध्म और असत्सवादिता ने पत्ते को पत्ता की नजर में बहुत बोल रहे देख है और पत्ते के इस बोलने को कई काहराफ़ों की कहानियों ने प्रस्तुत भी किया है। समाज में प्रवृत्त सामाजिक सुधियों को तोड़ना और उनसे गुज़ार पाना प्रथम नारी के आक्षेप रही है, जिससे बलते परम्पराओं पर प्रवृत्त या अप्रवृत्त रूप से वह प्रहर भी करती रही है, लेकिन समाज की वर्ष पुरानी प्रथाओं में संघ लगाना उसके लिए इतना आसान नहीं है।

महिलाओं ने जब स्वयं लेखनी उठायी तो उन्होंने पुरूष को धीरे-धीरे अपनी सिद्धति और विवाहधरम से परिचित कराना अन्याय समझा। जहाँ ही अन्याय देखा। 'उन्होंने पुरूष की कृसित भावनाओं को बीच चौहारे पर नंगा किया। यहीं तक की उन्होंने स्त्री के शोषण में सहभागिता नवती स्त्री को भी नहीं छोड़ा। समकालीन लेखिकाओं ने ऐसे समाज की परिकल्पना को व्यवहारिक रूप देने का निश्चय कर लिया, जिसमें स्त्री व्रग को कभी दुखी नहीं होती।

महिला कथाकारों के इस दृष्टिकोण द्वारा यह सिद्ध करने का उपक्रम चला है कि समाज में जिती भी समस्याएं, अभाव, शोषण और अर्थवार ि है। उन सब की उपमोक्ष प्रक्ष्य, पश्चात रूप से रसी ही अविकार होती है। परम्पराओं धर्म, दंग, व्यवसाय, विवाद आदि का प्रभाव अधिकार नारी पर ही पड़ता है। फलता: अलका सरावगी ने अपने कहानी संग्रह द्वारा अपने दृष्टिकोण, अपनी विद्रोहाद्विग्यको भूम्भक करता करना चाहा है। उनकी कहानियों में समाज में पति द्वारा प्रतिदिन की जा रही नारियों, उपेक्षित हो
रणी की असिमा के लिए आधुनिक सामाजिक परिवेश में जो लेखकों अपनी कलम से संघर्ष कर रही थी और अब भी कर रही हैं, उनमें अलका सरावगी का नाम अरुणी है। उनकी कहानियों वश्यक की अभिव्यक्ति का सशक्त माध्यम है। कहानियों में न केवल नगरीय और महानगरीय जीवन बोध मुखर हुआ है, बल्कि व्यक्ति के अंदर का वह ह्यू क्री मुझे सामने आया है जिसके वह रात-दिन जूझता रहता है।

अलका सरावगी हिंदी की पहली कथाकार है। ‘जो प्राणों में घुले हुए रंग’ और ‘नन के रंग’ को यानी मनुष्य के रंग-विरंग और प्रेम को, दूध और करूणा को, हस-उलस और पीड़ा को अपनी कहानियों में एक साथ लेकर ‘आला शिल्पी’ के रूप में उपस्थित होती है। साथ ही वे मनुष्य का विज्ञान एक तोस जीवन पर, एक काल विशेष में करती है।

अलका सरावगी के दो कहानी संग्रह है: ‘कहानी की तत्त्वाचार्य में तथा ‘दूसरी कहानी’ दोनों ही ‘छोटी-छोटी कहानियों का गुलदस्ता है। किसी ने ठीक ही कहा है: ‘कलम का आलार पर रचा हुआ संसार रोचक होता है कितने अनुभव से होकर गुजरने वाला संसार जीवंत और प्रामाणित होता है।’ अत: अलका सरावगी का कथा साहित्य जीवंत और प्रामाणिक है।

अलका सरावगी ने अपने कहानी संग्रह ‘कहानी की तत्त्वाचार्य’ में के माध्यम से सामाजिक जीवन की सशक्त अभिव्यक्ति की है और हिंदी कथा साहित्य में अपनी स्थिति निर्मित की है। कहानियों के माध्यम से समाज के उन सभी पक्षों को प्रस्तुत करने का प्रयास किया है, जो अनगाय है, विसंगतिपूर्ण है और जिनकी अपनी राजनीति, धर्म, मूल्य बोध की सीमा और अर्थव्यवस्था है।

अलका की प्रथम कहानी संग्रह ‘कहानी की तत्त्वाचार्य’ में ‘छोटी-छोटी कुछ संस्कार कहानियों’ हैं, इन कहानियों में सामाजिक जीवन में
रोजमर्स की जिन्दगी की लकड़ के खिलाफ दिखाई देती है। इस कहानियों में सामाजिक चिंताका का एक नया रूप उभरकर हमारे सामने आया है, जो इस प्रकार है –

'कहानी की तलाश में' यह एक ऐसी लड़की की कहानी है, जो कहानी लिखती है तथा फाइलों को हाथ में लेकर एक अंधेरी गली में अक्सर जाती दिखाई देती है। वहिं एक साधारण व्यक्तित्व बालू पृथक उस लड़की से प्रभावित हो जाता है परंतु उससे बात करने की हिम्मत नहीं जुड़ता पाता। लड़की वहीं सभी लोगों से बात करती हैं, परंतु उस प्रौढ़ व्यक्ति की तरफ उसका जरा भी ध्यान आकर्षित नहीं होता है, जिसके कारण उस पृथक को लड़की से खिलखिलाता है। कहानी के अन्त में पृथक को उस समय में आ जाता है कि वह लड़की कहानी लिखती है और उसे जहाँ कहानी मिलती है वह उन्हीं से बात करती है, उन्हीं को देखती है और उसके पास गौं लड़की नहीं है, इस कारण वह उसमें कोई दिलचस्पी नहीं रखती है।

'हर शो बदलती है' डिम्पल और तनाव प्रत्यावर्तन एक लड़की की कहानी है। विडियोडाइट उसके जीवन का अहम हिस्सा बन जाता है। अपने जीवन से खिन्न उसके मन में हजारों प्रश्न और सेकंडों बातें होती हैं। सत्तार का पहला दिन 'सामवान' उसमें जीवन की नई शुरुआत का उत्साह जगाता है। इस कहानी का मूल यह है कि सामाजिक जीवन में रोजमर्स की जिन्दगी का मलब हिस्सापिटा नहीं होता है, बल्कि सामाजिक जीवन में हर रोज कुछ नया करने का होता है।

'बीज' कहानी एक ऐसी लड़की की कहानी है, जो अपनी लम्बी बीमारी से पर्याप्त होकर दुखिया से नासा तोड़ लेती है और उदासी भरे जीवन को अपनाकर अंकले स्थानों को ही अपनी नियात मान लेती है। परंतु कुछ समय बाद वह अपनी दूरी के हिम्मत का बटोरकर अपनी बीमारी से लड़ते हुए एक नयी चेतना के साथ किर से जिन्दगी की शुरुआत करती है।

'मिसेज डिसूज़ा के नाम' कहानी एक ऐसी मां की है, जिसकी वह साल की बेटी डिस्तित है। वंदिता की मां संगीता होने के कारण अपने संगीत के कार्यक्रमों में व्यस्त रहती है। वह अपनी विद्वानी बेटी की प्राचात्मकता का एक शिकायती पत्र लिखती है उस पत्र के बाद में द्वारा वह अपने को एक सफल माँ और रोजी के रूप में खड़ी करना चाहती है। इस प्रकार एक औरत को सफल माँ और सफल रोजी के अंतर्वर्त में खड़ा करना भी धितन का नयी रंग में हो।

'टिफन' कहानी छात्रा सारिका की कहानी है, जो विद्यालय के क्या-कलापों को रोज अपनी दादी को सुनाती है। सारिका अपनी दादी के सबसे निकट होती है। विद्यालय की घटनाओं में वह सबसे ज्यादा अपने टिफन की बातें देती है कि उसकी सभी सहेलियों एक साथ खाना खाती हैं। उसकी एक सहेली है—विशा जो हमेशा ‘टिफन’ में ‘मूड’ लाती है। कहानी के अन्त में सारिका की सहानुभूति विधा के प्रति दिखाई देती है, सामाजिक समस्तता हेतु प्रेरित करती है।

'बहुत दूर है आसमान' कहानी की नारकिक एक महिला अथायिका है, नौकरीपेशा होने के बाबसू भी वह रोज होने की सजा भुगाती है। वचन्य से स्वतंत्र जीवन की बात उसकी अभिलाषा होती है। गुलऽ जो उसकी बेटी है, उसके लिए जब कोई असीम आते दीवार पर लिख जाता है तो वहीं बंधन अपनी बेटी के जीवन में देखती है, जो रोजी होने के कारण उसके जीवन में उसका पिता द्वारा लाग्या गया था। जब वह उस परिस्थितियों का उसकी बेटी के जीवन में विशेष करना चाहती है तो पति द्वारा उसे समझा दिया जाता है कि सामाजिक व्यवस्था में समस्तता कर जीवन ही रोजी की नियात है। यहाँ समाज द्वारा बनायी गयी सामाजिक व्यवस्था से समस्तता करना रोजी की व्यथा है, जो सामाजिक धितन का कारण है।
'एक भ्रम की कथा' कहानी के भ्रम पर आधारित है। इस कहानी में नारी जीवन में भ्रम, उपयोग का महत्व दृष्टबंध होता है। हर भ्रम की कहानी में भ्रम बना करने वाली रचना के लिए पति या बच्चों के अमंगत से संबंधित कुछ न कुछ सजा तत्ज्ञों रहती थी। इसी कारण परम्परागती लक्षीर पर चलते हुए प्रत्येक रचना चाहे वह पढ़ी-लिखी हो या अपना इन परम्पराओं का पालन करती है। यह कहानी रूढ़िवादी परम्पराओं पर आधारित सामाजिक सिद्धांत है।

'प्रतीक्षा के बाद' कहानी में इंतजार की बैठनी और इंतजार खाम होने का आनंद दोनों को देखा जा सकता है। इस कहानी में एक डॉक्टर से मिलने के लिए प्रतीक्षा करते हुए व्यक्तियों में एक व्यक्ति का पति बेटी के अपनी बाहर की इंतजार कर रहा होता है कि अब वह वह युवा लड़की डॉक्टर को अपने साथ लेता है जो लिए हड़कड़ते हुए चेमबर में घूम जाते है। प्रतीक्षा में बेला व्यक्ति विचार करने लगता है कि यदि उसकी प्रतीक्षा का उस सकारात्मक फल नहीं मिल पाया तो उसका अब लिए का इंतजार व्यर्थ हो जाएगा, परन्तु जब डॉक्टर उन लड़कों के साथ जाने से मना कर देता है तो वह राहत की सांस लेता है। जब इस व्यक्ति ने प्रतीक्षा समाप्त होती है तो वह अपनी बाहर आने पर हड़कड़ा जाता है परन्तु उस हड़कड़त में भी एक खुशी होती है। यहीं युवाओं द्वारा नियम विरुद्ध कार्य करने की रिस्क को दर्शाया गया है।

'सम्मान' कहानी एक भ्रम पर आधारित है। अपने दुःखों को भूलने और खुशियों की ललात में व्यक्ति एक भ्रम में जीना भी स्पष्टकर कर लेता है। कनाक अपने जीवन की उदासी और खालीपन को भरने के लिए एक मुंह बोला रिसा बनने का बनाती है। अपने यह और परिवार में मिलने वाले सुख को वह अपने द्वारा बनाये गए रिसे में ढूँढती है। चेहरे पर इसी का नकाश आड़े वह आधुनिकता की बचकावीं में खो जाती है, परन्तु उसकी इस मुंह बोली बहन और उसका परिवार भली-भाँति समझते हैं। इस कहानी में सामाजिक संवेदनशीलता को उजागर किया गया है।

'खिजाब' कहानी दमयती जी की कहानी है। उद्यावस्था के प्रभाव से दमयती जी खूब स्वतंत्र जीवन चाहते हैं। उन्हें लोगों के साथ नहीं होने और एकल जीवन व्यक्त प्राप्त करने में विफल होते हैं। लोगों में खिजाब लगाये रहने वाली धमयती जी अपनी जीवन अपनी शाति पर ही जीना पसंद करती है। यह कहानी आधुनिकतावादी जीवन की विषयस्तियों को उजागर करती है।

'हमें बिताए' कहानी सुशीला जी और एक लड़की के जीवन पर आधारित है। सुशीला जी के व्यक्तित्व और उपवास से प्रभावित लड़की का अपने व्यक्तित्व को उन्हीं के अनुसार बाल लेने की कोशिश के फलस्वरुप उन्हें न जैसा व्यवहार करने लगती है। उस लड़की के प्रति उसके सहयोगी जो कि उसके साथ विताए के समाधान का काम करता है कि एक धारणा बन जाती है परन्तु बाद में उस धारणा का खण्डन भी हो जाता है।

'जोड़-घटाव' कहानी की नायिका सुषा जी और विश्वविद्यालय के प्रोफेसर के बीच आपसी कार-घटाव का लेख जोखा है। इस कहानी की रचना के लिए विश्वविद्यालय के प्राध्यापकों को माध्यम बनाया गया जाता है। प्रोफेसरों की शक्तिशाली राजनीति का सुषा जी अपनी तरह समझ जाती है। इस कहानी में स्वाधीनता राजनीति को स्पष्ट देखा जा सकता है।

'पिसूं और कलम पिसूं' कहानी लेखकों के जीवन का दस्तावेज है। लेखक कलम पिसकर जीवन तो व्यापार कर सकते हैं परन्तु जीवन में चक्कावीं नहीं ला सकते। वर्तमान युग रिखावटी युग है क्योंकि जहाँ सादगी होनी वहीं विकास अपरन्य होगा। अपनी उन्मति के लिए व्यक्ति को दिखाये और धूम-धड़के को अपनाना होगा। इस कहानी में आधुनिकतावादी
सामाजिक विचारधारा को उजागर किया गया है।

'उद्विग्नता का एक दिन' एक ऐसी ही महिला की कहानी है, जो उस स्थल से बचने के लिए अपने आस-पास के लोगों की ओर अपना ध्यान केन्द्रित करती है और पुरुषों बातों का भी समर्थन करती है। वातावरण में यह एक अच्छा माध्यम है अपने अकलेपन को खत्म करने का।

मीठे में कुछ छोटे-छोटे और उसके साथ मन से जुड़ जाते। इस प्रक्रिया से एक अलग प्रकार के आनंद की प्राप्ति होती है।

'मीठ का एक दिन मुश्किल है, नींद कभी रात भर नहीं आती' कहानी व्यक्ति की इसी कालहका पर आधारित है। इसमें बताया गया है कि मीठ का डर जो हंसबदाहट पैदा करता है, शायद उससे ही वेदना कहते हैं। इस वेदना में ही हम हर क्षण जीते और गंवत हैं। इस कहानी द्वारा जीवन में हर क्षण जीने-मरने की स्थिति की वेदना को दिखाया गया है।

'लाल मिट्टी की सड़क' कहानी नारी हंस भर पर आधारित है। वेदना अपने जीवन के अकलेपन, ऊब और उदासी से निर्भर पाना चाहती है। अपने अकलेपन होने की अनुमति और खालीपन को मानने के लिए यह यायावर जीवन का विकल्प तत्तातिङ है। इस कहानी में नारी जीवन के हंस को स्पष्ट करते हुए यायावर जीवन की तलाश पर विचार किया गया है।

'आपकी हांसी' कहानी व्यक्ति के उस समय को उजागर करती है कि स्कूलमितज्ज होना अच्छा है तथा जुड़े रहने से ज्यादा सीधा और हंसमुख होना हांसी का पत्ता बना देता है। नभू बाबू के घर में रहने वाला आदमी अपनी सादगी और मोतिलाप के कारण लोगों के बीच उपहास का पात्र बनता है। नभू बाबू के दूर के रिश्तेदार या मुनाफे के नौकर के पागल होने का प्रमाण उसकी हांसी है। आदर्शिकतावादी और संवेदनशील इस समकाल में जहां संवेदना का कोई स्थान नहीं है वहाँ व्यक्ति का भावात्मक स्वभाव उसे पागल कराया जाता है। इस कहानी में बताया गया है कि व्यक्ति को जरूरत से ज्यादा सीधा और हंसमुख होना उपहास का पात्र बना देता है।

अल्का सरायगी के कहानी संग्रह 'कहानी की तलाश मे' में यथार्थ सामाजिक विचार के कारण इसे सामाजिक जीवन की कहानियों का संग्रह भी कहा जा सकता है। इसमें समाज की आर्थिक दशा के साथ-साथ संकट के उत्थान-पतन की स्थितियों भी व्यजित हुई हैं।

स्त्री-पुरुष संबंधों, लड़कियों, परम्पराओं और आधुनिकता बोध के स्वरूप एवं अर्थसाइट पश्चात का विचार भी इसमें देखा जा सकता है, साथ ही नारी की स्थितियों के विविध रूप भी प्रकट हुए हैं। अधिकांशतः नारी पाठ वे समाज से विद्रोह करने की क्षमता है, परंतु उन नारी पाठों की संख्या अधिक है, जो लड़कियों, अंधविश्वासों, आड़म्रों, और दरोजियों की शिकार हैं। जिनकी आकाशाएँ, मनोकामनाएँ किन्हीं छोटी तक उल्टन-उल्टन मज़ा का वर्ण करती हैं।

वर्तमान आधुनिक परिवेश में अल्का सरायगी का कथा साहित्य महिलाओं के प्रति सामाजिक विचार के वृद्धिका है मद्दत की दिशा में आहम भूमिका निभा रहा है साथ ही आधुनिकतावादी जीवन के सामाजिक विचार को भी उजागर करता है।

वर्तमान में बदलते सामाजिक संदर्भ को चित्रित करने वाली कहानियों में आधुनिक समाज में नारी के शोषण और एकाकी जीवन का प्रवाह मिलता है। लेखिका अल्का सरायगी यह मानती है कि इसके लिए समाज में महिलाओं के प्रति नये दृष्टिकोण का आवश्यकता है और आज की रचना महिलाओं के प्रति हो रहे अन्याय को प्रकट करने की चाहिए। पिछले दशकों के दौरान असमानता को दूर करने, लिंग-याद व स्थापित करने तथा महिलाओं द्वारा स्थिरकार की जाने वाली समस्याओं पर ध्यान केंद्रित करने के लिए दुर्दिश्वियों के द्वारा प्रयास किया गया और समय-समय पर इन समस्याओं को मूल्यांकन की गई है। अल्का सरायगी
का यह कहानी संग्रह समाज की कुछ ऐसी ही परिस्थितियों पर ध्यानाकर्षण करता है।

संदर्भ सूची—

1. कहानी की तलाश में (कहानी संग्रह) — अलका सरावगी, राजकमल प्रकाशन, नई दिल्ली, पटना, प्रथम संस्करण, 2005
2. समकालीन हिन्दी लेखिकाओं की कहानियों में अभिव्यक्त बहुआयामी विद्रोह — डॉ. रेशमी रामदोनी
GST: A Study of Impact and Implications on Various Industries in Indian Economy

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Abstract

ST that is Goods and Service Tax is the most recent sort of Indirect Tax which is proposed to be in compel from first July, 2017 which is as of now in constrain on numerous nations around the globe and they all were thinking about it as their business tax framework. The GST will be the demanded on the produce, deal and the utilization of products and enterprises in India. It is said to be the greatest type of change in the roundabout tax collection perspective as far back as 1947. The committee of the GST will be going by the Union Finance Minister that is as of now Arun Jaitley. The principle reason for GST is to achieve the single duty framework for the fabricate and the offer of merchandise at both focal and the state level in the nation. The GST is for the most part executed to evacuate all different assessments like VAT (Value-Added Tax), Excise obligation and Sales Tax. The Tax will be particularly helpful for the buyers in the parts of installment of Taxes that is, we as a whole need to pay isolate impose at state level and at focal level for the products and ventures acquired and after the GST there will be just a single duty to be paid for the merchandise and enterprises devoted which is the Goods and Services Tax (GST). This paper realizes out the review of the ideas of GST and its effect and suggestions on the different Industries in the Indian Economy. Through this paper we can be in a situation to comprehend about the ideas, destinations, affect and the ramifications of the Goods and Service Tax in India.

Keywords: Indirect Taxation; Goods and Service Tax; Marketing; Structural Equations

1. Introduction

GST is the crucial form of Indirect Taxation which is said to be the indirect taxation reform ever since our Independence. The GST is said to bring about the economic integration said by our Union Finance Minister Arun Jaitley during the Budget speech at 2016. The Goods and Service Tax is levied on the manufacture, sale and consumption of the goods and services. Through the implementation of GST, all other taxes like Value Added Tax, Sales Tax will be removed and a uniform tax system on goods and services will be followed.

Monika Sehrawat and Dhandha [1] have studied about the various features and the challenges associated with Goods and Service Tax well known as GST. They have found out that the legal procedures in implementing, consent from all the states, proper literacy on the concept of GST are the challenges associated with the implementation of GST.

Akanksha Kurana and Sharma [2] have made a research work about the impact of GST on Indian economy. They have found out that the GST will improve the input tax credit to the manufacturers which would result in reduced cost of goods. They have suggested that the government must provide awareness about the concepts of GST to the public.

Garg [3] and Kumar [4] have said that the GST has positive impact on the present scenario of Indian economy. The Indirect Taxes Committee of Institute of Chartered Accountants of India (ICAI) has said that the Goods and Service Tax have positive impact on Indian Tax System [5].

2. Objectives of the Study

This study is based on the following objectives.

1. To study about the concepts of GST.
2. To study about the need and the Importance of the Goods and Service Tax to the Indian economy.
3. To study about the impact of GST on Various sectors in Indian economy.
4. To provide suggestions and recommendations regarding GST.

3. Methodology

This study is descriptive in nature and it used the exploratory technique. The data for the study were gathered from the secondary sources such as journals, articles published online and offline on various newspapers and websites.

4. Legislative History of GST Bill in India

The GST Bill was initially proposed by the committee under the then Prime Minster Atal Bihari Vajpayee during the year 2000 which headed by Asim Dasgupta, the Finance Minister of West Bengal. Later on 2004, The Kelkar Task force which
was instrumental in the implementation of Fiscal Responsibility and Budget Management Act (FRBM) Act, 2003 suggested about the implementation of GST under the principle of VAT.

On 2006, the then Finance Minister of Union P. Chidambaram, announced the target date for the implementation of GST in India as 1st April, 2010. During 2007, an empowered committee was formed by the finance ministers of each state to submit the roadmap for GST and they have submitted it. On 2008, that Empowered Committee submitted a report entitled “A Model and Roadmap for Goods and Services Tax (GST) in India” containing the roadmap for the implementation of GST in India. They also made some suggestions with regard to that report. Later on November 2009, the EC submitted the first paper and conducted a debate with regard to gather the opinion of all stakeholders.

In 2010, the then finance minister Pranab Mukarjee assured that effective implementation of GST Bill on April 1, 2011. And on 2011 the 115 Amendment Bill was passed in Lok Sabha in order to implement the GST Bill for certain goods and services and it was sent to the standing committee. In 2013 the standing committee submitted its report. But later it was lapsed due to some political discrepancies.

On 2014, Union Finance Minister Arun Jaitley has passed a 122 Amendment on December 17, 2014. Later, on the budget the Finance Minister said that the Bill will be passed on 1st April 2016, and which could not happen and as of during the budget of 2016, Arun Jaitley said that the GST bill will be implemented through the One Hundred and One Amendment Bill officially known as The Constitution (One Hundred and One) Amendment Act 2016 will be in force from 1st July, 2017 [6-8].

• Concept Overview - GST at a Glance Goods and Service Tax-Explainedz
The GST is the proposed Indirect tax system which is levied on the manufacture, sale and the consumption of goods and services. It will replace all the indirect tax systems such as sales tax and value added tax. The main purpose of GST is to bring about the single uniform system of taxation in the manufacture, sale and the consumption of goods and services in India.

The GST is said to reduce the level of Tax evasion and the corruption and it also reduces the tax burden of the public.

5. Objectives of GST
1. To remove the cascading effect of taxes that is through this Single taxation system (GST) the tax on taxes will be removed easily.
2. To reduce the Tax evasion and Corruption.
3. To bring about the consumption based tax instead of manufacturing.
4. To absorb various Indirect taxes and to bring a single system of taxation.
5. To remove the prices of goods by having a uniform system of taxation over the country.
6. To increase the GDP by the exclusion of cascading effects of Taxation.

• GST Model
The GST model consists of three components or three different varieties of GST. They are as follows.
• Central GST.
• State GST.
• Dual GST.
1. Central GST: Goods and Service Tax to be levied at the centre.
2. State GST: GST levied at the state.
3. Dual GST: GST to be levied at the State and Centre concurrently.

• Proposed GST Rate
The rate of the proposed Goods and Services Tax for the certain goods and services are laid down by the government which is as follows.
1. For Goods the Total GST rate is 20 % in which 12% of the tax is levied by Central while remaining 8% will be levied by the state.
2. For Services the Total GST is 16% out of which 8% is for the Central and 8% is for the state.
3. For the essential Goods the GST is levied at 12% in which is divided equally that is 6% for Centre and 6% for state.

Currently, it is collected in the form of VAT which is 26.5% that is Central Value Added Tax is 14% and State VAT is 12.5%.

The above mentioned percentage of Goods and Service Tax is just a proposed value it may subject to change as per the revisions make up by the Executive Committee and the government.

• Taxes those Absorbed by GST
The Proposed Indirect Taxation System of GST is likely to include the following taxes in Centre and at state level, they are as follows
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Products not covered under GST
The Goods and Service Tax does not include certain products they are as follows.

- Petroleum Products.
- Alcohol.
- Tobacco Products.

Need and Importance for GST
- To bring about the uniformity in the System of Indirect taxation.
- To remove the cascading effects of Tax.
- To bring about the economic integration.

Generally, the Taxes are imposed at various rates among various states in India.
So, there is a huge loss of revenue to the central as well as state government. Through GST a uniform tax rate is followed all over the country and so that there will no such loss of revenue.

- Reduces complexities and increases more number of economic transactions.
- The GST brings about a competitive pricing. As all the products are taxed uniformly across the country, the various forms of indirect taxes will remove and which in turn will reduce the tax burden of the consumers. This will reduce the prices of the products and increases the consumption which in turn will be more beneficial for the companies.

- Generally, the main aim of GST is to bring about the single tax system which will reduce the cost of production for the manufacturers, So that it will be a big boost for those producers who made their products at lower cost and involves in international trade that is exports.

- As it is the Single Tax system, the tax burden for starting industrial units will be reduced; As a result when more industries were created it will ultimately result on more employment.

Through GST the government receives more amount of Tax revenue which will be utilised for the services to the public.

- As there is more transparency in the system of GST and since it is a system of single taxation, the chances of corruption will be very low.

- The Country is said to have one market economy, as through GST the number of numerous markets divided by various tax will be avoided.

- To avoid the Tax burden of the common consumers and the public by making it into a single tax system.

Effect of GST on Various Sectors

The GST is said to positively affect the economy overall. Be that as it may, with regards to sectoral-wise arrangement, the GST has both positive and in addition negative effect on every one of the divisions. Here are a few areas given and its GST is given beneath.

Innovation (Information innovation and ITeS): The GST arrangement of backhanded tax assessment has made the obligation on the assembling products from 14% to 18-20%. Therefore, the costs of the product items will be at high which will give either an impartial or somewhat negative effect on the Technology Sector all in all. However, they will be profited through the lessening of assessment and advantages of different businesses and can to some degree alleviate it.

Media communications: The broadcast communications segment is directly paying the expense at the rate of 14% which is relied upon to be expanded amid the GST administration. What's more, it is thought to be around 18% which will be relied upon to be ignored to the clients and this gives a photo that GST will unfavorably influence this segment.

Pharmaceuticals: Presently, the Pharma organizations are paying duties around 15-20%. Since, there is no unmistakable picture of expense treatment for Pharma in the event that it is under 15% it would be a positive effect on the Sector however in the event that it is over 15% then it will cause some slight negative effect.

Vehicles: The Automobile
business is right now paying a duty rate of a range between 30-45%. Furthermore, it is normal that after GST the rate will be around 18% which will be an immense positive for the car business and which will be gainful to both the Manufacturers/merchants and a definitive shoppers. The standard and the societal position of the purchasers get inspired. There will be a gigantic blast in the Automobile Industry because of execution of Goods and Services Tax.

Money related Services: The Financial administrations, for example, managing an account, Stock Trading firms are at present paying 14.5% as VAT which is probably going to be expanded to 18 to 22% sooner rather than later under the GST administration. What's more, the administrations are probably going to be costlier.

Materials: Currently, the Textile business is paying the assessment at the rate of almost 12.5% or more additional charges and which shifts upon the MRP of the items. Since there is no unmistakable thought regarding the expense rate of this industry under the administration of GST it is normal at the rates of 15% which will moderatly affect the business.

This direct effect may either be impartial or somewhat negative when contrasted with the other present arrangement of tax assessment. In any case, they will be profited through the lessening of cost in transportation, investment funds and so forth.

Media and Entertainment: The appraisal rate for the Media is around 22% beginning at now and since the authority for the expect of charges remains to be the benefit of the area bodies, it is typical that the silver screen affirmations are depended upon to slip after the GST organization and the cost of DTH and satellite TV organizations are most likely going to wind up costlier. There is to some degree either neutral or imperceptibly negative impact of GST on the Media and Entertainment Industry.

Buyer durables: The current of expense rate of this industry is around the range between 23-25%. Furthermore, under the GST administration it is thought to be bring down around 15-18% which will be certain effect to this industry.

Bond: The concrete business as of now pays the assessment at the rate of 25% right now. What's more, after the GST administration, it is relied upon to be settled at the rate of 18 to 20%. This will be a noteworthy help for the organizations of that industry. What's more, the coordinations assess additionally is to be diminished; it would be a twofold advantage for every one of the enterprises associated with assembling.

Real estate: Real estate contributes about nearly 7.3% of India’s GDP and it is the largest generator of employment immediately after IT. Real estate is said to get a positive impact under the GST regime immediately after its implementation. It is expected that since there is a single system of Taxation under GST, all other forms of indirect taxation will be removed which results on reduction of property prices and the cost of construction. Thus, we can have a positive impact of GST on the Real estate sector.

7. Problems in Implementing GST
There are certain challenges and problems in implementing the GST in India. Some of them are as follows.

1. There is no such clear picture about the GST both to the government and to the general public.
2. There is no cooperation between the Central government and the state government in implementing the GST. Even though, if implemented the levy of Tax remains on the part of the state.
3. The State government generally refuses to accept it. As the states levy taxes on the Destination principle i.e. (the state in which the product or service is sold or rendered), so in order to lose the revenue they were avoiding it.
4. The Revenue Neutral Rate (RNR) is the key factor responsible for the effective implementation of GST. But under GST, we could not say that the revenue remains same as that of the current system of taxation.
5. Loss of revenue to the state. If we buy any product the VAT @ 14.5% is included towards it, after the GST regime, there will be no VAT then it results on the loss of revenue to the state.
6. Even though the government said that they will pay the loss of revenue to the state government, it will be again imposed on the general people in some other forms.
7. It involves massive cost on the training of the staff of the Taxation department.
8. Lack of political support. The Bill must be passed in the Rajya Sabha for its successful implementation.
9. IT is the backbone of GST which would connect the various stakeholders through the Virtual platform. So, government must show keen interest on the development of portal for GST and successfully achieves it.
10. There is a large debatable question in implementing the GST such as whether the small entrepreneurs and small firms will be helpful through the GST regime?, whether the government and the Public ready for such a
change? Are some of the questions which are highly in confused dilemma?

8. Proposals and Recommendations

To give education and mindfulness about the GST.

- Effective spending on productive Tax organization staff.
- Well upkeep and regular subsequent meet-ups of GSTN (Goods and Service Tax Network) gateway for better association with different partners.
- With a specific end goal to evade the pointless loss of income to the state government, the focal government may consider the extensive level of GST which will be useful for all partners of GST. Consent from all states and proposals from each state for advancement of GST and the wellspring of Tax income.
- The legislature should take think about the RNR which ought not influence the duty income to any administration either focal or state.
- The loss of Tax income ought to be overseen and repaid appropriately through legitimate broadening of assets without weight to anybody.
- The Central and the State government ought to be in legitimate understanding and helpful with each other for the fruitful usage of GST.

9. Limitations of the Study

1. The study is completely based on the secondary sources.
2. No Quantitative data were collected.
3. The Study is not based on the research.

10. Conclusion

The GST is very crucial tax reform since independence of India, so it must be better handled with utmost care and analysed well before implementing it. And, the government both central and state has to conduct awareness programmes and various literacy programmes about GST to its various stakeholders.

11. References

Impact of International Trade and Human Capital on Economic Growth of India: An Empirical Analysis

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Abstract

International Trade is the principal channel through which the flow of ideas, knowledge and technology will take place. But it is not clear to what extent the recipient country can take advantage of these variables. Adoption, imitation and production process, by and large, depend on human capital in the recipient country, and also on how the different components of human capital (e.g. on-the-job-training versus academic training) are distributed. This paper uses Ordinary Least Square to investigate relationship between International trade, human capital and economic growth. The empirical result shows that there is a significant relationship between International trade, human capital and economic growth. The study shows that any progress in human capital will positively affect economic growth. In turn, higher economic growth will lead to more employment, higher income and profit, which means more investment in human capital.

Keywords: Trade, Human Capital, Economic Growth, India

1. Introduction

Economic growth is the result of many domestic and external factors. Trade and human capital cannot be detached from economic growth. Their link is indispensable. Human capital and foreign trade would reinforce the process and the size of economic growth. Foreign trade will affect domestic markets and human capital plays a complementary role to trade. Education as indicator of human capital is one of the main factors which influences the development of trade and is one of the building blocks of productivity of factors of production. A workforce with higher education will have more potential for change and for being innovative. Human capital and foreign trade are complementary factors. They interact with each other and work together to strengthen the force of further economic growth and development.

The basis for international trade is the same as for trade within a country. Many economists argue that opening to international trade accelerates economic growth. The growth may be a transitory stage but nevertheless it will pave the path for future growth rate. Clearly, the transition takes time. That could be couple of decades or more. It is not unreasonable to speak of opening ones borders to international trade as a cause of accelerating economic growth (Dollar and Kraay, 2001).

India’s foreign trade was severely hit by the 1929 great depression. The value of total trade in 1932-33 was less than half of what it was in 1929-30. The impact of depression began to subside after 1932 and India’s foreign trade showed some sign of improvement. During the Second World War, exports increased rapidly, particularly to Britain. Britain and USA accounted for the bulk of India’s exports. India enjoyed export surplus in her foreign trade during the last one hundred years of British rule. But the continued surplus in its balance of trade didn’t lead to any real gain and used to pay for its invisible imports and debt servicing obligations (Bhasin, 2005, p.7).

Since independence the number of changes has been taken place in almost all sectors of the Indian economy. As far as foreign trade is concerned India has adopted an inward-oriented restrictive trade time.
policy till 1960’s. Since 1960’s, India has adopted the import substitution policy. The Indian foreign liberalisation era started in 1970’s but only half-heartedly. In the late 1980’s and early 1990’s more drastic changes have taken place as far as Indian foreign trade is concerned. Indian economy has shifted towards greater openness and recognizing the impacts of globalization trend (Shinde, 2010).

India has been implementing policies in favour of trade liberalization but domestically and internationally. These policies have brought tremendous changes in Indians foreign trade and human capital. The purpose of this study is to examine the impact of foreign trade and human capital on India economy for the period of 1980–2011.

2. Literature Review

Economists have always been aware of the importance of economic growth and development. Economic growth is the backbone of any national economic activity. Generally speaking, economic growth is a result of greater quantity and better quality of natural, human, and capital resources, and also technological advances that boosts productivity (Chen and Gupta, 2006).

Krueger (2001) finds a strong association between export and economic growth. In his comprehensive study, he examines the role of exports on the economic growth of 10 countries from 1994 – 2002.

Isaksson (2003) concluded in his study that trade is important for transporting growth-enhancing factors like technological advances and knowledge. The author also argues that the positive impact of international trade can be much greater if countries engaged in trade had the same high level and quality of human capital. Many third world countries or economies that are experiencing their transitional period cannot take advantage of the full benefits of international trade because of poor and low quality and quantity of human capital.

Wacziarg and Welch (2006) showed that trade liberalizing countries comparatively tend to have higher volumes of trade, higher investment and economic growth. These authors have also highlighted another effect of trade liberalization. In their work it has been implied that political stability is one of the consequences of trade liberalization, which in turn will affect economic growth positively.

Söderbom and Teal (2008) ask the question “Do openness to trade and higher levels of human capital promote faster productivity growth?” To answer this question authors used panel data on 93 countries for the 1990-2010 periods. Their findings show that there is a significant correlation between trade openness and the rate of economic productivity. The study shows that if the level of openness is doubled the underlying rate of technical progress will increase by 0.8 per cent per annum.

Chang et al. (2010) states, opening the economy to foreign trade will promote the efficient allocation of resources. This is because comparative advantage allows the dissemination of knowledge and technological progress and encourages competition in domestic and international markets.

Chen and Gupta (2011) examined the impact of trade openness on economic growth for the SADC region in Africa over the period of 2010 to 2011. The results of their study confirm that trade openness have a strong positive impact on economic growth in this region over this period. The study also highlights the role of education in strengthening the effect of openness on sustainable growth via better absorption of knowledge and technological spillovers from trade liberalization.

Tanna and Topaiboul (2014) found in their study that there are significant effects of domestic investment and trade openness on import-led economic growth in Thailand. They concluded that trade openness has played a greater role than FDI in influencing Thai economic growth. At the same time their study reveals a subtle role for technology. It is transferred by means of the complementary mechanism of trade, FDI and government expenditures.

Obadan and Elizabeth (2015) showed in their paper that trade openness positively impacted the Nigeria’s economic growth. Maksymenko and Rabbani (2015) conducted a research about the role of economic reforms and human capital accumulation in the postreform economic growth in South Korea and India. They have detected a significant positive correlation between human capital accumulation and trade liberalization in both India and South Korea.

3. Data and Model Specification

In this study an attempt has been made to examine the effect of foreign trade and human capital on economic growth of India. Data of the study were taken from handbook of Indian economy and economy survey and were collected from period of 2000 to 2015 to show impact of foreign trade and human capital on economic growth. To determine the existence or nonexistence of the relationship between the variables in the
model and also to find out whether this relationship is linear or non-linear, this study adopted the Ordinary Least Squares method (OLS). Model for testing this relationship is as follow:

\[
\text{Growth} = f (\text{Openness, Human Capital, FDI, Exchange Rate, and Domestic Investment})
\]

The openness variable is measured as exports plus imports divided by GDP (\(X + M / GDP\)). It is used as proxy for the level of trade between the economy and the rest of the world. It is expected to have a positive effect on growth as drawn from various works that we have reviewed earlier. India’s foreign trade is regulated by the 1992 foreign trade act, which replaced the 1997 import and export act. The act of 2002 empowers the central government to formulate and announce from time to time the export and import policy and to amend it in like manner. New trade policy in 2002 made a conscious effort to dismantle various protectionist regulations and policies to accelerate India’s economic integration to global markets.

HC: Investment expenditure in education is used as proxy of human capital and it is believed that human capital has positive influence on economic growth. Human resource development is the key player of economics development and without this resource process of growth and development will be longer. Trade has a conditional impact on growth and can be said that trade has a pro-growth influence. Foreign trade plays a major role in diffusion of new technology but to what extent a relatively less developed country can take advantage of new technology through trade is difficult to measure. It appears that direct adoption of relatively advanced technology, as well as imitation requires a certain level of capital and skills in the recipient country (Issakson, 2002). Therefore, development of human capital through promoting education and skills would result in promoting more exports and trade.

FDI: Foreign direct investment is used to show the role of external factors on economic growth. FDI helps economic growth through diffusion of technology and development of human capital. In India, prior to economic reforms that were introduced in 2011, FDI was discouraged by (a) imposing severe limits on equity holdings by foreigners and (b) by restricting FDI to the production of only a few well protected sectors of the economy. Developing countries adopted their liberalization and deregulation policies and hence their foreign investment policy as dynamic and efficient vehicle to secure and develop their industrial technology, managerial expertise and marketing know-how and networks so that they will maintain a steady economic growth, employment, productivity and export (Gakhar, 2014).

ER: Exchange rate: It is expected at lower exchange rate, growth rate will be higher. Frequent fluctuation and poorly managed exchange rate has disastrous impact on economic growth but more flexible exchange rate in economies that are tend to be more market oriented usually experience higher economic growth.

DI: Gross domestic capital formation is used as proxy of domestic investment. Economic growth needs capital investment. The problem of low marginal propensity to save in developing countries is one of the main obstacles of economic growth. There is need for resources, to be employed efficiently, to achieve a target rate of growth in any countries. These resources can be mobilized through both domestic and foreign resources (Tang et al., 2008 and Tawiri, 2010). Therefore, it is expected that an increase in domestic investment will have a positive impact on economic growth in the same way as foreign investments but may not to the same scale.

4. The Tests and the Outcomes

In order to identify the stationary of the variables under study we start our analytical part by applying the Augmented Dickey-Fuller (ADF) test.

Table 1

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<th>Unit Root Test</th>
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<td>-</td>
<td>-3.670170</td>
<td>-2.963972</td>
</tr>
<tr>
<td>Openness</td>
<td>-4.684136</td>
<td>1</td>
<td>-3.679322</td>
<td>-2.967767</td>
</tr>
<tr>
<td>EE</td>
<td>4.650429</td>
<td>-</td>
<td>-3.689194</td>
<td>-2.971853</td>
</tr>
<tr>
<td>FDI</td>
<td>6.726945</td>
<td>-</td>
<td>-3.752946</td>
<td>-2.998064</td>
</tr>
<tr>
<td>ER</td>
<td>3.824597</td>
<td>1</td>
<td>-3.699871</td>
<td>-2.976263</td>
</tr>
<tr>
<td>GDCF</td>
<td>3.626648</td>
<td>-</td>
<td>-3.711457</td>
<td>-2.981038</td>
</tr>
</tbody>
</table>

Table 1 shows the result of unit root test. From this table it can be seen that openness and ER (exchange rate) variables were not stationary but when we convert these series into first difference these variables became
stationary. We will use these variables with one year lag in model of study to find the affect of these variables on economic growth.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness (-1)</td>
<td>29.85621</td>
<td>0.0288</td>
</tr>
<tr>
<td>EE</td>
<td>2.18E-05</td>
<td>0.0001</td>
</tr>
<tr>
<td>FDI</td>
<td>2.50E-05</td>
<td>0.0009</td>
</tr>
<tr>
<td>ER (-1)</td>
<td>0.140916</td>
<td>0.0009</td>
</tr>
<tr>
<td>GDCF</td>
<td>6.69E-06</td>
<td>0.0025</td>
</tr>
<tr>
<td>C</td>
<td>0.315149</td>
<td>0.8742</td>
</tr>
</tbody>
</table>

Table 2 presents the result of the regression analysis of the study.

The value for the R-squared in the model is 0.71 which shows that 71 per cent of the variation in the dependent variable is explained by the independent variables of the model. The 29 per cent variation in the dependent variable remains unexplained by the independent variables of the study. The value for the F-statistic is 4.99 and is significant. It is endorsing the validity and stability of the model relevant for the study. The Durbin-Watson statistic (2.44) also shows that there is no autocorrelation in the model.

The results of variables suggest that the openness has significant positive impact on economic growth as dependent variable. This result confirms the importance of foreign trade on expansion of Indian economy. Same results have been found by Harrison (2001), Sachs and Warner (2007), Obadan and Elizabeth (2010).

Investment expenditure on education also has a positive and significant impact on economic growth in India. Human capital plays a central role on endogenous economic growth. Knowledge and the ability to invent and innovate are considered the key determinants of economic development in all types of economic system. This result is consistent with the conclusion of earlier studies.

FDI shows significant positive impact on dependent variable. FDI is one of the important vehicles for the transfer of technology, management skill and development of human capital. FDI has played an important role in economic growth in India. This result corresponds with the findings of other scholars that have conducted their research in the same field about Indian economy and positive impact of FDI on economic growth such as Ray (2012) and Agrawal and Aamir Khan (2011). The result of both studies confirmed that there is positive relationship between foreign direct investment (FDI) and GDP and vice versa.

Exchange rate shows positive and significance impact on dependent variable. The unification of the exchange rate was instrumental in developing a market-determined exchange rate regime. Following the recommendations of O.P. Sodhani Expert Committee, which were proposed in 1996, wide-ranging reforms have been undertaken for deepening and widening of the Indian foreign exchange market. An Internal Technical Group on the Foreign Exchange Market was constituted in 2005 to undertake a comprehensive review of the measures initiated by the Reserve Bank. These measures were taken in order to identify the areas for further liberalization or relaxation of restrictions up to the medium-term. These efforts have resulted in the momentous developments in the enhanced risk-bearing capacity of banks along with rising foreign exchange trading volumes and small margins in the foreign exchange dealings. In this way the foreign exchange markets in India acquired greater scope and depth in the last couple of decades.

As we have indicated in many occasions before domestic investment (GDCF) has also a significant positive impact on economic growth in India. This result demonstrates the essential place of domestic investment for economic growth. Investment is the engine of economic growth and it can be from domestic or as foreign direct investment. Either way it acts as the force of economic growth. This result is in agreement with findings of Tawiri (2010) which showed that domestic investment plays an important role in to stimulate economic growth rates in Libya, especially with the policy of openness. That might be possible if government encourage more domestic private investment projects which should not be neglected at the expense of trend towards FDI.
5. Conclusion

In this study we have assessed the impact of foreign trade and human capital on economic growth in India. The result of our study shows that economic growth in India is affected by many factors and India has benefited extensively from foreign trade, human capital, FDI and domestic investment ever since she has adopted policies that leaned towards these aspects of the economy. Foreign trade and human capital factors are very significant variables in determining both the rate and size of economic growth in any given country for any given time .Investing in human capital improves workforce knowledge and skills and subsequently the economic productivity of the nation. Trade liberalization on other hand is expected to re-direct resources from activities with positive price distortions towards activities that are either undistorted or negatively distorted. Those decades that are characterized by greater economic liberalization of India’s foreign trade are also the decades that India has experienced its highest rates of economic growth. In this study we have shown that foreign trade has improved economic growth in India. Study corroborates the hypothesis that an economy that opens its borders to foreign trade can be more effective. It brings more stability and certainty in the markets. A country can be benefited from international trade when it has high capacity of human capital with high level of knowledge and expertise. Investment in human capital and promotion of greater international trade have acted as two most primary catalysts in India’s high economic growth rate in the recent decades and will continue to do so in the future.

6. References

Yoga is Prime Source for Personality Development

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Abstract

Yoga is an ancient method of exercise that focuses on strength, flexibility and breathing to boost physical and mental level. The aim of yoga is self-realization and Union of God (Supreme soul). Yoga gives an effective method of reducing stress, anxiety and depression. Yoga practices and their duration is very important for practice holder. Yoga asana are much better than the physical exercise for all the age group people. This paper suggests that different types of yoga techniques produce different effects on the basis of age and sex. The present study shows that a specific yoga therapy decreases the exercise of patients. Yoga may have implemented as a supportive treatment for overall personality development at low budget and less space.

Keywords: Yoga Techniques, Yoga Types, Effects and Benefits, Physical Exercise V/S Yoga Exercise, Yoga Resources, Yoga and Modern World

1. Introduction:

Yoga is an ancient method of exercise that focuses on strength, flexibility and breathing to boost physical and mental level. The aim of yoga is self-realization and Union of God (Supreme soul). Yoga gives an effective method of reducing stress, anxiety and depression. Yoga practices and their duration is very important for practice holder. Yoga asana are much better than the physical exercise for all the age group people. This paper suggests that different types of yoga techniques produce different effects on the basis of age and sex. The present study shows that a specific yoga therapy decreases the exercise of patients. Yoga may have implemented as a supportive treatment for overall personality development at low budget and less space.

2. The Mechanisms of Yoga / Yoga Techniques Works on:

(i) Breathing exercise based on training

Yogic breathing exercise proved training in the efficient use of abdominal and diaphragmatic muscle in breathing.

(ii) Maintaining certain body posture:

Yogic postures reduce psychological over-activity in asthmatic and increase the muscle efficiency.

(iii) Certain yogic cleansing procedure of body:

The yogic cleansing procedures help in removal of secretion from bronchial tree.
3. Types of Yoga

(A) Bhakti Yoga

(Bhakti Yoga is a path of a union of soul and spirit through devotion. In this type of yoga a person (devotee) devotes oneself with the Lord completely.

(B) Karma Yoga

(Art of right action)

This type of yoga explains in detail by Lord Krishna in Gita. This type of yoga is suitable to those who are household. In this yoga one must do one's duties without the desire of results is the cause of boundation.

(C) Gyan Yoga

(Balance between love and knowledge)

According to gyan yoga the yogis, (devotee) perceives God through his wisdom. Devotee find a spiritual upliftment by concentrating his mind with the devotion and faith on the saying of scriptures.

(D) Laya Yoga

(Union by dissolving Ego in the infinite)

In this type of yoga emphasis is given to the words. Words are systematically arranged in rhythms and singing in praise of God in the form of bhajan, and kirtans.

(E) Tantra Yoga

(Union through Seed word, Fire and Sexual Power)

This type of yoga works on the principle of Union of negative and positive. The follower of this path to consider the mahayogis shivaardhnarishwar form as their deity.

(F) Manta Yoga

(Union through root word vibration)

The path of God union by chanting and incantation of seed word sounds. During the chanting of those root sound words. Some rites are also performed, and offering are offered to the deity in the fire.

(G) Hatha Yoga

(Union through bodily discipline)

This type of yoga devotee assumes as a child and God as a father. This yoga needs a lot of self-control and also very uncommon impractise. It is practiced by only few those who have renounced the world.

(H) Ashtang Yoga

(Royal path of Union of soul and God)

This is supreme science of God communication. A lot is written in scripture regarding this supreme yoga. This science has been explained in detail in Manuscript, Gita, and Upanishads etc.


Yoga therapy is a feasible and economical mode of treatment and rehabilitation for patients of asthma. Yoga therapy sessions were conducted at CYTER [Table 1] by trained and qualified yoga therapists. Components of yoga therapy protocol included yogic counseling, preparatory practices, brahma mudra, chandra nadi, and bhramari pranayamas, shavasana relaxation, and a series of 15 asanas, mudras, and pranayamas collectively known as Hathenas in the Gitananda (Rishiculture Ashtanga) Yoga tradition.[10] All of these are traditional yoga practices that enhance awareness and mindfulness of the various lung segments, thus facilitating flow of prana into those regions [Figure 1]

Table 1: Yoga practices (given thrice a week for 4 months) and their duration
5. Different groups of people may have different yoga-related experiences

- **Differences based on age**
  Generally middle-aged people were more likely to practice yoga to lose weight and increase muscle strength while older-aged people were more interested in improving their age-related chronic health issues.

- **Differences based on education**
  National survey data indicate that “lack of knowledge” is more commonly a problem for lower educated people so they attain less yoga classes than the highly educated people. So seminar and awareness programs are very important for illiterate and less educated people. We can motivate them to participate in yoga based programs. It makes them his life more comfortable and healthy.

- **Differences based on sex**
  A study found evidence for differences between men and women in the effects of specific yoga poses on muscles. A study in veterans found preliminary evidence that women might benefit more than men from yoga interventions for chronic back pain.

- **Differences based on area**
  A study on area based survey found that urban area people were more interested to participate in yoga class as compare to rural area. Because urban people have higher literacy rates, their attitude of living is also different. They enjoy more luxurious and comfortable life.

6. Case Study

Raageshwari was born on 25 July 1977. She signed her first film Zid in 1994 as a child actress. She later acted in some Bollywood movies like 'Aankhen' and 'Main Khiladi Tu Aanari'. She has been an Indian pop singer, television anchor, former MTV VJ, actress and a model. Raageshwari Loomba later moved on to become a VJ in the popular television show which featured Hindi movie songs and ranked them as per the popularity. She had also written her own scripts while working as a VJ. She later on became a musician and launched her own album. Her album named 'Duniya' became a huge success. This album was an instant hit and another album was released named "Oye Shava".[18]

This album reached platinum in just few months and this success gave her a Coco cola deal to do concerts all over India. In the year 2000 she came...
up with another album with her father and brother named as Y2K Saal Do Hazaar. Unfortunately she was diagnosed with bell's palsy (which is a facial paralysis). This left her paralyzed on the left side of her face and even affected her voice. She however did not lose hope but with the help of electrical stimulation, physiotherapy and yoga, she regained her health and looks and was back with a album in 2006 named Sagari Rayn. Raageshwari got rid of paralyzed life through yoga. She has proved that yoga is not only exercise but also it is an art of living healthy and peaceful life. Even now she is busy in learning unexplored form of yoga.

7. Benefits of Yoga Exercises

i.) Gives Core Strength

The core is the center of your body, including the spine, hips, and abs. Strong muscles are important for performing routine activities, from getting out of bed, bending our body and lifting the things up and down. The role of yoga is more important for all human being and specially if you are sports person.

ii) Strong Bone Density

The yoga plays a vital role for bone. Low bone density can cause bone fractures. Hatha yoga is beneficial in treating the bone loss as it promotes bone density. Yoga can increase balance and coordination, thereby protecting against falling, that is a major cause of osteoporotic fractures. It creates an impact that physically triggers osteoblasts, which are the bone making cells that are initially found on the outside of the bone and turn into osteocytes. These cells then start incorporating within your bone. This phenomenon will develop new bone.

iii) Healthy Heart

Yoga exercises stretch muscles and then it involves deep breathing to calm down blood pressure. Mind-calming meditation is also important part of yoga. All yoga activities can help prevent disease. Yoga exercises improve lung capacity and strengthen respiratory function and improve cardiovascular health. It also gives protection, calmness and relief and also reducing the hypertension, which is one of the major causes of heart problems.

iv) Glowing and Healthy Skin

Yoga keeps your skin healthy and glowing. Yoga exercises releases stress, premature wrinkling, loss of elasticity, breakouts and it improves skin tone as it boosts blood flow to the nerves underneath the face. The improved blood circulation also removes dull and tired complexion. It prevents pimples and acne breakouts as it flushes out the toxins. It strengthens the facial muscles and promotes the blood flow to the skin, thereby delaying wrinkless and sagginess. Finally, it improves your glow as it boosts blood circulation as well as provides essential nutrients to the skin.

v) Boosting Immunity System

Hatha yoga helps strengthen the immune system. It supports the lymphatic system that protects the body from disease and infection. Besides, it lowers stress that negatively affects the immune system. Yoga also keeps the inflammatory level in check to prevent immune system disorders. Some of the best yoga poses for boosting your immune system are Wide-Legged Forward Fold, Headstand, Plow Pose and Upward Facing Bow.

vi) Weight Loss

According to a yoga survey report, the average person burns nearly 4-6 calories per minute doing yoga, so 170-180 calories burned during per hour class. Hatha Yoga also helps you burn calories and get toned muscles with improved flexibility. Some yoga exercise put a strain on the muscles. This causes muscles to get ripped, but in a good way. Yoga also promotes mindfulness, making you more aware of your eating habits and feelings of fullness. Some of the best hatha yoga poses for losing weight are Seated Forward Bend, Shoulder Stand, Warrior Pose, and Half Moon Pose. This can help suppress overeating and weight gain; it may even lead to weight loss.

vii) Sharpen the Intellect

The clean air enters the lungs by doing pranayam. The person doing the pranayama starts working intensely. The body and the mind are quick enough to make the head sarasana also work to sharpen the intellect and increase the memory power.

viii) Cleanliness of the internal part of the body

Yoga practice keeps the body healthy and it is cleaned, as the dhoti kriya cleans the stomach and the intestine is cleansed by the settlement process.

ix) Strengthening the body organs and bringing the strains

The physical limbs are strengthened by yoga and the Aashanans, also by connecting and developing bones, blood pressure becomes intense. Sagittarius amount of Dhanuraashan and Halasan reads are
easy to increase, early aging does not occur, Mayurassan strengthens the wrist and performs this kind of action and strengthens the body.

x) Keeping the body in good condition:

It is the virtue of good personality. The knees do not collide with each other by making posture Padmasana neither the hump increases in the shoulders nor stomach grow.

8. Physical exercise and yoga exercise both are totally different from each other.

(i) During physical exercise lactic acid is produced inside the body which causes fatigue and in Yoga exercise lactic acid is not produced inside the body so there is no fatigue inside body as after effects.

(ii) During physical exercises as the intensity of work out increases, oxygen input falls short and myoglobin is utilized by the working muscle which causes oxygen debt and in Yoga exercises no intensity increase during body posture and throughout the Postures oxygen input meets the demand so there is no oxygen debt.

(iii) During physical exercises some by products gets deposited inside the body due to energy metabolism. These makes the body acidic and bring down the PH balance blood gets toxified and during Yoga exercises no formation by product and due to proper amount of oxygen intake and long deep breathing body get detoxified.

(iv) Before physical exercise a lot of warm up is needed otherwise there are chances of injury and before Yoga exercise mild warm up is needed and there are very less chance of injury.

(v) After physical exercises cool down is required to convert the lactic acid into glycogen reuse and to relax the body and after the yoga exercise no need of cool down little shavasana is sufficient. Lactic acid is not formed inside the body so no need to convert it in glycogen.

(iv) Physical exercises develop mainly muscles and there is very less effect on neurons and yoga exercises develop both Sarcomeres as well as Neurons equally.

(vii) Physical exercises are very difficult for elderly and yoga exercises are easy for the elderly.

(viii) Physical exercises are only physical in nature and Yoga exercises are physical as well as spiritual in nature.

(ix) Physical exercises need more time for better results and in Yoga exercise need less time compared to physical exercises. Maximum benefit can be derived in less time.

(x) Physical exercises may be difficult and dangerous for pregnant women but Yoga exercises are easy and safe even for pregnant women.

(xi) Aim of physical exercises is only physical, mental and social health and the aim of yoga is self-realization and Union of God (Supreme soul).

9. Yoga based Resources:

Yoga Asana: There are several places to see - Yoga Journal, Yoga Basics, YouTube, YouTube (gentle yoga), YouTube (restorative yoga), YouTube (sun salutation), YouTube (yoga for people with disabilities) etc.

Breathwork: There are several places to see - YouTube, DoYogaWithMe.com, GaiamTV, vimeo Yoga Journal, etc.

10. Yoga and Modern World:

During ancient times yoga was not meant for everyone. It was mainly practiced by the Rishis and taught to their discipline and member of royal families only. It was forbidden for masses. In modern world yoga is preached and taught to the masses by the eminent philosopher world over but in true sense only a few are learning the art of yoga in total. Masses not interested in God or supreme soul. They are interested in yoga for their physical fitness reason, so that by staying healthy, they can earn more money and can enjoy the worldly pleasures. We can say Definition of yoga has been changed as a way of life to stay healthy by doing some exercises and pranayam so that worldly can be enjoyed. No form of yoga today is practiced in its purest form.

In modern world yoga has become very popular but has lost its aim of God Union and Humanity. Instead of Tapa (tolerance of extremities of climate) air conditioned yoga Hall have been built which in turn pollute the environment.

Conclusion: Overall, the studies comparing the effects of yoga and physical exercise seem to indicate that, yoga is more effective or better than physical exercise. It improves a variety of health-related problem. Yoga should be done under the guidance of a professional yoga teacher, especially if you are a beginner. Additional studies are needed to distinguish between the different types of yoga and their various techniques.

As far as modern world is concerned yoga has lost its meaning for masses and symbolizes as a set of exercise to keep them healthy. So that they can earn
more money and enjoy out of it. Some preachers are taking it as a profession of treatment and money minting. So it can be concluded that the yoga is not actual yoga today. For some it is a business. However, “Yoga is a great tool for staying healthy.”

11. References


Importance of Yoga in Daily Life

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Abstract
Yoga in Daily Life is a system of practice consisting of eight levels of development in the areas of physical, mental, social and spiritual health. When the body is physically healthy, the mind is clear, focused and stress is under control. This gives the space to connect with loved ones and maintain socially healthy relationships. When you are healthy you are in touch with your inner Self, with others and your surroundings on a much deeper level, which adds to your spiritual health. The word “Yoga” originates from Sanskrit and means “to join, to unite”. Yoga exercises have a holistic effect and bring body, mind, consciousness and soul into balance. The main goals of “Yoga in Daily Life” are Physical Health, Mental Health, Social Health, Spiritual Health, Self-Realization or realization of the Divine within us. These goals are attained by Love and help for all living beings, Respect for life, protection of nature and the environment. A peaceful state of mind, Full vegetarian diet, Pure thoughts and positive lifestyle, Physical, mental and spiritual practices, Tolerance for all nations, cultures and religions. Yogic techniques are known to improve one’s overall performance. Pranayama is an important, yet little known part of Yoga. Until recently, this art and science of yogic breathing was almost completely unknown to the common man like many other ancient Indian arts. Pranayama techniques act to purify the nadis including these three main energy channels.

1. Introduction:

The modern life tempts us with comfort. And to make our life more comfortable and convenient we pay for it with obesity, hypertension and cardiac problems. Although we have hi-tech medical facilities, we are still leading a stressful, unhealthy and unstable life. In this situation, yoga can bring peace to our body, mind, and soul and add more value to our life. The importance of yoga in modern life is abundant.

The modern man has problems of tension due to fast life style driven by science and technology. The amount of rest he / she is taken is minimal to make the physical, mental, and spiritual happiness. At the time people think they are in rest, they make Yoga teaches us the knowledge of how to lead a healthy living. It improves our concentration, creativity and sharpens our memory. To maintain a positive physical and mental health, yoga is a must. In the middle of hustle and bustle of the modern life, our emotional stability declines day by day. But yoga can help to prevent it. So another importance of yoga in modern life can be that yoga improves our muscle strength, stamina and bring immune and mental stability. In the modern life in addition to technological advancement and easing lifestyles, the habit of food is also being changed. In previous time people were using natural food fruits and vegetables. This habit is shifted to food produced in artificial ways in a factory like fast foods. The environment and work style is also changed and has the negative effect in the life of the people especially in the urban industrial setting.

2. Significance of yoga:

The main goals of “Yoga in Daily Life” are:

- Physical Health
- Mental Health
- Social Health
- Spiritual Health

- Self- Realization or realization of the Divine within us

These goals are attained by:-

- Love and help for all living beings
- Respect for life, protection of nature and the environment
Hence, practicing yoga in the day to day life helps to maintain a healthy relationship between the mind and the body. The development and balance of the two is important for mental, physical and emotional development in all aspects of our life. There is a need for finding the right science of living to cope up in the present life situation. And no doubt, Yoga is the science of right living because its focused is on both holistically integrated aspects of individual such as spiritual, physical, mental and social wellbeing. Yoga helps in “reducing stress, maintaining and improving your health and physical fitness, and forming more harmonious and satisfying personal and sexual relationships”. It is also useful to be more fruitful in work.

- Improves concentration and helps to stay focused: The importance of yoga in modern life is endless. One of the best lessons yoga teaches us is to focus on the present. In recent studies, it was found that practicing yoga every day improves our IQ and memory. Everyday our focus and concentration get bombarded by our modern lifestyle in form of cell phones, laptops, TVs and social media. Thankfully yoga can bring our awareness to the present moment and help us to stay focused and improve our concentration.

- Helps to build strength: Yoga plays a vital role when it comes to strengthening your body. Doctors these days suggest their patients perform yoga on a daily basis. For example, for new mothers, yoga is essential. Yoga helps to strengthen their body and helps them to get back in shape. The reason behind this is, yoga involves a lot of stretching exercises. So even it’s a total body workout, it is a low-impact exercise

Improves flexibility & posture:
Another importance of yoga in modern life is that it helps us to have a more flexible body and as a result, our life becomes just a bit more manageable. Often we suffer from knee joint pain. It’s because tight hips strain the knee joint due to improper alignment of the thigh and shin bones. Another discomfort occurs due to the inflexibility of muscle is back pain and poor posture. Tight hamstring flattens the lumbar spine and causes back pain. Inflexibility in muscle and connective tissue causes poor posture.

All of us know that Yoga improves posture, increases the intake of oxygen enhances the Functioning of the respiratory, digestive, endocrine and reproductive and excretory systems. Its effects on the emotions are equally beneficial by calming the mind, tuning us to the environment and diminishing insomnia caused by mental restlessness. Yoga is highly recommended for

- A peaceful state of mind
- Full vegetarian diet
- Pure thoughts and positive lifestyle
- Physical, mental and spiritual practices
- Tolerance for all nations, cultures and religions

It’s important first to understand the characteristic of modern life to explain the significance of yoga in modern life. Pointed out the characteristics of modern life in terms of work life, eating style and family life in the following way. In terms of a busy life the people of the city have much work to do, as a result, they leave early in the morning and back home late, the time they have for rest is very short because they are driving in a very stressful traffic jam. The modern man involves not in a single activity but in diversities of activities for earning their life, and involve in strong business activities driven by technologies which makes the activities faster.

In terms of eating style the modern men have no sufficient time to cook his own food, and hence he/she consume from fast food restaurants which lack nutritional diet. Family life, the family life is in most cases nuclear family type, and the time the father, the mother and children meet are very short, the role of both the mother and father play to fulfill the family demand is difficult and stressful. Above all, due to the competitiveness especially that of advertising agencies, the demand for children increased which is a headache for the parents to fulfill their demand.

The change in the lifestyle of the individual has positive contribution for physical, mental and spiritual health. This requires behavioral adjustment and attitudinal change. The adjustment and change is a positive contribution to our health. Hence, Practicing Yoga brings change in all walks of life. It is useful for creating emotionally, physically and mentally healthy citizens.

The importance of yoga in modern life can be categorized under physical, mental, spiritual benefit. In practicing Yoga several people related Yoga with Physical exercise only but that is not correct it goes beyond the physical fitness or posture, it is whole sided system of thought that can provide valuable understanding of how to make our life best, including not only the concern of the physical, but also the emotional, mental, and spiritual parts of life. In general Yoga is a “way of life”.

There is an interrelationship between the mind and the body “when the body is physically healthy, the mind is clearly focused and stress is under control”.

Inflexibility in muscle and connective tissue causes poor posture.

All of us know that Yoga improves posture, increases the intake of oxygen enhances the Functioning of the respiratory, digestive, endocrine and reproductive and excretory systems. Its effects on the emotions are equally beneficial by calming the mind, tuning us to the environment and diminishing insomnia caused by mental restlessness. Yoga is highly recommended for
people in competitive, stressful working environments, for those who suffer from headaches, back and shoulder aches, allergies and asthma. Yoga also cures the behavioral disorder, nervous breakdown, and manic depression. The regular practice of Yoga helps us to accept whatever physical or mental conditions we might be suffering from, by increasing our immediate sense of well-being, concentration, and calmness. Yoga is what is mainly experienced in practice and this helps the modern man to gain much from the daily practices. “Due to its metaphysical nature, yoga adepts have suggested that Yoga cannot be explained or understood by our intellectual faculties and that it can only be experienced as such”. Yoga in this modern time provided as the best solution for the sufferings of the modern man due to his/her dependency nature on modern technology and sedentary behaviors. Though the development of science and technology simplify life it also has an adverse effect on our life. In this modern times, physical labor is highly reduced which makes the modern man change his lifestyles. The change in lifestyle creates competition for survival which leads to suffering from stress both psychological and physical. Yoga provides a solution to such problem with the systematic exercises that it provides to those who are practicing.

According to WHO – “Health is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity” (WHO 1964). Hence the contribution of yoga in providing this integrated whole benefit to individuals who practicing yoga in the day to day life is huge. Regular yoga practice builds mental lucidity and coolness, boost body awareness, relieves stress patterns, relaxes the minds and sharpens concentration. Yoga provides tools through which one can manage which the pain and helps contradict with the feeling of helplessness and depression.

As it is shown in the above discussion practicing yoga give physical, mental, social and spiritual health. WHO also emphasize the fulfillment of physical, mental and social well-being? It is not a mere absence of disease which brings health according to WHO. There is a strong interrelationship between the physical, mental, social and spiritual world. The malfunctioning of one has an impact on the overall functioning of our system. It is only when the physical body is in health, that the mind function properly and tension also be controlled. This makes the social and spiritual life smooth, so it is under this interrelated factor that yoga aimed at to realize. In yoga, the other important thing is the breathing exercise. The breathing exercise performed in practicing yoga is a solution for stress and anxiety. It is obvious that the modern life driven by science and technology resulted in such problem as stress and anxiety. Hence, while exercising the breathing exercise the anxiety and stress we are faced are gradually reduced. Yoga helps to live in harmony with our environment; it helps us to give recognition for ourselves, the natural environment we are living and help us to peacefully interact with the society to which we belong. In maintaining the physical health it is essential to balance our diet. The type of food we are eating has an effect on our body. Yoga teaches as an ethical principle we have to be selective of the food we eat and focus on vegetable food, and we have to avoid meat foods, and alcohols, drugs, and nicotine. In yoga, there are different ways of maintaining mental health. "An important tool in self-investigation and self-knowledge is the technique of "Self-Inquiry Meditation", a step-by-step meditation technique of Self-Analysis. In this meditation practice, we come into contact with our subconscious, the source of our desires, complexes, behavioral patterns and prejudices” In general, yoga is significance in modern life in “improving postures, increases the intake of oxygen enhances the functioning of the different system of our body such as the respiratory, digestive, endocrine and reproductive and excretory system”. Yoga is highly suggested for people in competitive, stressful working atmospheres, (ibid), which is characteristics of modern life. Yoga is a tool to get rid of the deceptive curtain that positions in the middle of us and vibrant energy of life. Unlike other physical exercises yoga does not require running field, stadium or the like; we can easily practice in small space which is enough for yoga mat nearby your bed or any places in your home. Therefore, practicing yoga is significant in controlling all the problems resulted from modern life situation. Yoga is holistic which provide physical, psychological, social and spiritual benefits.

3. Conclusion:

To conclude the fundamental principle of “Yoga in Daily Life” is religious freedom. Yoga is not a religion - it is the source of spirituality and wisdom, the root of all religions. Yoga transcend religious boundaries and reveals the way to unity. “Yoga in Daily Life” offers the spiritual aspirant guidance on life’s path through the practices of Mantra Yoga and Kriya Yoga. As the most highly developed beings upon earth, humans are capable of realizing their real nature and inner Self, God.
The spiritual goal of Yoga is God-Realization, the union of the individual soul with God. The realization that we are all one in our common root and connection to God is the first step. Decisions regarding your health and Wellbeing and a free, happy life, are in your hands. Practice regularly with firm determination and success will be certain. I wish all Yoga practitioners and those still to become practitioners much happiness, success, health, harmony; joy in life and God's blessing.

4. References

Hepatoprotective Activity of Leucas Cephalotes (roth.) Spreng. and leucas Aspera (willd.) Linn (lamiaceae)

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Abstract

Ayurveda which literally means ‘The science of life’ is one of the most ancient medical sciences of the world. Its basic fundamentals lie upon three factors i.e. Hetu (cause), Linga (signs and symptoms) and Aushadha (medicines). Aushada is the most important one without which treatment cannot be given. Most of the medicines used in Ayurveda are herbal drugs. In the past two decades there has been worldwide revival of herbal drugs for the health care. More than 80% population in the developing countries still depends on the use of herbal drugs as they are easily available and have minimal side effects. Only a small portion of hepatoprotective plants as well as formulations used in traditional medicine are pharmacologically evaluated for its efficacy. It has been reported that about 170 phytoconstituents isolated from 110 plants belonging to 55 families do possess hepatoprotective activity. Lucas cephalotes (dronapuspi) and lucas aspera are both drugs shown hepatoprotective activity.

Keywords - Dronapuspi, Lucas cephalotes, Lucas aspera, hepatoprotective.

Introduction

Hepatoprotectives are a class of therapeutic agents that includes synthetic as well as natural product which offer protection to liver from damage or help in regeneration of hepatic cells. Medicinal herbs are significant source of hepatoprotective drugs. Liver is the largest organ of human body which plays an important role in maintenance, performance and regulation of homeostasis. Liver diseases are one of the 10 top killers of the world which can severely disable the quality of a life. It possesses a severe threat to the international public health since modern medicine has little to offer for alleviation of liver diseases. Leucas cephalotes(Dronpushpi) and its other species Leucas aspera, documented as the botanical sources of Dronapushpi, are annual herbs found throughout India in cultivated fields, wastelands and road sides. The juice of Dronapushpi is being frequently used by Tribal people of India in jaundice, psoriasis, chronic rheumatism.

Nirukti -  

Taxonomical Classification

- Domain: - Eukaryota
- Kingdom: - Plantae
- Subkingdom: - Viridaeplantae
- Phylum: - Tracheophyta
- Subphylum: - Euphyllophyta
- Infra phylum: - Radiatopes
- Class: - Magnoliopsida
- Subclass: - Lamiidae
- Superorder: - Lamianae
- Order: - Lamiales
- Family: - Lamiaceae
- Genus: - Phlomis / Leucas
Specific epithet: - cephalotes / aspera

**DISTRIBUTION**

*Leucas cephalotes / Dronapusphi* is found throughout India and in the plains of Bangladesh, South East Asian countries, Mauritius, Java and Philippines.

**Vernacular Names**

Table No - 1

<table>
<thead>
<tr>
<th>Language</th>
<th>Names</th>
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<tbody>
<tr>
<td>Bengali</td>
<td>Ghalghasa, Halkasa, Ghasghas, Dandakalasha</td>
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<tr>
<td>Gangapur</td>
<td>Nakiara, Nakingara, Halkasa</td>
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<tr>
<td>Gujarati</td>
<td>Dosi Na Kubo, Khetrau Kuba, Kubi</td>
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<tr>
<td>Hindi</td>
<td>Dedona, Goma, Motapati, Madhpati</td>
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<tr>
<td>Kannada</td>
<td>Tumb, Kumbhi, Vruksha, Tambe</td>
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<td>Marathi</td>
<td>Deo Kumba, Kumbha, Shetved</td>
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<tr>
<td>Mundari</td>
<td>Bananaki, Gomanaki</td>
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<tr>
<td>Punjabi</td>
<td>Chatra, Guldoda, Maldod</td>
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<tr>
<td>Tamil</td>
<td>Tumbar</td>
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<tr>
<td>Tailangi</td>
<td>Latug, Tumbi, Gayas</td>
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<tr>
<td>Telagu</td>
<td>Pedddtumm</td>
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<td>Unanai</td>
<td>Gomabuti</td>
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<tr>
<td>Sanskrit</td>
<td>Dronapuspi, Drone, Kaundinya, Kumbhayoni, Kuramba,</td>
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<tr>
<td>English</td>
<td>Thumbe</td>
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**Synonyms in Various Nighantu**

Table no - 2

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<td>Dronika</td>
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<td>Kaundinya</td>
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<td>Kumbhayoni</td>
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<td>Kutumbika</td>
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<tr>
<td>Mahadrona</td>
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**Derivations of Synonyms**

1. Flower and Inflorescence
   - *Dronapurushpi* – द्रोणा पुष्प= पूष्प धारण या या ।
   - The word *dronapurushpi* denotes a plant which has its flower size shape like that of a drona (cup or bowl).
   - *Drona* – the flower looks like a bowl or cup shaped vessel.

2. Morphology
   - *Kusumbhaka* – word is from ‘kus’ to round up, envelop, indicating bigger size of flower. ‘umbha’ is to fulfil, complete inflate it.
   - *Phalepuspa* – फलांनी पुष्पाणि व पुष्पल संक्ति अस्त्रा इति ।
   - *Chhatraka* – it is resembles shape of umbrella, whole plant may look like that.
   - *Chhatrini* - चहांका संक्ति ।

55
It is may be resemble with curved nature of horn cow.
The infrorscene Of lucas cephalotes bears two leaves on top which resembles the horn of ac cow.

3. Leaves –
- Chitra 
putra – Leaf is abnormal type i.e cut age design shaped leaves.
- Dirghapatra – Dirgha means long and patra means leaf, the leaves are linear and sharp.
- Ksharpatra – Leaves are many with serrated margin.

Kshavpatra – Smell of leaves causes sneezing.

4. Therapeutic –
- Swanasak – dronapuspi is indicated in shwasa as it expectorates kapha and clears of swasmarga.
- Kaundeya – it is useful in insect bite.

5. Mythological –
- Shankerpiya – Shankerpiya is used to oworship /offering to shankara bhagwan.

6. ORGANOLEPTIC –
- Putigandhaka – The leaves or plant is unpleasant in smell.

Showing Botanical Description of Family Lamiaceae

<table>
<thead>
<tr>
<th>S.N</th>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Habitat</td>
<td>Herbs or under shrubs, rarely shrubs, usually with aromatic oil glands, usually wooly or villous.</td>
</tr>
<tr>
<td>2.</td>
<td>Stem</td>
<td>Branches opposite or verticillate usually 4 - angled</td>
</tr>
<tr>
<td>3.</td>
<td>Leaves</td>
<td>Leaves opposite or whorled, entire, simple or rarely pinnatisect, exstipulate.</td>
</tr>
<tr>
<td>4.</td>
<td>Flower</td>
<td>Flower hermaphrodite irregular, solitary</td>
</tr>
<tr>
<td>5.</td>
<td>Calyx</td>
<td>Inferior, gamosephalous, more or less tubular, persistent, subirregular 4-5 fid or distinctly 2 – lipped.</td>
</tr>
<tr>
<td>6.</td>
<td>Corolla</td>
<td>Gamopetalous, hypogynous, tubular at base, limb 4-5 lobed or distinctly 2-lipped, lobes imbricate in buds</td>
</tr>
<tr>
<td>7.</td>
<td>Androecium</td>
<td>Stamens inserted in the corolla tube, 4 didynamous or only 2 pairs usually inserted at different levels in the corolla, stamens only 2. Anther cells often separated from one another by tranverse connective and are placed at an angle with each other</td>
</tr>
<tr>
<td>8.</td>
<td>Gynoecium</td>
<td>Ovary superior, deeply 4-lobed, syncarpous, originally 2-celled, divided into 4 loculi by false partition, Style simple, from the centre of the ovary between the lobes(gynobasic), erect, filiform, slender. Stigma usually 2-fid, sometimes unequally. Ovules solitary in each lobe of the ovary, erect, anatropous, inferior micropole</td>
</tr>
<tr>
<td>9.</td>
<td>Fruit</td>
<td>Fruit of 4 day - 1-seeded nutlets at the base of the calyx</td>
</tr>
<tr>
<td>10.</td>
<td>Seeds</td>
<td>Seed solitary in the nutlets, small, erect.</td>
</tr>
<tr>
<td>11.</td>
<td>Embryo</td>
<td>Embryo conforms to the seed, radicle inferior</td>
</tr>
</tbody>
</table>

Rasapanchak of Dronapuspi –

<table>
<thead>
<tr>
<th>S.n</th>
<th>Classical text</th>
<th>Rasa</th>
<th>Guna</th>
<th>Veerya</th>
<th>Vipak</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Charaksmhita</td>
<td>Madhur</td>
<td>Ruksha</td>
<td>Sheet</td>
<td>Madhur</td>
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<tr>
<td>2.</td>
<td>Madanpal nighantu</td>
<td>Katu , madhura</td>
<td>Guru , ruksa</td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>3.</td>
<td>Shodhala nighantu</td>
<td>Katu</td>
<td></td>
<td>Ushna</td>
<td>Katu</td>
</tr>
<tr>
<td>4.</td>
<td>Kaidev nighantu</td>
<td>Madhur lavna katu</td>
<td>Guru , ruksa</td>
<td>Ushna</td>
<td>Madhura</td>
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<tr>
<td>5.</td>
<td>Raj nighantu</td>
<td>Katu tikta</td>
<td>Tikshna</td>
<td>Ushna</td>
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<tr>
<td>6.</td>
<td>Bhavprakash nighantu</td>
<td>Katu lavna , madhur</td>
<td>Guru , ruksa tikshna</td>
<td>Ushna</td>
<td>Madhur</td>
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<tr>
<td>7.</td>
<td>Shaligram nighantu</td>
<td>Katu</td>
<td>Ushna</td>
<td>Ushna</td>
<td>Katu</td>
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<tr>
<td>8.</td>
<td>Priya nighantu</td>
<td>Tikta</td>
<td>Tikshna</td>
<td>Ushna</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Nighantu aad rash</td>
<td>Katu , tikta</td>
<td></td>
<td>Ushna</td>
<td>Katu</td>
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### Classification of Dronapuspi

#### Table No. – 5

<table>
<thead>
<tr>
<th>Name of the text</th>
<th>Varga</th>
<th>Pharmacological actions</th>
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<td>Charakasamhita</td>
<td>Shaka</td>
<td>Bhedana</td>
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<tr>
<td>Sushrutasamhita</td>
<td>Shaka</td>
<td>Kaphaghna, Vata-pittakara</td>
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<td>Ashtanghridaya</td>
<td>Shaka, Sarpavish pratisedha</td>
<td>Vishaghna</td>
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<td>Shodhalanighantu</td>
<td>Karviryadi</td>
<td>Kaphaghna, Kamlahar, Krimighna, Shopajit, Pakshaghata-vinashini</td>
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<td>Kaiyadevanighantu</td>
<td>Aushadi</td>
<td>Kaphaghna, Kamlahar, Shopahara, Tamakshwas, Kasahara.</td>
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<td>Madhava Dravyaguna</td>
<td>Vividhoushadi</td>
<td>Kaphaghna, Aumhara, Kamlahara, Shothahara, Krimiha.</td>
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<tr>
<td>Madanpalnighantu</td>
<td>Abbayadi</td>
<td>Vata-pittahara</td>
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<td>Hridayadipaka nighantu</td>
<td>Dwipada</td>
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<tr>
<td>Rajanighantu</td>
<td>Parpatadi</td>
<td>Vata-kaphahara, Agnimandayahara</td>
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<td>Bhavprakashnighantu</td>
<td>Guduchyadi, Shaka</td>
<td>Krimiha, Prahmehahara, Jwarahara, Pithakruta</td>
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<td>Nighantuadarsha</td>
<td>Tulasyadi</td>
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<td>Priyanighantu</td>
<td>Shatpushpadi</td>
<td>Vishaghna, Panduhara</td>
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<tr>
<td>Dravyaguna Vijana33(P.V Sharma)</td>
<td>Vishamjwaragha</td>
<td>ittashodhaka, Raktaashodhaka, Shothahara, Aartavajanaka</td>
</tr>
</tbody>
</table>

#### Description in nighantu –

**Ashtangnighantu (8th A.D.)**
- Astanga nighantu mentioned this drug with synonyms like Adhicatra, Kumbhayoni, Kutumbika & Kaudinya. He also described synonym for bigger variety i.e. Mahadrona as Devakutumbaka.

**Vrundha Madhav**: (9th A.D.)
- Acharya Vrindha first time quoted therapeutic indication of Dronapushpi in Kamala in the form of curryhillum.

**Chakradatta (11th C.D.)**
- Chakrapanidatta prescribed application of Dronapushpi Svaras Anjana in the condition of Kamalaa.It is also indicated in the management of Krimidanta.

**Gadnigraha**: (12th A.D.)
- Acharya Shodala indicates Dronapushpi Svaras in the Nasya form is the management of Patalgat rogas and prescribed it as Anjana for chronic Kamala.

**Madhav Dravyaguna**: (13th A.D.)
- Madhava has mentioned Dronapushpi in Vividhoushadi Varga and described it with Kapha, Ama, Kamala, Shotha and Krimighna properties.

**Hrudaya Deepaka Nighantu** (13 TH A.D.)
- Acharya Bopdeva coined synonyms like Drona, Dronapushpika for Dronapushpi and Devkurumba and Mahadrona for its bigger variety.

**Madanpal Nighantu** (1374 A.D.)
- Madanpalnighantu attributed Dronapushpi with properties like Swadu- Katu Rasa, Guru-Ruksha Guna, Ushna Virya with activities like Vatapittahara, Bhedana. The indications include Kamala, Shopha and Krimi. Madanpala ascribed synonyms like Shwasnanka, Palindi, Dronapushpi.

**Kaiyade Nighantu** (1425 A.D.)
- Kaiyadev classified Dronapushpi under the Aushadhi Varga and gave synonyms like Kumbhayoni, Kutumbaka, Dronachatra, Vrshalakara, Swasanaka, Swasanaha, Kusumbhaka. He has mentioned Dronapushpi Ruksha- Guru Guna, Madhura Vipaka, Vatapittakrit, Bhidehanya properties and indicated it in Kapaha Vyadhi, Kamala, Shopha, Tamakswasa and Kasa.

### Chemical Composition
- Labellenic acid,
- Beta – sitosterol
- Glycoside.

**Species of Dronapuspi**
- Acharya Vagabhadata has mentioned about two types of Dronapushpi viz. Drona and Mahadrona in the treatment of snakebite and latter works like Raja Nighantu, Hridaya Deepak Nighantu and Abhinavbhuti Darpana followed Vaghbhat’s descriptions. Vaidya shree Virajacharan Gupt, in his compilatory work known as Vanoushadhidarpan, interpreted Mahadrona as Divyapushpi which was correlated with Leucas...
cephalotes by the commentator. The other sources of Dronapushpi mentioned were Leucas zeylenica, Leucas linifolia, Leucas aspera.28

Modern Acharyas suggested some varieties according to its botanical description.

Jai Krishna Indrajitji has mentioned following types of Dronapushpi.29

- Leucas stelligera as Dungarao kubo (The one which is found on Hills)
- Leucas longifolia Lamba pana no kubo (The one with long leaves)
- Leucas cephalotes as khetrao kubo (The one which is generally found in fields)
- Leucas linifolia as jina pan na kubo (The one with short leaves)
- Leucas aspera as kubi
- Leucas urticafolia as kubi

Abhinav Buti Darpana has mentioned the variety of Guma as follows:29

- Leucas cephalotes
- Leucas linifolia
- Leucas zeylanica
- Leucas aspera
- Leucas sibiricus

Acharya Priyavat Sharma stated some familiar plants of Dronapushpi. These are Leucas lavandulaefolia

- Leucas aspera

Flowering And Fruiting – December – January

Collection Period – March – April

Formulations And Preparations 19 20:-

Churna- Sudarshan Churna.

Ethno-Botanical Uses Of Leucas

CEPHALOTES:-
The decoction of dried aerial parts of plant (India) is used orally for diarrhea.22 The decoction of entire plant (India) is used orally to reduce fever.22 The water extract of entire plant (India) is used orally as an appetizer.23 The flowers and leaves are applied externally as poultice to treat headache.24 The decoction of flower heads in Nepal is used orally to treat jaundice.25 The decoction of flowers in India is used orally as an emmenagouge.25 Hot water extract of dried flowers in India is used orally for coughs.26 Hot water extract of dried flowers in India is used orally for colds.27

ETHNO-BOTANICAL USES OF LEUCAS ASPERA:-

Water extract of Leucas aspera is used orally as stimulant, anthelmintic, laxative, and diaphoretic. It is also used orally for the treatment of headache, asthma, and bronchitis. Hot water extract of entire plant is also used to treat inflammation, dyspepsia, and jaundice. Entire plant extract is used orally to treat scabies, psoriasis

Traditional Medicinal Uses31

- Scorpion sting31
  - In scorpion sting the plant is used internally as well externally.
- The leaves juice (few drops) is mixed with honey and taken orally.
- Topically, the leaves juice is applied on place of sting.

- Snake bite
  - The folk remedy is to put few drops of whole plant in nostrils.

- Skin diseases, removing blood toxins
  - Dronapushpi plant has ability to flush the toxins from body.
- In skin diseases, whole plant of Dronapushpi is used. The plant is dried. Five grams of dried powder is taken with three grams Neem/Margosa leaves in 2 glass water. This is boiled till volume reduces to one fourth. Then it filtered and taken two times a day.

- Abnormally heavy bleeding at menstruation
  - The leaves of plant are taken a handful. These are washed and then ground to make fine paste. This paste is mixed with lemon juice and sesame oil/tel oil (edible). The preparation is eaten empty stomach every morning for a week.

- Asthma, cold, cough
  - The leaves juice of plant is taken in dose of 1-3 teaspoons.

- Excessive thirst
  - The flowers (2 tablespoon) are boiled in water (150 ml) till volume reduces to half. This is filtered and taken thrice a day.

- Cough, leucorrhoea
  - The leaves of plant are cooked and eaten with rice.

Clinical Uses –

Fever

- Powder described plant 3 gm, borax 250 mg with honey 10 gm, 2 times a day.
Rhinitis –
- Syrup of flower, or hot infusion of whole plant 3gm, or juice of described plant 10 ml with honey 10 gm, 2 times a day.

Pruritis –
- local application of juice described plant, is beneficial.

Headache of Cold Weather –
- Use juice of described plant 4-4 drops, as nasal drops.

Malaria –
- Decoction of power of the described plant 5 gm, piper nigrum 500 mg, sugar 10 gm, 2 times a day.

Reference -
1. Database of medicinal plant used in ayurveda and siddha, CCRAS, Delhi vol-8 page no-74
19. Database on medicinal plants used in Ayurveda & Siddha, CCRAS, Delhi, vol 8, p-74.
20. K.C Chunekar, Plants of Bhavaprakash, R.A.V, New Delhi, p-84
23. Johns T, Kokwaro JO, Kimanani EK. Herbal remedies of the Luo of siaya district, Kenya:
29. Shree Vaidya Virajcharan Gupt, Vanaushadidarpan, translated by Dr. Indradev Tripathi, Chowkhamba sanskrit sansthan, 2006,p-238.
30. Jayakrishna Indraji, Vanaspati shastra, Pravin prakashan, Rajkot, p-589-592
32. https://www.bimbima.com/ayurveda/medica
33. K nisthwar dravya guna vijana page no -360.
34. Ayurvedic medicinal plants of india vol – 1 edition 2011 – dr ramesh kumar bhutya scientific publication india .266
35. Handa SS, Plants as drugs, The Eastern Pharmacist, 1991; 34 :79 – 85

Ethno - Medicinal & Folklore Uses of Udaipur Region Plants by Gunijana

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Madhav Ayurvedic Medical College,
Madhav University, Abu Road, Distt. Sirohi, Rajasthan

Abstract

The city of Lakes, Located in the Aravali ranges of Rajasthan. The City of Dawn, surrounded by the ancient Aravali Mountains and set on the edge of three lakes, is a brilliant kaleidoscope of narrow lanes flanked by bright stalls, gardens, lakes, palaces and temples. The city is famous for its palaces, lake, museums, temples, and gardens and much more. A large number of wild and cultivated plants are being used by them for the treatment of various elements, thus, a considerable amount of information on medicinal plants is available with these communities. Rajasthan is one of the largest states located in the Northwestern part of India. Geographically, it lies between 23º3' to 30º12' longitudes and 69º30' to 78º17' latitudes. These people are largely dependent on their traditional healing system for their healthcare and the information is passed on from generation to generation through the word of mouth. The paper enumerates the ethno medicinal uses of 36 plant species used by the traditional practitioners of Udaipur region in Rajasthan. These hills ranges possess an abundant population of various tribes.

Keywords: - Udaipur , Evergreen Species, Ethno medicine.

1. Introduction

Folk medicines today play a key role in the developing countries due to a lack of or limited modern health service. From ancient times, plants have been a rich source of effective and safe medicines. Southern part of Rajasthan comprising Banswara, Chittorgarh, Dungarpur and Udaipur districts is the tribal belt in which bhil(1), damor garasiya, kalbelia and meena are the main tribes. Ethno botany of India might is among the earliest in the world and all traditional systems of medicine had their roots in ethnobotany. Rajasthan has rich cultural diversity and biodiversity. Present paper presents use of medicinal plants by tribal people in general and Rajasthan in particular (5).

Climate of Udaipur (4)

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Ju.</th>
<th>July</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg.high °C</td>
<td>24.2</td>
<td>26.9</td>
<td>32.8</td>
<td>37.4</td>
<td>39.8</td>
<td>37.3</td>
<td>33.9</td>
<td>30.9</td>
<td>30.3</td>
<td>32.6</td>
<td>29.3</td>
<td>25.5</td>
</tr>
<tr>
<td>Avg low °C</td>
<td>7.0</td>
<td>9.1</td>
<td>14.3</td>
<td>20.2</td>
<td>25.0</td>
<td>26.1</td>
<td>24.5</td>
<td>23.2</td>
<td>21.4</td>
<td>16.9</td>
<td>111.7</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Gunijana Training (6) – 1. First Phase : Exchange Of Information and Human Anatomy
Gunis exchange understandings of traditional medicine and treatment methods, as well as discuss the definition and role of Gunis in society. To strengthen their medical skills, Gunis discuss symptoms and causes of common diseases in rural communities, share herbal formulations and attend classes on human anatomy (6).

2. Second Phase: Medicinal Plant Identification And Preparation In Forest

Gunis participate in a 10-day forest tour along with botanists, Ayurveda practitioners and research scholars to identify wild medicinal plant species and exchange traditional knowledge. They gather plant specimens for herbarium preparation and collect seeds to conserve endangered species (6).

3. Third Phase: Herbal Formulation Demonstrations

Gunis share traditional knowledge with each other regarding herbal formulation, doses and conception methodology, restrictions and instructions when applying the medicine under supervision by an Ayurveda practitioners or pharmacist. In this stage, formulations are practiced and standardized following this training. JJVS screens out those who meet the Guni classification criteria and guides them through a validation process that lasts for an additional 2-6 months (6).

2. Methodology -

Field trips conducted with the local medicine men. Generally tribals, who know about the herbal medicine do not want to give all the information because they believe that when the medicinal plant is disclosed its medicinal properties will be lost (12). For this reason, the information collected from the tribes is an important aspect of ethnobotanical study. The peoples who can provide information about medicinal plants, were consulted and includes for authenticity about medicinal properties of plants and the information collected during fieldwork were verified at different places through different informants and in different seasons (12). Each of the plant species recorded have been collected with the help of the informants and photographs were taken. The species were identified with the help of authentic literature (12).

**TABLE 1:**

<table>
<thead>
<tr>
<th>S.N</th>
<th>Plant name</th>
<th>Family</th>
<th>English name</th>
<th>Useful part</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><em>Acacia catechu</em></td>
<td>Mimosaceae</td>
<td>Cutch tree</td>
<td>Twak &amp; khadir sar part</td>
</tr>
<tr>
<td>2.</td>
<td><em>Achyranthes aspera</em></td>
<td>Amaranthaceae</td>
<td>Prickly chaff flower</td>
<td>Mool &amp; tandul , patra , panchang</td>
</tr>
<tr>
<td>3.</td>
<td><em>Emblica officinale</em></td>
<td>Euphorbiaceae</td>
<td>Embolic myrobolan</td>
<td>Fruit</td>
</tr>
<tr>
<td>4.</td>
<td><em>Aegle marmelos</em></td>
<td>Rutaceae</td>
<td>Bael</td>
<td>Fruit and leaf.</td>
</tr>
<tr>
<td>5.</td>
<td><em>Abutilon indicum</em></td>
<td>Malvaceae</td>
<td></td>
<td>Leaf, seeds</td>
</tr>
<tr>
<td>6.</td>
<td><em>Acacia nilotica</em></td>
<td>Leguminoseae</td>
<td></td>
<td>Whole plant</td>
</tr>
<tr>
<td>7.</td>
<td><em>Anogeissus latifolia</em></td>
<td>Combretaceae</td>
<td>Axle wood</td>
<td>Stem</td>
</tr>
<tr>
<td>8.</td>
<td><em>Alangium salvifolium</em></td>
<td>Alangiateae</td>
<td></td>
<td>Root</td>
</tr>
<tr>
<td>9.</td>
<td><em>Ampelocissus latifolia</em></td>
<td>Vitaceae</td>
<td>-</td>
<td>Tuber</td>
</tr>
<tr>
<td>10.</td>
<td><em>Asparagus racemosus</em></td>
<td>Liliaceae</td>
<td>-</td>
<td>Root</td>
</tr>
<tr>
<td>11.</td>
<td><em>Abrus precatorius</em></td>
<td>Papilionaceae</td>
<td>Indian liquorice root</td>
<td>Seed , root , leaf</td>
</tr>
<tr>
<td>12.</td>
<td><em>Butea monosperma</em></td>
<td>Leguminoseae</td>
<td>-</td>
<td>Twka , puspa , niryas</td>
</tr>
<tr>
<td>13.</td>
<td><em>Barleria prionitis</em></td>
<td>Acanthaceae</td>
<td>-</td>
<td>Panchang leaf ( specially )</td>
</tr>
<tr>
<td>14.</td>
<td><em>Boerhaavia diffusa</em></td>
<td>Nyctaginaceae</td>
<td>-</td>
<td>whole plant</td>
</tr>
</tbody>
</table>
### TABLE NO – 2

Medicinal properties of these plants acc. To text

<table>
<thead>
<tr>
<th>S.N</th>
<th>Plant name</th>
<th>Family</th>
<th>Chemical composition</th>
<th>Raspanchak</th>
<th>Dosh shamkata</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><em>Acacia catechu</em></td>
<td>Mimosaceae</td>
<td>Katha (khadir sar), Catchenin &amp; catechu tannic acid</td>
<td>Laghu, ruksha, Tikta, kashay, Katu vipak, Sheet veerya</td>
<td>Kaph – pitta shamka</td>
</tr>
<tr>
<td>2.</td>
<td><em>Achyranthes aspera</em></td>
<td>Amaranthaceae</td>
<td>Potash</td>
<td>Laghu, ruksha, tikshna, Katu, Tikta rasa, Katu vipak, Ushna veerya</td>
<td>Kaph – vata shamka</td>
</tr>
<tr>
<td>3.</td>
<td><em>Emblica officinalis</em></td>
<td>Menispermaceae</td>
<td>Gallic acid, tannic acid, cellulose</td>
<td>Laghu ruksha, Amla rasa, Amla vipak sheet</td>
<td>Tri-doshhar</td>
</tr>
<tr>
<td>5.</td>
<td>Anogeissus latifolia</td>
<td>Combretaceae</td>
<td>Volatile oil tannin</td>
<td>Laghu ruksha</td>
<td>Kashay</td>
</tr>
<tr>
<td>6.</td>
<td>Abrus precatorius</td>
<td>Papilionaceae</td>
<td>Abrine, abelin glucoside Glycyrrhizin (root &amp; leaf)</td>
<td>Laghu ruksha</td>
<td>teeksna</td>
</tr>
<tr>
<td>7.</td>
<td>Butea monosperma</td>
<td>Leguminose</td>
<td>Kino tannic acid Palasonin</td>
<td>Laghu, ruksha</td>
<td>Katu tikta kashay</td>
</tr>
<tr>
<td>8.</td>
<td>Barleria prionitis</td>
<td>Acanthaceae</td>
<td>Barlerin</td>
<td>Laghu Tikta madhur</td>
<td>Katu vipak</td>
</tr>
<tr>
<td>9.</td>
<td>Calotropis procera</td>
<td>Asclepiadaceae</td>
<td>Ushkerin, calotropin calotoxin</td>
<td>Laghu ruksha</td>
<td>teeksna</td>
</tr>
<tr>
<td>10.</td>
<td>Capparis decidua</td>
<td>Capparacea</td>
<td>Glaucocaperin glucoside</td>
<td>Laghu, ruksha</td>
<td>Katu, tikta</td>
</tr>
<tr>
<td>11.</td>
<td>Echinops echinatus</td>
<td>Asteraceae</td>
<td>-</td>
<td>Madhur rasa</td>
<td>Madhur vipak</td>
</tr>
<tr>
<td>12.</td>
<td>Enicostema lotralle</td>
<td>Gentianaceae</td>
<td>Swertiamerine</td>
<td>Laghu, ruksha</td>
<td>Tikta, katuvipak</td>
</tr>
<tr>
<td>13.</td>
<td>Grewia abutilifolia</td>
<td>Tiliaceae</td>
<td>Tannin</td>
<td>Laghu, picchil</td>
<td>Katu vipak</td>
</tr>
<tr>
<td>14.</td>
<td>Helicteres isora</td>
<td>Sterculiaceae</td>
<td>Sapponin, lignin</td>
<td>Laghu, ruksha</td>
<td>Katu, sheet veerya</td>
</tr>
<tr>
<td>15.</td>
<td>Holoptelea integrifolia</td>
<td>Ulmaceae</td>
<td>Yellow oil</td>
<td>Laghu, ruksha</td>
<td>Tikta, kashay</td>
</tr>
<tr>
<td>16.</td>
<td>Jatropha curcas</td>
<td>Euphorbiaceae</td>
<td>Curcin</td>
<td>Snigdh, teeksna suksham</td>
<td>Madhur, kashay Madhur vipak</td>
</tr>
<tr>
<td>17.</td>
<td>Madhuca indica</td>
<td>Sapotaceae</td>
<td>Sapponin</td>
<td>Guru Madhur sheet veerya</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Peristrophe paniculata</td>
<td>Acanthaceae</td>
<td>Voilet oil saponin</td>
<td>Tikta kashay</td>
<td>Sheet veerya</td>
</tr>
<tr>
<td>19.</td>
<td>Ricinus communis</td>
<td>Euphorbiaceae</td>
<td>Ricin, ricicine</td>
<td>Snigdh, teeksna</td>
<td></td>
</tr>
<tr>
<td>S.N</td>
<td>Plant name</td>
<td>Local name</td>
<td>Uses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
<td>------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1.  | *Acacia catechu* (Mimosaceae) | Khair katha, | ➢ The gum is used by tribal males because they use Anogeissus latifolia gum during winter as a laddu. (1)  
➢ kattha are taken in stomachache (1)  
➢ Dental pain (1) |
| 2.  | *Achyranthes aspera* (Amaranthaceae) | Andhi Jhara kintuliya | ➢ Dental pain – use of apamarg stem (10)  
➢ Itching - bathing of apamarg panchang relief in itching (10) |
| 3.  | *Aegle marmelos* (L.) (Rutaceae) | Bael | ➢ Fruit pulp is taken daily in constipation. (1)  
➢ the unripe fruit is taken in case of chronic diarrhoea and dysentery. (1) |
| 4.  | *Anogeissus latifolia* | Dhawari | ➢ The gum is used during winter season as well as after delivery in the form of laddu |
| 5.  | *Abrus precatorius* (Papilionaceae) | Chirmu Ratti | ➢ Fresh leaves are chewed during ulcer. (1)  
➢ Seeds are taken for abortion. (2) |
<p>| 6.  | <em>Butea monosperma</em> | Khankra, Sura (10) | ➢ Laddus prepared from the gum, known as kamarkas, are eaten after delivery (1). |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Species Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Barleria prionitis (Acanthaceae)</td>
</tr>
<tr>
<td></td>
<td>Danteli, Kala bans</td>
</tr>
<tr>
<td></td>
<td>➢ Flower juice is given to children during fever and cold (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Crushed seed on red stones is given to newly born child in case of diarrhoea (1).</td>
</tr>
<tr>
<td>8.</td>
<td>Calotropis procera (Asclepiadaceae)</td>
</tr>
<tr>
<td></td>
<td>Akra</td>
</tr>
<tr>
<td></td>
<td>➢ Dried stem is used as a piper and the smoke of Xanthium fruit is inhaled through the pipe to relieve headache (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Root paste is applied on scorpion bite (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Leaf is rolled to make pipe for smoking (1).</td>
</tr>
<tr>
<td>9.</td>
<td>Capparis decidua Capparaceae</td>
</tr>
<tr>
<td></td>
<td>Kair</td>
</tr>
<tr>
<td></td>
<td>➢ Flower buds are eaten to relieve stomachache (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Root paste is applied on scorpion bite (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Use in back pain (11).</td>
</tr>
<tr>
<td></td>
<td>➢ For hair groth (11).</td>
</tr>
<tr>
<td>10.</td>
<td>Echinops echinatus Asteraceae</td>
</tr>
<tr>
<td></td>
<td>Oont Kantilo</td>
</tr>
<tr>
<td></td>
<td>➢ Use in Sarpdansha intake of decoction of root of this plant (11).</td>
</tr>
<tr>
<td></td>
<td>➢ Use dysurea intake of root with talmakhana and mishri (11).</td>
</tr>
<tr>
<td>11.</td>
<td>Enicostema lotralle Gentianaceae</td>
</tr>
<tr>
<td></td>
<td>Nahi</td>
</tr>
<tr>
<td></td>
<td>➢ Whole plant extract is taken once a day for fever (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Plant juice is taken for seven days during body pain (2).</td>
</tr>
<tr>
<td>12.</td>
<td>Grewia abutilifolia Tiliaceae</td>
</tr>
<tr>
<td></td>
<td>Gangchi</td>
</tr>
<tr>
<td></td>
<td>➢ During bone fracture, dried root powder/decoction is given (1).</td>
</tr>
<tr>
<td>13.</td>
<td>Helicteres isora Sterculiaceae</td>
</tr>
<tr>
<td></td>
<td>Anteri, Marorfali</td>
</tr>
<tr>
<td></td>
<td>➢ Fruit powder is taken with water for twice a day for 3 days (1).</td>
</tr>
<tr>
<td>14.</td>
<td>Holoptelea integrifolia Ulmaceae</td>
</tr>
<tr>
<td></td>
<td>Sil, Kanjeri</td>
</tr>
<tr>
<td></td>
<td>➢ Seed oil of Holoptelea, locally known as Kanjeri oil added with sulphur is kept for 5 days, and then applied on the affected part (1).</td>
</tr>
<tr>
<td></td>
<td>➢ Use in sandhishoth lepa of bark (8).</td>
</tr>
<tr>
<td>15.</td>
<td>Jatropha curcas Euphorbiaceae</td>
</tr>
<tr>
<td></td>
<td>Ratan Jot</td>
</tr>
<tr>
<td></td>
<td>➢ Decoction of kwath of leaf in denatal carries (8).</td>
</tr>
<tr>
<td></td>
<td>➢ Latex is used in the treatment of itching of genital organs (1).</td>
</tr>
<tr>
<td>16.</td>
<td>Madhuca indica Sapotaceae</td>
</tr>
<tr>
<td></td>
<td>Mori</td>
</tr>
<tr>
<td></td>
<td>➢ Mohri leaves mixed with turmeric powder is useful in cold, cough &amp; bronchitis (1).</td>
</tr>
<tr>
<td></td>
<td>Scientific Name</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------</td>
</tr>
</tbody>
</table>
| 17. | Peristrophe paniculata  
Acanthaceae | Bhamwara Kakar      | Flowers are eaten to increase lactation(1)  
Decoction of leaves in javra and cough (8)  
Leaves are applied as a poultice to eczema and bandage on the swelling or affected muscles.(1) |
| 18. | Ricinus communis  
Euphorbiaceae | Arandi              | In case of muscular injury without bleeding, leaf paste with mustard oil is applied on the affected area(8).  
Leaf paste is applied on head to relieve headache.(8)  
Leaves boiled with maize grain is used as a rat killer(1). |
| 19. | Solanum surattense  
Solanaceae | Kateli, Bhurangi     | Dried fruit smoke is used to remove worms of teeth and fruit decoction is taken in cough & asthma.(1) |
| 20. | Soymida febrifuga  
Meliaceae | Rohini Doyam,             | Fresh/dried bark is boiled in water and applied in swelling(1)  
Used in Menstrual disorder.(10) |
| 21. | Tinospora cordifolia  
Menispermaceae | Giloy             | Stem juice is taken to cure leucorrhoea.(11)  
Juice of leaves in dengue fever (11) |
| 22. | Tridax procumbens  
Menispermaceae | Rukhari         | Whole plant checks bleeding when applied on cut wounds.(2)(3)  
Leaf juice is insecticidal, pesticidal,(2)(3)  
Removes stones from urinary bladder, diarrhoea, dysentery.(2)(3) |
| 23. | Xanthium strumarium  
Asteraceae | Aadha–Shishi,        | Dry fruits of Xanthium strumarium kept on Calotropis procera dried stem are burnt and the smoke is inhaled.(2)  
Seeds are used for the disease Aadha–shishi, generally known as migrene pain.(3) |
Drug Picture of These Medicinal Plants

1. *Acacia catechu* mimosoidae (leaf)

2. *Achyranthes aspera* amarantaeae (leaf)

3. *Emlica officinales* euphorbiaceae (fruit)

4. *Abutilon indicum* Malvaceae (fruit and flower)
5. *Aegle marmelos* Rutaceae (fruit and flower)

6. *Acacia nilotica* Leguminous (legume and flower)

7. *Alangium salvifolium* Alangiaceae (fruit and leaf)

8. *Ampelocissus latifolia* Vitaceae (leaf)
9. *Asparagus racemosus* Liliaceae (leaf and tuber)

10. *Abrus precatorius* leguminose (seed and leaf)

11. *Butea monosperma* leguminose (leaf, flower and legume)

12. *Barleria prionitis* acanthaceae leaf and flower
13. *Boerhaavia diffusa* Nyctgynaceae  leaf and flower

14. *Calotropis procera* leaf and flower

15. *Cassia fistula* leguminose (flower and seed and legume)

16. *Cassia tora* legumonose  leaf and yellow flower)
17. *Clitoria ternatea* leguminose (flower and leaf)

18. *Costus specious* Zingiberaceae leaf

19. *Echinops Echinatus*

20. *Enicostema lotrale* Gentianaceae
22. *Helicteres isora*  Sterculiaceae

23. *Madhuca indica*  Sapotaceae

24. *Ricinus communis*  euphorbiaceae

25. *Solanum surattense*  solenaceae
3. Results and Discussion

Total 36 plant species belonging 36 genera have been recorded and enumerated. The data on ethnomedicinal plants such as the botanical name, local name, family, time and their traditional methods of drugs administration in different ailments are presented (Table 1) (1). These plants are being used by various ethnic groups and rural people of southern herbal medicine will be coherence in future. There is an urgent need to study and document the precious knowledge of ethnomedicinal practices. Documentation of such information will go a long way in developing new drugs through further researches.(12) The information on the ethnomedicinal plants will certainly help in developing strategies for the conservation, cultivation of traditional medicine and economic welfare of rural and tribal population of this region of Rajasthan. The plants and the remedies as recorded here need phytochemical and pharmacological screening for their active principles and clinical trials for therapeutic action (table no 3). (12)

4. Conclusion

This review is focused on the plants used in traditional medicine and the future prospects for their further scientific investigation. Research on pharmacognosy, chemistry, pharmacology and clinical studies has been carried out on many traditional folk medicinal plants. The development of these traditional systems of medicines with proper studies will help to preserve this traditional heritage and rationalize the use of natural products in health care without serious side effects (6).

5. Reference

2. Important medicinal plants from different regions of Rajasthan.
3. Traditional medicinal plants of rajasthan used in tribal medicine : a review. Meghendra
sharma1 and ashwani kumar2 1.Department of Science and Technology, Govt of Rajasthan, SATcom office, IGPRS Campus, JLN Marg, Jaipur 302004. 2Department of Botany, University of Rajasthan, Jaipur 302004. 
5. https://jagranjan.org/traditional-medicines/
6. Folk herbal medicines used by the Meena community in Rajasthan Ajay Kumar Meena *, M M Rao National Institute of Ayurvedic Pharmaceutical Research, CCRAS, Moti Bagh Road, Patiala 147001 (Punjab), India
8. Sri Bhavamisra, Bhavaprakasha Nighantu, Commentary by Prof.K.C.Chunekar, Edited by dr.G.S.Pandey, Chaukhamba Bharti Academy 2015 page no 82,85
10. Ganvo me oausdah-ratna krishan gopal bhavan kaldar ajmer vol 1,2 3.
Clinical Application of Agnikar

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Abstract

Agnikarma is an important parasurgical measure extensively practiced in Ayurveda. It is a simple, ambulatory, minimal invasive and day care procedure. It can be utilized as a preventive, curative and haemostatic measure for systemic and surgical diseases. The common clinical conditions like External piles, Sentinel piles, Corn, Warts, Moles, Sciatica, Osteoarthritis, Frozen Shoulder and Calcaneum Spur can be treated effectively by Agnikarma. The commonly used Agnikarma instruments are Pancha Dhatu Shalaka made up of Copper – 40 %, Iron – 30 %, Zinc – 10 %, Lead- 10 %, Tin –10% and different cautery probes of Thermal Cautery Machine.

Keywords: Agnikarma, Ayurveda, Parasurgical, Haemostatic, Day care.

1. Introduction

In Agnikarma, Agni is applied directly or indirectly with the help of different materials to cure the disease. It is an important parasurgical measure and is still used extensively in the surgical practice in modified form by way of electric heat cautery and freezing, where actual heat is transmitted into the tissues to nullify the disease pathology. It is regarded as superior to all other surgical and parasurgical procedures because of non-recurrence of the disease. When it is properly employed, it can destroy the tissue in the lesions that are incurable by other measures. It is a simple and can be performed as day care procedure. The Agnikarma is also known by different names like Dahanakarma, Dahakarma, Dagdhakarma, Jalanakarma, Tapanakarma, Pachanakarma and finds its role in the Vataja and Kaphaja Vyadhi involving the Dhatu that are predominant with Pruthvi and Ap Mahabhutha.

2. Importance

- Agnikarma is always utilized as the ultimate measure among the Yantra (Blunt Instruments), Shastra (Sharp Instruments), Anushastra (Parasurgical measures), Kshara etc., because of its ability to cure those diseases also, which are seldom cured by the Bheshaja (Medicine), Shastra (Surgery) and Kshara (Alkali).
- Agnikarma does not allow the diseases to reoccur, once treated by it.
- Agnikarma is superior to Kshara by means of its action.
- Agnikarma is having the effect of Nirjivanukarma (Sterilization). It destroys the pathogens because of its heat effect. Thus, the Post-Agnikarma wounds are rarely infected.
- Agnikarma is the ultimate measure for the haemostasis among the four Raktasthambhana measures i.e., Sandhana (Unification), Skandhana (Coagulation), Pachana (Desiccation) and Dahana (Cauterization).

3. Area of Intervention

I. Agnikarma Can Be Utilized –
- As preventive measure.
- As curative measure for systemic disease.
- As curative measure for surgical disease.
- As haemostatic measure.

(i) As Preventive Measure:
- Agnikarma is used to destroy the invading Krimi (Worms or Pathogens) and demons in the vagina and uterus of the women and to save the fetus from the Krimi.

(ii) As Curative Measure for Systemic Disease:
- Application of Swedana Karma by hot cotton piece, sand, brick etc to treat the Sheeta induced disease.
- Red hot iron piece kept in a little distance from the forehead and lemon juice squeezed over it so that the hot lemon

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drops which fall on the forehead to awaken the unconscious patient of Visuchika (Cholera).

- Agnikarma can be administered as a curative measure in case of Twak, Mamsa, Sira, Snayu, Asthi and Sandhigata Vata.
- Agnikarma around the umbilical region by a red-hot iron ring relieves the abdominal pain.

(iii) As Currative Measure for Surgical Disease:

- Various disorders that require surgery for their cure can be cured by the Agnikarma either as Pradhana or Paschat Karma. E.g., Arsha (Haemorrhoids), Bhagandara (Fistula-in-ano), Antravridhi (Hernia), Kadara (Corn), Medhoja Oshtaroga (Hypertrophy of lips as seen in herpes labialis), Nadivrana (Sinus), Pleehodara (Spleenomegal), Arbuda (Tumours), Granthi (Cystic swellings), Ashmari (Calculus), Shleepada (Elephantiasis) etc.

(iv) As Haemostatic Measure:

- Agnikarma over the Sira will cause constriction of the Sira. Thus it stops the bleeding.

II. All the diseases, which come under the Shalya Tantra caused by Vata and Kapha Dosha, involving the Sthayi Dhatus like Mamsa, Me đa, Asthi, Majja and Upadhatu like Sira, Snayu and Twak that are Pruthvi and Ap Mahabhutha predominant, should be treated with Agnikarma on the basis of Vipareeta Chikitsa.

4. Indications

Vata Vikara, Ulcer with excessive granulation and anesthetic patch, Arsha (Haemorrhoids), Arbuda (Tumor), Bhagandara (Fistula-in-ano), Apaci (Lymphadenitis), Sleepada (Elephantiasis), Charkakila (Warts), Tilakalaka (Moles), Antravridhi (Hernia), Nadi (Sinus), Sonata Atipravrti (Excessive hemorrhage), Ankylosing spondylitis, Sciatica, Bursitis, Carpal Tunnel Syndrome, Fibromyalgia, Sprains & Strains, Osteoarthritis, Plantar Fasciitis, Rheumatoid Arthritis, Tendonitis, Tennis Elbow, Frozen Shoulder,etc etc5.

Contraindications

Pitta Prakrti, Bhinnakoshtha, Antasonita (Internal bleeding), Anudgruta Shalya (Impacted Foreign body), multiple Vrana, Balaka (Child), Vrudha (Old age), Bhiru (Fearful), Durbula (Weak), who is contraindicated for Swedana Karma and Kshara Karma6.

6. Classification

I. According To Shape

1. Valaya –The cautereization is done in the site of disease in circular manner.

2. Bindu – This type of Agnikarma is done by the tip of the Pancha Loha Shalaka Yantra, it will give shape of dot.

3. Vilekha – Cautereization is done in various shapes i.e. transverse, vertical & angular.

4. Pratisarana – Agnikarma is done by heated Shalakas in which they are applied in scraping or rubbing manner.

II. According To Involvement of Dhatus

1. Twak Dagdha – When Agnikarma is applied to the skin it will give rise to cracking sound, bad odour and constriction of the skin.

   Indications: Padmini Kantaka, Tilakalaka, Mashaka, Angaglani, Shirashoola, Adhimantha, Keela, Tila etc.

2. Mamsa Dagdha – If muscles are cauterized, there is pigeon’s colour, mild swelling and pain along with dry and constricted wound.

   Indications: Arsha, Bhagandara, Granthi, Nadivrana, Dushtavrana, Arbuda, Gandamala, Galashundika etc.

3 & 4. Sira and Snayu Dagdha – The veins and ligaments are cauterized, there is black, raised wound and cessation of discharge.

   Indications: Shlishtavartma, Asruksrava, Neelya and Asamyak Sira Vyaadhana, Asamyak Nadi, Snayu, Sandhi and Asthi Cheda, Dantanadi, Upapakshma etc.

5 & 6. Asthi and Sandhi Dagdha – If bone and joints are cauterized, the wound occurs with roughness, dark reddishness, hard and fixity of the lesion. Indications: Sandhi Vedana, Sandhi Stabdhatva, Sandhivata, Sandhigata Vrana, Kunaka etc.

III. According To Site

a. Sthanika Dahanakarma:

   Agnikarma applied over the diseased area. e.g., Arsha, Bhagandara, Kadara, Bhinna Udara, Mootrasrayukta Vrana, Medoja Granthi, Medoja Oshtaroga etc.

b. Sthantariaka Dahanakarma:

   The Agnikarma is done in the other places from the diseased area means, the diseases are located in one place and the Agnikarma is applied to some other place. e.g.
*Agnikarma* is applied in the lower leg, twelve Angulas from the Parshni avoiding the Indrabasti Marma, to take out the Meda in Apachi Roga.

In Vataja and Kaphaja Vridhdi, Agnikarma is applied in between the Angusha and Tarjani of right side in case of left-sided Antravriddhi and vice versa.

Pleehodara is treated by Agnikarma, with Tapta Shara applied at left Manibandha Sandhigata Sira.

### IV. According To Stage of Intervention

**As Pradhana Karma:** Arshankura (External Piles) that are Karkasha, Sthira, Pruthu and Kathina are burnt with Jamboshta Shalaka.

**As Paschat Karma:** Agnikarma is used after Chedanadhi Ashtavidha Shastrakarma, to reduce the possibility of reoccurence of disease. For e.g., Agnikarma is to be done after surgical excision of Kadara, Nadivrana and Bhagandara.

- **Materials and Application of Agnikarma In Different Parts**

  The materials and application of Agnikarma in different parts are shown in Table 1.

- **General Procedure of Agnikarma**

  **Poornakarma (Pre Operative Procedure):**
  
  - The operation theatre should be fumigated with Krimighna drugs like Guggulu, Sarshapa etc.
  
  
  - Selections of patient - All the patients were selected based on their clinical findings as well as relevant investigations.
  
  - Written consent should be taken.
  
  - Advised to take Snigdha, Pichhila Aahara prior to this procedure for increase the strength of the patient and alleviate the Pitta Dosha and counter act Usna Guna of Agnikarma.
  
  - The stove or other source of Agni should be kept in the preparation room near the theatre and Agnishalaka should be heated to red hot.
  
  - Preparation of local part - Local part should be washed with Triphala Kashaya and wiped with dry sterilized gauze piece and draped.

**Pradhanakarma (Operative Procedure):**

- Dahana Karma is s done at indicated site based on the pathology and Samyak Dagdha Lakshanas are observed.

- In general, the Sudagdhavrana will be having the features like production of sound during the procedure, proper haemostasis, Lasikasrava (serous discharge) and wound exhibits Pakwa Tala Phalavarna or Kapotavarna.

**Paschatkarma (Post Operative Procedure):**

- Immediately after doing Agnikarma, Kumari Swarasa, Yastimadhu Ghrita and Madhu applied to relieve burning sensation.

- Advised to apply paste of Haridra powder and Coconut oil at night time.

- Avoid water contact for 24 hr.

- Avoid dietetic regimen like Rice, Sigrup, Brinjal, Groundnut, Potato, Beans etc.

- 7days gap should be kept between two sittings.

- **Complications and Its Management**

  - **Plushtha Dagdha** ( Scorched Burnt) – Insufficient burn results into Panduvarna and excessive burning sensation without the production of Sphota. Plushtha Dagdha is managed by Swedana and Ushnakriya comprising of Ushna Aoushadha, Alepa, Annapana etc.

  - **Durda Dagdha** (Blistered Burnt) – Improperly applied Agni will result into Sphototpatti, Daha, Raga, Paka, Chosha for longer period, thus resulting into Durda Dagdhravarna. Sheetakriya is applied for deep tissue burns and Ushnakriya is applied for superficial tissue burns.

  - **Atidagdha** (Deeply Burnt) – Excessive application of heat will cause Mamsavalambhana, Gatra Vishlesha, pain in Sira, Snyu, Sandhi and Asthi, Jwara, Daha, Pipasa and the wound heals after long time leaving behind the scar. Atidagdha is managed by removal of Visheerna Mamsa and application of Tindukri Twak with ghee and cover the wound with Guduchi Patra and Padmotpala.

  - **Marmaghata** – Due to fear of burn, patient may go in shock. The emergency management should be given to the patient.

  - **Daha ( Burning)** - Burning pain is experienced by each and every patient and treated with Ghritakumari Swarasa or Yashtimadhu Ghrita application.

**Agnikarma in General Practice**

The common clinical conditions like External piles, Sentinel piles, Corn, Warts, Moles, Sciatica, Osteoarthritis, Frozen Shoulder and Calcaneum Spur can be treated effectively by Agnikarma. The commonly used Agnikarma instruments are Pancha Dhatu Shalaka made up of Copper – 40 %, Iron-30 %, Zinc – 10 %, Lead- 10 %, Tin – 10% and different cautery probes of Thermal Cautery Machine.
1. External And Sentinel Piles – Agni Karma is indicated in rough, fixed, broad and hard type of pile masses. It is also advised in Vataja and Kaphaja Arshas\(^{11}\). The patient is in lithotomy position, the part is cleaned with aseptic solutions and draping is done after Anaesthesia. Later the positions of various pile masses are assessed by Arsho Yantra. The surgeon should perform Samyak dagdha vrana with help of Pancha Dhatu Shalaka or Jambovosta or different metallic rods etc to the extent of Mamsa dhatu of Arshas by Pratisarana type of Dahana. In general, the external pile is grasped with Allis tissue forceps, the cauterization is done with help of Cautery Probe of Thermal Cautery Machine, which simultaneously does the excision of the external pile mass with proper haemostasis. The Samyak Dagdha Vrana is to be dressed with honey and ghee or Ghritakumari Swarsa and bandaging is done and shifted to the postoperative ward\(^{12}\). Agnikarma in External Piles is shown in figure 1.

2. Kadara (Corn) – The disease characterized by formation of hard mass over the sole is Kadara. It gives pain while walking. This condition is rarely seen over palm also. The Kadara is burnt by red hot Pancha Loha Shalaka or Thermal Cautery. After Dagdha Karma, Shatadhouta Ghrita is applied.

3. Charmakeela (Wart) – Warty and pedunculated growths occurring over the skin. These are generally painless unless inflamed due to secondary infection. The Wart is burnt by red hot Pancha Loha Shalaka or Thermal Cautery.

4. Sandhi Shula – It is the most common clinical manifestation seen in various joint disorders. Bindu type of Agnikarma is performed on most tender part. It has to be repeated daily for five to seven days.

5. Gridhrasi (Sciatica) – It is a Vata Vyadhi with characteristic pain starting from Kati and radiating to Adho Shaka. In this disease most tender points will be elicited and three to five Dahanas of Bindu type of Agnikarma are performed on Kati, Uru, Janu, Jangha and Gulpha Pradesha. In this condition there will be instant relief of pain after Agnikarma. The improvement is noticed instantly in standing and walking thus the treatment enable the patient to lead their day-to-day activity without much discomfort.

6. Vatakantaka (Calcaneum Spur) – In Vatakantaka, pricking type of pain is found near to Gulpha (Conditions like Calcaneal spur, Infra calcaneal bursitis, Plantar fasciitis etc.). After taking aseptic measures the patient is made to lie in supine position. Bindu type of Agnikarma is performed on most tender part till Samyak Twak Dagda Lakshanas. Haridra Churna is applied over the burnt site. Agnikarma in Vatakantaka (Calcaneum Spur) is shown in figure 2.

7. Cervical Spondylosis – Vilekha Dahana type of Samyak Dagdha Vrana is made by red hot Pancha Dhatu Shalaka. Simultaneously application of Kumari Swarsa on the Vrana to relieve the burning sensation. Minimum space was given between the two points\(^{13}\).

8. Conclusion

- Agnikarma procedure is very simple, safe, ambulatory, outdoor procedure and affordable to the common man.
- Agnikarma therapy is result oriented for Sthanika involvement of Vata in Vatakaphaja disorders.
- Best haemostatic procedure.
- No Post-operative complications.

References


### Table 1: Materials and application of Agnikarma in different parts

<table>
<thead>
<tr>
<th>Extent of burn</th>
<th>Instruments used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twak Dahana (Skin burns)</td>
<td>Pippali (Piper longum), Ajashakrut (Faecal matter of goat), Godanta (Teeth of cow), Shara (Arrow), Shalaka (Rod), Gugguladi Varti, Suryakanta (A variety of semiprecious stone).</td>
</tr>
<tr>
<td>Mamsa Dahana (Muscle burns)</td>
<td>Jamboshta (A wick shaped instrument made of stone), Itara Loha (Other metallic instruments), Suchi, Shalaka, Madhu, Sneha, Guda etc.</td>
</tr>
<tr>
<td>Sira, Snayu, Asthi and Sandhi</td>
<td>Madhu, Guda, Sneha, Ghrita, Taila, Vasa and Majja.</td>
</tr>
<tr>
<td>For Kapha Pradhana Vyadhi</td>
<td>Rooksha Dravya (Dry substances)</td>
</tr>
<tr>
<td>For Vata Pradhana Vyadhi</td>
<td>Snigdha Dravya (Lubricant substances)</td>
</tr>
</tbody>
</table>
Fig 1: Application of Agnikarma in External Piles

Fig 2: Application of Agnikarma in Vatakantaka (Calcaneum Spur)
Anti-Fungal Activity of Arka Manhshila Tail

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Abstract
Fungal infections are increasing due to immuno-deficient states like Diabetes Mellitus, HIV, wide spread use of broad spectrum antibiotics, steroids etc. The aim of the study is to assess the antifungal activity & determine the zone of inhibition of Arka Manahshila Tail on fungal strains of Candida Albicans and Aspergillus Niger. Candida Albicans causes candidiasis, which commonly occurs in mucous membrane in mouth or vagina due to lack of hygiene & weakened immune system. Aspergillus Niger is an air-borne pathogen commonly causes otomycosis which is an ear disorder. Antifungal activity on these two strains was seen using Agar Cup Diffusion Method and Minimum Inhibitory Concentration (MIC) was determined using Tetrazolium Salt Method on fungal strains. The drug was effective and exhibited a significant activity against C. albicans and A. Niger.

Keywords: Antifungal, Aspergillus Niger, Candida Albicans, Arka Manahshila Tail, Fungal infection

1. Introduction:
Fungal infections have become very common. It is increasing due to immune-deficient states like Diabetes Mellitus, HIV, wide spread use of broad spectrum antibiotics, steroids etc. Fungi reproduce by spreading microscopic spores. These spores are often present in the air and soil, where they can be inhaled or come into contact with the surfaces of the body, primarily the skin. Consequently, fungal infections usually begin in the lungs or on the skin. Of the wide variety of spores that land on the skin or are inhaled into the lungs, most types do not cause infection. A few types cause infection only in people who have one of the following: 1. A weakened immune system. 2. Foreign material, including medical devices (such as an artificial joint or heart valve), in their body.(1)

Aspergillus Niger is a common food contaminant which grows as a black mould on food & vegetables and is an air-borne pathogen commonly causes otomycosis which is an ear disorder which may damage tympanic membrane & ear canal and Aspergillosis which is serious lung disease which is frequent in horticultural workers. (2)

Candida Albicans is naturally present in Human gut-flora detectable in GI tract in 40% of healthy adults. It causes candidiasis, which commonly occurs in mucous membrane in mouth or vagina due to lack of hygiene & weakened immune system. (2)

Arka Manahshila Tail (AT) is an herbal oil preparation which can be used for fungal infections, skin diseases etc.

2. Aims & Objectives: To assess the anti-fungal activity & minimum inhibitory concentration of Arka Tail on two fungal strains 1. Candida Albicans and 2. Aspergillus Niger

3. Materials & Methods:
Preparation of Arka Tail: Reference: Preparation of Arka Tail was performed as described in Chakradatta/Kushtha Chikitsa/159.

Ingredients: Arka Tail consists of only 3 ingredients:

Arka leaves: Leaves of Arka i.e Calotropis Gigantea are used in skin diseases. It is said to be Vata Kapha hara.(3)

Turmeric Powder: Cucurma longa is a widely used spice in India & has numerous health benefits. It acts as an anti-inflammatory & also possesses anti-fungal properties.(3)
Mustard Oil: Mustard (Brassica Nigra) Oil improves blood circulation. It has anti-bacterial & anti-fungal properties. (3) (4)

4. Procedure:

One part of Arka swaras (obtained from Arka leaves) was mixed with 1/4th part of Mustard Oil and 1/16th part of Manahshila paste. Mix all the ingredients properly in exact proportions. Heat it on manda agni (low flame) till all the siddhi lakshans of sneha Kalpana are obtained. The oil prepared is Arka Tail. (4)

200ml Arka swaras + 50ml Mustard oil + 12.5gmsManahshilapaste

Properties of Arka Manahshila Tail: Arka Taila has Katu and Tikta Rasa, Laghu, Tikshna Guna, Ushna Veerya, Katu Vipaka, and Kapha-Vatashamaka properties. Arka Manahshila Tail is indicated in Kustha.(4)

5. Evaluation Technique:

Protocol: Antifungal activity was seen using agar cup diffusion method and MIC was determined using tetrazolium salt method.

Medium: Sabouraud’s Agar

The test organisms were grown in Sabouraud’s broth for 48 hour and used for the study. The optical densities of the culture were fixed using 0.5 McFarland standard.

Minimum inhibitory concentration:

Preparation of Samples: 100 µl of sample was diluted in DMSO and further used for analysis.

Preparation of Inoculums: The loop culture was grown in Sabouraud’s broth for 48 hour. The culture OD was adjusted was to McFarland standard 0.5 in order to get 1.5 x 10⁸ CFU/ml. The microbial cell suspension was mixed to homogeneity to give a final density of 1 x 10⁶ CFU/ml.

The minimum inhibitory concentration (MIC) of A. niger was determined by using tetrazolium microplate assay. This assay was performed using flat bottom 96-well clear microtitre plates. The wells in first row of each column were filled with Sabouraud’s broth which serves as blank; the second row was filled with 100 µl of Sabouraud’s broth containing standard antibiotics while third row was filled with 100 µl of Sabouraud’s broth containing diluents. Fourth row was filled with 100 µl 2X Sabouraud’s broth and 100 µl of samples was added in each column. Then 5th row onwards each wall were filled with Sabouraud’s broth. An identical two-fold serial dilution were made from 4th row to the 12th row. Lastly, 100µl of Fungal inoculum were added in all the wells from 2nd row to 12th row and mixed thoroughly to give final concentrations Δ ranging from 0.5mg/ml-1.953125 µg/ml with 5 x 10³ colony forming units. The cultured microplates were sealed with lid and incubated at 37°C for 48 h. The MIC of samples was detected following addition. (40µl) of 0.2mg/ml p-iodonitrotetrazolium chloride in all the wells and incubated at 37°C for 30 min. Microbial growth were determined by observing the change of color p-iodonitrotetrazolium chloride (INT) in the microplate wells (pinkish-red formazan when there is growth and clear solution when there is no growth). MIC was defined as the lowest sample concentration showing no color change (clear) and exhibited complete inhibition of fungal growth.(1)

The minimum inhibitory concentration (MIC) of A. niger & C. albicans was determined by using tetrazolium microplate assay.

6. Results & Discussion:

Zone of inhibition (ZOI):

The result of anti-fungal activity of Arka Tail in presented in Table No.1. The zone of inhibition measured is 15-18mm on Candida Albicans and 11-12mm on Aspergillus Niger. This result is compared with control group. The results reveal that Arka Tail showed anti-fungal activity against Candida Albicans and Aspergillus Niger.

Minimum of Concentration (MIC):

The effect of Arka Tail was seen at 5th fold concentration i.e 5% on C. albicans and 3rd fold concentration i.e 20% on A. Niger as presented in Table No2.

<table>
<thead>
<tr>
<th>Organisms</th>
<th>AT (neat)</th>
<th>AT (diluted)</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candida Albicans</td>
<td>18mm</td>
<td>15mm</td>
<td>10mm</td>
</tr>
<tr>
<td>Apergillus Niger</td>
<td>12mm</td>
<td>11mm</td>
<td>10mm</td>
</tr>
</tbody>
</table>

Table No1: Zone of inhibition (ZOI) of Arka Manahshila Tail
Table No2: Minimum of Concentration (MIC) of Arka Tail

<table>
<thead>
<tr>
<th>Organisms</th>
<th>MIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candida Albicans</td>
<td>5th fold</td>
</tr>
<tr>
<td>Apergillus Niger</td>
<td>3rd fold</td>
</tr>
</tbody>
</table>

7. Conclusion:
Arka Manahshila Tail has shown significant fungicidal activity on Candida Albicans & Apergillus Niger strains with minimum inhibitory concentration of 5% & 20% respectively. Arka Manahshila tail can be used externally for candidiasis & aspergillus niger infection.
8. References:

6. Indian journal of chemistry, March 2007; 46550-55
GRĪŚMAṚṬUCHARYĀ: Scientific Practice and Regime for Summers

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Abstract:
The first aim of Ayurveda is to prevent the health of healthy beings. For fulfilling this purpose, Ayurveda described some practices and regimes i.e. Dincharya, Ritucharya, Rasayanasevan, Aacharrasayana, Sadvritta etc. Among them Ritucharya is the practice of food habits and daily behavior according to particular season (Ritu). By following which we can prevent adverse effects and diseases caused by changing in environment. To make a holistic approach for prevention and control of diseases and patho-physiological changes caused by summer season with the help of Shastras. Various texts of Ayurveda and their commentaries, various research papers and peer reviews, modern texts of environmental science and dietetics.

Keywords: Aadaankaal, Ritucharya, Grishma, Avshoshan, Snigdha-Madhur-Sheet Aahaar, Katu Rasa, Ushanta etc.

1. Introduction:
Ayurveda is the science which deals with healthy, happy, advantageous and long living of human beings. There are two aims of Ayurveda, first is to preventing health of healthy beings and second one is to treat unhealthy individuals. The objective of this science is to balance the basic structures and functioning of body. For achieving first aim, there are some concepts are given in texts i.e. Dincharya, Ritucharya, Sadvritta, Aacharrasayana, Adharniya-Dharniyavegas, concept of Pragyaapraadh etc. Among them Ritucharya is following and practice the regulations related food and behavioral habitats according to season.

A solar year is divided into two parts according to position of sun, Uttarayan or Aadaankaal and Dakshinayan or Visarga kaal. Uttarayan is when sun lights are more prominent in north hemisphere of earth. It called Aadaankaal too because due to high and intensive sun lights and dry, warm air, there is lack of moisture and resistance power in all fauna, flora and human beings. There are three seasons in Aadaankaal sequenced Shishir (Autumn), Vasant (Spring) and Grishma (Summers). Grishma is the highest Ritu of Aadaankaal in order to Ruksha and Balahaani which held in Jyeshtha and Aashadh months of Indian calendar or when sun in Vrishabha(Taurus) and Mithuna(Gemini) signs. The meaning of Grishma is “in which water particle and moisture of world absorbed by sun.” Due to Yogvaahi properties of vaat, it became dry, hot and sharper. Both works together in absorption of watery part of world, resultant emaciation of Shleshma, KaphaDhatu and Rasa in body. Due to excess heat and air in environment, Katu rasa which is predominant in Agni&Vayuguna become produce in body and flora both, which resultant as Balahaani in humans. The excess Ruksha, Ushnavguna of climate and Katu rasa leads to increase pitta and vaata in body. There are so many regimes described in Ayurveda for...
Grishmaritu which works mainly on ‘Saamaanya-vishesh-Siddhant.’ These neutralize excess pitta and vata and balance the homeostasis of body.

Food habitats for summers; food should have properties like Madhurarasa, Drava, Snigdha, Sheet etc. Some preferable food preparations for this season are i.e.

1. Panaka: which should be sheet, Sugandhit, sugar added.
3. JungalMrig, birds (Teetar, Bater etc.) MamsRasa(e).
5. Coconut water, Drakshojal
6. Shaali rise and wheat with Ghrit and milk.
7. Cold milk after boiling and added with sugar.
8. Do not intake alcohol, if do then it should be little in amount and diluted with more water.
9. Do not use Amla, Lavan, Katurasa and Ushnavirayadravya (γ).
10. Do not use Guru, Abhisyandidrvyas.

General habitats for summers:-

1. Living in cold houses during day time and sleeping under the moon light in night.
2. Use of sandal and vetiver water for bath, bodypack and room fragrance.
3. Use of pearl, quartz, blossoms as ornaments.
4. Use of light, loose cotton and linen garments.
5. Living near gardens and water bodies.
7. Avoid sexual intercourse or do once in 15 days.

By following the regulations described in Grishmaritucharya, individuals can prevent themselves from harmful impacts of summers.

2. Aims and Objectives:
   - To review the rules and regimes for Grishmaritu from various Ayurveda Texts.
   - To find out the scientific approach towards Grishmaritucharya.

3. Materials and Methods:
   For the present review study, original text of Chakrapani’s AyurvedDeepika and Gangadhar’s Jalpakalpaturu commentaries on CharakSamhita edited by Dr. Lakshmidhar Dwivedi, Dalhan’s commentary on Sushrutsamhita, Arundatta’s Sarvangsundara commentary on Ashtanghiridaya was screened. Other available published paper, peer review, published books on Swasthavritta were referred to compile, analyze, organize and describe the different contexts of ‘Grishmaritucharya’ in a systematic manner.

4. Observations:

There are significant similarities in all main texts of Ayurveda regarding Grishmaritucharya except following points:

1. In SushrutaSamhitavarjiyavihara and aahar (contradictory food, general behavior) are mentioned in starting instead of SevniyaAahavvihaar. Which indicate that in order to practicing Grishmaritucharya the one should avoid Vyayam, Aatapsevan etc. Apathya at least. To avoiding above is more important thing in Grishmaritucharya.(a)
2. According to Ayurveda sleeping in day time is Tridoshprakopaka, but in Grishmaritu according to Ashtanghiridyaam, it’s beneficial to sleep in day time for one Muhurt(~45 min.). It increasesShleshmain body which nourish all Dhatu in body. But the individuals who are Bahumedkaptha in nature, Vishhaart and suffering from Ajeern should avoid sleeping in day time.

5. Discussion:

This is the way the ancient sages set up the regimen for Grishmaritu on analytical reasoning to obtain Swasthya and prevent diseases. According to modern science when climatic temperature increased more by 37ºC, the body’s internal thermostat maintains a constant inner body temperature by pumping more blood to skin and increased sweating, this is described in Ayurveda as loss of Ras and Shleshma due to sun and air in Grishma. When an individual does exercise, hard work in hot climate/ in afternoon, this caused sustained increased body temperature and homeostasis process become faster, resultant water and electrolytes loss from body(σ). This caused impaired nervous and circulatory functions and sometimes in multiple organ failure. This is described in Dalhan as:

As temperature become high, individuals may feel increased irritability, confusion, loss of concentration, heat cramps, unconsciousness etc. Other symptoms may feel- Anorexia, loss of appetite, nausea, diarrhea, dehydration, palpitation, headache, polydipsia etc.

Regimes described for Grishmaritu are mainly focused on how to reduce heat and heat generated exhaustion i.e.

1. Living near gardens and water bodies: The temperature surrounding water sources, fountains usually lower than outer atmosphere due to heat absorption and energy conversation. Green plants also absorb heat and give cooling and relaxing effect on body and mind.
2. Application of thin layer of sandalwood reduce body heat and the fragrance shows soothing effect on mind.

3. Using of white, light and cotton cloths, bedsheets reflect heat in day time and become cool very easily in moon light.

4. Wearing gemstones like pearl, quartz etc. gives cooling effect. They feel cold in touch because of their high thermal inertia they refract heat and don’t get hot by body heat or room temperature quickly (n). Wearing them is also gives pleasantness.

5. Every activity which relax body and mind as well are good in this season.

In diet practice Amla, Lavan, Katuras and Usna, Teekshnadravyass should be prohibited in this season because these properties may cause or elevate adverse effects of season as written in texts-

Amalarasa is pittavardhak, can cause blood related problems, induce inflammation, may cause burning sensations and hyperacidity as written in Ayurveda texts(n). According to modern science uses of too much acidic food specially in summers when already electrolyte imbalance is present, may disturb pH level of blood. In that condition body use calcium from bones and muscles, which may cause bone and muscle deterioration. Too much acidity can also increase the risks of cancer, liver problems and heart diseases (n).

Lavanrasa increase pitta, induce thrust, blood disorder, may induce toxic effects as written in Ayurveda texts(n). According to modern science excess intake of salts increase sodium concentration in blood. It also happens in excessive sweating, patients on diuretics, in dehydration etc. High concentration of sodium in blood (hypernatremia or salt toxicity) cause strong feeling of thirst, followed by weakness, nausea, muscle twitching, bleeding in or around brain, feeling of confusion and jitters, cardiac arrhythmia, seizure and coma(n).While hyperchloremia is closely related with septicemia and metabolic acidosis(n).

Katuras is ShlesmahKshayKarak, Pittavardhak, can cause disorders of Vata, induce thrust, can cause Vasodilation (margouanvivranot), can disrupt mucosal layering( Bandhanshchhinotti) as written in Ayurveda texts(n). According to modern science intake of excessive spicy food curb appetite and speed metabolism, can cause gastritis, irritation in intestine and speed up water secretion from walls of intestine, irritation from spicy food induce localize vasodilation(n).

All the regimes suggested for Grishtmaritscharya are having properties which can neutralize elevated Pitta and Vata and provide nutrition to body i.e. –

Madhurrasaincrease all Dhatu of body including Oja, it is Vat-Pittashamak, reduce burning and excess thrust, increase vitality, strength and complexion according to Ayurveda (n). According to modern science glucose is the main source of energy for body. In addition, the treatment of heat stroke and dehydration is also oral rehydration and fluid transfusion, which contains water, glucose/dextrose, trace of sodium, potassium and citrate (n).

Dravagunaof diet increase amount of body fluid, maintain osmotic pressure and blood pressure. Thus, it is very beneficial in conditions like heat exhaustion, dehydration and sun stroke.

Snigdhaguna reduce excess pitta and Vata, increase amount of Shlesma, nurture all Dhatu of body according to Ayurveda texts(n).

Sheetguna of diet cause vasocontraction (Stambhak) by which it stops fluid loss from body. It gives satisfaction to all senses. Neutralize excess pitta and increase Shlesha (n).

The specific foods which suggested in Grishtmaritscharya are full of nutrients and electrolytes in liquid form which is essentially required in this season. Some of examples are: -

Pan – it is mixture of fruit juices with sugar

Manth – roasted barley and gram powder added in cold water and ghee, which should not be much concentrated and not much diluted (n).

Ras – meet soup of birds and animals like Teetar (greyfrancolin), Bater (common quail), JangalMrig (Indiangazelle) etc.

Curd – intake of curd is prohibited in summers due to its Guru, Abhishyandi, Ushnaguna and Amlarasa. Consuming it continuously can cause Agnimandhya, Amlapitta, Medavikriti, Shotha etc. instead of curd Buttermilk (fresh, diluted curd with quadrupke water and without butter and added with cumin, mint and trace salt) can be use (n).

Panchsaar – Munakkara (raisin), Falsa(Grewiaasiatica), Khajoory (date), honey and sugar added in quadrupke water(n).

6. Conclusion:

Ayurveda has depicted various rules and regimens for summers, regarding diet and behavior to acclimatize seasonal enforcement easily without
altering body homeostasis. With the knowledge of Ritucharya we can surely avoid seasonal manifestations and lifestyle disorders by practicing regimen in accordance with Ritu to maintain the harmony of the Tridosha and to stay healthy ever. With variation in the advent of season, there may be a query of importance of Ritucharya in present scenario but the base of Ritucharya is Tridosha and Panchmahabhoot theory. Although today if Ritu do not follow uniformity, the level of Tridosha and Panchmahabhoot can be analyzed accordingly, to decide the regimen, to which this knowledge of Ayurveda holds as a pathfinder.

7. References:

1) Dr. Lakshmidhar Dwivedi’s vidyotani commentary on CharakaSamhita, Chakrapani AyurvedaDeepika (sutrasthan 30/26)
2) Kashinath pandey’s commentary on CharakaSamhita (Sutrasthan 1/41)
3) Dr. Lakshmidhar Dwivedi’s vidyotani commentary on CharakaSamhita, Chakrapani AyurvedaDeepika (sutrasthan 6/6)
4) Dr. Kashinath Samgandi’s SwasthvrittaSudha, chapter 4 (GrishmaRitucharya, Grishmaparibhasha page 65)
5) Acharya Yadav Trikamji’s commentary on SushrutSamhita (Uttartantra 64/11)
6) Kashinath pandey’s commentary on CharakaSamhita (Sutrasthan 6/28)
7) Kashinath pandey’s commentary on CharakaSamhita (Sutrasthan 6/29)
8) Acharya Yadav Trikamji’s commentary on SushrutSamhita (Uttartantra 64/11, DalhanTeeka)
9) YadunandanUppadhyay’s commentary on Vidyotani commentary of Atridevgupt on AshtanghrudayaSutrasthan 7/56,59,60 (14th addition)
10) OSH Answers Fact Sheets, Hot Environment-health effects and first aid (Canadian center for occupational health and safety 2016/08/04)
11) Joel E. Arem, Gemstones Thermal Properties (The International Gem Society)
12) Kashinath pandey’s commentary on Charaka Samhita (Sutrasthan 26/43)
13) Zohra Ashpari and Erica Tips for limiting acidic foods medically reviewed by Katherine Marengo LDN, RD on August 29, 2018, published in Health line.
14) The Nutrition Source, Salt and Sodium (HARVARD T.H. CHAN school of public health)
16) Linda Carroll, spicy foods: the health effects of adding heat to your meal (Today, Health And Wellness 2016/3/9)
17) Kashinath pandey’s commentary on CharakaSamhita (Vimaanstanth1/24)
18) Acharya Yadav Trikamji’s commentary on SushrutSamhita (Sutrasthan 46/522)
19) Dr. Lakshmidhar Dwivedi’s vidyotani commentary on CharakaSamhita, Chakrapani AyurvedaDeepika (sutrasthan 6/28 ChakrapaniTeeka)
20) Dr. Lakshmidhar Dwivedi’s vidyotani commentary on CharakaSamhita, Chakrapani AyurvedaDeepika (sutrasthan 27/227)
21) YadunandanUpaddhyay’s commentary on Vidyotani commentary of Atridevgupt on AshtanghrudayaSutrasthan 3/31 (14th addition)
A General Introduction to pathya – Apathya Aahara Vihara

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Abstract

Ayurveda is not only a medical science it is a holistic science of life. The aim of ayurveda is to promoting and preserving the health of individual and to cure from diseases. Pathyas are food practice and lifestyle described in ayurveda as preventive measures and for therapeutic management of diseases. Those drugs and regimes which are not harmful to channels and pleases the mind are considered as pathya, and sadapathya dravyas are such food which are good for most of the healthy individuals. Wholesome diet or Pathya plays equal role in management of any disease, it is essential to follow dietetic rules and regimes in order to curing diseases so that keep their dhatu in a healthy state and will not let them get vitiated more from doshas. The food which is prescribed according to disease by physician plays important role in successful treatment and it’s also prescribed as prophylactic and interventional diet.

Keywords - Pathya, Apathya, Wholesome, Unwholesome, Aahara, Vihara, healthy lifestyle, hitkara ,ahitkara.

1. Introduction

Ayurveda is not a medical science it is a whole science. It deals with life. It describes how to live a good and healthy life; teaches us ethics and rules and regimes for living a healthy life. Ayurveda has two purposes as described by acharya Charaka -

1. Prevention and cure from diseases and maintaining health of individuals
2. To recovering from diseases. [1]
The first one is main purpose of ayurveda. There are different diet and regimes mentioned in ayurveda texts for a healthy living and lifestyle.

Some concepts are –pathya- apathy aahara vihara , dincharya , ritucharya ,dharaniya and adharantiya vega , swasthyavrit, sadvritta etc.

Here we will discuss about pathya (wholesome) apathy(unwholesome) aahara and vihara.

Pathya or wholesome means which drugs and regimen are good for person’s health and pleasant to his mind also are considered as pathya; and which are adversely affect mind and body are considered as unwholesome or are apathy.[2]

The purpose of intake wholesome diet etc. is to maintain normal health and alleviate chances of various diseases.

Pleasing of mind is here for one should like that diet and regimen; because it is often said that given drug or diet will not be effective if it is taken unwillingly, and it will be more effective if it is taken with person’s will , and that will be able to maintain his normal health.[3]

Nirukti of pathya – pathya word is derived from path which literary meanings channel or way.

Monier williams (page 582)–Belonging to way

- Suitable
- Fit
- Proper
- Wholesome

Pathya and apathy includes both material substances and regimes but in general these are used for diet.

- Charaka described traya-upstambh(Tri- sub-pillars or sub-supporters) which supports our body for healthy living, these are–Aahara(diet),
2. Importance of Pathya

Charaka mentioned pathya as the synonym of chikitsa. [9]

Sushruta described hita-ahita in a whole different chapter named “HitaaHitiyam adhyayam”. [10]

Kashyap mentioned that health depends of food, food is best medicine; only pathya (wholesome) food can keep person healthy. [11]

Harita described in context of importance of pathya is: A Person should follow Pathya always and diseases cannot be cured by apathyaa(unwholesome). If person is taking only medicine which are prescribed to him by physician and avoiding pathya(wholesome) than he cannot be healthy. [12]

Bhel also explains pathya(wholesome) diet gives strength and growth in body and apathy diet causes morbidity of doshas. Pathya or hitkara diet increases dhatus ( rasa, rakta etc) and apathy aahara cannot digested properly and causes imbalance in doshas, dhatus etc and causes morbidity. For example a seed only grows in proper environment similarly body grows by proper pathya diet taken at proper time. Pathya aahara helps detoxification of body by getting rid of vitiated doshas. So person should always consume pathya aahara. [13]

Yogaratnakara said that nidana( cause of disease/ aetiology) , drugs , and pathya ( wholesome are main constituents of treatment of any disease , physician should think about them carefully and then management should be done , because proper combination of three of those cause successful eradication of disease just like without proper raining seedling is destroyed. [14]

Vaidhya Lolimbaraja indicated importance of pathya sevan that , if a person follows pathya(wholesome) diet and regimes than he doesn’t have to take any medicine because he wouldn’t be diseased and if he gets diseased than he will cured by disease without much efforts and if person is taking only his prescribed medicines and not following pathya(wholesome ) diet and regimes then taking medicine wouldn’t be effective. [15]

Charaka had given equal importance to Pathya aahara ( wholesome food) along with Pathya vihara (wholesome routine) ; as he said that if person is suffering from any of Chinta (Anxiety), shoka (Grief), Bhaya (Fear), Krodha (anger), Dukha shayya (Sleeping on uncomfortable bed), jagrana ( insomnia) ; wholesome food taken by him cannot be digest. So one have to follow pathya aahara vihara (wholesome diet and regimes) for having a healthy life. [16]

Pathya- apathyaa can be classified according to one’s condition- It can be divided as for healthy individual and for diseased one.

3. General pathya apathyaa for Healthy Individual

- SadapathyaAhar dravya :-

These food articles are which can be consumed daily by any healthy individual. These food substances maintain person’s health and do not make any new health issues. These are – Shashthik ( a variety of rice) Shali ( a variety of rice) mudga (Phaseolus radatusLinn.), saindhav (Rock salt), amalaka(emblica officinalis Gaertn.), yav (Orza sativa), anarikhaja jul ( rain water), kshir (milk), jaungula maans ( inhabitant of airy place), madhu(honey). [17]

- Sadapathya Vihara :- snaan (bathing) vyayaama ( exercise) nidra (sleep) pratimarsha nasya (instillation of nasal drop, dantdhavan ( dental cleaning) etc.[18]

- Sada apathyaa – Vailirat (dried meat) , Dry vegetables , Lotus rhizome and stalk , meat of diseased animal.[19]

- Most Wholesome Ahara Dravyas:- [20]

<table>
<thead>
<tr>
<th>Varga (Categories)</th>
<th>Pathya (wholesome)</th>
<th>Apathya(unwholesome)</th>
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<tbody>
<tr>
<td>Shali</td>
<td>Shashthik</td>
<td></td>
</tr>
<tr>
<td>mudga</td>
<td>Phaseolus</td>
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<td>saindhav</td>
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<td>amalaka</td>
<td>Emblica officinalis</td>
<td>Gaertn.</td>
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<td>yav</td>
<td>Orza sativa</td>
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<td>jaungula</td>
<td>Milk</td>
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<td>maans</td>
<td>Inhabitant of airy place</td>
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<tr>
<td>madhu</td>
<td>Honey</td>
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Most Wholesome Vihara –

- Brahama charya
- Nivaat shayana
- Ushnodaka isnaan
- Nisha swapna
- Vyayaam
- Vega-avadharaana and anuuddiran
- Matra vat ashan

- Kaada bhojan
- Abhyang
- Bhojana- jeerne
- Sadvritta and swasthyavritta etc.

Disease Specific Pathya

- These categories for diseased persons. Pathya in any disease is decided according to their disease, general condition, dosha involved, prakriti of person and balo of person.

Genral Parameters To Decide Pathya and Apathya

- One year old shail and shuka dhanya is wholesome because it easily digestible andunctuous. Whole grain is easily digestible. Those grain and corns take less time to harvest are laghu (easily digestible) than long term harvesting period grains and corns. [21]
- Meat of animals who have died of natural death, emaciated, dried up after death, excess fatty, old or too young, killed by poison, who are not of natural habitat, bitten by snakes etc are unwholesome. [22]
- Vegetables infested with insects, long time exposed to sun, dried up, old, unseasonal are unwholesome.[23]
- Fruits which are unripe, infested with insects and snakes, exposed to sun for long time, not of natural habitats and unseasonal, putrefied are unwholesome. [24]
- Water with defective taste, touch, form, smell virya (potency), vipaka (transformed state after digestion) is unwholesome. [25]

Aims and Objectives

To elaborate knowledge about pathya ahara vihaara and its utility for health promotion and prevention from diseases and its importance in healthy individual.

Materials and Methods

Material for study is collected from ayurvedic text books such as Charaka Samhita, Sushruta Samhita, Kashyap Samhita, Bhel Samhita, Yogratnakara, Vaidhyakiya Jeevan by Lollima Raj, and books of modern science and some sites related to the title.

Observation

A person should take wholesome diet at a proper time and amount, he should keep control over his desires and senses otherwise he faces many previous diseases sooner or later in his life. [26]

These pathya and apathya concept of diet are variable according to matra(quantity), kaal(time), kriya(person’s working capacity), bhumi(inhabitant), deha(body of individual), dosha(state of doshas).
So we should manage wholesome diet according to person’s condition and person should follow it for healthy living. [27]

According to acharya charaka person should take his diet and regimes opposite of their prakriti(vaat etc) ahara-vihara should not same as his prakriti so that it alleviate increased dosha so that homeostasis can be maintain in his body.

If person has sam-prakriti or sam dhatu prakriti than he should take diet that includes all kind of rasa,guna etc so that all doshas can stay in their normal state. [28]

Person considered as healthy individual if person has dosha (humor) , agni (digestive fire), dhatu (tissues) mal(humors), kriya (physiological functions) and whose aatma(soul),indriya(senses) and mana(mind) all are happy is considered as healthy individual. [29]

All these pathya-apathyahara vihara concept works for establishing equilibrium of dosha-agni-dhatu-mala-kriya and maintain homeostasis of body, so that person can have healthy life by maintaining healthy lifestyle.

7. Discussion
Pathya ahara vihara paalan is the way of maintaining healthy lifestyle. This concept of ayurveda science described for making a person healthy mentally and physically both and for his wellbeing. Following pathya aahara vihara enhance life span, luster, enthusiasm, memory, ojas, Agni. [30]

As described by acharya sushruta above; pathya paalan provide ojas(immunity and strength) to our body works as prophylactic diet and regimen so that future disease stays away and keeps us healthy so we can do our daily tasks enthusiastically.

Sadapathya aahara for maintain digestive fire; Proper agni(digestive fire) digests food on time and utilise properly by body so that one gets energy for his day to day life. In Ashtaang hridaya described that all diseases are occurring by mandagni (low digestive fire),because of pathya agni doesn’t vitiated and Ama(toxins) due to indigestion doesn’t occur so that many Aama related diseases also does not occurs.[31]

Concept pathya aahara is of balanced and nutritious diet of ayurveda as modern science also describes to us. There are six basic nutrients that are essential in modern balanced diet ; Carbohydrates, Proteins, Fat, Minerals, Vitamins, Water. These nutrients are needed to body to function properly. This wholesome diet provides whole nutrition to our body like carbohydrates by godhum, shali, shashnik dhanya ; essential fatty acids by ghee and milk ; protein by meat and milk and shami dhanya(pulses) etc ., minerals and vitamins are micronutrients needed are provided by vegetables and fruits like leafy vegetables ,pomegranate,amla etc . These fruits also source of antioxidants , these antioxidants neutralize free radicals; and cease the chain reaction before vital molecules are damaged. Fruits and vegetables also provide fibre diet for healthy gut. Antariksha jal (water) hydrates body and tissue and maintain normal physiology of body like fluid balance, temperature balance, absorption, secretion, transportation of nutrients, normal bowel functions etc.

So that we can understand it’s a balanced diet concept given ancient Ayurvedic acaryas.

Sadapathyahivaahra also mentioned in Ayurveda under swasthayavritta and sadvritta. Swasthayavritti is for daily hygiene purpose, excellence of indriya, healthy and harmonious mind, and enhanced bala of body.

There are many procedures described in ayurveda texts for the purpose are Hygiene; some eg. Are for oral hygiene danta-dhavan (toothbrushing ), jehvanirlekhan (tounge scraping), for all over body hygiene by isuana( bathing)etc and for excellence of indriya are karma puran ( oil instillation ear, shiro-abhyang(head massage) , nasya( oil instillation in nose) etc, for all over strength of body vyayama (physical activity), abhyanga (Self massage) etc. [32]

Daily exercise promotes all over body health, controls weight, strengthens body and muscles, increases digestive fire. Daily massage helps in increasing blood circulation and eliminate toxins from body reduce stress,fatigue and pain,keeps skin lustrous that’s why person is less prone to any disease. Charaka described concept of sadvritta for physical,mental, social, spiritual wellbeing. [33]

A person should follow Brahmcharya( controlled sexual activity),gyan( knowledge),daan(donate things to needy persons),maitri( good relationships with good persons),karunya(kindness),shar(cheerful attitude), apekshat(ignorance of unnecessary things in surrounding) , prashum( calmness) for having healthy social life. So he can have stress free and happy life by following sadvritta. [34]

For prevention from external causing diseases Charaka mentioned that one should keep control on his intelligence and senses, should have good memory, should keep knowledge of his province or
surroundings and time, should have self awareness and should follow sadvritta. [35]

Charaka mentioned Dharaniya sharirik (physical), mansik (mental), vachika (vocal) vega (urges) as hitkara.

For peace and harmony of mind with holding of Manasika Vega like desire, anger, greediness, attachment, hatred etc., [36]

If someone wants good in this world (life) and after that (death) also he should follow wholesome diet and regimen. [37]

8. Conclusion

A person who takes wholesome diet and regimes and have analytical thoughts, not attached to things and addicted to desires, who donates his excessive wealth to needy persons and treating every living being similarly, always says truth and doesn’t shows partiality , forgiving in nature and serve knowledgeable and gentle people ; he stays healthy always. [38]

Pathya is diet and regimen described in ayurveda for adopting it as daily life routine for promoting healthy life and for prevention from diseases. These pathya aahara provides proper nutrition to the body and strengths to the immunity while pathya vihara (regimen) helps in maintaining hygiene, strengthen body framework and gives peace of mind and healthy and happy social life. It promotes person’s well-being. This all lead to a healthy and stress free life of any individual.

9. References

1. Agnivesha krita, Charaka Samhita , Vidhyotani tika, Kashinath Pandey and Goraknath Chaturvedi, Reprint 2015, Sutra Sthan 30/26, Page 587
2. Ibid, Charaka Samhita, Sutra Sthan 25/45 page 478
3. Ibid, Charaka Samhita, Sutra Sthan 25/45 page 683
4. Ibid, Charaka Samhita, Sutra Sthan 11/35 page 227
5. Sushruta Virachita, Sushruta Samhita, Ayurveda Tatwa Sandipika, Kaviraj Dr. Ambikadutta Shastri, Reprint 2014, Chikitsa Sthan 24/68 page 136
6. Ibid, Sushruta Samhita, Sutra Sthan 46/3 page 241
7. Ibid, Sushruta Samhita, Sutra Sthan 24/19 page 133
8. Ibid, Charaka Samhita, Viman Sthan 5/23 page 714
9. Ibid, Charaka Samhita, Chikitsa Sthan 1/3 page 2
10. Ibid, Shushruta Samhita , Sutra Sthan , Hitabhitayam adhyayam
11. Kashyap-Samhita, Vidhyotani commentary, Shri Satyapala Bhishagacharya krita, Khil Sthan, 5/9, page 256
14. Yogaratnakara, Vidhyotani tika, Vaidhyalaxmi Shastri, Uttaradtha, Pathya Apathyda Vidhim page 251
15. Lolimbarakritra Vaidhakryajeevanam, Sudha tika, jwar chikitsa, page 4
16. Ibid, Charaka Samhita, Viman Sthan 2/9 page 688
17. Ibid, Charaka Samhita, Sutra Sthan 5/12 page 106
18. Ibid, Charaka, Sutra Sthan 5
19. Ibid, Charaka Samhita, Sutra Sthan 5/10 page 106
20. Ibid, Charaka Samhita, Sutra Sthan 25/38-39 page 466,467
22. Ibid, Charaka Samhita, Sutra Sthan 27/311 page 562
23. Ibid, Sushruta Samhita, Sutra Sthan 46/298 page 267
25. Ibid, Sushruta Samhita, Sutra Sthan 45/11 page 218
26. Ibid, Charaka Samhita, Nidan Sthan, 6/11
27. Ibid, Charaka Samhita, Sutra Sthan 25/46 page 478
28. Ibid, Charaka Samhita, Sutra Sthan 7/41 page 166
29. Ibid, Sushruta Samhita, Sutra Sthan 15/48 page 84
30. Ibid, Sushruta Samhita, Chikitsa Sthan 24/68 page 136
31. Ibid, Ashtaang Hridaya, Nidan Sthan 12/1 page 263
32. Ibid, Charaka Samhita, Sutra Sthan 5 page 113
33. Ibid, Charaka Samhita, Sutra Sthan 7/53 page 170
34. Ibid, Charaka Samhita, Sutra Sthan 8 page 181
35. Ibid, Charaka Samhita, Sutra Sthan 7/60 page 171
36. Ibid, Charaka Samhita, Sutra Sthan 7 page 160
37. Ibid, Charaka Samhita, Sutra Sthan 8/29 page 189
38. Ibid, Charaka Samhita, Sharira Sthan, 2/46 page 850
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